



4

Alternatives

In the previous chapter, the aviation facilities required to satisfy airside and landside demand through the long-term planning period of the master plan were identified. In addition, several Federal Aviation Administration (FAA) standards were discussed that apply to airfield design. The next step in the planning process is to evaluate reasonable ways these facilities can be provided while meeting design standards. The purpose of this chapter is to formulate and examine rational development alternatives that address the short-, intermediate-, and long-term planning horizon levels. Because there are multiple possibilities and combinations, it is necessary to focus on the opportunities that have the greatest potential for success. Each alternative provides a different approach to meeting existing and future facility needs; these layouts are presented for evaluation and discussion.

Some airports become constrained due to limited availability of space, while others may be constrained due to adjacent land use development or geographical features. Careful consideration should be given to the layout of future facilities and impacts on potential airfield improvements at Gainesville Municipal Airport (GLE). Proper planning at this time can ensure the long-term viability of the airport for aviation and economic growth.

The primary goal of this planning process is to develop a feasible plan for meeting the needs that result from the projected market demand over the next 20 years. The plan of action should be developed in a manner that is consistent with the future goals and objectives of the City of Gainesville and airport stakeholders, including users of the airport and the local community and region, all of which have a vested interest in the development and operation of GLE.

The goal is to develop an underlying rationale that supports the final recommended concept. Through this process, an evaluation of the highest and best uses of airport property will be made while also weighing local development goals, efficiency, physical and environmental factors, capacity, and appropriate safety design standards.

The alternatives presented in this chapter have been formulated as potential means to meet the overall program objectives for the airport in a balanced manner. Through coordination with the City of Gainesville, GLE management, the planning advisory committee (PAC), and the public, an alternative (or combination of alternatives) will be refined and modified, as necessary, into a recommended development concept (Chapter 5) The planning considerations and alternatives presented in this chapter can be considered a beginning point in the evolution of a recommended concept for the future of GLE.

NO-ACTION/NON-DEVELOPMENT ALTERNATIVES

Prior to the presentation of development alternatives for GLE, non-development options should be taken into consideration. Non-development alternatives include a “no-build” or “do-nothing” alternative, development of a replacement airport at a new location, or closure of the existing airport and the transfer of services to another existing airport. This section presents a discussion of the primary non-development alternatives.

NO-BUILD/DO-NOTHING ALTERNATIVE

The City of Gainesville is charged with managing the airport for the economic improvement of the community and region. In some cases, alternatives may include a no-action option; for GLE, this would effectively reduce the quality of services being provided to the public, affect the aviation facility’s ability to meet FAA design standards, and affect the region’s ability to support aviation needs. The ramifications of a no-action alternative expand into impacts on the economic well-being of the region. **An analysis of the economic benefit of the airport was completed in 2018 and found that GLE had a total annual economic impact of \$172.8 million and supported nearly 2,300 jobs.** If facilities are not maintained and improved so the airport can support general aviation operations; delays become unacceptable; or aircraft storage is not available, aviation activities and business may shift elsewhere. The no-action alternative is also inconsistent with the long-term goal of the FAA and Texas Department of Transportation (TxDOT) Aviation Division to enhance local and interstate commerce.

Furthermore, GLE has received nearly \$6.2 million in state and federal grants since 2000. These grants represent a direct economic stimulus that has lasting positive economic impacts. The City of Gainesville has a vested interest in maintaining and improving airport facilities for business and general aviation users. Without a commitment to ongoing improvement of the airport, users of the airport will be constrained from taking full advantage of the airport’s air transportation capabilities; therefore, a no-action alternative is not considered further in this master plan.

TRANSFER OF SERVICE/RELOCATE AIRPORT

This study will not consider the relocation of services to another airport or the development of a new airport site. The development of a new facility is a complex and expensive option. A new site would require greater land area, duplication of investment in facilities, installation of supporting infrastructure that is already available at the existing site, and greater potential for negative impacts to natural, biological, and cultural resources.

As previously mentioned, the City of Gainesville has accepted nearly \$6.2 million in federal and state development grant funding over the last 25 years. Through grant assurances, the acceptance of these grants obligates the airport sponsor to maintain the airport as an airport. Closing the existing airport and transferring services to another existing airport would be considered a violation of the grant assurances and would require repayment of grants that are not yet fully depreciated. The investments made and the economic benefits received from the airport (both public and private) could not readily be shifted or regenerated to another airport without significant costs/losses. As such, this alternative is not considered practical, reasonable, or financially feasible.

NON-DEVELOPMENT ALTERNATIVES SUMMARY

The purpose of this master plan is to examine aviation needs at GLE over the course of the next 20 years; therefore, this master plan will examine the needs of the existing airport and present a program of needed capital improvement projects to cover the scope of the plan. The airport is a lucrative business, transportation utility, and economic asset for the region. It can accommodate existing and future demand and should be developed accordingly to support the interests of residents and businesses that rely upon it. Ultimately, the final decision regarding development rests with the City of Gainesville, TxDOT, and the FAA on an individual project basis. GLE is a vital facility with abundant remaining growth potential; as such, the non-development alternatives will not be considered further in this planning process. The following analysis covers airside and landside development alternatives that consider an array of facility demands, including safety, capacity, access, and efficiency.

PLANNING OBJECTIVES

A set of basic planning objectives has been established to guide the alternatives development process. It is the goal of this master planning effort to produce a development plan for the airport that addresses forecasted aviation demand and meets FAA design standards to the greatest degree possible. As the owner and operator of the airport, the City of Gainesville provides the overall guidance for its operation and development. It is of primary concern that GLE is marketed, developed, and operated for the betterment of the community and users of the airport. The following basic planning principles and objectives are utilized as general guidelines during this planning effort:

- Develop a safe, attractive, and efficient aviation facility in accordance with applicable federal, state, and local regulations.
- Preserve and protect public and private investments in existing airport facilities.
- Provide a means for the airport to grow as dictated by demand.
- Establish a plan to ensure the long-term viability of the airport and promote compatible land uses surrounding the airport.
- Develop a facility that is readily responsive to the changing needs of all aviation users.
- Reflect and support the long-term planning efforts that currently apply to the region.
- Develop a facility with a focus on self-sufficiency in operational and developmental cost recovery.
- Ensure future development is environmentally compatible.

REVIEW OF PREVIOUS AIRPORT PLANS

The currently approved Airport Layout Plan (ALP) for GLE completed in 2007, following the 2005 master plan. Recommendations from the previous master plan include the following:

- Improve Runway 18-36 to C-II design standards and extend to 7,000 feet
- Improve Runway 13-31 to B-II design standards; maintain existing dimensions
- Improve instrument approach capabilities on both runways ($\frac{3}{4}$ -mile minimums on Runway 18, 1-mile minimums on Runway 36, 13, and 31)
- Install an approach lighting system on Runway 18
- Construct a partial-parallel taxiway to serve the majority of Runway 13-31
- Hangar development within the existing airport property boundary

The analysis presented in this chapter revisits the recommendations presented in the previous master plan. Since the completion of the last plan, the FAA has made significant modifications to design standards, as outlined in Chapter Three. As such, some elements of the previous plan may be carried over to this master plan, while others may be changed or removed from further consideration.

AIRSIDE ALTERNATIVES

Development alternatives are categorized into two functional areas: airside and landside. Airside considerations relate to elements such as runways, taxiways, navigational aids, lighting, and marking aids and require the greatest commitment of land area to meet the physical layout of the airport, as well as the required airfield safety standards. The design of the airfield also defines minimum setback distances from the runway and object clearance standards. These criteria are defined first to ensure the fundamental needs of the airport are met. Landside considerations include hangars, aircraft parking aprons, and terminal services, as well as utilization of remaining property to provide revenue support for the airport and benefit the economic development and well-being of the regional area.

The remainder of this chapter describes various development alternatives for airside and landside facilities. Although each area is treated separately, ultimate planning will integrate the individual requirements so they can complement one another.

AIRSIDE CONSIDERATIONS

Airside planning considerations generally relate to airport elements that contribute to the safe and efficient transition of aircraft and passengers from air transportation to the landside facilities at the airport. Planning must factor and balance many airside items, including meeting FAA design parameters of the established design aircraft, instrument approach capability, airfield capacity, runway length, taxiway layouts, and pavement strengths. Each of these elements for GLE was analyzed in the previous chapter. The alternatives to follow will examine airside improvement opportunities to meet design standards and/or capacity constraints, along with potential facility needs to accommodate commercial service and/or air cargo. A summary of the primary airside planning issues to be considered in this alternatives analysis is included below.

Airside Planning Considerations

1. Meet future/ultimate design standards on both runways
2. Ultimate crosswind runway disposition; construction of parallel runway
3. Analyze extension options for primary Runway 18-36
4. Mitigate non-standard conditions in safety areas
5. Improved instrument approach capability
6. Corrective measures for non-standard taxiway geometry
7. Upgraded/new visual approach aids and lighting
8. Preliminary site analysis for the potential addition of an airport traffic control tower

Consideration #1 – Meet Future/Ulimate Design Standards

The critical aircraft analysis in Chapter Two concluded that primary Runway 18-36 should meet RDC C-II-4000 design standards in the future condition, with a potential to meet RDC C-IV-2400 in the ultimate condition, based on possible air cargo activity. Runway 18-36 is currently categorized as RDC B-II-4000; however, it already meets some of the design standards associated with the future C-II condition, including those for runway width and runway-parallel taxiway separation. A transition to either the future or ultimate condition would, however, result in larger safety areas. The alternatives to follow will illustrate options to protect the safety areas in all conditions (existing, future, and ultimate) while also presenting mitigative actions for any non-standard conditions. **It should be clearly stated that the ultimate scenario is not currently justified, and alternatives depicting this scenario are included for conceptual planning purposes only. Additional evaluation and justification would be required to support capital projects based on this design standard.**

Crosswind Runway 13-31 is currently classified as RDC B-I-VIS, meaning it supports smaller aircraft and is a visual runway only, without published instrument approach procedures. This runway is planned to continue to meet these design standards, should it continue to be maintained in the future.

Consideration #2 – Ultimate Crosswind Runway Disposition/Construction of Parallel Runway

Analysis presented in the previous chapter detailed the wind coverage provided by primary Runway 18-36 (refer to Exhibit 3B). According to the analysis, Runway 18-36 provides 97.31 percent coverage in 10.5 knot conditions and greater than 98.79 percent coverage in 13-knot and higher conditions. Generally, the FAA considers a crosswind runway eligible when the primary runway provides less than 95 percent coverage; however, new guidance indicates that an existing crosswind runway may be considered a “legacy” crosswind runway if certain criteria are met, even if the primary runway provides greater than 95 percent coverage – such is the case at GLE. For this reason, the airside alternatives to follow will depict one scenario in which the existing crosswind Runway 13-31 is maintained, and several other scenarios in which it is decommissioned to allow for other development opportunities.

Construction of a parallel runway is also considered in the airside alternatives. While the capacity analysis in Chapter Three did not indicate that the airport’s annual service volume (ASV) would be constrained over the planning period, resulting in significant delay, the airport sponsor and other local stakeholders

have been coordinating with a consultant to evaluate the potential construction of a parallel runway to support activities outside of general aviation, such as air cargo. As such, that potential will be included within this analysis; however, **it should be clearly stated that a parallel runway is not currently justified, and alternatives are included for conceptual planning purposes only. Additional evaluation and justification would be required to support capital projects based on this design standard.**

Consideration #3 – Analyze Runway Extension Options for Runway 18-36

Primary Runway 18-36 is currently 6,000 feet long. The runway length analysis in the previous chapter illustrated that some turbine operators are weight-restricted or unable to operate on the existing runway length, especially during hot weather. A length of 6,400 feet is recommended to accommodate 100 percent of the business jet fleet (aircraft less than 60,000 pounds) at 60 percent of their useful load, per FAA runway length calculations. Aircraft-specific analysis indicated that payload reductions would be necessary for many of these aircraft to operate on the existing length, including those within the future critical aircraft family. For example, the Falcon 900 and Embraer 135 require lengths of 7,130 feet and 8,231 feet, respectively, to operate at their full useful loads. The ultimate critical aircraft (Boeing 767-300) requires a length of 9,300 feet to operate at its maximum takeoff weight. As such, extension options for the primary runway will be analyzed in the airside alternatives to follow. These options will carefully weigh the cost/benefit of extending the runway when considering existing constraining factors, including adjacent roads and other off-airport development.

Consideration #4 – Mitigate Non-standard Conditions in Safety Areas

Chapter Three evaluated the safety areas associated with each runway in the existing, future, and ultimate conditions. In the existing condition, the primary consideration is the overlap of the runway safety areas (RSA) at the point where the extended Runway 13 centerline converges with Runway 18-36. There is also vegetation located within the Runway 13-31 runway object free area (ROFA). In the future/ultimate condition, the RSA and ROFA dimensions increase on Runway 18-36, which results in the introduction of vegetation within the ROFA. The runway protection zones (RPZ) associated with Runway 18-36 are also considered non-standard as they are not fully owned/controlled by the airport and contain incompatible land uses (i.e., buildings and public roads). The alternatives will consider mitigation options for these non-standard conditions.

Consideration #5 – Improved Instrument Approach Procedures

GLE is currently equipped with two published instrument approach procedures. Each end of Runway 18-36 has a localizer performance with vertical guidance (LPV) via an area navigation (RNAV) global positioning system (GPS) approach. Runway 18 has visibility minimums down to $\frac{7}{8}$ -mile, and Runway 36 has minimums down to $\frac{3}{4}$ -mile. There are currently no instrument approaches to crosswind Runway 13-31.

As described in Chapter Three, the approach visibility minimums serving the airport are considered sufficient for the future condition; however, the alternatives will consider improved instrument approach capability in the ultimate condition, with visibility minimums reduced to $\frac{1}{2}$ -mile for aircraft approaching from the north. This would result in a larger RPZ for the affected runway end, as well as the need for an approach lighting system.

Consideration #6 – Corrective Measures for Non-standard Taxiway Features

Direct Access

FAA taxiway geometry design standards recommend offsetting taxiway connections between aprons and runways to mitigate the potential for pilots who are unfamiliar with the airport layout to unintentionally taxi directly onto a runway, resulting in a runway incursion. Taxiway C allows for direct access to Runway 18-36 from the terminal apron, while the taxiway connector serving Runway 13-31 is a direct access point from the midfield T-hangars. The airside alternatives present options for eliminating these direct access points to enhance safety.

Aligned Taxiway

Runway 13 is accessible via an aligned taxiway, which is a non-standard condition that presents an elevated risk to aircraft operating on those surfaces. An option to correct this will be shown on the alternative that maintains Runway 13-31 in place.

Consideration #7 – Visual Approach Aids and Airfield Lighting

Both ends of primary Runway 18-36 are equipped with two-light precision approach path indicator (PAPI-2) systems. A four-light PAPI (PAPI-4) is recommended for airports serving turbine aircraft operations. As GLE currently serves and is anticipated to be utilized more frequently by turboprops and jets, PAPI-4s are recommended for each runway end when the need arises. Runway end identifier lights (REILs) are available on both ends of Runway 18-36. These systems are recommended for runway ends not served by a more sophisticated approach light system. Approach light systems are only required for instrument approaches that provide lower than $\frac{3}{4}$ -mile visibility minimums but are recommended for approaches with minimums between $\frac{3}{4}$ -mile and one-mile. As such, the alternatives to follow will depict an option that includes a medium intensity approach lighting system with runway alignment indicator lights (MALSR) on Runway 18, in the event that reduced minimums are established. Runway 18 is the runway most commonly used during instrument flight rules (IFR) conditions.

Crosswind Runway 13-31 is not equipped with any visual approach aids. An option to add these features will be shown on the alternative that maintains Runway 13-31 in place.

The medium intensity runway lighting (MIRL) currently installed on Runway 18-36 is considered adequate for the future condition; however, an upgrade to HIRL on the primary runway may be warranted in the ultimate condition. If maintained, Runway 13-31 should be equipped with MIRL. All taxiways are currently equipped with centerline reflectors, which should be upgraded to medium intensity taxiway lighting (MITL).

Consideration #8 – Airport Traffic Control Tower

The airport is not currently equipped with an airport traffic control tower (ATCT). Preliminary analysis, detailed in Chapter Three, indicated that GLE may be eligible for the addition of an ATCT in the future. This initial assessment is based solely off estimated operational data and serves simply as a starting point.

Should the City of Gainesville decide to pursue construction of a tower, the FAA will conduct its own analysis utilizing additional factors. If the FAA determines that a tower is justified, additional study will be required before construction. However, for planning purposes, the alternatives will present several potential locations on airport property that meet FAA ATCT siting criteria.¹ Each site assumes a footprint of ¼-acre, with variable tower and cab heights. It should be clearly stated that these sites are preliminary in nature and are subject to change based on the ultimate tower design, runway disposition, and ultimate landside development.

AIRSIDE ALTERNATIVES

Several alternatives have been prepared to address the items outlined above. The details of each alternative are described as follows.

AIRSIDE ALTERNATIVE 1

Airside Alternative 1 is based upon meeting a future RDC of C-II-4000 for Runway 18-36 and maintaining Runway 13-31 at RDC B-I-VIS. This option is depicted on **Exhibit 4A** and considers the following:

- Primary Runway 18-36 is extended to the north by 600 feet, bringing the total runway length to 6,600 feet. This exceeds the 6,400 feet recommended to accommodate 100 percent of the business jet fleet at 60 percent useful load; however, the additional length would allow for these aircraft to operate with heavier payloads and would also accommodate the Embraer 135, a common regional jet and one that is utilized by JSX, at 70 percent of its useful load.
- With a transition to C-II, the dimensions of the RSA and ROFA associated with Runway 18-36 increase, encompassing a larger area. This, in combination with the proposed extension, results in approximately 4.1 acres of property within the future RSA and ROFA extending beyond the existing airport boundary and over County Road (CR) 404. This property is proposed to be acquired fee simple and this portion of the roadway closed. Other obstructions within the RSA and ROFA are proposed to be removed or relocated and the RSA graded, as necessary.
- Property within the Runway 18 RPZ (30.3 acres) and Runway 36 RPZ (21.6) acres is proposed to be acquired fee simple (preferred) or protected via acquisition of easements to limit new development in these areas. No changes to FM 1200, which passes through the northeast corner of the future Runway 18 RPZ, are proposed.
- Taxiway A is extended north to the ultimate Runway 18 end. The taxiway extension is planned to meet taxiway design group (TDG) 2A standards, which calls for a width of 35 feet.

¹ This analysis utilized components of the operational requirements stated in FAA AC 6480.4b, specifically sections of 6480.4b Appendix D (Visibility Performance Analyses). The FAA Air Traffic Control Visibility Analysis Tool were utilized to determine minimum cab heights based on potential tower sites. Line of Sight analysis was not conducted at this phase of the study.

SAFETY AREAS

Runway 18-36 Future RDC: C-II-4000
 Runway 13-31 Existing/Ultimate RDC: B-I-VIS

Notes:

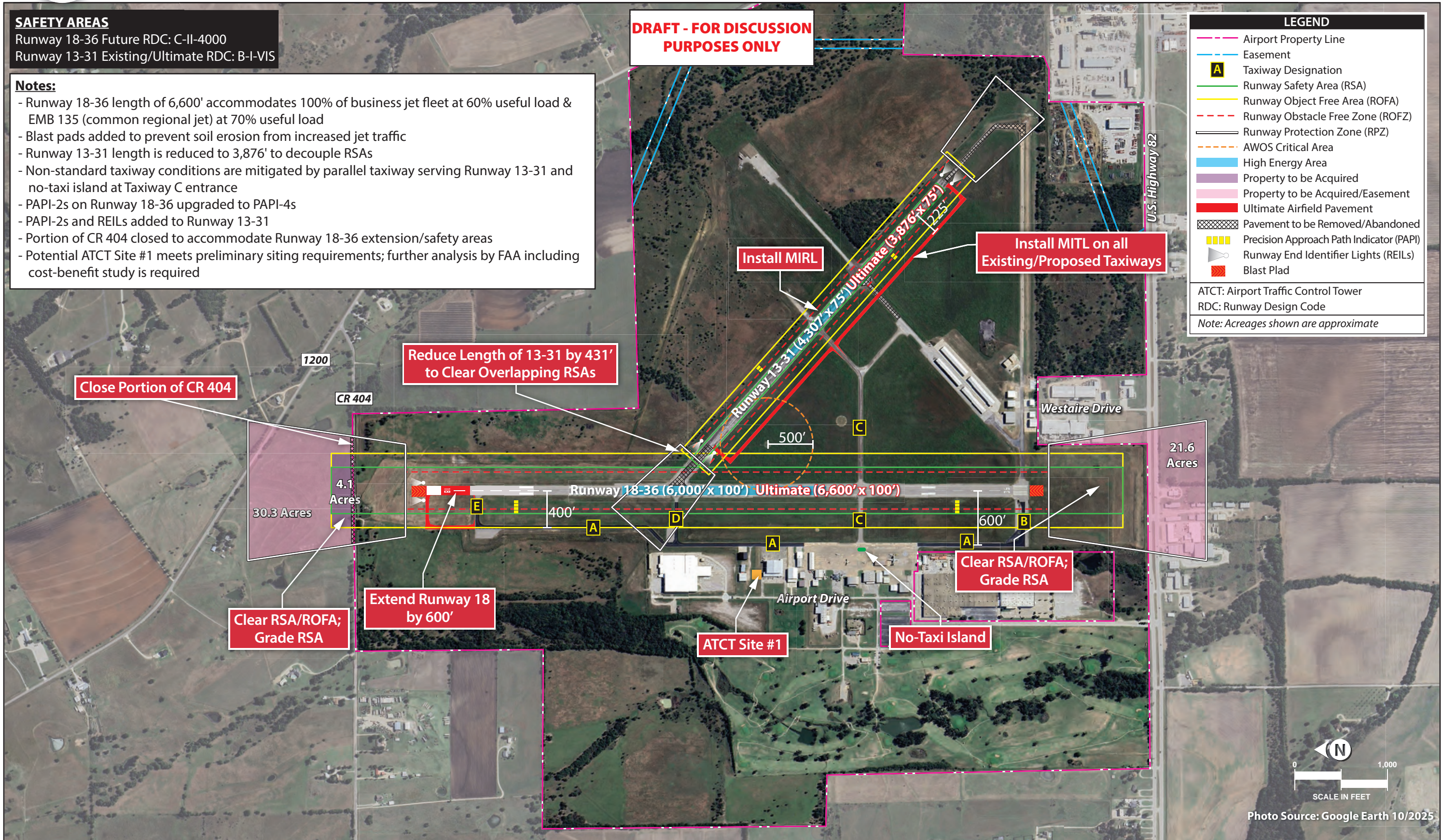
- Runway 18-36 length of 6,600' accommodates 100% of business jet fleet at 60% useful load & EMB 135 (common regional jet) at 70% useful load
- Blast pads added to prevent soil erosion from increased jet traffic
- Runway 13-31 length is reduced to 3,876' to decouple RSAs
- Non-standard taxiway conditions are mitigated by parallel taxiway serving Runway 13-31 and no-taxi island at Taxiway C entrance
- PAPI-2s on Runway 18-36 upgraded to PAPI-4s
- PAPI-2s and REILs added to Runway 13-31
- Portion of CR 404 closed to accommodate Runway 18-36 extension/safety areas
- Potential ATCT Site #1 meets preliminary siting requirements; further analysis by FAA including cost-benefit study is required

DRAFT - FOR DISCUSSION PURPOSES ONLY

LEGEND

- Airport Property Line
- - - Easement
- A** Taxiway Designation
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- - - Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- High Energy Area
- Property to be Acquired
- Property to be Acquired/Easement
- Ultimate Airfield Pavement
- Pavement to be Removed/Abandoned
- Precision Approach Path Indicator (PAPI)
- Runway End Identifier Lights (REILs)
- Blast Pad

ATCT: Airport Traffic Control Tower
 RDC: Runway Design Code
 Note: Acreages shown are approximate



This page intentionally left blank

- Blast pads are added at both ends of Runway 18-36 to mitigate any potential for soil erosion caused by jet wash.
- Relocation of the REILs serving Runway 18, in accordance with the proposed runway extension.
- Crosswind Runway 13-31 is reduced in length by 431 feet at the Runway 13 end, with pavement proposed to be removed or abandoned. The resulting runway length is 3,867 feet. This reduction would shift the RSA associated with Runway 13-31 off of the RSA associated with Runway 18-36, mitigating the overlapping RSA condition that currently exists.
- A parallel taxiway serving Runway 13-31 is proposed to mitigate the aligned taxiway that serves Runway 13.
- A portion of taxiway pavement that extends from the T-hangar area and connects to Runway 13-31 is proposed to be removed, eliminating direct access from these hangars to the runway.
- A no-taxi island is proposed to be marked on the terminal apron at the entrance to Taxiway C to mitigate direct access from the apron to Runway 18-36. A no-taxi island is an area of either natural or artificial turf or paint that functions to force pilots to make a turn prior to entering the runway environment, thereby improving pilot situational awareness and reducing the risk of a runway incursion.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on Runway 18-36, installation of a PAPI-2s and REILs on Runway 13-31, installation of MIRL on Runway 13-31, and installation of MITL on all existing and proposed taxiways.
- ATCT Site #1 is located north of the terminal apron and is set back approximately 900 feet from the runway centerline. In this location, the cab is planned for an observer eye height of 72 feet. The tower is east-facing. The FAA prefers that towers be oriented to the north, but east, west, and south orientations (in that order) are also considered when factoring in direct and indirect sun glare, nighttime lighting glare, external light sources, and thermal distortion.

AIRSIDE ALTERNATIVE 2

Airside Alternative 2 is based upon meeting a future RDC of C-II-4000 for Runway 18-36, with Runway 13-31 decommissioned. This option is depicted on **Exhibit 4B** and considers the following:

- Primary Runway 18-36 is extended to the north by 1,000 feet, bringing the total runway length to 7,000 feet. This is the length depicted on the currently approved ALP on file with TxDOT Aviation and the FAA. This length could accommodate a wider array of turbine operators, including the Embraer 135 at 80 percent of its useful load.
- Due to the Runway 18-36 extension and increased safety area dimensions, approximately 12.9 acres of property within the future RSA and ROFA would extend beyond the existing airport boundary and would encompass CR 404. This property is proposed to be acquired fee simple and this portion of the roadway closed. Other obstructions within the RSA and ROFA are proposed to be removed or relocated and the RSA graded, as necessary.

- Approximately 32.9 acres of property within the future Runway 18 RPZ is proposed to be acquired fee simple or protected via easement. Compared to the previous alternative, a larger portion of FM 1200 would be encompassed within the RPZ. As such, this road is proposed to be rerouted outside the RPZ and provide a connection to CR 404 west of the runway.
- Taxiway A is extended north to the ultimate Runway 18 end. The taxiway extension is planned to meet TDG 2A standards and includes construction of a multi-lane holding bay, with removal of the existing holding bay pavement.
- Blast pads are added at both ends of Runway 18-36 to mitigate any potential for soil erosion caused by jet wash.
- Relocation of the REILs serving Runway 18, in accordance with the proposed runway extension.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement removed or abandoned. As mentioned previously, the wind roses depicted in Chapter Three (see Exhibit 3B) indicated that primary Runway 18-36 provides greater than 95 percent coverage during crosswind conditions, which exceeds the FAA's threshold for crosswind runway eligibility. While Runway 13-31 would likely still be considered eligible for federal grant funding as it meets the criteria to be defined as a legacy crosswind runway, the runway is in poor condition and is in need of significant rehabilitation. Therefore, it is prudent to consider a scenario in which the runway is closed, allowing for capital funds to be invested in other projects and for expanded development potential on the airport's east side.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned, including the portion of Taxiway C east of Runway 18-36.
- To resolve the direct access from the terminal apron, this alternative proposes closure of Taxiway C west of Runway 18-36 and construction of a new connector taxiway to the north.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on Runway 18-36 and installation of MITL on all existing and proposed taxiways.
- ATCT Site #2 is located northwest of the terminal apron and is set back approximately 1,300 feet from the runway centerline. In this location, the cab is planned for an observer eye height of 80 feet and is east-facing (second preferred orientation).

AIRSIDE ALTERNATIVE 3

Airside Alternative 3 is based upon meeting a future RDC of C-II-4000 for Runway 18-36, with Runway 13-31 decommissioned. This option is depicted on **Exhibit 4C** and considers the following:

- Primary Runway 18-36 is extended to the north by 2,200 feet, bringing the total runway length to 8,200 feet. This length could accommodate more than 75 percent of the business jet fleet at 90 percent useful load, and the Embraer 135 at nearly 100 percent of its useful load.

SAFETY AREAS

Runway 18-36 Future RDC: C-II-4000

Notes:

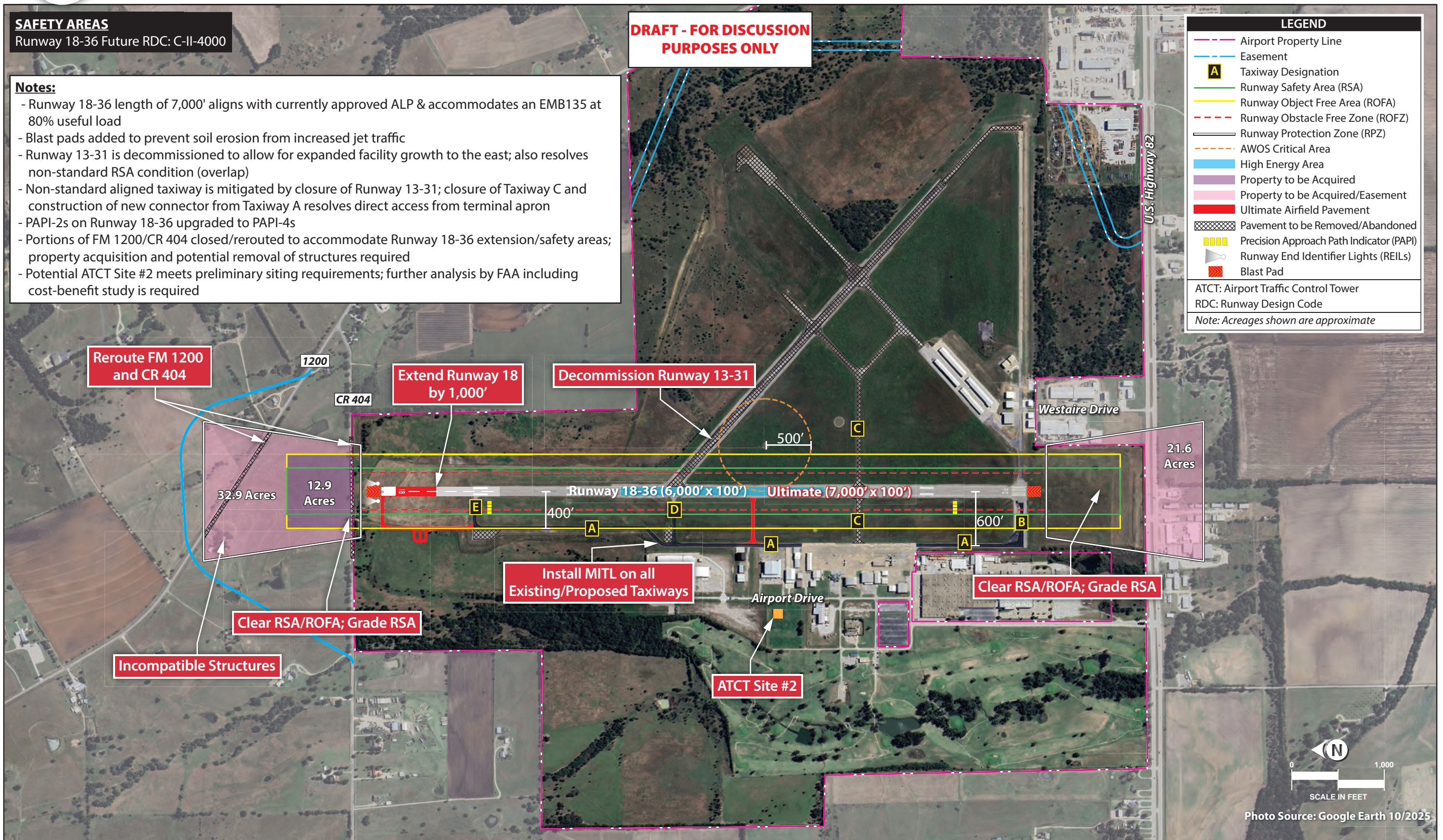
- Runway 18-36 length of 7,000' aligns with currently approved ALP & accommodates an EMB135 at 80% useful load
- Blast pads added to prevent soil erosion from increased jet traffic
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap)
- Non-standard aligned taxiway is mitigated by closure of Runway 13-31; closure of Taxiway C and construction of new connector from Taxiway A resolves direct access from terminal apron
- PAPI-2s on Runway 18-36 upgraded to PAPI-4s
- Portions of FM 1200/CR 404 closed/rerouted to accommodate Runway 18-36 extension/safety areas; property acquisition and potential removal of structures required
- Potential ATCT Site #2 meets preliminary siting requirements; further analysis by FAA including cost-benefit study is required

DRAFT - FOR DISCUSSION PURPOSES ONLY

LEGEND

- Airport Property Line
- - - Easement
- A** Taxiway Designation
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- - - Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- High Energy Area
- Property to be Acquired
- Property to be Acquired/Easement
- Ultimate Airfield Pavement
- Pavement to be Removed/Abandoned
- Precision Approach Path Indicator (PAPI)
- Runway End Identifier Lights (REILs)
- Blast Pad

ATCT: Airport Traffic Control Tower
RDC: Runway Design Code
Note: Acreages shown are approximate



Reroute FM 1200 and CR 404

Extend Runway 18 by 1,000'

Decommission Runway 13-31

32.9 Acres
12.9 Acres

21.6 Acres

Install MITL on all Existing/Proposed Taxiways

Clear RSA/ROFA; Grade RSA

Clear RSA/ROFA; Grade RSA

Incompatible Structures

ATCT Site #2

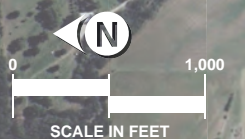


Photo Source: Google Earth 10/2025

SAFETY AREAS

Runway 18-36 Future RDC: C-II-4000

Notes:

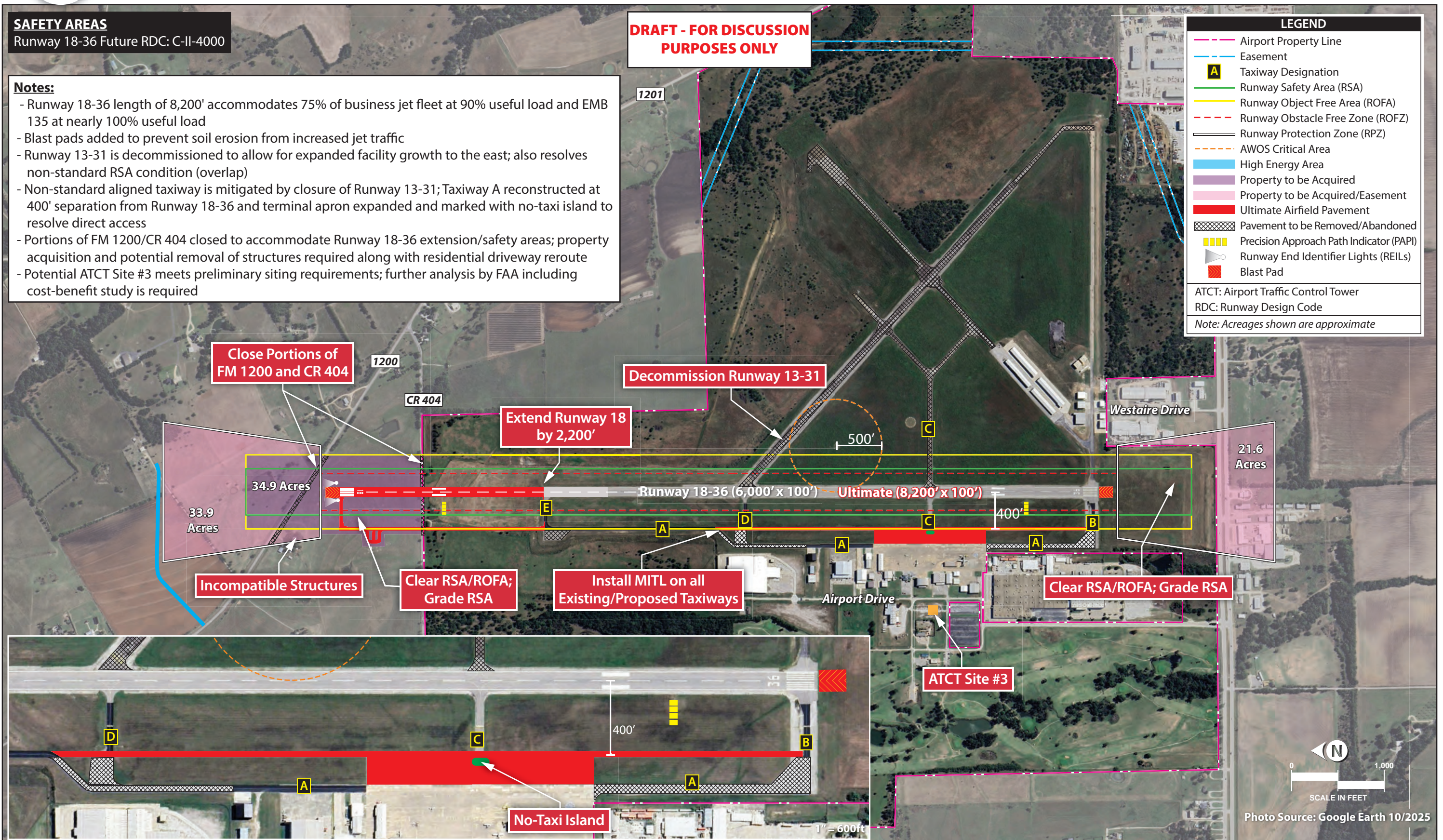
- Runway 18-36 length of 8,200' accommodates 75% of business jet fleet at 90% useful load and EMB 135 at nearly 100% useful load
- Blast pads added to prevent soil erosion from increased jet traffic
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap)
- Non-standard aligned taxiway is mitigated by closure of Runway 13-31; Taxiway A reconstructed at 400' separation from Runway 18-36 and terminal apron expanded and marked with no-taxi island to resolve direct access
- Portions of FM 1200/CR 404 closed to accommodate Runway 18-36 extension/safety areas; property acquisition and potential removal of structures required along with residential driveway reroute
- Potential ATCT Site #3 meets preliminary siting requirements; further analysis by FAA including cost-benefit study is required

DRAFT - FOR DISCUSSION PURPOSES ONLY

LEGEND

- Airport Property Line
- - - Easement
- A** Taxiway Designation
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- - - Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- High Energy Area
- Property to be Acquired
- Property to be Acquired/Easement
- Ultimate Airfield Pavement
- Pavement to be Removed/Abandoned
- Precision Approach Path Indicator (PAPI)
- Runway End Identifier Lights (REILs)
- Blast Pad

ATCT: Airport Traffic Control Tower
RDC: Runway Design Code
Note: Acreages shown are approximate



- Due to the Runway 18-36 extension and increased safety area dimensions, approximately 34.9 acres of property within the future RSA and ROFA would extend beyond the existing airport boundary and would encompass CR 404 and FM 1200. This property is proposed to be acquired fee simple and these portions of the roadways closed. Other obstructions within the RSA and ROFA are proposed to be removed or relocated and the RSA graded, as necessary.
- Approximately 33.9 acres of property within the future Runway 18 RPZ is also proposed to be acquired fee simple or protected via easement. The outer edge of the RPZ would abut a residential land use, and the driveway accessing this property would pass through the RPZ. This driveway is proposed to be rerouted outside the RPZ. The future Runway 18 RPZ also encompasses a portion of residential property in the southwestern corner of the RPZ, and the FAA would likely require structures within the RPZ to be removed.
- Taxiway A is extended north to the ultimate Runway 18 end. The taxiway extension is planned to meet TDG 2A standards and includes construction of a multi-lane holding bay, with removal of the existing holding bay pavement. Additional property to accommodate the taxiway object free area (TOFA) is also proposed to be acquired.
- The portion of Taxiway A that is separated from Runway 18-36 by 600 feet (south end) is proposed to be reconstructed at a separation of 400 feet to match the north end. This results in a more standard layout and provides an opportunity to expand the terminal apron. A no-taxi island is proposed at the entrance to Taxiway C to mitigate direct access (refer to inset photo on **Exhibit 4C**).
- Blast pads are added at both ends of Runway 18-36 to mitigate any potential for soil erosion caused by jet wash.
- Relocation of the REILs serving Runway 18, in accordance with the proposed runway extension.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement either removed or abandoned.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned, including the portion of Taxiway C east of Runway 18-36.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on Runway 18-36 and installation of MITL on all existing and proposed taxiways.
- ATCT Site # 3 is located directly west of the terminal apron and is set back approximately 1,300 feet from the runway centerline. In this location, the cab is planned for an observer eye height of 102 feet and is east-facing (second preferred orientation).

AIR CARGO RUNWAY ALTERNATIVES

The next series of alternatives reflect a scenario in which air cargo activity utilizing large, wide-body aircraft is established at GLE. As detailed previously, an ultimate RDC of C-IV-2400 was established for long-range planning purposes in the event this service is implemented, with the Boeing 767-300 serving as the representative aircraft. Analysis in Chapter Three determined that a length of 9,300 feet would be necessary to support this aircraft at its maximum takeoff weight.

Consideration was also given to the potential construction of a relief route for U.S. Highway 82. In August 2025, TxDOT released a generalized drawing depicting this bypass road, which is proposed north of the airport. If constructed as illustrated, the relief route may be a limiting factor for airfield development to the north, particularly if a longer runway intended to serve large cargo aircraft is constructed. Each of the alternatives to follow considers a 9,300-foot-long runway, based on the needs of the ultimate critical aircraft. The location of the proposed bypass roadway is also depicted. As can be seen in the exhibits to follow, a runway built to this length would potentially conflict with the proposed relief route in several of the alternatives. Nonetheless, the intent of this exercise is to illustrate these potential limitations so that they can be considered by City and TxDOT officials.

There is presently no justification supporting the construction of a new runway or an extension to the existing primary runway to accommodate this type of aircraft, and the alternatives presented in the following sections are included for conceptual planning purposes only.

AIRSIDE ALTERNATIVE 4

Airside Alternative 4 depicts three scenarios in which crosswind Runway 13-31 is decommissioned and a parallel runway designed to RDC C-IV-2400 standards is constructed, with the intention being to serve large cargo aircraft, as stated above. Existing Runway 18-36 is proposed to meet RDC C-II-4000. **Exhibit 4D** details these options on three drawings.

Airside Alternative 4.1

- Existing Runway 18-36 becomes ultimate Runway 18R-36L due to the construction of a new parallel runway to the east. The runway is maintained at its existing dimensions of 6,000 feet long by 100 feet wide, in accordance with RDC C-II-4000 standards.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement either removed or abandoned.
- Ultimate Runway 18L-36R is constructed at 9,300 feet long by 150 wide, in accordance with RDC C-IV-2400 standards for width. At these dimensions, the runway would be capable of accommodating a wide array of turbine aircraft, including a fully loaded Boeing 767-300. The runway is proposed to be separated from existing Runway 18-36 by 700 feet to the east, which is the minimum separation allowable for parallel runways in visual flight rules (VFR) conditions.

SAFETY AREAS

Runway 18R-36L Ultimate RDC: C-II-4000
 Runway 18L-36R Ultimate RDC: C-IV-2400

Notes:

- Existing Runway 18-36/Ultimate 18R-36L maintained at existing dimensions; blast pads constructed
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap)
- Ultimate Runway 18L-36R constructed at 9,300' long by 150' wide; this length would accommodate a fully loaded Boeing 767-300; separated from existing Runway 18-36 by 700' (minimum required for VFR operations)
- Ultimate Runway 18L-36R equipped with PAPI-4s, MALSR (18L), and REILs (36R)
- Significant property acquisition and road closures required
- Non-standard taxiway conditions are mitigated by closure of Runway 13-31; inclusion of no-taxi island at Taxiway C entrance resolves direct access
- PAPI-2s on Runway 18-36 upgraded to PAPI-4s
- Potential ATCT Site #4 meets preliminary siting requirements; further analysis by FAA including cost-benefit study is required
- Ultimate Runway 18L RPZ and MALSR may conflict with proposed bypass route

DRAFT - FOR DISCUSSION PURPOSES ONLY

LEGEND

- Airport Property Line
- Easement
- A Taxiway Designation
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- High Energy Area
- Property to be Acquired
- Property to be Acquired/Easement
- Ultimate Airfield Pavement
- Pavement to be Removed/Abandoned
- Precision Approach Path Indicator (PAPI)
- Runway End Identifier Lights (REILs)
- Blast Pad

ATCT: Airport Traffic Control Tower
 MALSR: Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
 RDC: Runway Design Code
 VFR: Visual Flight Rules

Note: Acreages shown are approximate

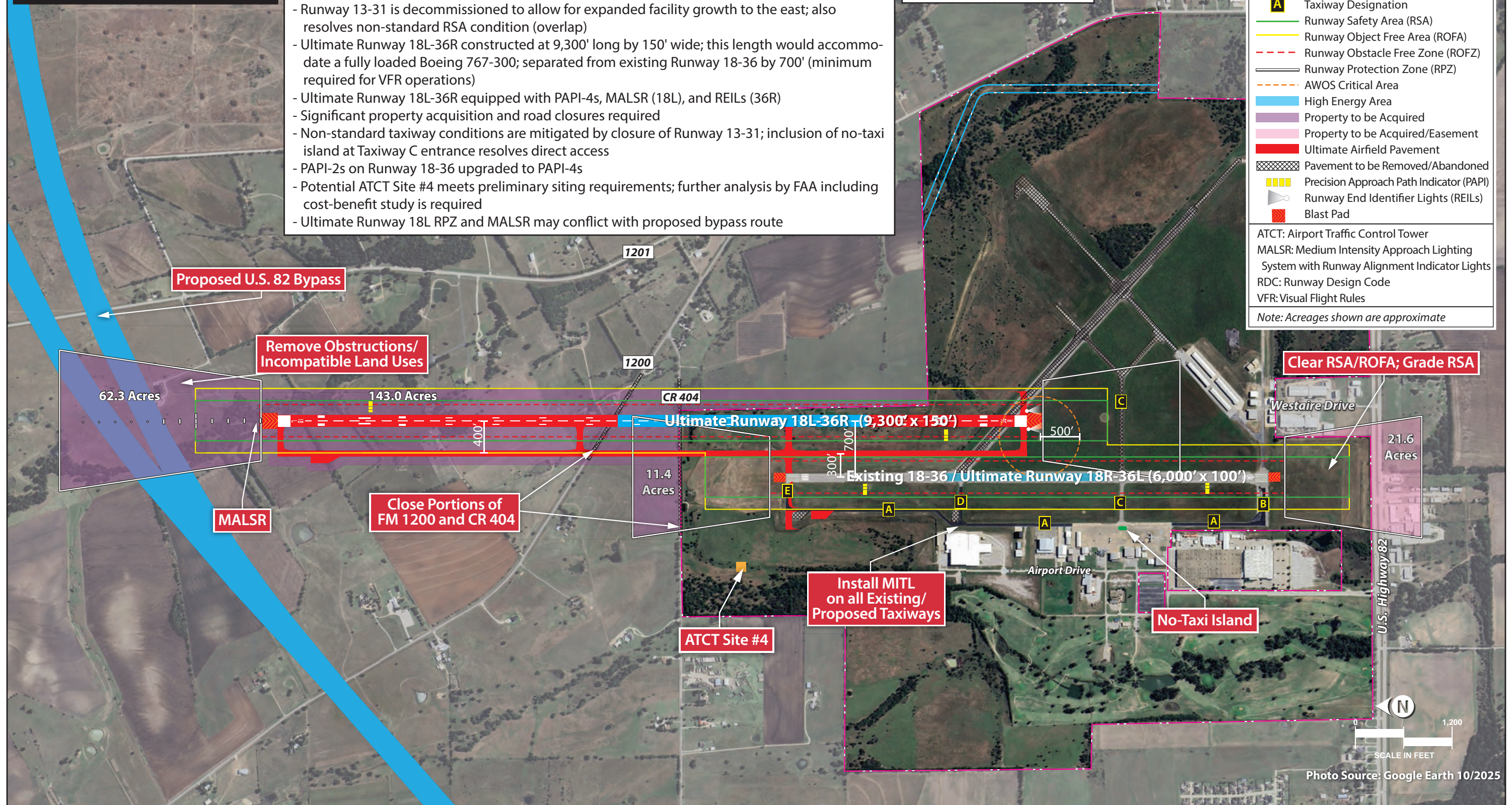


Photo Source: Google Earth 10/2025

This page intentionally left blank

- Construction of ultimate Runway 18L-36R would require a significant level of property acquisition. Approximately 143.0 acres of land would be necessary, at a minimum, to accommodate the RSA, ROFA, and TOFA associated with the proposed runway and parallel taxiway, with an additional 62.3 acres of property within the ultimate Runway 18L RPZ also proposed for fee simple acquisition. This property currently contains a variety of land uses, including roads (FM 1200 and CR 404), residential, and agricultural uses.
- As shown on the exhibit, construction of a parallel runway as described above would potentially conflict with the proposed U.S. Highway 82 relief route. The Runway 18L RPZ would encompass the roadway, and the bypass road would also interfere with several of the lights associated with the MALSR.
- Approximately 11.4 acres of property within the existing Runway 18 RPZ is proposed to be acquired fee simple, and the portion of CR 404 that traverses the RPZ closed. Approximately 21.6 acres in the existing Runway 36 RPZ is also proposed to be acquired or protected by easement.
- Blast pads are added to all runway ends to mitigate any potential for soil erosion caused by jet wash.
- Proposed taxiway pavement includes a full-length parallel taxiway serving the west side of ultimate Runway 18L-36R. This taxiway would be constructed to meet TDG 5 standards, which call for a width of 75 feet. The taxiway is positioned at a 300-foot separation from the existing Runway 18-36 centerline and a 400-foot separation from the ultimate Runway 18L-36R centerline. A holding bay near ultimate Runway 18L is also included.
- Existing Taxiway E, which currently serves as a threshold taxiway to Runway 18, is proposed to be widened to 75 feet and extended to the west accommodate future development north of the existing landside area (i.e., air cargo facilities). An eastward extension is also proposed to connect with the new parallel taxiway.
- A no-taxi island is proposed at the entrance to Taxiway C to mitigate direct access from the terminal apron to existing Runway 18-36.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned, including the portion of Taxiway C east of Runway 18-36.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on both runways, an approach lighting system (MALSR) on ultimate Runway 18L, REILs on ultimate Runway 36R, and MITL on all existing and proposed taxiways. HIRL is proposed on ultimate Runway 18L-36R.
- ATCT Site # 4 is located northwest of Runway 18 and is set back approximately 1,330 feet from the existing Runway 18-36 centerline. In this location, the cab is planned for an observer eye height of 83 feet and is east-facing (second preferred orientation).

Airside Alternative 4.2

- Existing Runway 18-36 becomes ultimate Runway 18R-36L due to the construction of a new parallel runway to the east. The runway is maintained at its existing dimensions of 6,000 feet long by 100 feet wide, in accordance with RDC C-II-4000 standards.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement either removed or abandoned.
- Ultimate Runway 18L-36R is constructed at 9,300 feet long by 150 wide, in accordance with RDC C-IV-2400 standards. At these dimensions, the runway would be capable of accommodating a wide array of turbine aircraft, including a fully loaded Boeing 767-300. The runway is proposed to be separated from existing Runway 18-36 by 2,500 feet to the east, which would allow for simultaneous operations during instrument flight rules (IFR) conditions.
- Construction of ultimate Runway 18L-36R would require a significant level of property acquisition. Approximately 145.6 acres of land would be necessary, at a minimum, to accommodate the RSA, ROFA, and TOFA associated with the proposed runway and parallel taxiway. An additional 62.3 acres of property within the ultimate Runway 18L RPZ is also proposed for fee simple acquisition. This property currently contains a variety of land uses, including roads (FM 1200 and 1201), residential, and agricultural uses.
- As shown on the exhibit, construction of a parallel runway and its associated safety areas and equipment would be clear of the proposed U.S. Highway 82 bypass route.
- Approximately 19.0 acres of property within the existing Runway 18 RPZ and 21.6 acres within the existing Runway 36 RPZ are proposed to be acquired fee simple or protected via easement.
- Blast pads are added to all runway ends to mitigate any potential for soil erosion caused by jet wash.
- Proposed taxiway pavement includes a parallel taxiway serving the east side of ultimate Runway 18L-36R, with several connectors providing access to the runway. Two stub taxiways extending from the proposed parallel taxiway are shown, intended to serve future landside development. All taxiways serving ultimate Runway 18L-36R are depicted at 75 feet wide, in accordance with TDG 5 standards. (Note: A west-side parallel taxiway was also considered, based on the potential to develop the midfield area between the two runways. However, vehicle access to this area from the south, which would be preferred, may be more challenging given existing and future development [i.e., hangars and taxiway pavement].)
- A no-taxi island is proposed at the entrance to Taxiway C to mitigate direct access from the terminal apron to existing Runway 18-36.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned. This does not include Taxiway C east of existing Runway 18-36, which is proposed to remain in place to provide access to the T-hangar units east of existing Runway 36.

SAFETY AREAS

Runway 18R-36L Ultimate RDC: C-II-4000
 Runway 18L-36R Ultimate RDC: C-IV-2400

Notes:

- Existing Runway 18-36/Ultimate 18R-36L maintained at existing dimensions; blast pads constructed
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap)
- Ultimate Runway 18L-36R constructed at 9,300' long by 150' wide; this length would accommodate a fully loaded Boeing 767-300; separated from existing Runway 18-36 by 2,500' (allows for simultaneous IFR operations)
- Ultimate Runway 18L-36R equipped with PAPI-4s, MALSR (18L), and REILs (36R)
- Significant property acquisition and road closures required
- Non-standard taxiway conditions are mitigated by closure of Runway 13-31; inclusion of no-taxi island at Taxiway C entrance resolves direct access
- PAPI-2s on Runway 18-36 upgraded to PAPI-4s
- Potential ATCT Site #5 meets preliminary siting requirements; further analysis by FAA including cost-benefit study is required
- Proposed bypass route clear of Ultimate Runway 18L-36R and safety areas

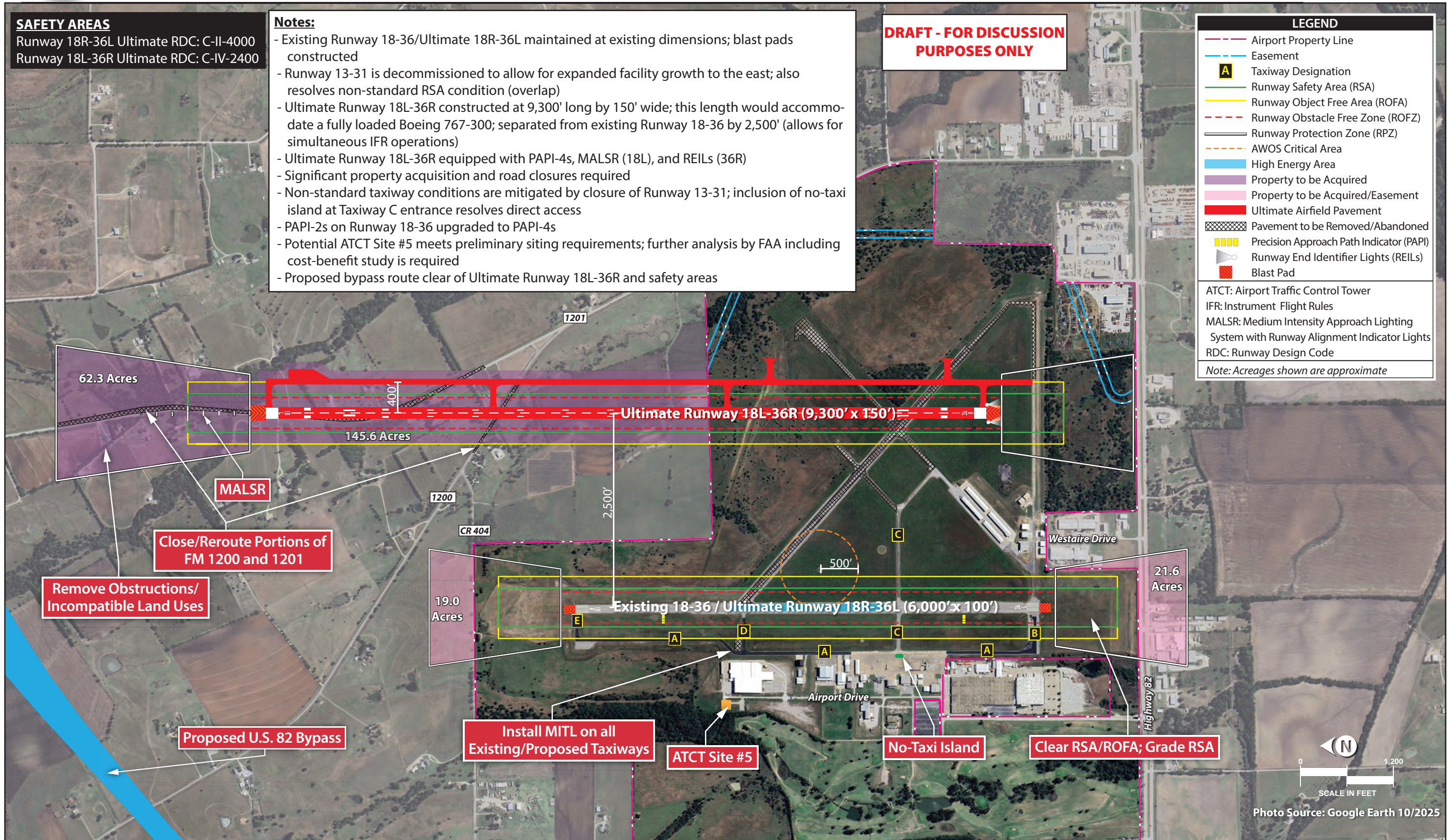
DRAFT - FOR DISCUSSION PURPOSES ONLY

LEGEND

- Airport Property Line
- - - Easement
- [A] Taxiway Designation
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- - - Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- High Energy Area
- Property to be Acquired
- Property to be Acquired/Easement
- Ultimate Airfield Pavement
- Pavement to be Removed/Abandoned
- Precision Approach Path Indicator (PAPI)
- Runway End Identifier Lights (REILs)
- Blast Pad

ATCT: Airport Traffic Control Tower
 IFR: Instrument Flight Rules
 MALSR: Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
 RDC: Runway Design Code

Note: Acreages shown are approximate



This page intentionally left blank

- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on both runways, a MALSR on ultimate Runway 18L, REILs on ultimate Runway 36R, and MITL on all existing and proposed taxiways. HIRL is proposed on ultimate Runway 18L-36R.
- ATCT Site # 5 is located west of Airport Drive and is set back approximately 1,400 feet from the existing Runway 18-36 centerline. In this location, the cab is planned for an observer eye height of 132 feet and is east-facing (second preferred orientation).

Airside Alternative 4.3

- Existing Runway 18-36 becomes ultimate Runway 18L-36R due to the construction of a new parallel runway to the west. The runway is maintained at its existing dimensions of 6,000 feet long by 100 feet wide, in accordance with RDC C-II-4000 standards.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement either removed or abandoned.
- Ultimate Runway 18R-36L is constructed at 9,300 feet long by 150 wide, in accordance with RDC C-IV-2400 width standards. At these dimensions, the runway would be capable of accommodating a wide array of turbine aircraft, including a fully loaded Boeing 767-300. The runway is proposed to be separated from existing Runway 18-36 by 2,500 feet to the west, which would allow for simultaneous operations during instrument flight rules (IFR) conditions.
- Construction of ultimate Runway 18R-36L would require a significant level of property acquisition. Approximately 134.3 acres of land would be necessary, at a minimum, to accommodate the RSA, ROFA, and TOFA associated with the runway and parallel taxiway. An additional 62.3 acres of property within the ultimate Runway 18R RPZ is also proposed for fee simple acquisition. This property currently contains a variety of land uses, including roads (FM 1200 and CR 404), residential, industrial, and agricultural uses. The Gainesville Municipal Golf Course, which is located on airport property, would also be impacted.
- As shown on the exhibit, construction of a parallel runway as described above would potentially conflict with the proposed U.S. Highway 82 bypass route. The Runway 18R RPZ would encompass the roadway, and the route would also interfere with several of the lights associated with the MALSR.
- Approximately 19.0 acres of property within the existing Runway 18 RPZ and 21.6 acres within the existing Runway 36 RPZ are proposed to be acquired fee simple or protected via easement.
- Proposed taxiway pavement includes a parallel taxiway serving ultimate Runway 18R-36L, with connectors depicted to serve future landside development and link the proposed runway to existing facilities.
- Blast pads are added to all runway ends to mitigate any potential for soil erosion caused by jet wash.

- A no-taxi island is proposed at the entrance to Taxiway C to mitigate direct access from the terminal apron to existing Runway 18-36.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on both runways, a MALS on ultimate Runway 18R, REILs on ultimate Runway 36L, and MITL on all existing and proposed taxiways. HIRL is proposed on ultimate Runway 18R-36L.
- ATCT Site # 6 is located near the end of Airport Drive and is set back approximately 1,300 feet from the existing Runway 18-36 centerline. In this location, the cab is planned for an observer eye height of 151 feet and is north-facing (preferred orientation).

AIRSIDE ALTERNATIVE 5

Airside Alternative 5 depicts three scenarios in which existing Runway 18-36 meets an ultimate RDC of C-IV-2400 and Runway 13-31 is decommissioned. Two of these scenarios also include the addition of a new parallel runway intended to serve small general aviation aircraft and designed to RDC A-I(Small)-5000 standards. **Exhibit 4E** details these options on three drawings:

Airside Alternative 5.1

- Primary Runway 18-36 is shifted to the north approximately 650 feet to bring the Runway 36 RPZ onto airport property and off of U.S. Highway 82. The runway is then widened to 150 feet, in accordance with ultimate RDC C-IV-2400 design standards for width, and extended to the north by 3,950 feet. The resulting total runway length is 9,300 feet, making it capable of accommodating a wide array of turbine aircraft, including a fully loaded Boeing 767-300.
- Due to the runway shift/extension, approximately 75.5 acres of property within the future RSA, ROFA, and TOFA would extend beyond the existing airport boundary to the north and would encompass CR 404 and FM 1200, along with residential land uses. This property is proposed to be acquired fee simple and these portions of the roadways closed and structures removed. A new road connecting CR 404 west of the runway to FM 1200 is proposed to provide access to landowners along FM 1200.
- Approximately 62.3 acres of property within the ultimate Runway 18 RPZ is also proposed to be acquired fee simple.
- The proposed bypass route is clear of ultimate Runway 18-36 and its associated safety areas and equipment.
- Blast pads are added at both ends of Runway 18-36 to mitigate any potential for soil erosion caused by jet wash.

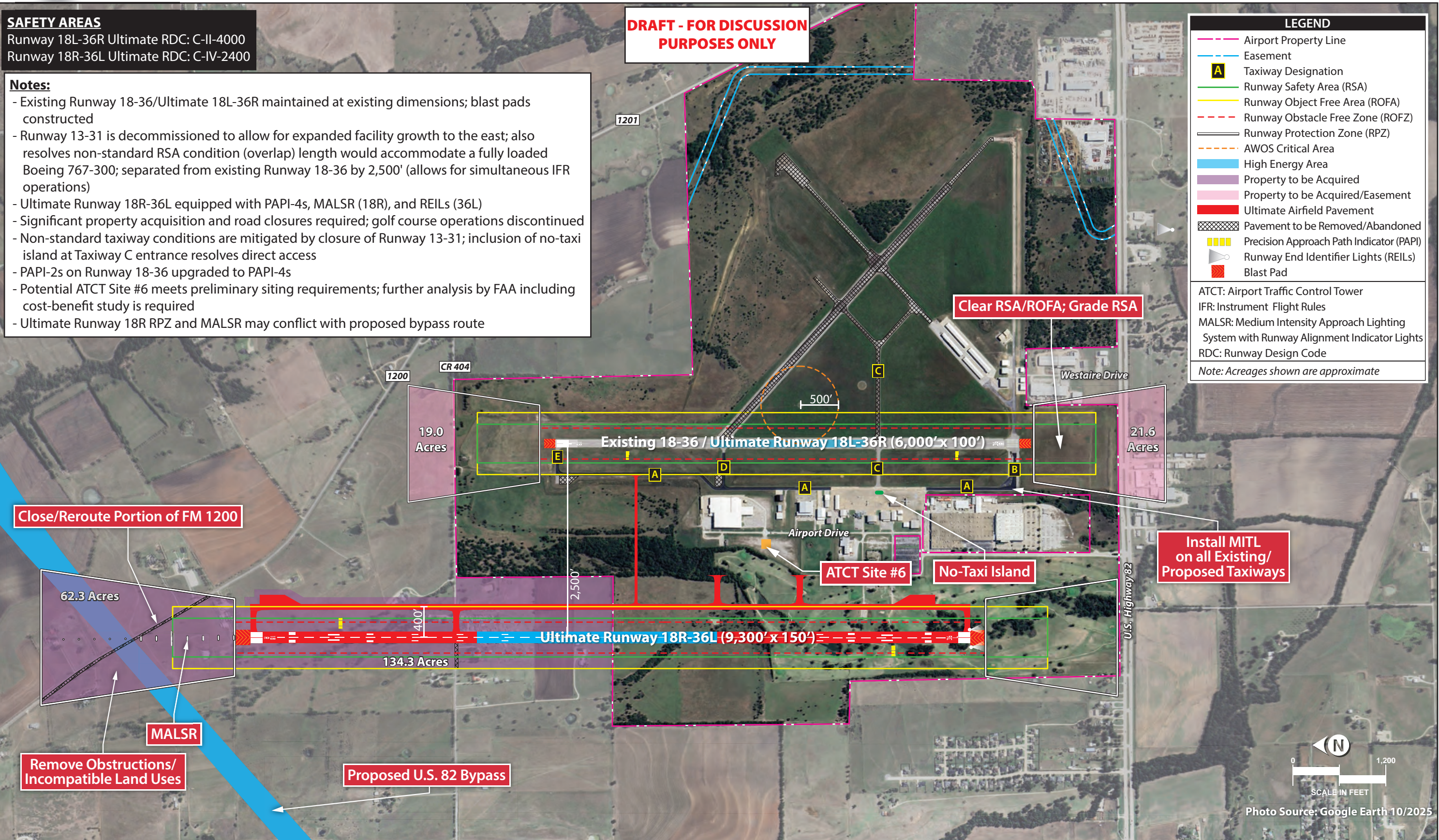
SAFETY AREAS

Runway 18L-36R Ultimate RDC: C-II-4000
 Runway 18R-36L Ultimate RDC: C-IV-2400

Notes:

- Existing Runway 18-36/Ultimate 18L-36R maintained at existing dimensions; blast pads constructed
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap) length would accommodate a fully loaded Boeing 767-300; separated from existing Runway 18-36 by 2,500' (allows for simultaneous IFR operations)
- Ultimate Runway 18R-36L equipped with PAPI-4s, MALSR (18R), and REILs (36L)
- Significant property acquisition and road closures required; golf course operations discontinued
- Non-standard taxiway conditions are mitigated by closure of Runway 13-31; inclusion of no-taxi island at Taxiway C entrance resolves direct access
- PAPI-2s on Runway 18-36 upgraded to PAPI-4s
- Potential ATCT Site #6 meets preliminary siting requirements; further analysis by FAA including cost-benefit study is required
- Ultimate Runway 18R RPZ and MALSR may conflict with proposed bypass route

DRAFT - FOR DISCUSSION PURPOSES ONLY



LEGEND

- Airport Property Line
- - - Easement
- A Taxiway Designation
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- - - Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- High Energy Area
- Property to be Acquired
- Property to be Acquired/Easement
- Ultimate Airfield Pavement
- Pavement to be Removed/Abandoned
- Precision Approach Path Indicator (PAPI)
- Runway End Identifier Lights (REILs)
- Blast Pad

ATCT: Airport Traffic Control Tower
 IFR: Instrument Flight Rules
 MALSR: Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
 RDC: Runway Design Code

Note: Acreages shown are approximate

Close/Reroute Portion of FM 1200

Clear RSA/ROFA; Grade RSA

Install MITL on all Existing/Proposed Taxiways

Remove Obstructions/Incompatible Land Uses

Proposed U.S. 82 Bypass

SAFETY AREAS

Runway 18-36 Ultimate RDC: C-IV-2400

Notes:

- Runway 18-36 widened and extended to accommodate a fully loaded 767-300; runway shifted north to remove Highway 82 from RPZ
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap)
- Runway 18-36 equipped with PAPI-4s and MALSR (18)
- Significant property acquisition and road closures required
- Non-standard taxiway conditions are mitigated by closure of Runway 13-31; inclusion of no-taxi island at Taxiway C entrance resolves direct access
- New taxiway pavement constructed at 75' wide; existing taxiways widened to 75'
- Proposed bypass route clear of Ultimate Runway 18-36 and safety areas
- Taxiway A reconstructed to clear Taxiway Object Free Area (TOFA)

DRAFT - FOR DISCUSSION PURPOSES ONLY

LEGEND

- Airport Property Line
 - - - Easement
 - A** Taxiway Designation
 - Runway Safety Area (RSA)
 - Runway Object Free Area (ROFA)
 - Runway Obstacle Free Zone (ROFZ)
 - Runway Protection Zone (RPZ)
 - AWOS Critical Area
 - High Energy Area
 - Property to be Acquired
 - Property to be Acquired/Easement
 - Ultimate Airfield Pavement
 - Pavement to be Removed/Abandoned
 - Precision Approach Path Indicator (PAPI)
- MALSR: Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
 RDC: Runway Design Code
 VFR: Visual Flight Rules
- Note: Acreages shown are approximate*

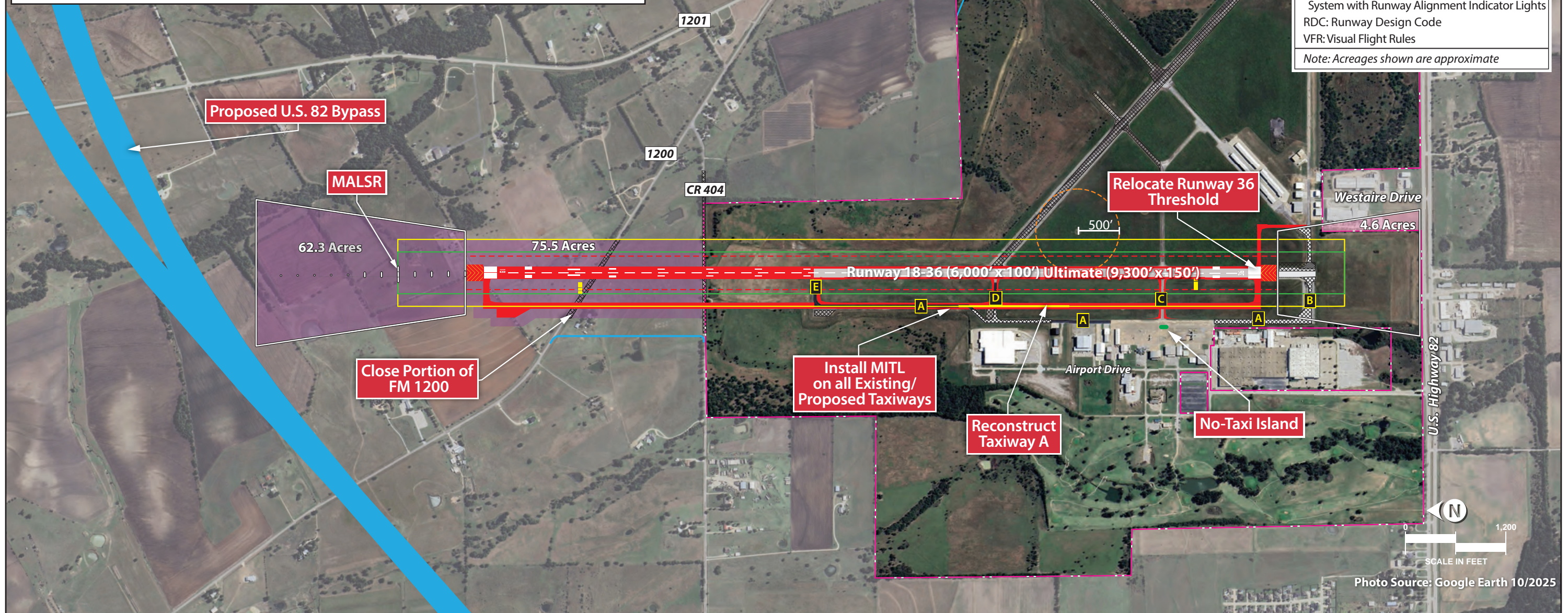


Photo Source: Google Earth 10/2025

- Taxiway A is extended north to the ultimate Runway 18 end. The taxiway extension is planned to meet TDG 5 standards and includes construction of holding bay, with removal of the existing holding bay pavement. Existing taxiway pavement that serves Runway 18-36 is proposed to be widened to 75 feet to meet the ultimate design standard. This would impact existing Taxiways A, C, D, and E. Taxiway B is proposed to be removed due to the relocation of the Runway 36 threshold, and new threshold/access taxiways constructed to the east and west.
- The southern portion of Taxiway A is proposed to be reconstructed so it is separated from ultimate Runway 18-36 by 400 feet, rather than 600 feet. In its current location, the TOFA would be obstructed by several of the hangars and other buildings along the taxiway, due to an increase in the TOFA dimensions in accordance with ADG IV.
- A no-taxi island is proposed at the entrance to Taxiway C to mitigate direct access from the terminal apron to existing Runway 18-36.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement either removed or abandoned.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on Runway 18-36, a MALSR on ultimate Runway 18, and installation of MITL on all existing and proposed taxiways. HIRL is proposed on ultimate Runway 18-36.

Airside Alternative 5.2

- Existing Runway 18-36 becomes ultimate Runway 18R-36L due to the construction of a new parallel runway 700 feet to the east. The runway dimensions are increased to 9,300 feet long by 150 wide, in accordance with RDC C-IV-2400 width standards. The runway is also shifted to the north approximately 650 feet to bring the ultimate Runway 36L RPZ onto airport property and off of U.S. Highway 82.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement either removed or abandoned.
- Ultimate Runway 18L-36R is constructed at 3,400 feet long by 60 feet wide, meeting RDC A-I(Small) standards for width. A length of 3,400 feet would accommodate 95 percent of the small aircraft fleet, as detailed in Chapter Three.
- Due to the extension of ultimate Runway 18R-36L, approximately 75.5 acres of property within the future RSA, ROFA, and TOFA would extend beyond the existing airport boundary and would encompass CR 404 and FM 1200, along with residential land uses. This property is proposed to be acquired fee simple and these portions of the roadways closed and structures removed. A new road connecting CR 404 west of the runway to FM 1200 is proposed to provide access to landowners along FM 1200.

- Approximately 62.3 acres of property within the future Runway 18R RPZ is also proposed to be acquired fee simple.
- The proposed bypass route is clear of Ultimate Runway 18R-36L and its associated safety areas and equipment.
- Blast pads are added at both ends of ultimate Runway 18R-36L to mitigate any potential for soil erosion caused by jet wash.
- Taxiway A is extended north to the ultimate Runway 18R end. The taxiway extension is planned to meet TDG 5 standards and includes construction of a holding bay, with removal of the existing holding bay pavement. Existing taxiway pavement that serves the runway is proposed to be widened to 75 feet to meet the ultimate design standard. This would impact existing Taxiways A, C, D, and E. Taxiway B is proposed to be removed due to the relocation of the ultimate Runway 36L threshold, and new threshold/access taxiways constructed.
- A no-taxi island is proposed at the entrance to Taxiway C to mitigate direct access from the terminal apron to existing Runway 18-36.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned, with the exception of Taxiway C.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on ultimate Runway 18R-36L, a MALSR on ultimate Runway 18R, and installation of MITL on all existing and proposed taxiways. HIRL is proposed on ultimate Runway 18R-36L, while MIRL is proposed for ultimate Runway 18L-36R.

Airside Alternative 5.3

- Existing Runway 18-36 becomes ultimate Runway 18L-36R due to the construction of a new parallel runway 1,930 feet to the west. The runway dimensions are increased to 9,300 feet long by 150 wide, in accordance with RDC C-IV-2400 width standards. The runway is also shifted to the north approximately 650 feet to bring the ultimate Runway 36R RPZ onto airport property and off of U.S. Highway 82.
- Crosswind Runway 13-31 is proposed to be decommissioned, and the pavement either removed or abandoned.
- Ultimate Runway 18R-36L is constructed at 3,400 feet long by 60 feet wide, meeting RDC A-I(Small) standards for width. A length of 3,400 feet would accommodate 95 percent of the small aircraft fleet, as detailed in Chapter Three.
- Due to the extension of ultimate Runway 18L-36R, approximately 75.5 acres of property within the future RSA, ROFA, and TOFA would extend beyond the existing airport boundary and would encompass CR 404 and FM 1200, along with residential land uses. This property is proposed to be

SAFETY AREAS

Runway 18R-36L Ultimate RDC: C-IV-2400
 Runway 18L-36R Ultimate RDC: A-I(Small)-5000

Notes:

- Existing Runway 18-36 (ultimate Runway 18R-36L) widened and extended to accommodate a fully loaded 767-300; runway shifted north to remove Highway 82 from RPZ
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap)
- Ultimate Runway 18L-36R constructed east of existing Runway 18-36 to serve small aircraft exclusively
- Ultimate Runway 18R-36L equipped with PAPI-4s and MALSR (18)
- Significant property acquisition and road closures required
- Non-standard taxiway conditions are mitigated by closure of Runway 13-31; inclusion of no-taxi island at Taxiway C entrance resolves direct access
- Taxiway pavement serving Ultimate Runway 18R-36L constructed at 75' wide; taxiway pavement serving Ultimate Runway 18L-36R constructed at 25' wide.
- Proposed bypass route clear of Ultimate Runway 18R-36L and safety areas

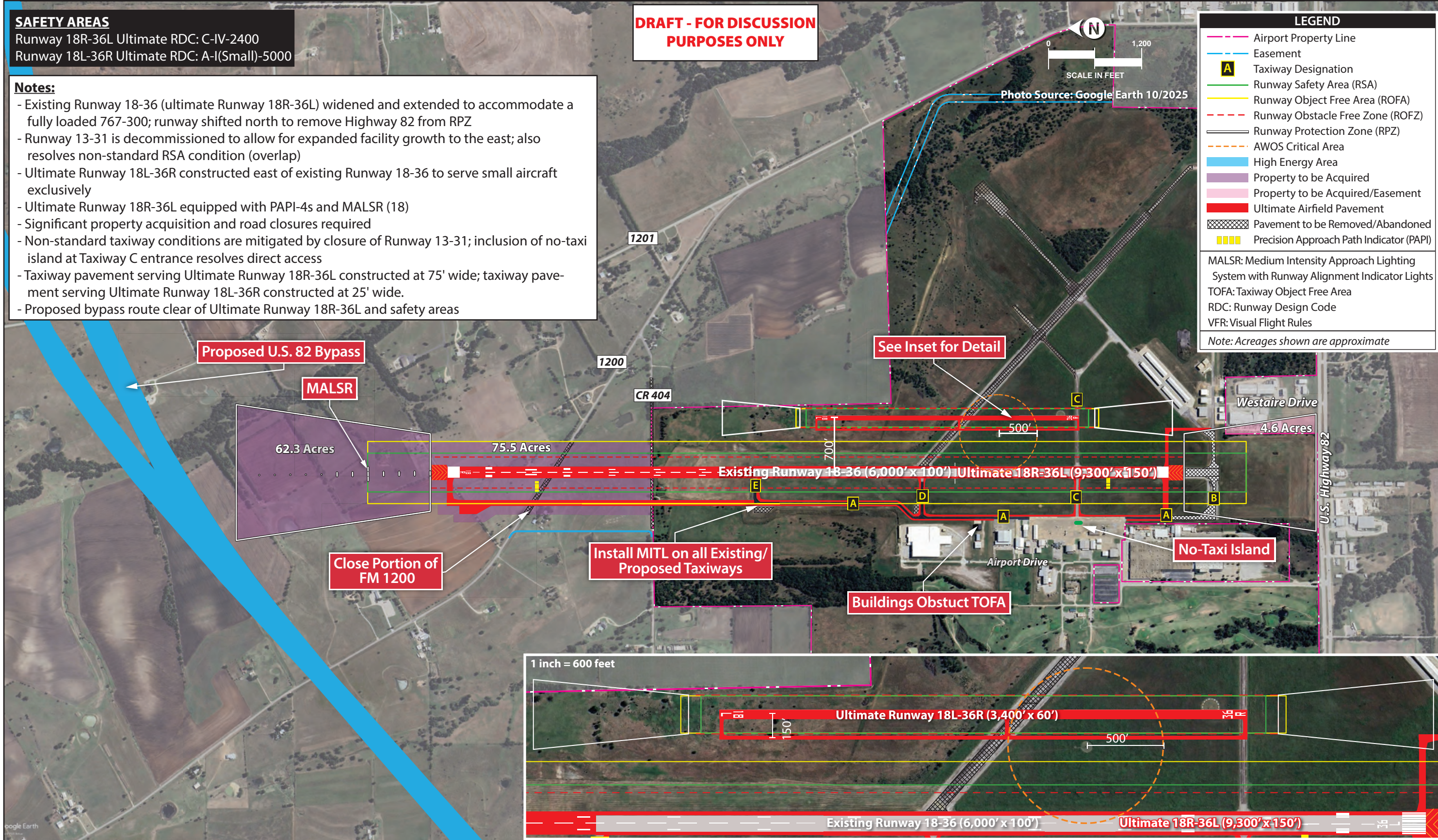
DRAFT - FOR DISCUSSION PURPOSES ONLY

LEGEND

- Airport Property Line
- - - Easement
- A Taxiway Designation
- Runway Safety Area (RSA)
- Runway Object Free Area (ROFA)
- Runway Obstacle Free Zone (ROFZ)
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- High Energy Area
- Property to be Acquired
- Property to be Acquired/Easement
- Ultimate Airfield Pavement
- Pavement to be Removed/Abandoned
- Precision Approach Path Indicator (PAPI)

MALSR: Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
 TOFA: Taxiway Object Free Area
 RDC: Runway Design Code
 VFR: Visual Flight Rules

Note: Acreages shown are approximate



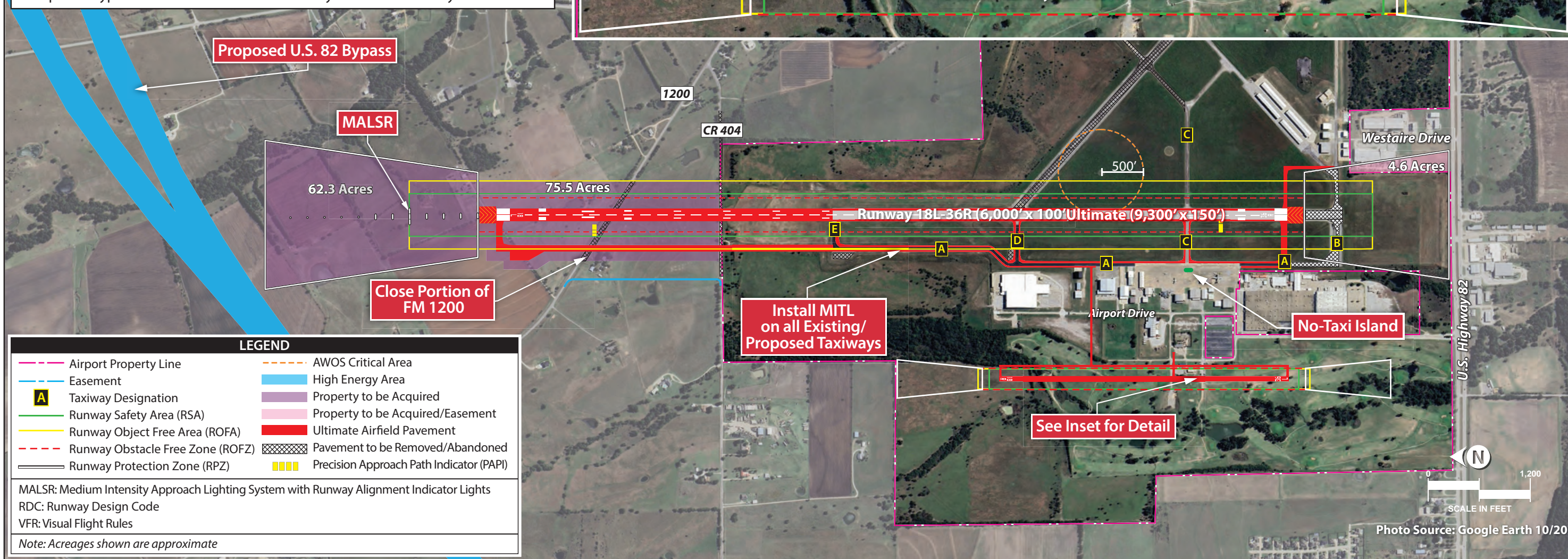
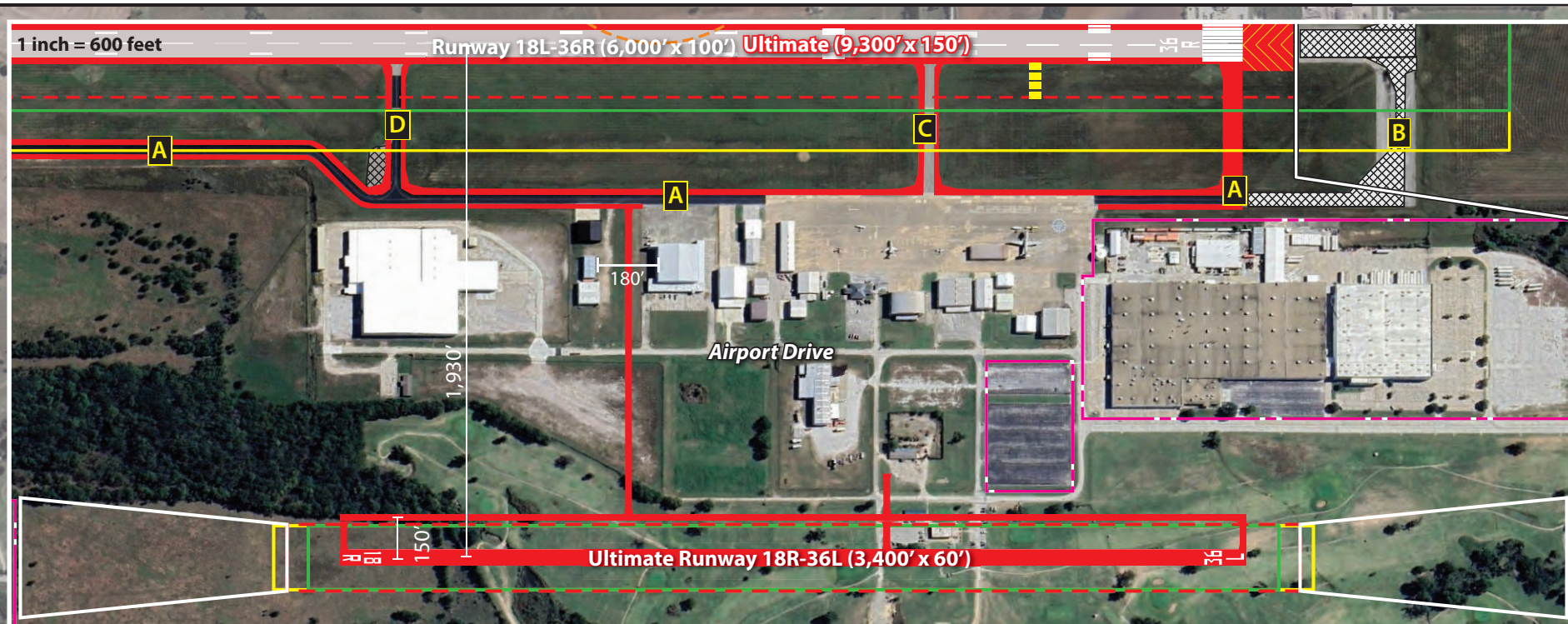
SAFETY AREAS

Runway 18L-36R Ultimate RDC: C-IV-2400
 Runway 18R-36L Ultimate RDC: A-I(Small)-5000

DRAFT - FOR DISCUSSION PURPOSES ONLY

Notes:

- Existing Runway 18-36 (ultimate Runway 18L-36R) widened and extended to accommodate a fully loaded 767-300; runway shifted north to remove Highway 82 from RPZ
- Runway 13-31 is decommissioned to allow for expanded facility growth to the east; also resolves non-standard RSA condition (overlap)
- Ultimate Runway 18R-36L constructed west of existing Runway 18-36 to serve small aircraft exclusively
- Ultimate Runway 18L-36R equipped with PAPI-4s and MALSR (18)
- Significant property acquisition and road closures required
- Non-standard taxiway conditions are mitigated by closure of Runway 13-31; inclusion of no-taxi island at Taxiway C entrance resolves direct access
- Taxiway pavement serving Ultimate Runway 18L-36R constructed at 75' wide; taxiway pavement serving Ultimate Runway 18R-36L constructed at 25' wide.
- Proposed bypass route clear of Ultimate Runway 18L-36R and safety areas



LEGEND

Airport Property Line	AWOS Critical Area
Easement	High Energy Area
Taxiway Designation	Property to be Acquired
Runway Safety Area (RSA)	Property to be Acquired/Easement
Runway Object Free Area (ROFA)	Ultimate Airfield Pavement
Runway Obstacle Free Zone (ROFZ)	Pavement to be Removed/Abandoned
Runway Protection Zone (RPZ)	Precision Approach Path Indicator (PAPI)

MALSR: Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
 RDC: Runway Design Code
 VFR: Visual Flight Rules

Note: Acreages shown are approximate

Photo Source: Google Earth 10/2025

acquired fee simple and these portions of the roadways closed and structures removed. A new road connecting CR 404 west of the runway to FM 1200 is proposed to provide access to landowners along FM 1200.

- Approximately 62.3 acres of property within the future Runway 18L RPZ is also proposed to be acquired fee simple.
- The proposed bypass route is clear of Ultimate Runway 18L-36R and its associated safety areas and equipment.
- Blast pads are added at both ends of ultimate Runway 18L-36R to mitigate any potential for soil erosion caused by jet wash.
- Taxiway A is extended north to the ultimate Runway 18L end. The taxiway extension is planned to meet TDG 5 standards and includes construction of a holding bay, with removal of the existing holding bay pavement. Existing taxiway pavement that serves the runway is proposed to be widened to 75 feet to meet the ultimate design standard. This would impact existing Taxiways A, C, D, and E. Taxiway B is proposed to be removed due to the relocation of the ultimate Runway 36L threshold, and new threshold/access taxiways constructed.
- A no-taxi island is proposed at the entrance to Taxiway C to mitigate direct access from the terminal apron to existing Runway 18-36.
- Taxiway pavement serving Runway 13-31 is proposed to be removed or abandoned, with the exception of Taxiway C.
- A new taxiway is proposed to extend west from Taxiway A to provide access to proposed parallel Runway 18R-36L and its taxiways.
- Upgrades to visual approach aids and airfield lighting include installation of PAPI-4s on ultimate Runway 18L-36R, a MALSR on ultimate Runway 18L, and installation of MITL on all existing and proposed taxiways. HIRL is proposed on ultimate Runway 18L-36R, while MIRL is proposed for ultimate Runway 18R-36L.

LANDSIDE ALTERNATIVES

Generally, landside issues are related to the facilities necessary or designed for the safe and efficient parking and storage of aircraft, movement of pilots and passengers to and from aircraft, airport support facilities, and overall revenue support functions. To maximize airport efficiency, it is important to locate facilities together that are intended to serve similar functions. The best approach to landside facility planning is to consider the development like that of a community for which land use planning is the guide. For airports, land use in the terminal area should generally be dictated by aviation activity levels.

LANDSIDE CONSIDERATIONS

Existing landside facility development at GLE is primarily focused on the west side, including the terminal and its associated apron, as well as the majority of aircraft storage hangars. There is some hangar development east of Runway 18-36, on the south side of airport property, which currently includes four multi-unit T-hangars and several executive box hangars.

While there is an abundance of undeveloped property on the airport, there are potential hurdles to developing some of these areas, including the need to extend utilities and terrain limitations. Development of landside facilities may be particularly challenging in some areas, because terrain variations make site preparation to meet FAA grading standards costly. Longitudinal grades for taxiways and taxilanes are limited to a maximum of 1.5 percent; however, the longitudinal grade can be increased to 2.0 percent for taxiways/taxilanes that exclusively serve small aircraft that weigh 30,000 pounds or less. Several of the landside alternatives to follow depict development in areas where this may be a factor; nevertheless, the potential should still be considered and the cost-benefit weighed.

Landside planning considerations were detailed in the previous chapter. Generally, the considerations reflect the needs of a growing general aviation airport that requires additional hangar capacity and growing itinerant traffic that demands greater apron capacity. The airport's terminal building is centrally located and its capacity is adequate for current activity levels, but it may need to be expanded at some point in the future, particularly if commercial service by a non-traditional carrier is established. Jet A fuel storage capacity may also need to be expanded in the future and an additional unleaded aviation fuel (100UL) tank may be needed once 100UL fuel is more widely available and demanded by users. Consideration has also been given to reserving space for future aeronautical activities, which could include facilities supporting additional terminal space (if warranted), additional hangars, or even advanced air mobility (AAM), a new entrant to the aviation industry. Several of the landside alternatives also depict reserve space for potential air cargo activity, which could also include dedicated space for a U.S. Customs and Border Protection facility.

LANDSIDE ALTERNATIVES

The following sections present a series of landside alternatives as they relate to the identified considerations. Variations of future hangar and apron developments are presented to help visualize what future facility developments could look like; however, the alternatives presented are not the only reasonable options for development. In some cases, a portion of one alternative could be intermixed with another, and some development concepts could be replaced with others. The overall intent of this exercise is to outline basic development concepts to spur collaboration for a final recommended plan. The final recommended plan only serves as a guide for the airport to aid the City of Gainesville in the strategic planning of airfield property. Airport operators often change their plans to meet the needs of specific users. The goal in analyzing landside development alternatives is to focus future development so airport property can be maximized and aviation activity can be protected.

Seven alternatives have been prepared: three for the west side of the airport, where the majority of existing facilities are located, and four for the east side of the airport. The landside alternatives incorporate several elements depicted on the airside alternatives, including the potential closure of Runway 13-31 or

the potential construction of a parallel runway. These alternatives provide possible development options aimed at meeting the needs of general aviation (and potentially commercial service or air cargo) through the long-term planning period and beyond.

West Landside Alternatives

The west side of the airport, which includes the existing terminal and main aircraft parking apron, features existing utility infrastructure, accessibility to the airfield, and level ground along the Runway 18-36 flightline to build new facilities. Farther to the west and immediately north of the golf course, the terrain drops off and is heavily treed. Nonetheless, the alternatives to follow will depict potential development scenarios for portions of this property, should city officials elect to proceed with expansion of either aeronautical or non-aeronautical facilities, which can help to diversify revenue streams at the airport.

West Landside Alternative 1

West Landside Alternative 1 is depicted on **Exhibit 4F** and considers the following:

- Expansion of the terminal building and fuel farm. A 2,000 square foot (sf) expansion of the existing terminal building to the west is depicted to accommodate future growth in itinerant traffic, which could include future passenger service by a carrier such as JSX. The fuel farm is also proposed for expansion, with two additional tanks installed to store Jet A fuel and/or unleaded aircraft fuel. To accomplish this, the airport beacon may need to be relocated. If so, a new site on the opposite side of the terminal building is proposed.
- Construction of two 60-foot by 60-foot executive box hangars west of the T-hangars located on the terminal apron.
- Development of a new aircraft parking apron north of existing facilities. As shown, development in this area assumes the continued maintenance of Runway 13-31, so the proposed development is depicted clear of the Runway 13 RPZ. This area is proposed to support up to six 150-foot by 150-foot conventional hangars. The apron is also marked with 11 marked tiedowns for fixed-wing aircraft. Access to this area is available from the north via a new road extending from CR 404, or from the south via Airport Drive.
- Development of 12 new 110-foot by 110-foot conventional hangars. The hangars are positioned to provide taxilanes with a 110-foot wide taxilane object free area (TLOFA), which is the standard to accommodate airplane design group (ADG) II aircraft. The proposed road from CR 404 would provide the primary access for these hangars, with parking available at the rear of each hangar.
- Development of a third hangar area northwest of the terminal apron, on the opposite side of Airport Drive. As shown, this area includes the development of ten 80-foot by 80-foot executive box hangars. Tenants would access these units from the airfield via a taxilane extending west from Taxiway A. A portion of Airport Drive is proposed to be closed, with a security gate installed and fencing rerouted to accommodate this hangar area. A new access road would be constructed to serve these hangars and ultimately connect back to Airport Drive farther to the north.

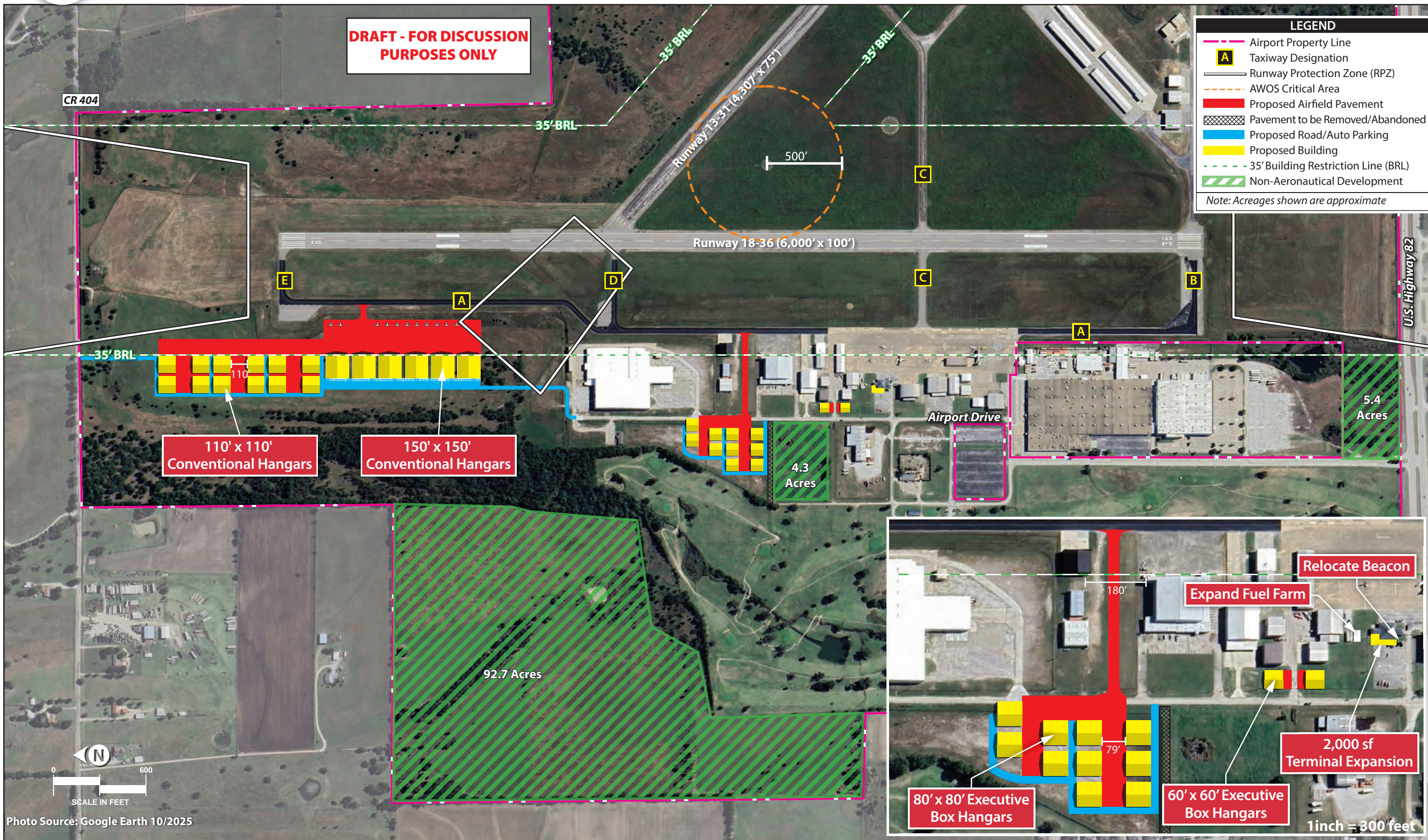
- Three areas dedicated to future non-aeronautical development. Typically, portions of airport property that have limited potential for aeronautical development or are disconnected from the airfield in some capacity are better utilized for non-aeronautical purposes, which could include commercial or industrial facilities. Beginning on the south side, a 5.4-acre parcel adjacent to U.S. Highway 82 is shown for non-aeronautical reserve, as is a 4.3-acre area east of the golf course. West and north of the golf course, approximately 92.7 acres are depicted for non-aeronautical development, should the need arise.

West Landside Alternative 2

West Landside Alternative 2 is depicted on **Exhibit 4G** and considers the following:

- Expansion of the terminal building and fuel farm. A 1,500 square foot (sf) expansion of the existing terminal building to the west is depicted to accommodate future growth in itinerant traffic. The fuel farm is also proposed for expansion, with two additional tanks installed to store Jet A fuel and/or unleaded aircraft fuel. To accomplish this, the airport beacon may need to be relocated. If so, a new site south of the terminal building is shown.
- Development of a new aircraft parking apron north of existing facilities to support two 200-foot by 200-foot conventional hangars and four 150-foot by 150-foot conventional hangars. The apron is also marked with 12 marked tiedowns for fixed-wing aircraft. Access to this area is available from the north via a new road extending from CR 404.
- Reserved area, approximately 6.6 acres in size, for future aeronautical development along the Runway 18-36 flight line north of the proposed hangars described above.
- Development of a T-hangar area northwest of existing facilities, accessible from the airfield via a taxiway connecting to Taxiway A. Vehicle access to the area would be available from an extension to the road currently serving the golf course. This is an undeveloped area that features dense vegetation and unlevel ground that would require clearing and grading. Approximately 18.5 acres in the vicinity of the proposed T-hangar area are set aside for additional development of small aircraft storage facilities, should the need arise.
- Redevelopment of the non-aeronautical facility situated on the north end of the landside area. While this 11.9-acre area has historically produced revenue for the airport through non-aviation tenants, its prime location along the flight line may be better suited for aeronautical development. An additional 10.9 acres adjacent to this area on the opposite side of Airport Drive has also been noted for potential aeronautical development.
- Two areas dedicated to future non-aeronautical development. The first is a 5.4-acre parcel adjacent to U.S. Highway 82, and the second is a 230.5-acre area that includes the Gainesville Municipal Golf course and undeveloped property to the north and west.

**DRAFT - FOR DISCUSSION
PURPOSES ONLY**

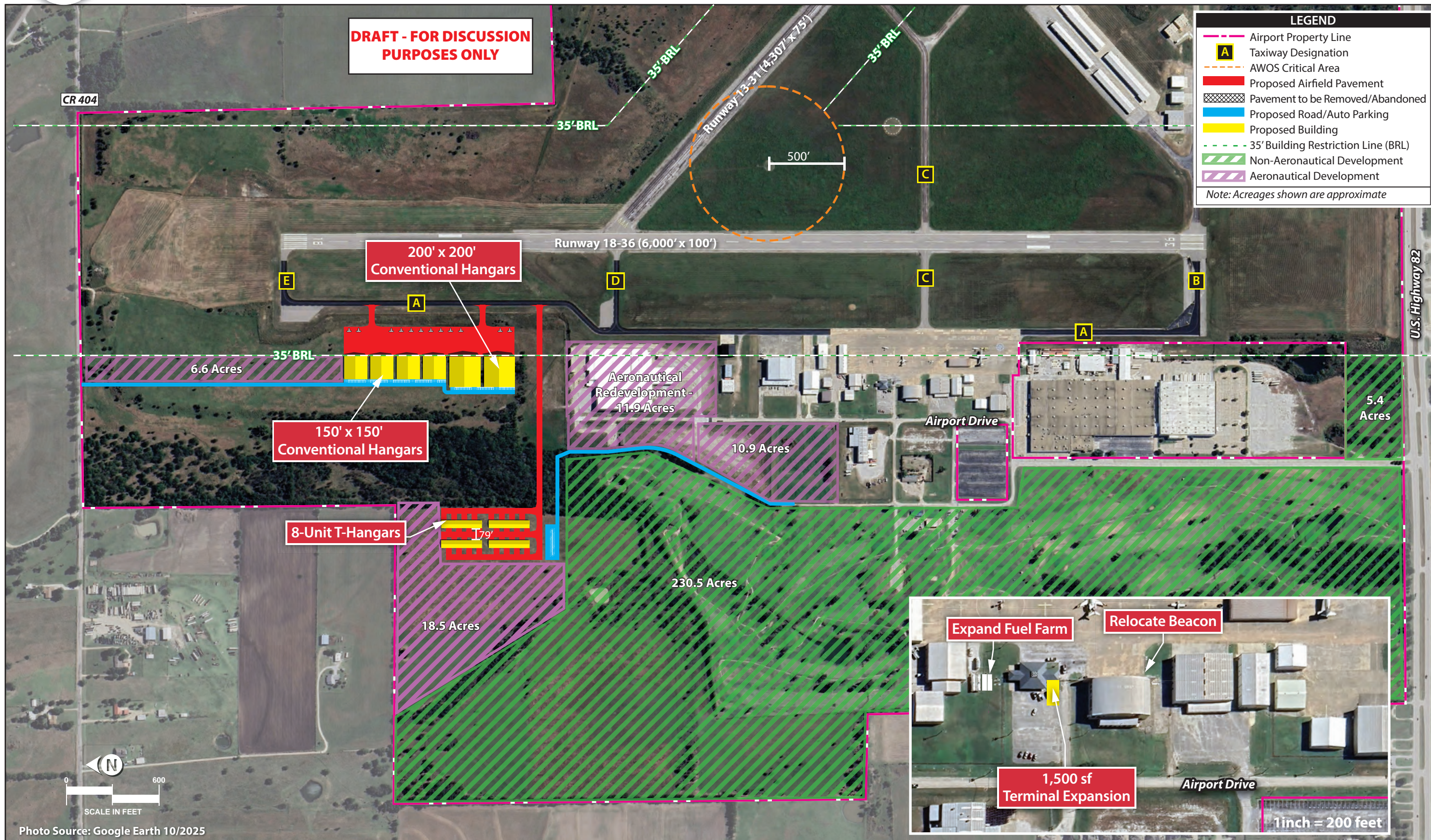


LEGEND

- Airport Property Line
- A Taxiway Designation
- Runway Protection Zone (RPZ)
- AWOS Critical Area
- Proposed Airfield Pavement
- Pavement to be Removed/Abandoned
- Proposed Road/Auto Parking
- Proposed Building
- 35' Building Restriction Line (BRL)
- Non-Aeronautical Development

Note: Acres shown are approximate

Photo Source: Google Earth 10/2025



West Landside Alternative 3

West Landside Alternative 3 is depicted on **Exhibit 4H** and is based on the potential construction of a west-side parallel runway, as shown previously on Airside Alternative 4.3. The following elements are considered:

- Development of a new aircraft parking apron north of existing facilities to support three 175-foot by 175-foot conventional hangars. The apron would connect to Taxiway A via a new taxilane, while vehicle access to this area is available from an extension of Airport Drive.
- Development of an executive box hangar complex, accessible from Taxiway A via a new taxilane, and accessible to vehicles from the north via an access road extending from CR 404. As shown on the graphic, this area is proposed to support two rows of 75-foot by 75-foot box hangars, with vehicle access and parking at the rear of each hangar.
- Redevelopment of the non-aeronautical facility situated on the north end of the landside area. While this 10.1-acre area has historically produced revenue for the airport through non-aviation tenants, its prime location along the flight line may be better suited for aeronautical development.
- Redevelopment of non-aeronautical uses west of Airport Drive. The proposed parallel runway would necessitate closure of the golf course and its facilities to accommodate not only the runway, but also landside infrastructure. As depicted on the exhibit, approximately 20.7 acres of property is set aside for potential air cargo facility development, along with a 9.2-acre parcel that currently supports the golf course maintenance building and a commercial building. This area is proposed for future aeronautical use that could include hangar development or additional space for air cargo operations, if needed.
- Acquisition of a 3.5-acre parcel that is currently used as a parking lot for adjacent non-aeronautical facilities. This parcel could be better served for aeronautical use, if the west side runway were to be constructed. An alternative to acquiring the property would be to engage in a land swap with the property owner to relocate the parking area to a vacant area on the south side of airport property, alongside U.S. Highway 82.
- One area dedicated to future non-aeronautical development. Approximately 14.7 acres of property is set aside for potential non-aeronautical development on the west side of Weber Drive.

East Landside Alternatives

The east landside area currently contains several box hangars and a T-hangar complex. In the current runway configuration, there is potential for additional aeronautical development around these facilities on the southeast side of Runway 13-31. The northeast portion of airport property primarily consists of undeveloped land along FM 1201. This area is not currently served by utilities and is traversed by a gas line, for which there is an easement.

The following alternatives consider various options for developing vacant portions of the east side, either for aeronautical use or reserving parcels for non-aeronautical purposes, such as commercial/industrial development. Another possibility is utilization of some of this property for on-site electricity generation via a solar farm. If AAM service is established at GLE, electricity demands will increase significantly, and a solar farm would help support some of the demands of these aircraft.

East Landside Alternative 1

East Landside Alternative 1 is depicted on **Exhibit 4J** and is based on the continued maintenance of the current airfield layout. This alternative considers the following:

- Development of a series of taxilanes to support the construction of a variety of box and conventional style hangars. As shown, two taxilanes would connect to the proposed parallel taxiway serving Runway 13-31. These taxilanes would provide access to two aprons supporting 100-foot by 100-foot conventional style hangars, before extending to the southwest for access to a series of 80-foot by 80-foot executive box hangars. Taxiway C is also planned to be extended to the southeast to provide access to the westernmost box hangars.
- Expansion of the existing T-hangar complex. Four additional multi-unit T-hangars are planned adjacent to the existing T-hangar facilities.
- Construction of box hangars along Taxiway B. East of Runway 36, Taxiway B currently provides access to several box hangars. Two additional hangars are planned for vacant spaces along the taxiway.
- New vehicle access roads. A new entrance road is proposed from U.S. Highway 82 to provide access to the majority of the proposed hangar facilities.
- Approximately 10.7 acres of undeveloped property in the vicinity of the proposed hangars is set aside for future aeronautical development.
- Approximately 51.4 acres of property along U.S. Highway 82 is reserved for non-aeronautical development, including commercial/industrial/solar farm construction.
- Approximately 230.0 acres of property northeast of Runway 13-31 is set aside for mixed use development, which could result in either aeronautical or non-aeronautical development. Generally, areas that are along a flight line should be reserved for aviation-related development, while areas that are farther away or have more limited access to the airfield are better suited to non-aeronautical development. A “mixed use” designation gives city officials greater flexibility in developing this area.

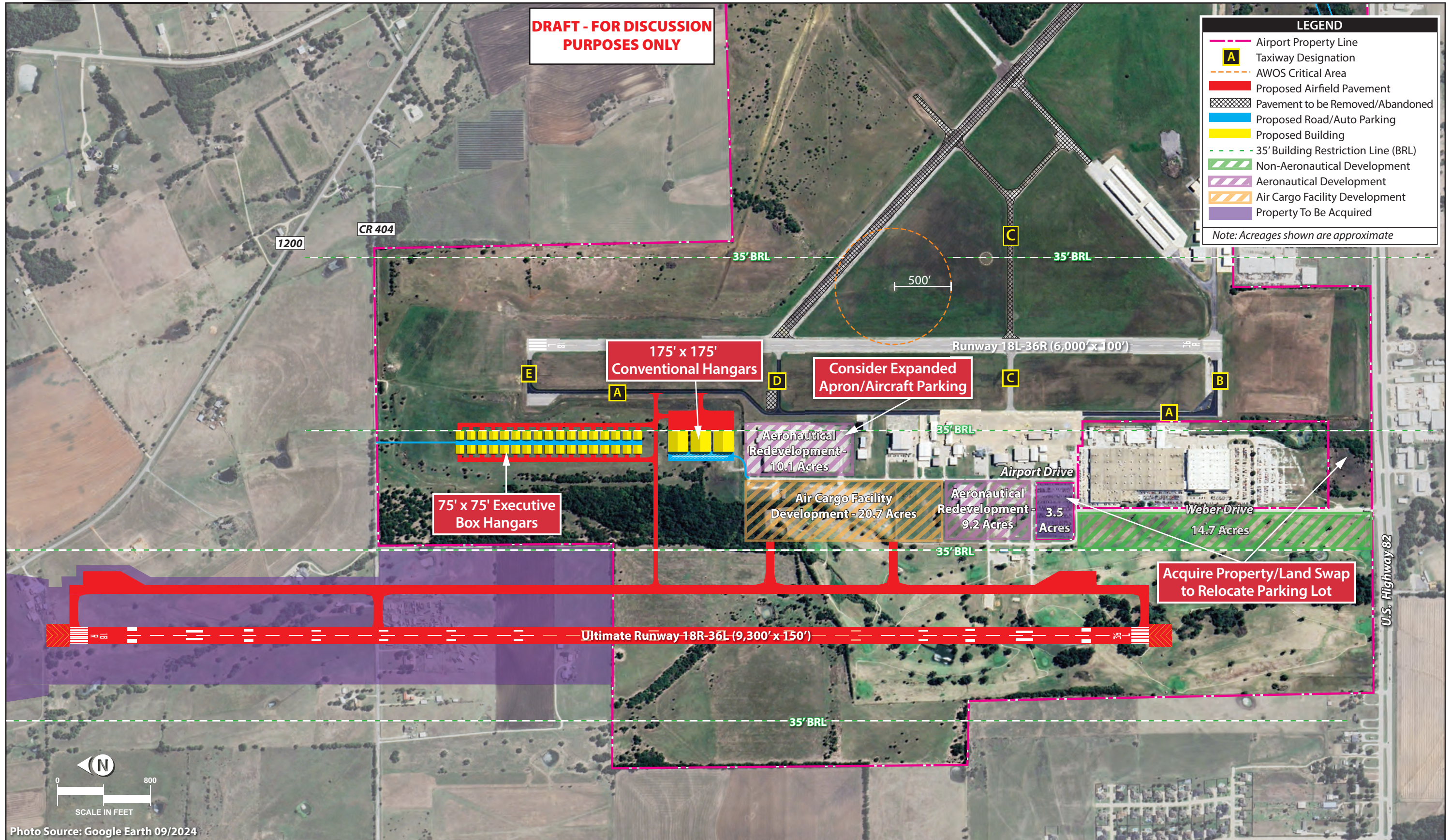
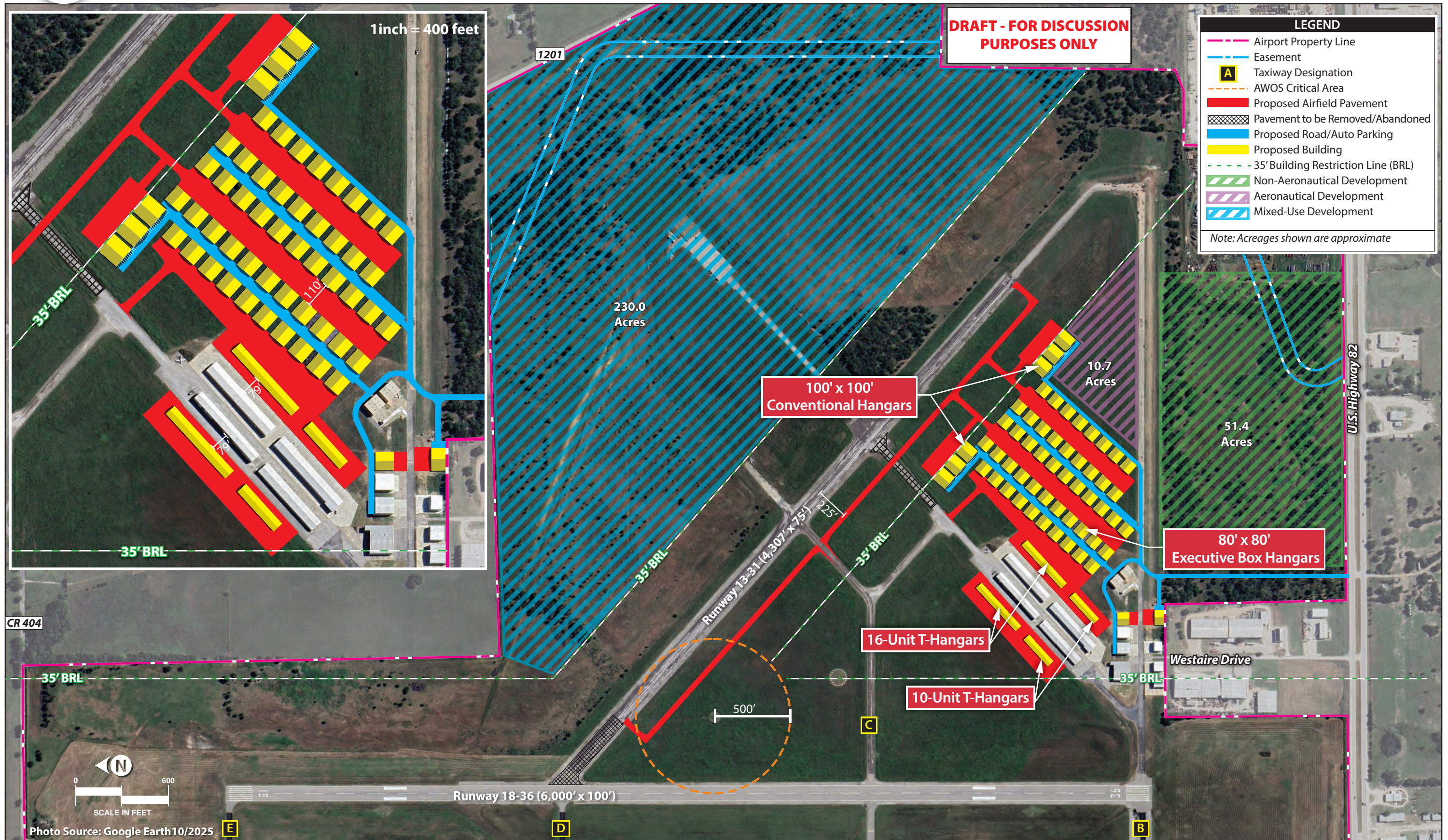


Photo Source: Google Earth 09/2024



East Landside Alternative 2

East Landside Alternative 2 is depicted on **Exhibit 4K** and considers development potential if Runway 13-31 is decommissioned. The following elements are considered:

- Development of an aircraft parking apron on the east side of Runway 18-36 to support large, conventional style hangars. To develop the area as shown, the automated weather observing system (AWOS) is proposed to be relocated to the north so new hangars do not obstruct the 500-foot critical area. The wind cone and segmented circle would also need to be relocated. As depicted on the graphic, a parallel taxiway is proposed to provide access to these facilities from the runway, with three taxilanes serving the planned apron area. The apron is marked with dedicated parking for fixed wing aircraft and supports two 200-foot by 200-foot conventional hangars and ten 150-foot by 150-foot conventional hangars. Vehicle access from the north is provided from CR 404.
- Development of a box hangar area off the proposed apron. This area is accessed from existing Taxiway C, east of the proposed apron. New taxilane pavement that connects to existing Taxiway C is proposed to support six 100-foot by 100-foot conventional hangars and seven 80-foot by 80-foot executive box hangars. An access road from the south is planned to serve this area as well as the 150-foot by 150-foot hangars on the south end of the proposed apron previously described.
- Development of a series of taxilanes to support the construction of executive box hangars along Taxiway B. As shown, the south side of the taxiway is planned for a single row of 80-foot by 80-foot executive box hangars, while the north side is planned for new taxilanes to serve several rows of hangars. Two roads extending from U.S. Highway 82 are proposed to access these and other facilities previously described.
- Expansion of the existing T-hangar area. Five additional multi-unit T-hangars of varying size are planned adjacent to the existing T-hangar facilities.
- Approximately 72.6 acres of undeveloped property in the vicinity of the proposed hangars is set aside for future aeronautical development.
- Two parcels of airport property along U.S. Highway 82 are reserved for non-aeronautical development; one sized 27.2 acres and the other 48.5 acres. An additional 239.0 acres of land on the northeast side of the airport along FM 1201 is also set aside for non-aeronautical development.
- Approximately 46.4 acres of property is set aside for mixed use development, which could be planned for either aeronautical or non-aeronautical development.

East Landside Alternative 3

East Landside Alternative 3 is depicted on **Exhibit 4L** and is based on the potential construction of an east-side parallel runway, as shown previously on Airside Alternative 4.1. The following elements are considered:

- Development of a new aircraft parking apron and taxilanes east of ultimate Runway 18L-36R to support potential air cargo facilities as well as aircraft storage hangars. As shown, this option sets aside 30.0 acres for future air cargo facilities along the north end of the proposed apron, with the south end supporting a taxilane serving 150-foot by 150-foot hangars. A secondary fuel farm is also depicted on this apron.
- Development of a box hangar complex. This includes 100-foot by 100-foot conventional hangars and several rows of 80-foot by 80-foot executive box hangars. These hangars would be accessible from the proposed apron or from existing Taxiway B, where it extends east to provide access to existing hangars on the airport's south side.
- Development of a T-hangar complex. This complex is proposed for the vacant area south of Taxiway B, just past existing development.
- Vehicle access road development. An access road extending from FM 1201 is proposed to serve future air cargo facilities and several of the 150-foot by 150-foot hangars. From the south, proposed roads connecting to U.S. Highway 82 would provide vehicle access to each of the planned hangar areas south of the new apron.
- Two parcels of airport property are reserved for future aeronautical development adjacent to proposed facilities. One of these areas is 25.3 acres in size and the other is 25.7 acres.
- Three areas are set aside for future non-aeronautical use – a 16.1 acre parcel along U.S. Highway 81 and two larger parcels (109.3 acres and 110.6 acres) along FM 1201.

East Landside Alternative 4

East Landside Alternative 4 is depicted on **Exhibit 4M** and is based on the potential construction of an east-side parallel runway, as shown previously on Airside Alternative 4.2. The following elements are considered:

- Development of a new aircraft parking apron and taxilanes east of existing Runway 18-36 to support a variety of hangar types ranging from T-hangars to larger conventional style hangars. In this layout, the AWOS, wind cone, and segmented circle are planned to remain in their existing locations with the apron set back far enough to allow for an unobstructed AWOS critical area. As shown, seven 150-foot by 150-foot conventional hangars are proposed on the apron's east side, with 100-foot by 100-foot conventional hangars on the north and south sides of the apron. Parking for both fixed wing aircraft and helicopters is also proposed.
- Development of an executive box hangar complex. These 80-foot by 80-foot hangars are planned for the north side of the main apron area.
- Development of a T-hangar complex.
- Development of a secondary apron area supporting 100-foot by 100-foot conventional hangars.

**DRAFT - FOR DISCUSSION
PURPOSES ONLY**

LEGEND

- Airport Property Line
- Easement
- AWOS Critical Area
- Proposed Airfield Pavement
- Pavement to be Removed/Abandoned
- Proposed Road/Auto Parking
- Proposed Building
- 35' Building Restriction Line (BRL)
- Non-Aeronautical Development
- Aeronautical Development
- Mixed-Use Development

Note: Acreages shown are approximate

1 inch = 400 feet



CR 404

35' BRL

Relocate Wind Cone/
Segmented Circle

500'

300'

Runway 18-36 (6,000' x 100')

150' x 150'
Conventional Hangars

200' x 200'
Conventional Hangars

Fuel Farm

Relocate AWOS

80' x 80' Executive
Box Hangars

72.6 Acres

125'

100' x 100'
Conventional Hangars

80' x 80' Executive
Box Hangars

Westaire Drive

35' BRL

239.0 Acres

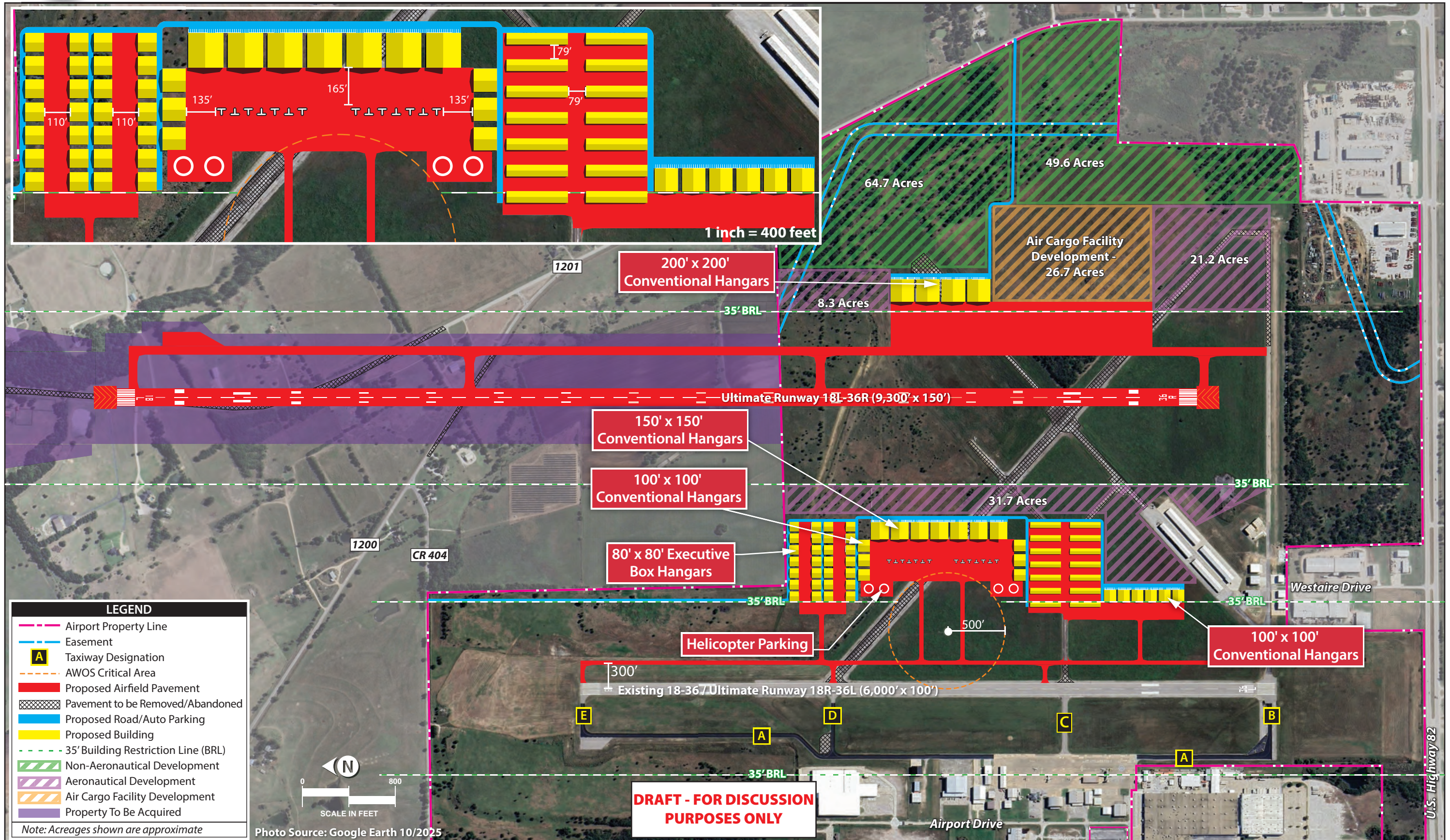
46.4 Acres

48.5 Acres

27.2 Acres

U.S. Highway 82

Photo Source: Google Earth 10/2025



This page intentionally left blank

- Vehicle access road development. An access road extending from CR 404 is proposed to serve all planned development on the existing runway's east side, with secondary access points provided to proposed hangar development areas.
- Development of an apron on the east side of the proposed parallel runway. This apron would serve to support potential air cargo facility development, as well as aeronautical development that could include large hangar construction, as depicted. Vehicle access to this area is made available from FM 1201.
- Two parcels of airport property along FM 1201 are reserved for non-aeronautical development; one sized 64.7 acres and the other 49.6 acres.

SUMMARY

This chapter presents an analysis of various options that may be considered for specific airport elements. The need for alternatives is typically spurred by projections of aviation demand growth and/or by the need to resolve non-standard airport elements. Several development alternatives related to both the airside and the landside have been presented.

The next step in the master plan development process is to arrive at a recommended development concept. Participation of the PAC and the public will be important considerations. Additional consultation with the FAA and TxDOT may also be required. Once a consolidated development plan is identified, a 20-year capital improvement program will be presented that includes a prioritized list of projects tied to aviation demand and/or necessity. Finally, a financial analysis will be presented to identify potential funding sources and show airport management what local funds will be necessary to implement the plan.