E CONCEPTS, ALTERNATIVES, AND DEVELOPMENT PLAN

INTRODUCTION. This chapter presents the development alternatives and recommendations for Will Rogers World Airport in terms of concepts and reasoning. It provides a description of the various factors and influences that will form the basis for the Airport's long-term development program. In concert with the role of the Airport and community, input received from the Study Committee, airport management, and other interested parties, basic assumptions have been established that are intended to direct the development of the Airport in the future.

Several basic assumptions have been established that are intended to direct the development of the Airport in the future. These assumptions include:

Assumption One. The Airport will be developed and operated in a manner that is consistent with local ordinances and codes, federal and state statutes, and federal grant assurances, as well as Federal Aviation Administration (FAA) and Transportation Security Administration (TSA) rules and regulations.

Assumption Two. The Airport's primary role will remain as a commercial passenger service facility, with secondary roles of accommodating general aviation activity, cargo activity, and military activity.

Assumption Three. This assumption states that the Airport will be designed to the appropriate dimensional standards. As presented in earlier chapters, Airport Reference Code (ARC) D-V will continue to be used as the basis for the layout of airport facilities and for determining setback and safety criteria.

Assumption Four. In order to accommodate aircraft operations with the greatest possible reliability, the Airport's runway system should be developed with instrument approach guidance capabilities and maximum runway length to accommodate the forecast operations as safely as possible under most weather conditions.

Assumption Five. Future airport development should strive to make the most efficient use of the available area for aviation-related activities, including general aviation facilities, passenger

terminal facilities, air cargo activity, industrial aviation, and other aviation-support uses, while ensuring compatibility with surrounding land uses.

Assumption Six. The Airport will continue to consider it a priority to focus on the relationship of airport facilities to off-airport land uses, and the compatible and complementary development of each. To the maximum extent possible, future facilities will be designed to enhance the compatibility of the operation of the Airport with the surrounding environs, as well as strive to promote the continued compatible development of off-airport land uses.

Assumption Seven. Previous planning documents have established several long-term airside development recommendations, which will likely not be needed during the 20-year planning horizon of this Master Plan Update. These features are critical to maintain as part of the overall development plan for the Airport so that appropriate areas can be reserved to accommodate long-term demands, even if activity levels that would justify construction are not expected to be reached during the planning period covered by this Master Plan Update. The following section, entitled *Summary of Established Airside Development Recommendations*, provides a written and graphic description of these features.

Assumption Eight. Will Rogers World Airport is an economic engine for the Oklahoma City area, Central Oklahoma, and the State at-large. As such, the Airport plays a significant role in the economic vitality of Oklahoma. Airport development should contemplate the nexus between superior airport facilities, air service, industrial and institutional aviation uses, and economic prosperity for the region.

Assumption Nine. General Aviation (GA) development at Will Rogers World Airport should focus on accommodating the largest GA aircraft – aircraft that might not be quite as suitable as based aircraft at Wiley Post Airport. Further, the roles of these airports should be recognized in the development planning for each facility. Wiley Post Airport is the primary GA "Reliever" airport for Will Rogers World Airport and does an excellent job of taking care of the aviation needs of smaller GA and corporate aircraft users, while Will Rogers World Airport is better suited to larger corporate aircraft and is in a less sensitive environment.

Goals for Development

Accompanying these assumptions are several goals, which have been established for purposes of directing the Master Plan Update and establishing continuity in the future for airport development. These goals take into account several categorical considerations relating to the needs of the Airport, both in the short-term and long-term, including: safety, noise, capital improvements, land use compatibility, financial and economic conditions, public interest and investment, and community recognition and awareness.

These goals are preliminary and are intended to stimulate discussion. After receiving input from the public and local government representatives, the goals will be used as a guide in the formulation of recommendations for this Master Plan Update:

- Provide effective direction for the future development of Will Rogers World Airport through the preparation of a rational, reasonable, and implementable plan.
- The Airport Trust is committed to the development of a safe, reliable, and high quality airport. The Master Plan Update for the Airport incorporates this vision into a long-term physical development program for the Airport, which reflects the remarkable development potentials for southwestern Oklahoma City, the greater metropolitan area, and the region.
- Accommodate forecast aircraft operations in a safe and efficient manner by provision of proper facilities and services.
- FAA safety and object clearing standards for the areas immediately surrounding the runway system have evolved significantly over the last several years, becoming more stringent. Airport management and staff at Will Rogers World Airport have responded to these evolving standards by working closely with the Federal Government to complete improvements in a manner that is FAA approved. Additional improvements will be implemented in the future as standards continue to evolve and as areas for upgrades are identified.
- Plan and develop the Airport to be environmentally compatible with the community, and minimize environmental impacts on both airport property and non-airport property that are affected or potentially affected by airport operations.

Summary of Environmental Considerations

Introduction

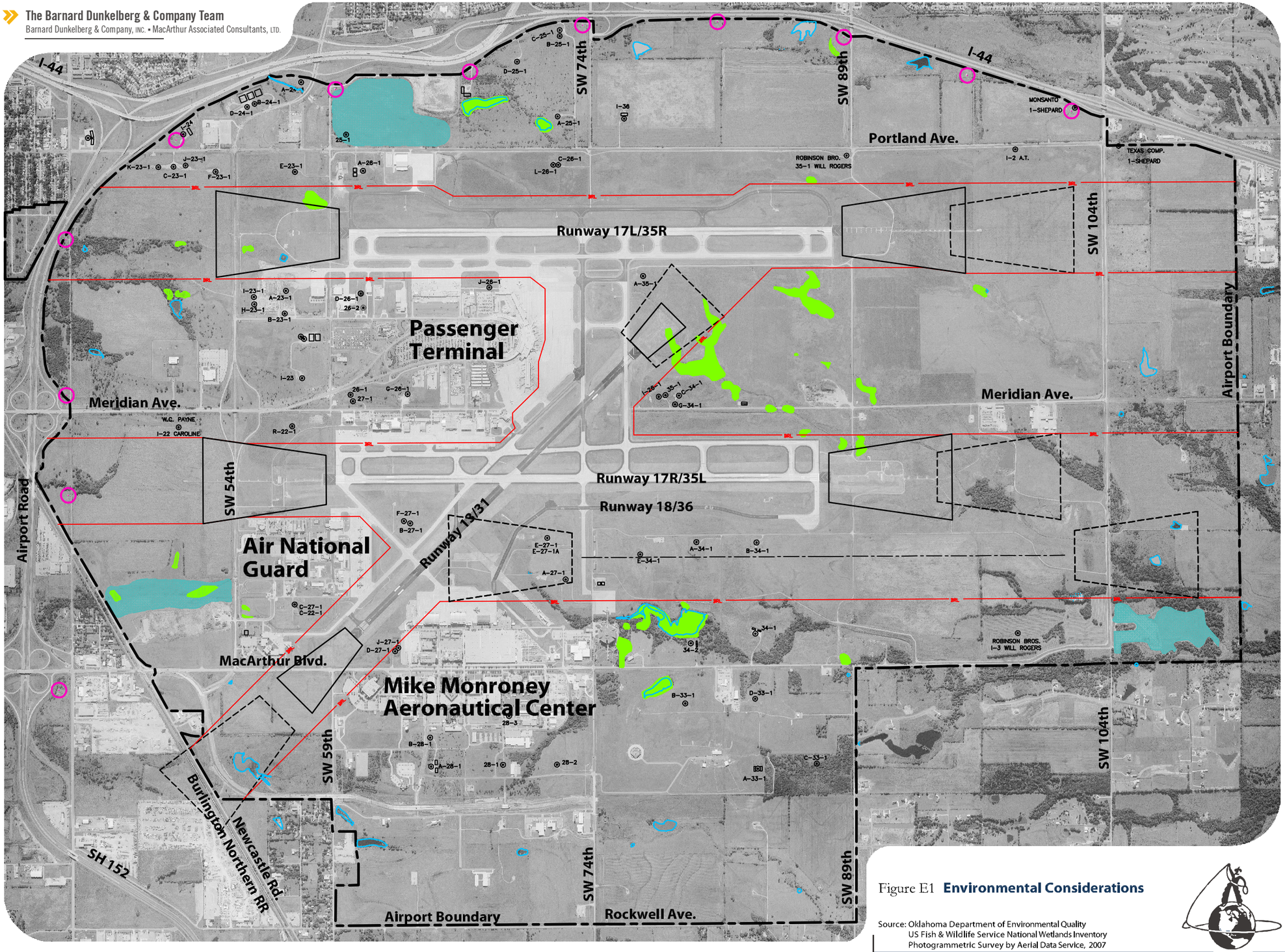
Using the environmental data presented in the *Inventory of Existing Conditions* chapter, an *ENVIRONMENTAL CONSIDERATIONS* illustration has been prepared and is presented on the following page. Other than aircraft generated noise, which is addressed in the following chapter, there are several environmental concerns that may influence on-airport development decisions. The primary environmental concerns identified for Will Rogers World Airport include the Public Water Supply wells located on the east and north sides of airport property, the 100-year floodplains primarily associated with Cow Creek and its tributaries, and wetland areas. Additionally, the Airport has programmed for three storm water detention facilities. One is located in the southwest corner of airport property south of S.W. 104th Street, another is located north of the Air National Guard facilities north of S.W. 54th Street, and the third is located east of the AIRINC facility between Portland and Interstate 44.

Airside Development Concepts

Introduction

The forecast operations and previously stated goals and assumptions were considered in the formulation of the generalized concepts and recommendations outlined and discussed in the following narrative. Because all other airport functions relate to, and revolve around, the basic airfield layout, airside development alternatives must first be carefully examined and evaluated. Specific airside considerations include runway and taxiway layout, runway length, dimensional standards, and instrument approach capabilities. As noted in the previous chapter, the runway system at Will Rogers World Airport is well configured to accommodate future demand.

Following a review of the airside development components, the purpose of which is to fulfill *major* facility requirements (basic runway configuration), recommendations for landside development are presented. For purposes of this study, landside facilities consist of aircraft parking aprons, hangar development areas, the terminal building and supporting elements, vehicular access and parking, and aviation and non-aviation related land use development.



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GRAPHIC SCALE IN FEET

- PUBLIC WATER SUPPLY (PWS) WELLS
- STORMWATER DETENTION AREAS
- POTENTIAL WETLANDS
- LAKES/PONDS
- BRL— BUILDING RESTRICTION LINE (35' STRUCTURE HEIGHT/TAXIWAY OFA, EXTENDED APPROACH INCLUDING FUTURE RUNWAY FACILITIES)
- RUNWAY PROTECTION ZONES
- FUTURE RUNWAY PROTECTION ZONES
- AIRPORT PROPERTY LINE
- OIL WELLS

Figure E1 **Environmental Considerations**

Source: Oklahoma Department of Environmental Quality
US Fish & Wildlife Service National Wetlands Inventory
Photogrammetric Survey by Aerial Data Service, 2007

Summary of Established Airside Development Recommendations

The following long-term airside development recommendations have been established in previous planning studies for Will Rogers World Airport, and, although demand may not justify construction during the 20-year planning horizon of this Master Plan Update, maintaining them as future recommendations is critical to reserve adequate space for implementation when required. These recommendations are:

- Extension of the existing parallel runways from their existing lengths of 9,800 feet to future lengths of 12,000 feet. The extensions are programmed to be placed on the south ends of the existing runways.
- The construction of a third parallel runway is programmed. The new runway would be placed west and south of the existing west parallel runway (Runway 17R/35L). It is programmed to be 9,500 feet in length, ultimately, but would initially be developed to accommodate the business jet fleet, along with regional jet commercial service aircraft, which would require a length of approximately 7,500 feet (see Table D5 in the previously published Facility Requirements chapter.
- Extension of the crosswind runway (Runway 13/31) from its existing length of 7,800 feet to an ultimate length of 10,000 feet. The extension would be placed on the northwest end of the runway.
- Extensions to Taxiways E and H in conjunction with the Runway 17L/35R extension to the south. The extensions will retain the taxiway system integrity by providing access to the future Runway 35R threshold.
- Extensions to Taxiways A and B in conjunction with the Runway 17R/35L extension to the south. The extensions will retain the taxiway system integrity by providing access to the ultimate Runway 35L threshold.
- Extension of Taxiway C in conjunction with the Runway 13/31 extension to the northwest maintains taxiway system integrity to the future Runway 13 threshold.
- Extension of Taxiway C to the southeast between Taxiways G and F completes the full parallel taxiway access to the Runway 31 threshold.
- Relocation of Taxiway B (to remove existing angled sections).

Please refer to the *AIRSIDE CONCEPTUAL DEVELOPMENT PLAN* (Figure E4, page E.13) for a graphic illustration of the recommendations presented above.

Runway Capacity and Orientation

As stated in previous chapters, the basic runway system that exists at the Airport provides adequate wind coverage and operational capacity to accommodate the forecast aircraft activity during the 20-year planning horizon of this Master Plan Update without excessive delay. The adequacy of the Airport's operational capacity is further enhanced by the reservation of space for the runway improvements identified above in the *Summary of Established Airside Development Recommendations section.*

Runway 18/36 (a section of Taxiway B) has historically been used for assault strip training by C-130 crews. Since the Air National Guard (ANG) mission re-alignment, C-130s are no longer based at the OKC ANG facility, which minimizes the demand for Runway 18/36. Because of the infrastructure investment in this runway, it will be maintained at its existing length and width (3,079' x 79') with only visual approaches for the short-term future. Runway 18/36 will be decommissioned and closed when Taxiway B is relocated and reconstructed.

Runway Length and Strength

As presented in previous chapters, the existing runway lengths and pavement strength are adequate to accommodate the existing and forecasted aircraft fleets. The adequacy of the runway lengths is further enhanced by the reservation of space for the improvements identified above in the *Summary of Established Airside Development Recommendations* section.

The published runway pavement strengths are sufficient to support the forecasted aircraft fleet throughout the planning period, provided routine pavement rehabilitation and maintenance are performed.

Runway Dimensional Standards

Resolving any existing dimensional standard deficiencies, maintaining current standards, and planning for the appropriate future standards are high priorities of the Master Plan Update process. As described in the previous chapter, some dimensional standards associated with the existing airfield layout do not meet standards. These issues are discussed in the following text.

Separation Between Taxiway H and Runway 17L/35R. Taxiway H is located on the east side of Runway 17L/35R (the east side parallel runway). The separation distance of Taxiway H from Runway 17L/35R (centerline to centerline) currently does not meet the standard for taxiways serving Airport Reference Code V runways with an instrument approach having visibility minimums less than ½-mile. The dimensional standard is 500 feet, with the existing distance of Taxiway H being 450 feet between Taxiways H-1 and H-2 (the center portion of the taxiway).

After discussions with the FAA, the preferred resolution in the short-term for this condition is for the Airport to place a notification in the Airport Directory that the taxiway separation distance is non-standard for Group V aircraft and, when landing on Runway 17L/35R, pilots will be required to contact the ATCT for instructions prior to landing. The Airport will have an agreement with ATCT personnel that they will issue special landing instructions for Group V aircraft. In the long-term, the relocation of the taxiway 50 feet to the east will be identified on the Airport Layout Plan.

Runway 17R/35L Runway Object Free Area. The Runway Object Free Area (ROFA) length beyond the Runway 35L threshold is penetrated by the existing airport perimeter road (the private-use on-airport service road use by airport maintenance personnel). This non-standard condition is caused by the perimeter road being located within the FAA specified ROFA (the perimeter road is located too close to the extended runway centerline at the southern end of the ROFA; see following illustration entitled *RUNWAY 35L PERIMETER ROAD RELOCATION*). Because this condition has existed for several years in its present form, this roadway is only used by airport personnel and, since the road is not located within the Runway Safety Area, its relocation will be recognized in the short-term as a needed improvement and listed on the Airport Layout Plan as a "Non-Standard Condition". In the long-term, the road's relocation will be programmed as a capital improvement project (hopefully, in conjunction with other improvements planned for this area of the Airport).

Runway 17L/35R Line-of-Sight. As identified in the previous chapter, the line-of-sight along Runway 17L/35R line does not meet current FAA standards. The line-of-sight standard is set by the requirement that two points located five feet above the runway centerline are mutually visible for a distance of one-half the runway length. Please refer to the following illustrations entitled *RUNWAY 17L/35R LINE-OF-SIGHT NON-STANDARD CONDITION.* This deficiency will be noted on the Airport Layout Plan as a non-standard condition. In the long-term, it will be resolved with the next runway reconstruction/reconfiguration project.

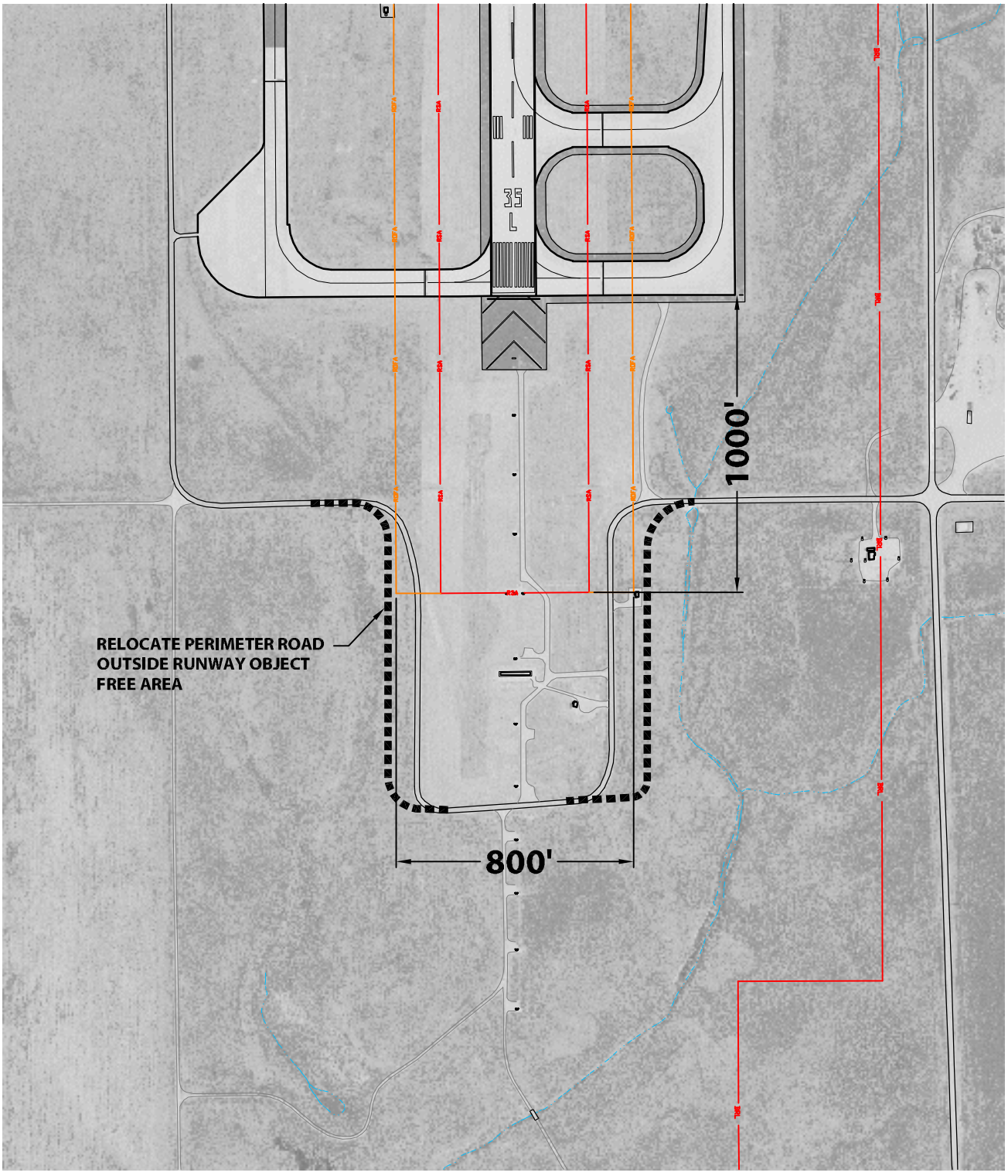
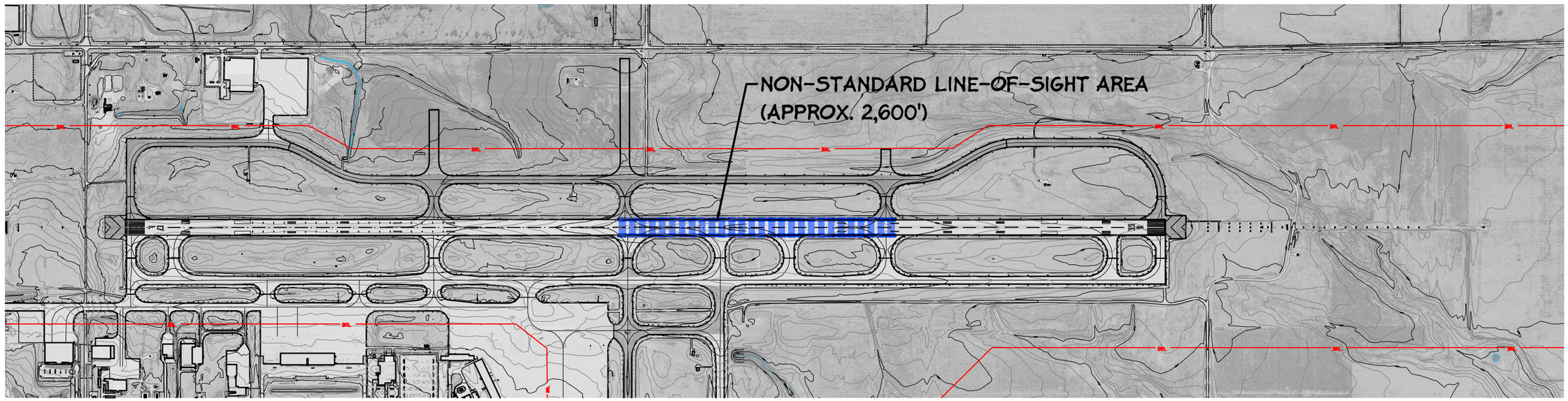


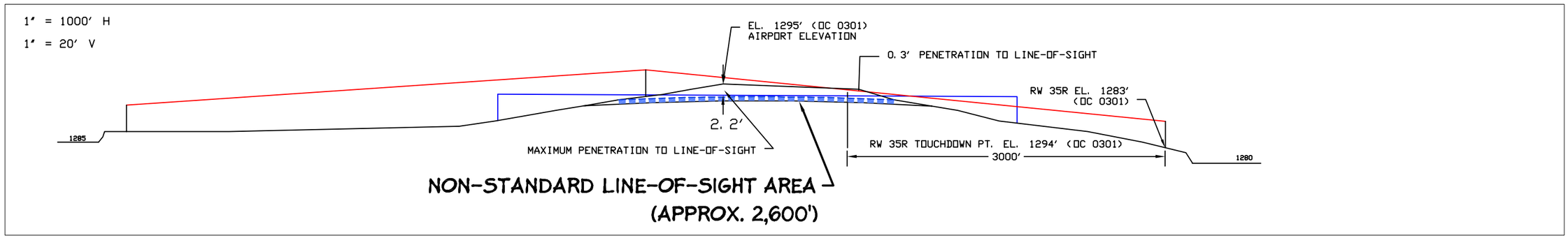
Figure E2 **Runway 35L Perimeter Road Relocation**

Source: Photogrammetric Survey by Aerial Data Service, 2007

PLAN



PROFILE



Line-of-Sight Standard Along Individual Runways with Full Parallel Taxiway.
The runway profile will be such that an unobstructed line-of-sight will exist from any point five feet (1.5m) above the runway centerline to any other point five feet (1.5m) above the runway centerline for one-half the runway length.

—BRL— Building Restriction Line
(35' Structure Height/Taxiway OFA/Extended Approach)

— — — Airport Property Line

Figure E3 **Runway 17L/35R Line-of-Sight Non-Standard Condition**

Source: Photogrammetric Survey by Aerial Data Service, 2007

Instrumentation and Lighting

Providing improved instrument approach capabilities enhances the Airport's ability to accommodate aircraft operations during periods of inclement (i.e., low visibility) weather conditions in a safe and efficient manner. Supplying additional runways with improved instrument approach procedures provides flexibility for accommodating aircraft operations when certain portions of the runway system are closed for emergencies, for repair/maintenance/construction, or when wind conditions dictate. Additionally, the continuing evolution of Global Positioning System (GPS) technology offers the potential for improving instrument approach capabilities with relatively little cost to the Airport. Therefore, the requirements, ramifications, and benefits of improving the approach visibility minimums to the Airport's runway system will be examined.

Currently, Will Rogers World Airport is supplied with an excellent array of instrument approaches. Runway 35R is equipped with both Category I and II ILS approaches and Runways 17L, 17R, and 35L are equipped with Category I ILS approaches. Runways 13 and 31 are equipped with RNAV (GPS) instrument approaches providing visibility minimums of 1-½ miles and 1 mile, respectively. The Runway Protection Zones (RPZs) associated with each runway end are encompassed entirely on airport property.

Runway 17L/35R. The Category II instrument approach capabilities to Runway 35R will be preserved. Category II capabilities are programmed for Runway 17L, which will require the installation of an ALSF-2 approach lighting system on the north end of the east parallel runway.

Runway 17R/35L. The existing instrument approaches to this runway are sufficient for the duration of the planning period of this Master Plan Update. Therefore, no improvements are recommended.

Runway 13/31. It is recommended that the Airport continue to protect for the ability to implement a precision instrument approach providing visibility minimums of ½-mile and a height above touchdown minimum of 200 feet to Runway 13. Continued protection for the ability to implement a precision instrument approach providing visibility minimums less than one mile, but greater than ¾-mile, and a height above touchdown minimum of 200 feet should be continued for Runway 31. These types of instrument approaches are likely to be either a Wide Area Augmentation System (WAAS) or a Local Area Augmentation System (LAAS), both of which are GPS-based. There does not appear to be on-site or near-in constraints within the approach paths that would hinder the implementation of these approach types. However, prior to implementation, surveys of the approach areas must be conducted, data compiled, and

submitted to the FAA for approval using the Vertically Guided Airport Airspace Analysis Survey criteria in FAA Advisory Circular (AC) 150/5300-18.

The specified future instrument approach to Runway 13 would require the installation of an approach lighting system such as a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR). An approach lighting system would not be required for the specified future instrument approach type to Runway 31, but is recommended.

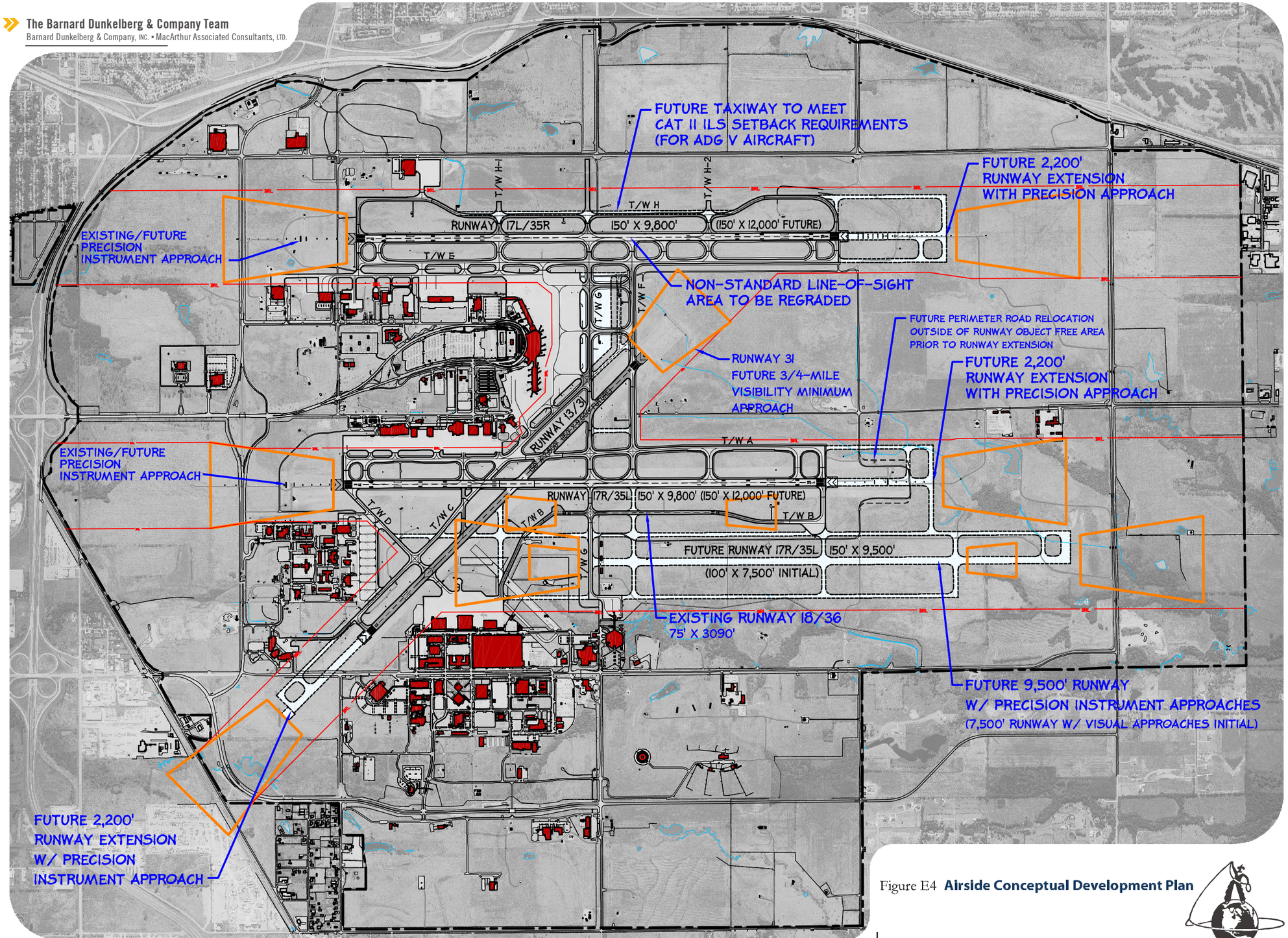
The Runway 13 RPZ associated with the improved approach and the runway extension would extend beyond existing airport property. Fee simple or easement acquisition of this area would be necessary to ensure land use compatibility.

Taxiway Pavement Strengths

Most of the existing taxiways have pavement strengths matching the published runway pavement strengths and are, therefore, adequate for the duration of the planning period, provided routine maintenance is performed. The exception is sections of Taxiway H are inadequate for supporting large aircraft that may utilize future landside development areas on the east side of the Airport. It is recommended that the inadequate pavement sections be reconstructed or strengthened to match the runway pavement strengths.

Airside Recommendations and Conceptual Development Plan

The following illustration, entitled *AIRSIDE CONCEPTUAL DEVELOPMENT PLAN*, provides a summary of the recommendations presented in the preceding sections.



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GRAPHIC SCALE IN FEET

PROPOSED RUNWAY PROTECTION ZONES

—BRL— BUILDING RESTRICTION LINE (35' STRUCTURE HEIGHT/TAXIWAY OFA, EXTENDED APPROACH INCLUDING FUTURE RUNWAY FACILITIES)

AIRPORT PROPERTY LINE

Figure E4 **Airside Conceptual Development Plan**

Source: Photogrammetric Survey by Aerial Data Service, 2007

Landside Development Concepts

Introduction

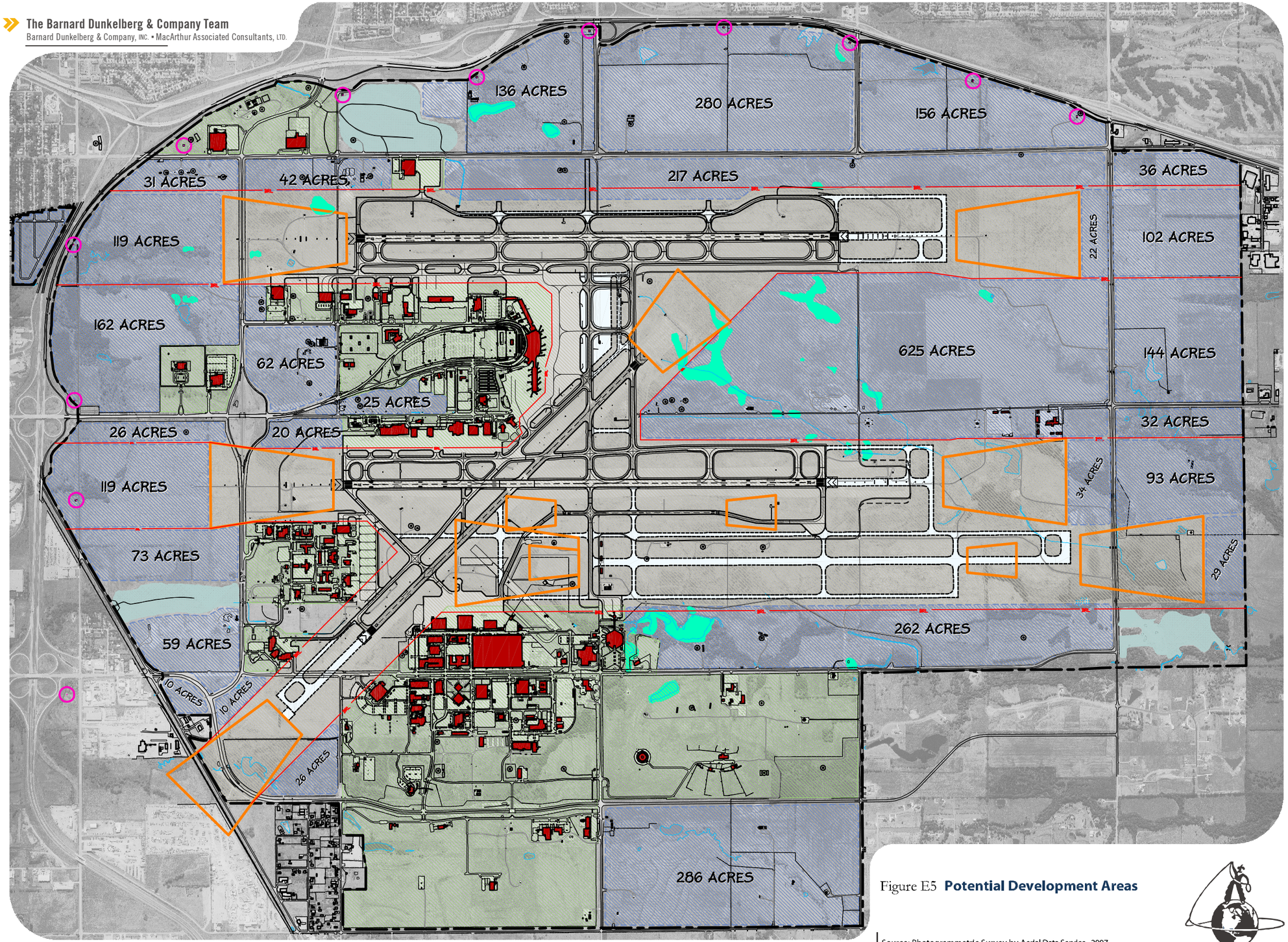
With the framework of the Airport's ultimate airside development identified, the placement of landside facilities can now be analyzed. The overall objective of landside development planning at the Airport is the provision of facilities, conveniently located and accessible to the community, which accommodate the specific requirements of airport users.

Prior to analyzing the landside development components of Will Rogers World Airport, a review of the relationship with the Airport to Oklahoma City is needed. The image of Oklahoma City, and especially the downtown entertainment district known as "Bricktown", has experienced dramatic change in the past several years. Several projects have been completed, are in progress, or have been proposed that have revitalized the downtown area and created renewed interest and development. The City has embarked upon a "Core to Shore" plan that will encourage and create downtown residential and commercial development. Certainly, the considerations of links and connections with the Airport (transportation links, complementary economic development concepts, and aesthetic themes) are important elements that have been recognized in the development of the Airport Master Plan Update.

Potential Development Areas

Figure E5, entitled *POTENTIAL DEVELOPMENT AREAS*, provides an illustration of airport property that is potentially available for development. Limitations are placed on developable land by certain extenuated factors. Land either currently used by, or reserved for, the ultimate airfield development such as runways, taxiways, aprons, and safety/object setbacks in consideration of instrument approach capabilities, is not available for development. Areas currently developed with both aviation and non-aviation facilities such as the terminal building, terminal support services, the Mike Monroney Aeronautical Center (MMAC) facilities, and the Air National Guard (ANG) facilities, among others, are not readily available for development; although, redevelopment of existing facilities is certainly possible. Additionally, there are three areas on airport property designated for stormwater detention facilities, as discussed previously, that are not available for development.

The illustration indicates that the Airport has a significant amount of property available for future development.



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GRAPHIC SCALE IN FEET

- AIRFIELD RESERVE
- EXISTING ON-AIRPORT DEVELOPMENT AREAS
- POTENTIAL DEVELOPMENT AREAS
- POTENTIAL WETLANDS
- STORMWATER DETENTION AREA
- PROPOSED RUNWAY PROTECTION ZONES
- —BRL— BUILDING RESTRICTION LINE (35' STRUCTURE HEIGHT/TAXIWAY OFA, EXTENDED APPROACH INCLUDING FUTURE RUNWAY FACILITIES)
- AIRPORT PROPERTY LINE
- OIL WELLS
- WATER WELLS

Figure E5 **Potential Development Areas**

Source: Photogrammetric Survey by Aerial Data Service, 2007

Summary of Landside Facility Development Needs and Influences

Terminal and Support Services. Centered on the terminal building, this category of land use describes those functions dependent on the flow of passengers through the Airport. The terminal building, parking facilities, rental car facilities, roadway network, curbside drop-off and pick-up lanes, hotels, and air cargo facilities are all vital components of this land use category. A more detailed examination of the potential development of this area is presented in the *Terminal Area Analysis* section.

Summary of Development Needs and Influences:

The existing development area for passenger terminal facilities is relatively compact and future terminal area support facilities are expected to consume existing undeveloped areas over the 20-year planning period covered by this Master Plan Update. The relatively narrow development footprint of the terminal loop road limits the width of development within the terminal area, as well as restricts the landside elevations and view plane of the terminal building improvements.

- Planning for the next phase (Phase III) of terminal building expansion is substantially complete. A new nine-gate concourse is programmed for the east end of the existing terminal building.
- Important comments received during the process to develop the Phase III recommendations have been considered in the development of the Airport Master Plan Update's terminal area recommendations and include:

  - ✓ Consider the customers' needs first.
  - ✓ Maintain a plan for future expansion so that we are always ready to meet demand (easy expansion).
  - ✓ There should be a special emphasis on the provision of customer service amenities.
  - ✓ The terminal experience at Will Rogers World Airport should set the community apart from others.
  - ✓ Curbside signage and process needs improvement.
  - ✓ Ground transportation center may need expansion – additional room for limos.

- The forecast number of passenger enplanements at the end of the 20-year planning period (2026) is approximately 2.6 million. At full build-out, rule-of-thumb estimates indicate that the Phase III expanded terminal building could accommodate approximately 3.4 million annual enplanements. Post-planning period estimates indicate the Airport could have as many as 4.0 million enplanements by the year 2046. This indicates that some thought should be given to where additional boarding gates might be accommodated in the very long-term.

- The Phase III expansion of the passenger terminal building will require the relocation of some air cargo facilities, including the existing belly freight building. Consideration should be given to new/expanded cargo facilities in the existing location and to other locations outside of the terminal area.

- General aviation development within the terminal area is close to being fully occupied. Consideration should be given to general aviation development potentials that exist outside of the terminal area. In addition, in the very long-term, consideration should be given to the relocation of the general aviation facilities on the west side of the terminal area, to make room for passenger terminal support facilities.

- Conceptual programming for a Consolidated Rental Car Facility is underway, with detailed design and refinement of facility plans scheduled in 2009. When this facility is constructed, the existing rental car area on the west side of the entry roadway will be available for passenger terminal support facilities.

- Passenger, rental car, and employee parking demands are expected to continue to increase throughout the 20-year planning period. The recommendations of a parking study that are currently being prepared have been, and will continue to be, incorporated into this Master Plan Update as they become available.

Mike Monroney Aeronautical Center (MMAC). This airport land use designation applies to all the MMAC facilities on the west side of the Airport. The MMAC is a very important tenant at the Airport and accommodating their future needs is imperative.

Summary of Development Needs and Influences:

- MMAC maintains its own facilities development Master Plan. As appropriate, the recommendations of the MMAC Master Plan will be incorporated into the Airport's planning documents.

Air National Guard. The ANG facilities located northeast of Runway 13/31, and west of Runway 17R/35L, are efficiently sited for maximum use by military aircraft and have excellent landside access.

Summary of Development Needs and Influences:

- As with the MMAC, the ANG maintains its own Master Plan. The Will Rogers World ANG facility recently had a mission change (transitioning from an Air National Guard facility that primarily focused on supporting C-130 aircraft, to an Army National Guard facility that is likely to support other aircraft types). This change in mission will almost certainly have some effect on the long-term facilities development plan for the site. Again, as appropriate, recommendations of the ANG's Master Plan will be incorporated into the Airport's planning documents.

General Aviation/Corporate/Institutional Facilities. This broad category applies to the general aviation FBOs and maintenance facilities located east of Runway 17R/35L, the corporate hangars located west of Runway 17L/35R, the Metro Technology Center's Aviation Career Campus, the Federal Bureau of Prisons Federal Transfer Center, and the ARINC facilities east of Runway 17L/35R.

Summary of Development Needs and Influences:

- As stated above, the existing general aviation development at the Airport is primarily located in the terminal area. Consideration has been given to general aviation development potentials that exist outside of the terminal area. Additional details concerning potential general aviation facilities development areas are provided below.

- The Oklahoma City Department of Airports operates a three-facility system of airports. The airports in the system are Will Rogers World Airport, Wiley Post Airport, and Clarence E. Page Airport. Understanding the general aviation roles of the airports within the system is an important aspect of the programming for appropriate types of future facilities.

  - ✓ Clarence E. Page Airport is the smallest airport in the system. It is located approximately 14 statute miles west-northwest of Will Rogers World Airport. The airport consists of two paved runways, Runway 17R/35L and Runway 17L/35R. Runway 17R/35L is 6,014 feet long, 100 feet wide. Runway 17L/35R is 3,502 feet long, 75 feet wide. For 2006, Clarence E. Page Municipal Airport recorded approximately 27,500 aircraft operations, and had 90 based general aviation aircraft (75 single engine, ten multi-engine, and five ultralight aircraft). The airport services include fuel sales, hangar and tiedown storage for transient aircraft, and major airframe and powerplant service.

  - ✓ Wiley Post Airport is located approximately ten statute miles north-northwest of Will Rogers World Airport. A full range of general aviation services is offered at the airport, which supports such activities as: business-related flying, recreational flying, flight training, air charters, air ambulance, aircraft rentals and sales, and aerial surveillance, along with others. Wiley Post Airport is operated with three runways: Runway 17L/35R, the airport's primary runway, is 7,198 feet in length and 150 feet in width; Runway 17R/35L is the secondary/parallel runway with a length of 5,000 feet and a width of 75 feet; and, Runway 13/31, the airport's crosswind runway, is 4,213 feet in length and 100 feet in width. In 2006, Wiley Post Airport had 312 based general aviation aircraft: 188 single engine, 43 multi-engine piston, 30 turboprop, 40 business jets, and 11 helicopters.

  - ✓ Will Rogers World Airport has four paved runways. Runway 17L/35R is 9,802 feet long, 150 feet wide, constructed of concrete with a grooved surface treatment, and equipped with HIRLs. Runway 17R/35L is 9,800 feet long, 150 feet wide, constructed of concrete with a grooved surface treatment, and equipped with HIRLs. Runway 13/31 is 7,800 feet long,

150 feet wide, constructed of asphalt and concrete with a grooved surface treatment, and equipped with MIRLs. Runway 18/36 is 3,078 feet long, 75 feet wide, and is constructed of asphalt. The full range of commercial aviation and general aviation services is provided at the Airport. In 2006, Will Rogers World Airport had 43 based general aviation aircraft: two single engine, 21 multi-engine prop aircraft (both piston and turbine), and 20 business jets.

As suggested by the types of facilities available and the types/quantities of based aircraft at the three system airports, they currently have, and will continue to have, different general aviation roles. Clarence E. Page Airport will continue to service smaller general aviation users, with facilities that cater to flight training, pleasure flying, and business operators using aircraft primarily propeller-driven aircraft, but up to, and including, the smaller business jets.

Wiley Post Airport will continue to accommodate a wide range of general aviation users; however, it receives a significant and frequent amount of activity from large corporate users, operating aircraft with wingspans up to 79 feet (Airplane Design Group II) and less frequent use by aircraft with wingspans up to 118 feet (Airplane Design Group III).

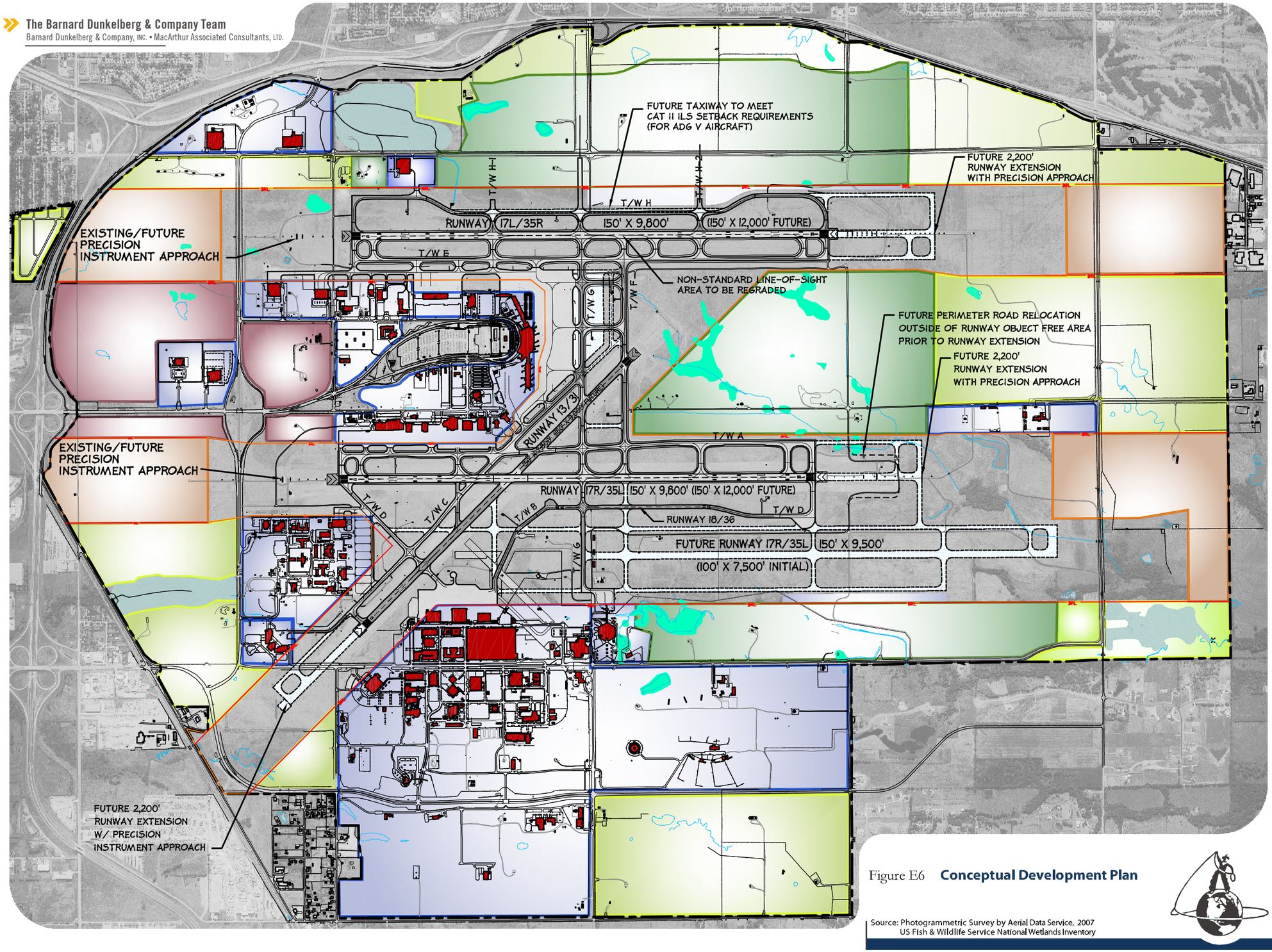
Will Rogers World Airport will remain the only commercial service airport in the system, and is designed to accommodate aircraft with wingspans up to 214 feet (Airplane Design Group V). The general aviation users at Will Rogers World Airport will primarily be larger general aviation aircraft operating Airport Design Group II and III aircraft (wingspans of between 49 feet and 118 feet). Although there will be no restrictions related to how large an aircraft must be to operate at Will Rogers World Airport, the general aviation facilities development focus will continue to be on larger corporate and institutional operators.

Overall Airport Development Concept. With a general understanding of the ultimate airfield configuration, as well as the anticipated needs and influences associated with the major airport user categories, a development concept can be established for the Airport. As can be noted in Figure E6, entitled *CONCEPTUAL DEVELOPMENT PLAN*, the plan provides the following:

- **The ultimate layout of airside facilities [i.e., runways, taxiways, and associated safety/object clearing setback requirements – identified on the Conceptual Development Plan (CDP) as airside reserve];**
- **The layout of existing on-airport landside facilities;**
- **An inventory of on-airport developable property (i.e., all airport land that is outside of the "Airside Reserve");**

- **A designation of land that should be reserved for aviation use in consideration of the development needs and influences provided above; and,**
- **A designation of land that should be utilized for indirect aviation or non-aeronautical facilities (facilities that do not require taxiway access).**

The overall theme for the formulation of the CDP is to ensure that enough land is reserved for airside and landside aviation-use facilities to accommodate potential activity even beyond the demands predicted in the 20-year forecast.



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GRAPHIC SCALE IN FEET

—BRL— BUILDING RESTRICTION LINE
(35' STRUCTURE HEIGHT/TAXIWAY OFA, EXTENDED APPROACH INCLUDING FUTURE RUNWAY FACILITIES)

AIRPORT PROPERTY LINE

EXISTING ON-AIRPORT DEVELOPMENT AREAS

DIRECT AVIATION-AERONAUTICAL

INDIRECT AVIATION & NON-AERONAUTICAL

INDIRECT AVIATION & NON-AERONAUTICAL/
TERMINAL SUPPORT FACILITIES

APPROACH PROTECTION - DEVELOPMENT RESTRICTED
(SOME TYPES OF DEVELOPMENT ACCEPTABLE; E.G., AUTO PARKING)

AIRSIDE RESERVE
(RUNWAYS, TAXIWAYS, RUNWAY PROTECTION ZONES)

STORMWATER DETENTION AREA

POTENTIAL WETLANDS

Figure E6 **Conceptual Development Plan**

Source: Photogrammetric Survey by Aerial Data Service, 2007
US Fish & Wildlife Service National Wetlands Inventory

Individual Development Area Concepts

Introduction

To explore Individual Development Area concepts, the landside of the Airport is divided into smaller areas for further analysis. Three parcels have been identified for further analysis. The parcels include the Terminal Area, representing the area in between Runways 17L and 17R, south of Airport Road, and north of Taxiway "G"; the East Side Development Area, representing the area east of Runway 17L/35R to the eastern boundary of airport property; and, the West Side Development Area, representing the area west on future parallel Runway 17R/35L to the western boundary of the Airport.

East Side Development Area

The east side of the Airport is roughly an 800-acre parcel of mostly undeveloped property centered on Portland Avenue and offering opportunities for industrial aviation development, as well as potential aviation support and non-aviation uses. The development and demand of the east side of the Airport are being primarily considered as part of the *Land Development Strategy Study*. Among other elements, the Development Strategy Study included a detailed market analysis to understand the potential demand of both aviation and non-aviation facility development areas that might utilize probably the most significant piece of undeveloped property in southwest Oklahoma City.

As illustrated in the following figure, *EAST SIDE CONCEPTUAL DEVELOPMENT PLAN*, the development concept for the east side included the basic tenet that the Airport should first and foremost support aviation uses; therefore, the majority of the site should be utilized to support aviation-related facilities. In addition, the Plan identifies an area of land adjacent to Interstate 44 that will likely best be utilized for non-aviation facilities, and an area on the south end of the property that is identified as a strategic land reserve.

West Side Development Area

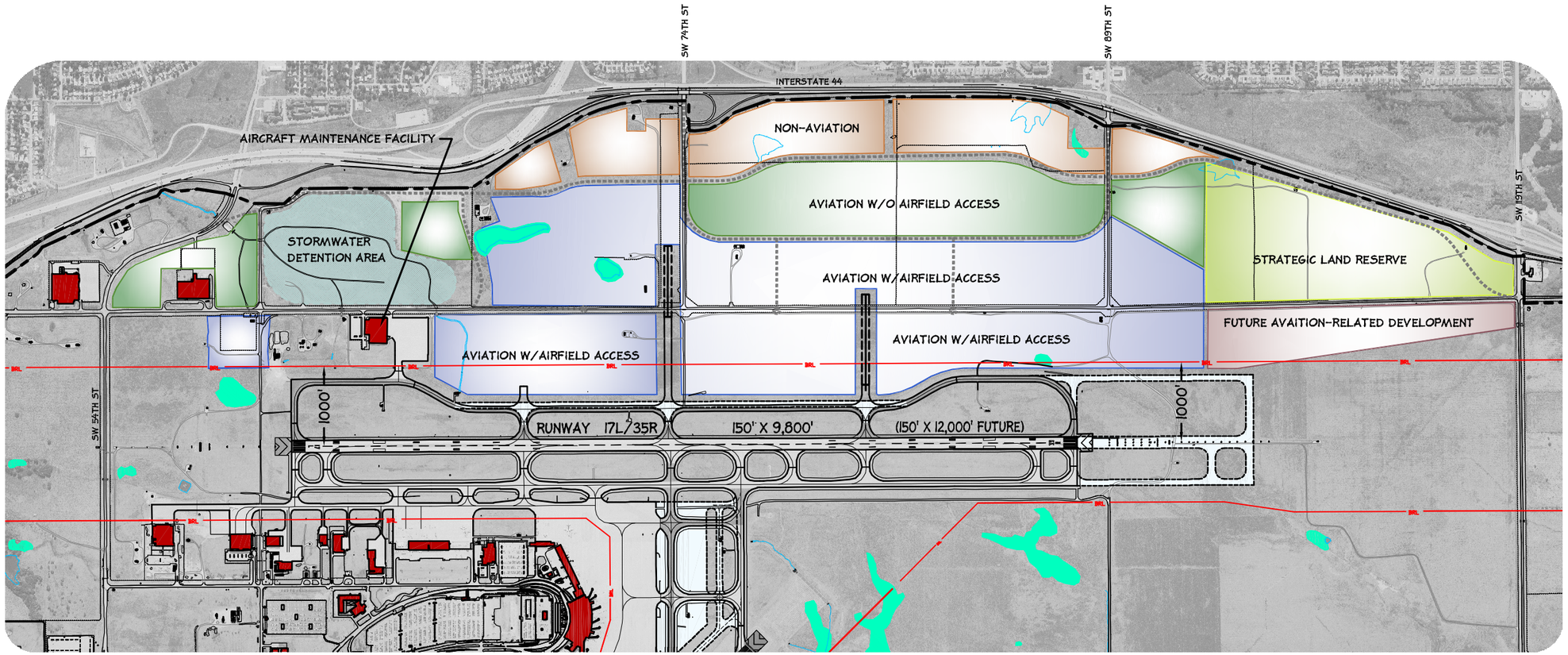
The west side of the Airport is dominated by MMAC; however, there is a strip of land on the west side of the future parallel runway (future runway 17R/35L), south of the Federal Transfer Center and east of South MacArthur Boulevard, which represents prime aviation-use development area. Although development of aviation use facilities in this area will require the extension of taxiway access from the apron area serving the Transfer Center, it is anticipated that demand for general aviation facilities may be strong enough to drive development on the west side of the Airport sometime during the 20-year planning period. A concept for the layout of

initial general aviation facilities is provided in the following figure entitled *WEST SIDE CONCEPTUAL DEVELOPMENT PLAN*.

Passenger Terminal Development Area

The terminal area of an airport is the front door to your community. No other place on the airport will be more closely identified with the community it serves. Well-integrated airport passenger terminal areas reflect the character and spirit of their cities and towns in both form and function. As such, great care should be given to the development of this area. At present, three important studies are taking place to deal with development considerations within the existing terminal area: this Airport Master Plan Update, a study of parking and rental car needs, and a terminal building study focusing on demand for Phase III terminal building development.

In its current configuration, the existing terminal area represents a significant investment in facilities and mixed use. Commercial passenger service facilities, corporate, institutional, and industrial aviation uses reside within this development area and are primarily accessed from Meridian Road. Many and varied land uses are competing for space within the terminal development area.



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GRAPHIC SCALE IN FEET

BRL BUILDING RESTRICTION LINE (35' STRUCTURE HEIGHT/TAXIWAY OFA, EXTENDED APPROACH INCLUDING FUTURE RUNWAY FACILITIES)

AIRPORT PROPERTY LINE

AVIATION W/AIRFIELD ACCESS

AVIATION W/O AIRFIELD ACCESS

STRATEGIC LAND RESERVE

FUTURE AVAITION-RELATED DEVELOPMENT

NON-AVIATION

STORMWATER DETENTION AREA

POTENTIAL WETLANDS

Figure E7 **East Side Conceptual Development Plan**

Source: Photogrammetric Survey by Aerial Data Service, 2007
US Fish & Wildlife Service National Wetlands Inventory

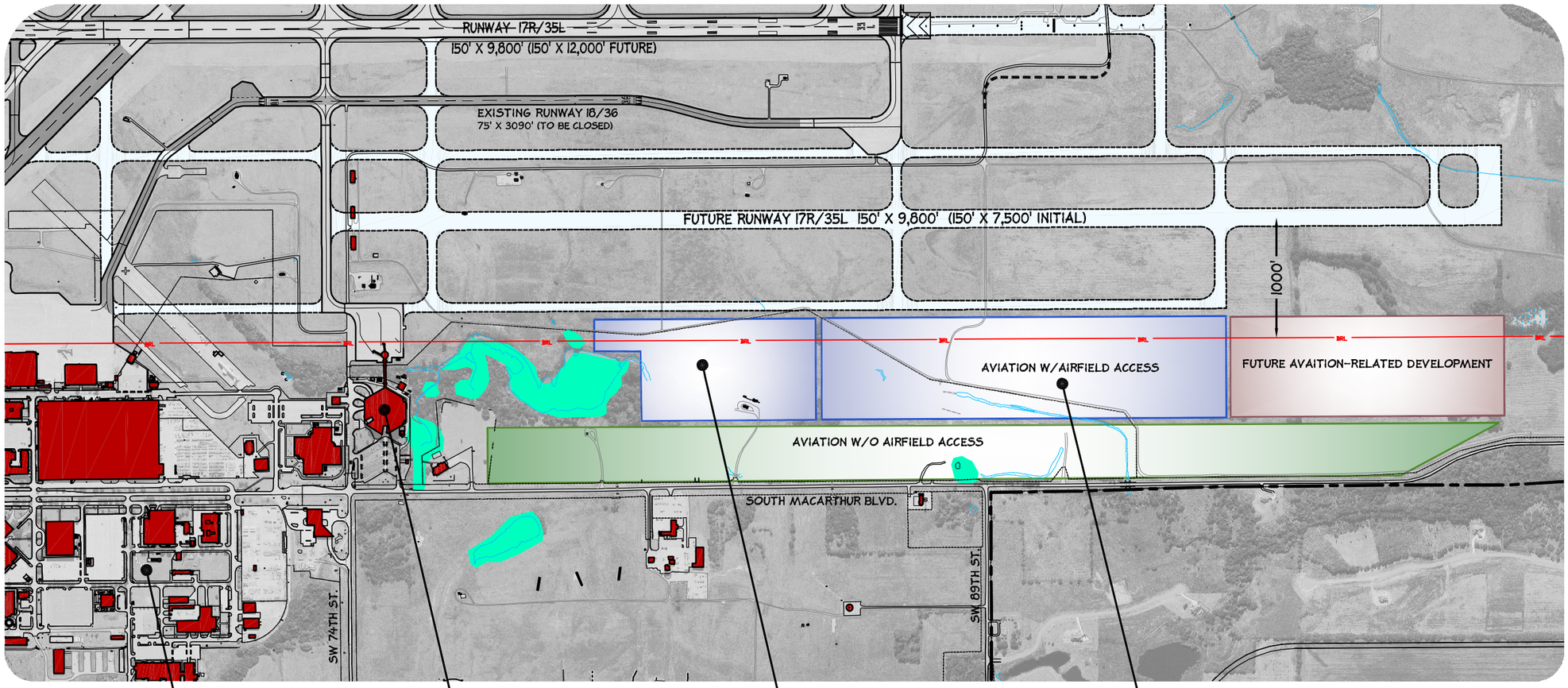


Figure E8 **West Side Conceptual Development Plan**

Source: Photogrammetric Survey by Aerial Data Service, 2007
US Fish & Wildlife Service National Wetlands Inventory

For this alternatives analysis, three development concepts have been created for consideration. They represent a graduated approach to planning concepts with each successive alternative concept being grander in scope. In each case, conceptual development is centered on the unifying terminal area element of the Meridian Road entrance to the Airport and the terminal loop road leading into and out of the immediate terminal area. Revising the layout of the terminal loop road provides a host of development opportunities in closer proximity to the terminal building, but also brings with it the potential relocation of existing facilities. As such, ***Concept Alternative One*** represents the most logical extension of the current terminal area planning theme. ***Concept Alternative Two*** represents a mild departure from the present planning theme. ***Concept Alternative Three*** represents the greatest departure from the current theme.

Common to each concept is the continuation and aesthetic enhancement of Meridian Road as the primary access to the terminal development area and the opportunity to create architecturally significant structures, or image statements, to reflect the character of Oklahoma City.

Terminal Area Concept Alternatives

Concept Alternative One. Again, Concept One represents a more traditional development approach and is an extension of the existing development theme. This concept maximizes the existing infrastructure and leaves the terminal loop road as is. It includes Option One from the *Auto Parking and Rental Car (RAC) Study* currently underway by replacing the mixed use terminal support function on the west side of the terminal loop road that presently includes car rental make ready space and sheltered auto parking with a new Consolidated Rental Car (RAC) facility. As presented in the figure, entitled *TERMINAL AREA DEVELOPMENT CONCEPT ALTERNATIVE ONE*, the elements of this planning concept are graphically illustrated. Major points of Concept One are described below, clockwise, from the top of the figure:

- **Continue and expand existing air cargo buildings and aprons on the east side of the development area.**
- **Expansion of the terminal building and apron with Phase III development in place of the existing belly cargo facility.**
- **Leaves existing parking structures in place and continues development scheme.**
- **Provides for the placement of an architecturally significant structure in place of existing sheltered auto parking.**

- **Sites a new RAC facility on the west side of the terminal loop road between the roadway and the existing industrial and general aviation facilities.**
- **Landscape screening between terminal loop road and industrial aviation to the west by creating a green belt to provide visual separation.**
- **Expanded high-end general aviation facilities to support larger corporate aviation based and transient traffic, and takes advantage of the role of Will Rogers World Airport in accommodating the largest of GA traffic.**
- **Provides for an additional opportunity for an architecturally significant structure at the view plane entrance to the terminal loop road and expansion of support facilities and commercial/retail development.**
- **Continuation and expansion of corporate and institutional aviation along the east side of the terminal development area.**

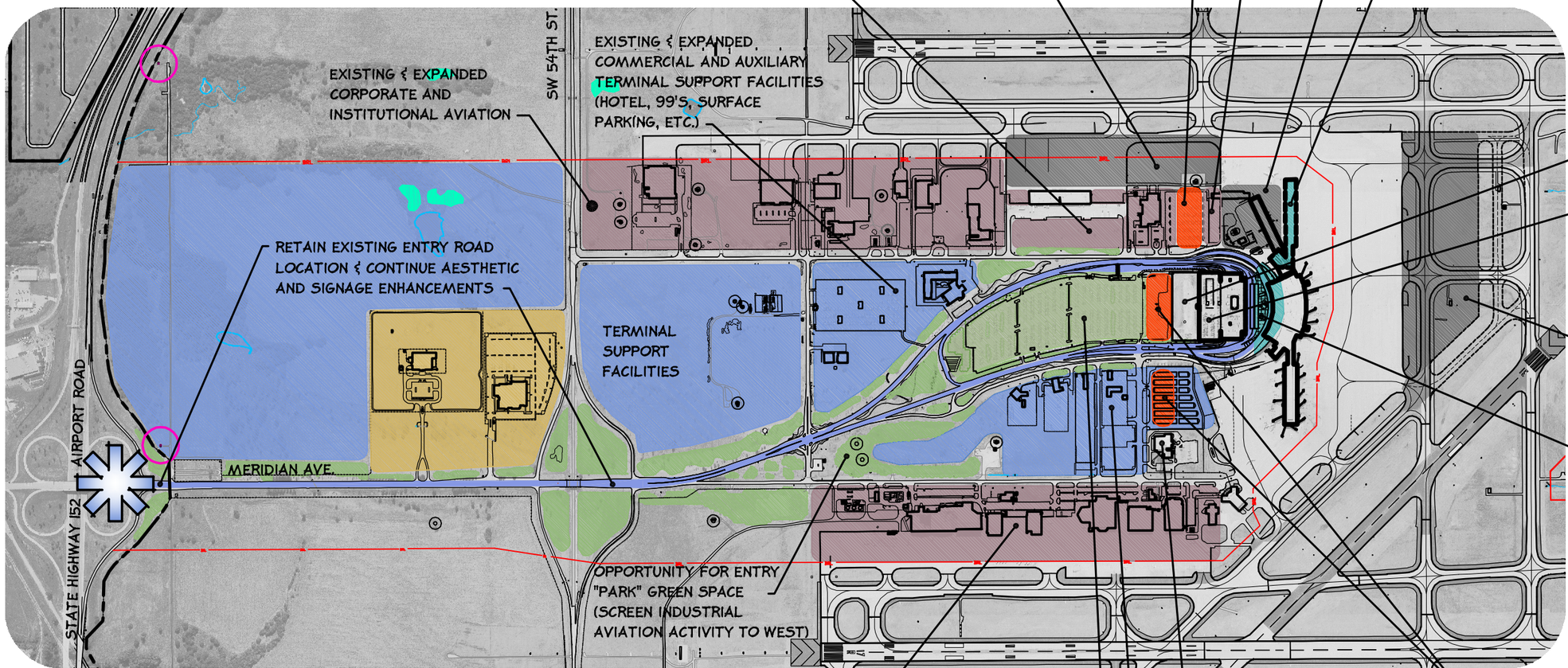


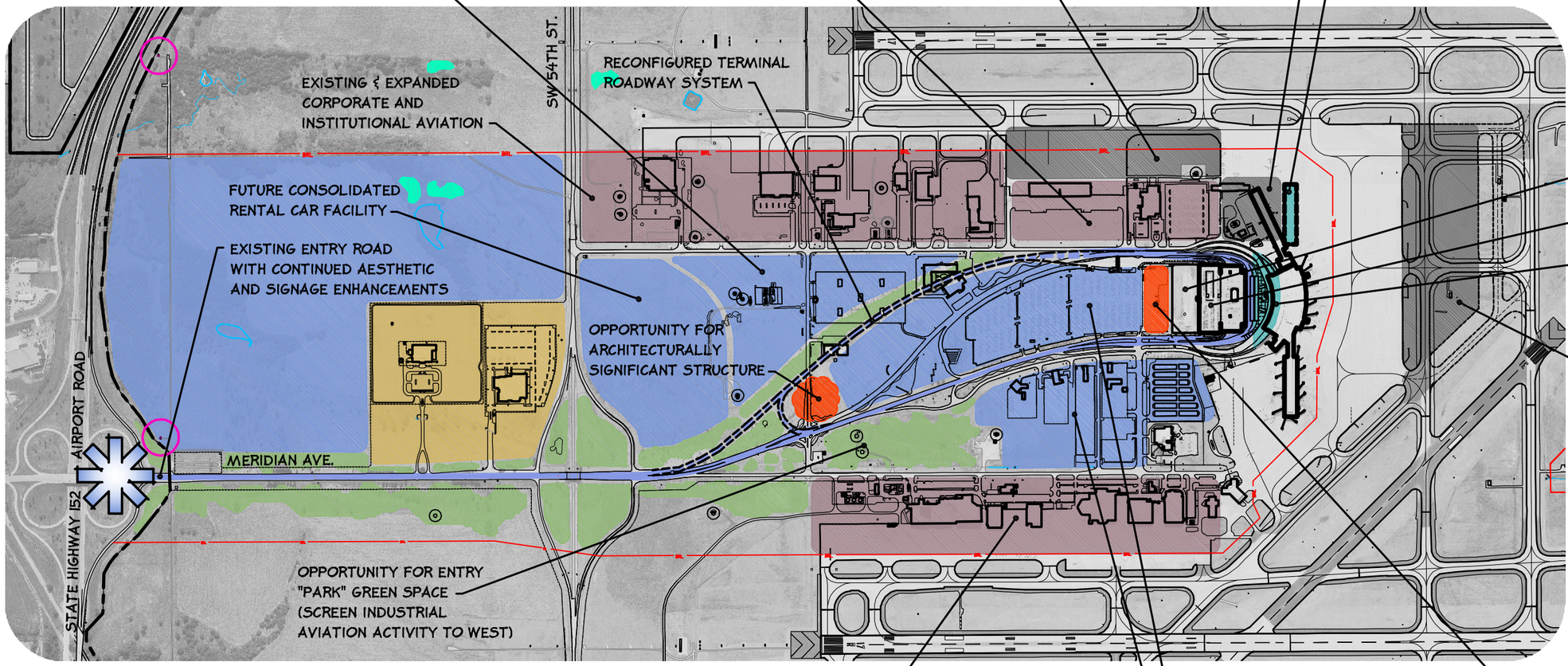
Figure E9 **Terminal Area Development Concept Alternative One**

Source: Photogrammetric Survey by Aerial Data Service, 2007
US Fish & Wildlife Service National Wetlands Inventory

Concept Alternative Two. Concept Two represents a minor break from the current development theme of the terminal area by opening up the north bound and return lanes of the loop road and allows for greater development footprint inside the loop road. This provides for additional terminal support land uses and provides greater flexibility. Further, this concept includes Option Two from the *RAC Study*, by locating an RAC further north within the terminal development area at the corner of 54th Street and the loop road. This Concept does not address the narrowness of the existing development corridor, but does suggest a flexible re-use of the mixed-use terminal support function on the west side of the terminal loop road for unspecified terminal support facilities, as well as providing for landscape screening between the terminal roadway and the industrial aviation activity to the west of the loop road. As presented in the figure, entitled *TERMINAL AREA DEVELOPMENT CONCEPT ALTERNATIVE TWO*, the elements of this planning concept are graphically illustrated. Major points of Concept Two are described below, clockwise, from the top of the figure:

- **Continue and expand existing air cargo buildings and aprons on the east side of the development area.**
- **Expansion of the terminal building and apron with Phase III development in place of the existing belly cargo facility.**
- **Leaves existing parking structures in place and continues development scheme.**
- **Provides for redevelopment of the mixed-use space (rental car make ready and sheltered auto parking) with more appropriate terminal support facilities.**
- **Expanded high-end general aviation facilities to support larger corporate aviation-based and transient traffic, and takes advantage of the role of Will Rogers World Airport in accommodating the largest of GA traffic.**
- **Landscape screening between the terminal loop road and industrial aviation to the west by creating a green belt to provide visual separation.**
- **Provides for the opportunity for an architecturally significant structure and primary image statement for Oklahoma City at the exact entrance to the terminal loop road. Additional commercial/retail/support facilities within the expanded terminal loop road are also provided.**
- **Sites a new RAC south of 54th Street and east of the terminal loop road. Additional commercial/retail/support facilities to the east of the expanded terminal loop road are also provided.**

Continuation and expansion of corporate and institutional aviation along the east side of the terminal development area.



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GRAPHIC SCALE IN FEET

Figure E10 **Terminal Area Development Concept Alternative Two**

Source: Photogrammetric Survey by Aerial Data Service, 2007
US Fish & Wildlife Service National Wetlands Inventory

Concept Alternative Three. Concept Three represents the furthest departure from the existing development theme of the terminal area. It widens the terminal loop road and opens up the view planes of the terminal building, provides for additional curb front space, and would allow for the ticket lobby and the passenger screening areas to expand to the north to provide for greater circulation and flow. By widening the terminal loop road, the Airport has the option of adding additional parking garages to the west rather than only to the north. By widening the entire loop road, a more park-like setting can be created with boulevards and green belts, and provides new wayfinding opportunities.

This Concept allows for maximum flexibility on terminal commercial and support facilities to provide for additional retail and commercial opportunities within the immediate terminal development area. It achieves this by location through the enlarged loop road and by the siting of an RAC on the north side of 54th Street. To achieve the planning benefits of Concept Three, significant redevelopment is required. As presented in the figure, entitled *TERMINAL AREA DEVELOPMENT CONCEPT ALTERNATIVE THREE*, the elements of this planning concept are graphically illustrated. Major points of Concept Three are described below, clockwise, from the top of the figure:

- **Belly cargo facilities to be moved north to provide for terminal Phase III building and apron expansion.**
- **All air cargo facilities to be relocated to the East Side Development Area.**
- **Demolition of existing short-term parking area to allow for expanded terminal building curb front and expansion of ticket lobby and passenger screening areas.**
- **Provides for the opportunity for three architecturally significant structures and primary image statements for Oklahoma City centered and flanking the terminal building. These structures/statements could be parking garages, hotel sites, or other commercial uses.**
- **Relocation of industrial aviation and depot-level maintenance to the East Side Development Area to allow for terminal roadway expansion, high-end GA expansion, and terminal building expansion to the west of Phase II terminal building improvement.**
- **Sites an RAC on the north side of 54th Street and provides for the separation of auto traffic and RAC bus traffic by utilizing the existing service road that supports the corporate and institutional aviation uses east of the loop road.**
- **Provides for significant expansion of corporate and institutional aviation along the east side of the terminal development area.**

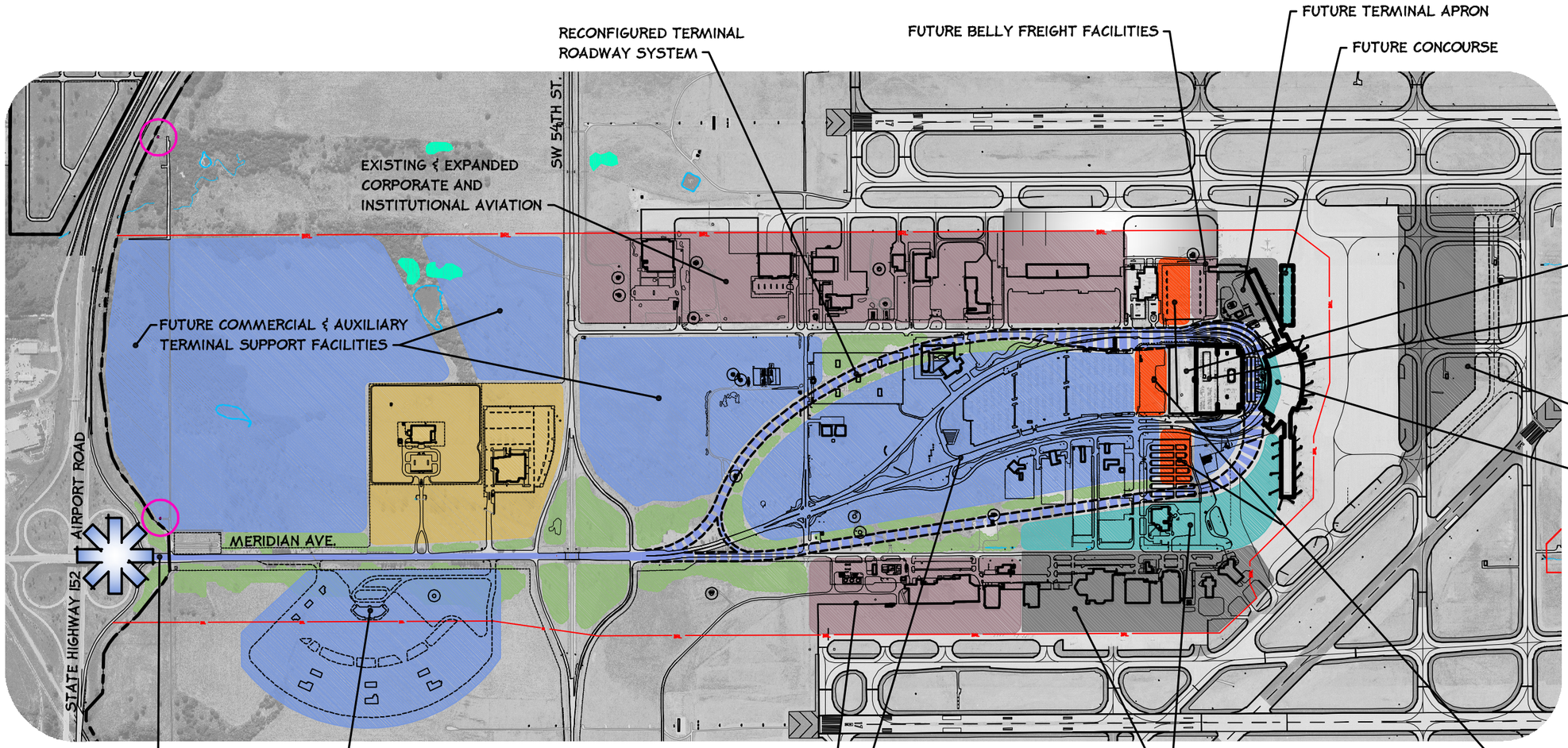

Figure E11 **Terminal Area Development Concept Alternative Three**

Source: Photogrammetric Survey by Aerial Data Service, 2007
US Fish & Wildlife Service National Wetlands Inventory

Terminal Area Planning Recommendations. Following review of the terminal area alternatives presented by the Study Committee, Airport/City Staff, and the FAA, input received indicated that a significant rerouting of the entry roadway system was impractical and that the basic layout of facilities provided in Alternative One was recommended. Therefore, the best program for the continued development of the terminal area was to maintain the basic framework provided by the terminal building, the existing roadway system, and the existing passenger parking facilities. It is also critical to program for the evolution of facilities to accommodate future demands, while providing a pleasing and "Oklahoma City-themed" use experience for airport users.

Planning for the improvement and maintenance of a complex facility like a passenger terminal is an on-going process. Therefore, several recent planning studies are important to mention, along with their recommendations.

Terminal Planning Study 1998. This study provided a comprehensive analysis of the terminal building and its support facilities in the terminal area at Will Rogers World Airport. The focus of the study was to determine if the existing terminal and landside facilities could be expanded to accommodate the anticipated future growth for the 20-year planning horizon. The findings of the Study concluded that the existing terminal building could be expanded to provide acceptable levels of service throughout the planning period. It recommended keeping the footprint of the ticketing lobby basically in tact; however, the existing concourses would be removed and replaced by new concourses oriented to the east and west of the core building. In addition, expansion of the bag claim area, the rental car counter area, inbound/outbound baggage make-up, and operations space was also recommended. Needed ancillary improvements to terminal support facilities, including access roads, passenger parking, terminal departure, and arrival curb frontage, etc., were also identified.

The 1998 *Terminal Planning Study* recommendations resulted in a $110 million terminal expansion and renovation program, which began in 2001. The terminal improvement project more than doubled the available square footage in the building, taking it from 183,944 square feet to 409,708 square feet. The improvement program was targeted on relieving terminal congestion, while creating an appropriated architectural image for the Airport providing more retail and food options, and reducing vehicle congestion on the terminal arrival and departure roads.

Gate Utilization Study. To better understand the capacity of the terminal to accommodate commercial passenger aircraft at forecast levels, a gate utilization study was completed in December 2007. The conclusions of the study included:

- **The use of more common-use gates (passenger boarding doors/jetways that are shared by more than one airline) could create opportunities to accommodate more flights at key times during the day.**
- **Even with common-use gates, flight schedule cannot expand beyond the short-term forecast during morning hours without the provision of additional passenger boarding gates.**
- **Passenger movement through the main security screening area may be improved by routing passengers to the other security screening area where there are normally shorter queuing lines.**
- **Passenger congestion in the terminal building may be reduced through improved signage and queuing systems.**
- **Improving the phasing of staffing at check-in, security and services may reduce queues, improve passenger flow, and increase retail revenues.**

Future Terminal and Concourse Improvements. As identified in the *Gate Utilization Study*, programming for continued improvements and expansion of the terminal building at Will Rogers World Airport in the short-term is critical. A planning program to identify the next phase of terminal improvement projects was initiated in mid-2008 and has recently been completed.

Programmatic requirements recognized in this project include:

Gates: The concourses provide 17 gates. Long-term demand shows the need for a total of between 22-24 gates. Full build-out of an east concourse can provide between eight to ten additional gates for a total of 25-27 gates, exceeding the demand expected for the long-term (20-year) planning horizon. The B-757 will be the critical aircraft for new concourse design.

Check-in Positions: The existing terminal can provide 75 check-in (airline ticketing) positions (including positions not currently in place in the center of the terminal). Long-term demand shows a need for approximately 70 check-in positions. The recommended full build-out for the terminal expansion does not provide any additional check-in positions, unless provided as a replacement for relocated check-in counters.

Security Checkpoint: The existing terminal provides six screening lanes at two checkpoints. The full build-out recommendation examines the potential for a single central security checkpoint. An additional lane (to provide seven total) may be required to support the full build-out of the east concourse when gates are fully utilized beyond the planning horizon.

Baggage Claim: The existing terminal provides six baggage claim carousels with a total of 700 feet of presentation frontage. Long-term forecasts of passenger activity indicate that there will be a demand for seven baggage claim carousels with 830 feet of presentation frontage. The full build-out of the terminal will include an additional baggage claim carousel with approximately 150 feet of presentation frontage.

Support Functions: The full build-out terminal building should provide new office space for Airport Police, Airport Operations, Airport Administration, and TSA.

- Airport Police: Approximately 3,600 square feet (SF) of replacement office, moving from basement to area with easier access to public on upper levels of terminal.
- Airport Operations: Approximately 4,900 SF of replacement office, consolidating off-site offices and existing badge office in the terminal.
- Airport Administration: Expansion of approximately 5,000 SF of additional administration support space.
- TSA: Assuming expansion of approximately 6,500 SF of support space, pending negotiations with TSA.

International Arrivals Processing: Full build-out will provide for a future international arrivals processing area – initial estimates of required area are approximately 18,000 square feet.

Other Terminal Functions: Other terminal functions such as departure lounges, concessions, circulation, restrooms, etc. will be provided as required to a similar level-of -vice as the existing building.

Adjacent Facilities: In conjunction with the Phase III terminal improvements, the existing belly cargo building and the existing cargo annex building will be demolished. The existing users in these buildings will need new facilities in close proximity to the passenger terminal and cargo facilities.

Future Terminal and Concourse Overall Recommendation: The Terminal Expansion study's recommendation is to program for a nine-gate concourse expansion on the east side of the existing terminal building.

Parking and Rental Car Facilities. Recent studies related to public parking and rental car operations concluded that the existing ready/return areas, vehicle storage lots, and vehicle service facilities at the Airport are incapable of meeting short- and long-term requirements for the rental car industry serving the Airport. This study evaluated three development concepts that accommodated the space allocation requirements and includes:

- **Relocation of ready/return facilities into the new public parking garage.**
- **Relocation of ready/return facilities northwest of the terminal building.**
- **Consolidation of all rental car facilities to a remote location at the intersection of Meridian Avenue and S.W. 54th Street, or on the west side of Meridian Avenue between Airport Road and S.W. 54th Street.**

Relocation of Ready/Return Facilities into the New Parking Garage. This option utilizes the at-grade level of the new five-story public parking garage for the ready/return area. Allocation of approximately 600 spaces would be provided and customers would access the ready lot by exiting the baggage claim area in the center of the terminal, cross the lower level roadway, and travel through a corridor in the middle of the current and new garage.

Advantages of this option include ease of finding the ready/return lot by customers, no need to bus customers to and from the ready/return lot, and all cars would be covered and sheltered from the weather. Disadvantages include: reduction in the inventory of available public parking; the 600-space allocation does not sufficiently address existing and future demand; expansion potential is limited; traffic movement concerns within the existing roadway network; vehicle service movements (i.e., refueling, washing, and vacuuming) would compound the vehicle traffic movement concerns; and, the need for additional rental car personnel at the ready/return lot.

Relocation of Ready/Return Facilities Northwest of the Terminal Building. This concept utilized the redevelopment of the existing rental car service centers and the use of the West Public Parking Lot into a rental car campus accommodating the entire 15-year space requirements. The campus would be phased in its development and would allow uninterrupted use of the existing vehicle service centers before replacing them.

Advantages of this option include no need to bus customers to and from the ready/return lot, convenience for customers, all rental car companies have their vehicle service centers located adjacent to the ready lot so cars could be serviced on the campus and would not be required to use airport roadways, and the rental car return function would be ideal with signage directing

customers to their intended destinations. Disadvantages include: the walking distance for customers to and from the terminal building would be lengthy, reallocation of some current uses in the terminal building might be necessary to shorten the distance, expansion capacity is limited to the construction of structures, and the rental car campus could adversely affect the current public use of 67th Avenue.

Consolidation of All Rental Car Facilities to a Remote Location Adjacent to Meridian Avenue. This option consolidates all rental car facilities (i.e., ready/return lot and vehicle servicing) to a single campus at a remote site. Several layouts of the campus would be viable and the site accommodates the long-term demand.

Advantages of this option include: complete accommodation of the rental car requirements throughout the planning period, adequate expansion capability, all rental car facilities located at one site with service centers adjacent to ready lot, and it has the potential to enhance the Airport's image with location near the entry corridor. The lone disadvantage is customers will require busing to and from the terminal building.

In conclusion, the Study determined that, of the three options, the consolidation of all rental car facilities to the remote site west of Meridian Avenue and north of S.W. 54th Street represented the best solution for accommodating the long-term rental car demand. This layout concept is shown in the following figure, entitled *RECOMMENDED TERMINAL AREA DEVELOPMENT CONCEPT*, which is presented at the end of this chapter.

Terminal Area Development Concept

Overall Configuration. The recommended development concept for the terminal area represents a traditional development approach and is an extension of the existing development theme. This concept maximizes the existing infrastructure and leaves the terminal loop road in its present condition. Needed improvements to the terminal loop roadway system, the terminal curb front, and passenger parking areas were identified in the *Terminal Planning Study* that was completed in 1998. The majority of those specified improvements have been accomplished over the ensuing years, leaving the Airport's access roadway system with a basic configuration that can accommodate anticipated demand for the next two decades.

As presented in the figure, entitled *RECOMMENDED TERMINAL AREA DEVELOPMENT CONCEPT*, the elements of this planning concept are graphically illustrated. Major points of recommended development concept include:

- Plan for the expansion of the terminal building, per the recommendations of the *Phase III Terminal and Concourse Expansion Study* (i.e., program for a nine-gate concourse expansion on the east side of the terminal building).
- In consideration of very long-term passenger activity forecasts, it is recognized that additional gates and concourse space may be required and that the addition of a south concourse could be considered. If a third concourse were to be constructed, the size of the terminal's core building area, which contains the ticketing, bag claim, security, and a variety of other functions, will also likely need to be larger.
- Continue the use of and expansion of existing air cargo buildings and aprons on the east side of the terminal development area. The existing cargo facilities should be expanded/revised to accommodate demand generated by the demolition of the belly freight and cargo annex buildings. A better location for the long-term, ultimate development of air cargo facilities at Will Rogers World Airport may be east of Runway 17L/35R, east of Taxiway H.
- The existing parking structures will remain in place.
- Provides for consideration of the placement of architecturally significant structures on the north side of the terminal building to provide an "airport arrival/OKC image" statement.
- Recommends that the aesthetic (landscaping) and wayfinding (signage) improvement program for the terminal access roadway system be continued.
- Recommends that a landscape screen be provided between the terminal loop road and industrial aviation facilities on the west side of the terminal area.
- Recommends that future general aviation facilities located in the terminal area should be focused on high-end transient operators, large corporate based aircraft, and institutional users. Heavy aircraft maintenance operations should transition to the east side of the Airport. It is also recognized that general aviation space within the terminal area is almost entirely developed. Future general aviation facility development area is programmed for both the east and west sides of the Airport.
- The potential to place a consolidated rental car facility on the west side of Meridian Avenue, north of S.W. 54th Street. This will not only free up room in

the existing passenger parking structures, which is currently being utilized for ready rental cars; it will also allow for the removal of the existing rental car facilities on the west side of the terminal entry road and free up room to accommodate other terminal support functions.

- The terminal area development concept is based on the continued aesthetic enhancement of Meridian Road as the primary access to the terminal development area, and the opportunity to create architecturally significant structures, or image statements, to reflect the character of Oklahoma City.

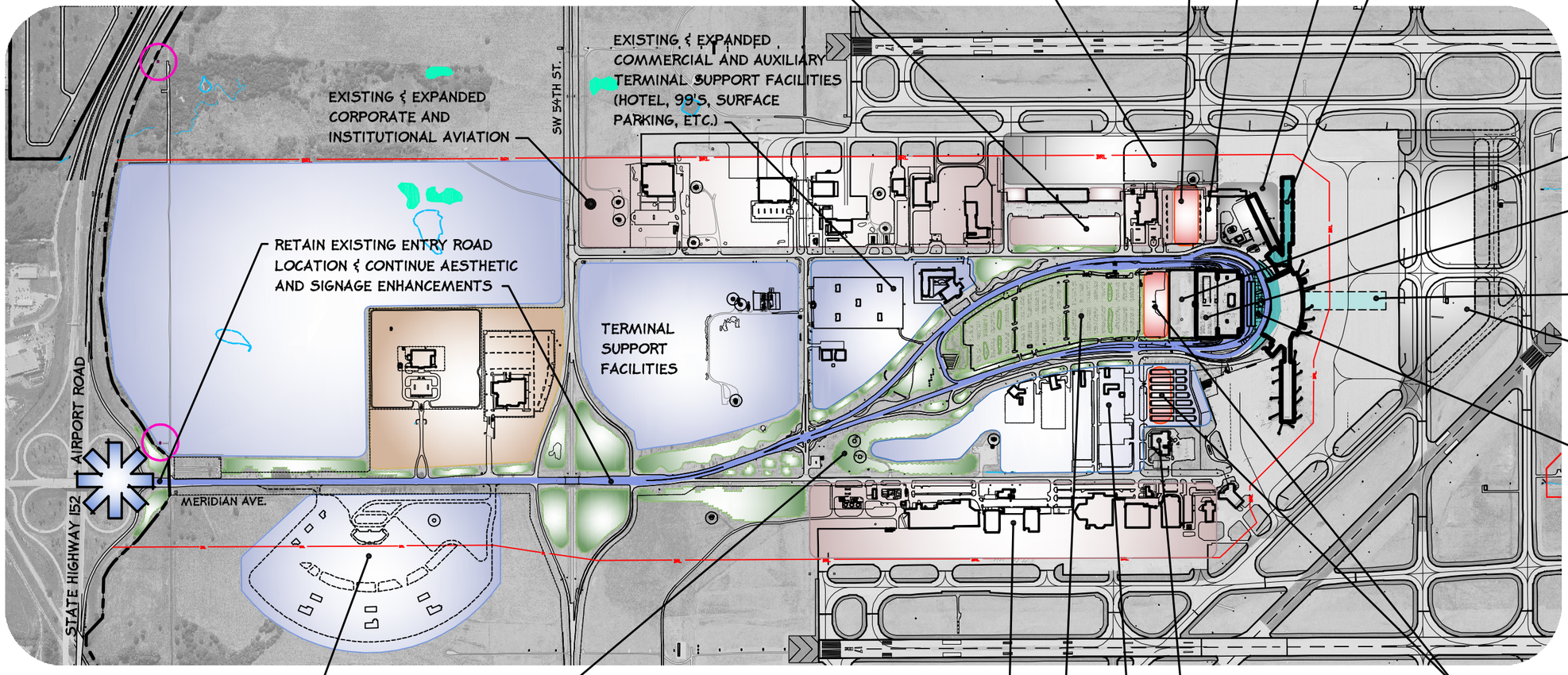

Figure E12 **Recommended Terminal Area Development Concept**

Source: Photogrammetric Survey by Aerial Data Service, 2007
US Fish & Wildlife Service National Wetlands Inventory