

## Blosser Municipal Airport project No. 3-20-0013-03

## Legal descriptions

<p>Tract A 2007 Blosser deed 1985 Blosser deed 9.1499 acres</p>	<p>A parcel of land in the Southeast Quarter (SE/4) of Section Four (4), Township (6) South, Range Three (3) West, in Cloud County, Kansas, more particularly described as follows: Beginning at the Southeast Corner of said Section Four (4); thence North 89°32'30" West, along the South line of said Section Four (4), 1048.49 feet to the true point of beginning; thence continuing along a prolongation of the last described course, 800.12 feet; thence North 0°32'45" West, 491.20 feet; thence North 89°27'15" East, 800 feet; thence South 0°32'45" East, 505.23 feet to the true point of beginning, containing 398.8989 square feet or 9.1499 acres more or less, except easements of record.</p>
<p>Tract B 2007 Blosser deed 1946 condemnation 190.3918 acres</p>	<p>Beginning at the southeast corner of the North One-half (N/2) of Southeast One-fourth (SE/4), Section Nine (9), Township Six (6) South, Range Three (3) West of the Sixth Principal Meridian, Cloud County, Kansas, said point being marked by a one (1) inch square iron bar; thence west along the south line of said North One-half (N/2) of Southeast One-fourth (SE/4) for a distance of one thousand nine hundred ninety-two and one tenth (1992.1) feet to a point marked by a three-fourth (3/4) inch iron pipe; thence with a deflection of eighty-nine (89) degrees and forty-six (46) minutes right for a distance of one thousand three hundred seventy-five and one tenth (1375.1) feet to a point marked by a concrete monument; thence with a deflection of zero (0) degrees and thirty-eight (38) minutes left for a distance of one thousand two hundred sixty-three and four-tenths (1263.4) feet to a point marked by a concrete monument; thence with a deflection of eighty-nine (89) degrees and zero (0) minutes left for a distance of six hundred one and nine-tenths (601.9) feet to a point marked by a concrete monument, and located on the east right of way line of U.S. Highway No. Eighty-one (81) and being the northwest corner of the Cloud County Park; thence with a deflection of eighty-nine (89) degrees and twenty (20) minutes right along the east right of way line of U. S. Highway No. Eighty-one (81) for a distance of one thousand three hundred twenty and zero tenths (1320.0) feet to a point on the north line of section Nine (9) and marked with a three-fourths (3/4) inch iron pipe; thence with a deflection of ninety (90) degrees and forty-five (45) minutes right for a distance of two thousand five hundred seventy-one and six-tenths</p>

(2571.6) feet to the northeast corner of Section Nine (9) and which is marked by a concrete monument; thence with a deflection eighty-nine (89) degrees and zero (0) minutes right along the east line of Section Nine (9) for a distance of three thousand nine hundred forty-nine and two-tenths (3949.2) feet to the point of beginning, and containing one hundred ninety-seven and seven-tenths (197.7) acres, more or less, EXCEPT a tract of land in the Northeast Quarter (NE/4) of Section Nine (9) in Township Six (6) South, Range Three (3) West of the Sixth Principal Meridian, described as follows: Beginning on the east right-of-way line of U.S. Highway No. 81 at a point 579.84 feet

South 0 degrees - 45 minutes East of the intersection of the east line of said highway and north line of said Section 9 (which point of intersection is 2571.1 feet west of the northeast (NE) corner of said Section 9) , and running thence South 0 degrees - 45 minutes East a distance of 90.16 feet; thence East 0 degrees - 45 minutes North a distance of 63 feet; thence East 48 degrees - 14 minutes South a distance of 761.2 feet; thence East a distance of 263.76 feet; thence North 1 degree - 00 minutes west a distance of 338.25 feet; thence North 48 degrees - 06 minutes West a distance of 477.27 feet; and thence West a distance of 473.94 feet to the place of beginning; containing 7.1 acres, more or less.

Tract C  
1985 Williams deed  
10.1145 acres

A tract of land in the S/2 of the SE/4 of Section 9, Township 6, Range 3 West, in Cloud County, Kansas, more particularly described as beginning at the northeast corner of the S/2 of SE/4 of said Section 9; thence north 89 degrees 38 minutes 07 seconds west along the north line of the said S/2 of the SE/4, 1187.69 feet to the true point of beginning; thence south 4 degrees 50 minutes 06 seconds east 739 feet; thence south 89 degrees 27 minutes 15 seconds west 650 feet; thence north 3 degrees 44 minutes 36 seconds east 747.59 feet to a point on the north line of said S/2 of the SE/4; thence south 89 degrees 38 minutes 07 seconds east along the north line of said S/2 of SE/4, 538.89 feet to the true point of beginning, containing 10.11 acres more or less.

Tract D  
1985 Blosser  
easement  
12.6167 acres

A tract of land in the Southeast Quarter (SE/4) of Section Four (4), Township (6) South, Range Three (3) West, in Cloud County, Kansas, more particularly described as follows: Beginning at the Southeast Corner of said Section Four (4); thence North 89°32'30" West, along the South line of said Section Four (4), 1048.49 feet; Thence North 0°32'45" West, 505.23 feet; thence South 89°27'15" West, 129.00 feet to the true point of beginning; thence continuing along a prolongation of the last

described course, 557.00 feet; thence North 9°04'36" West, 819.06 feet; thence north 89°27'15" East, 800.00 feet; thence South 7°59'06" West, 819.06 feet to the true point of beginning containing 549,583.1295 square feet or 12.6167 acres more or less, except easements of record.

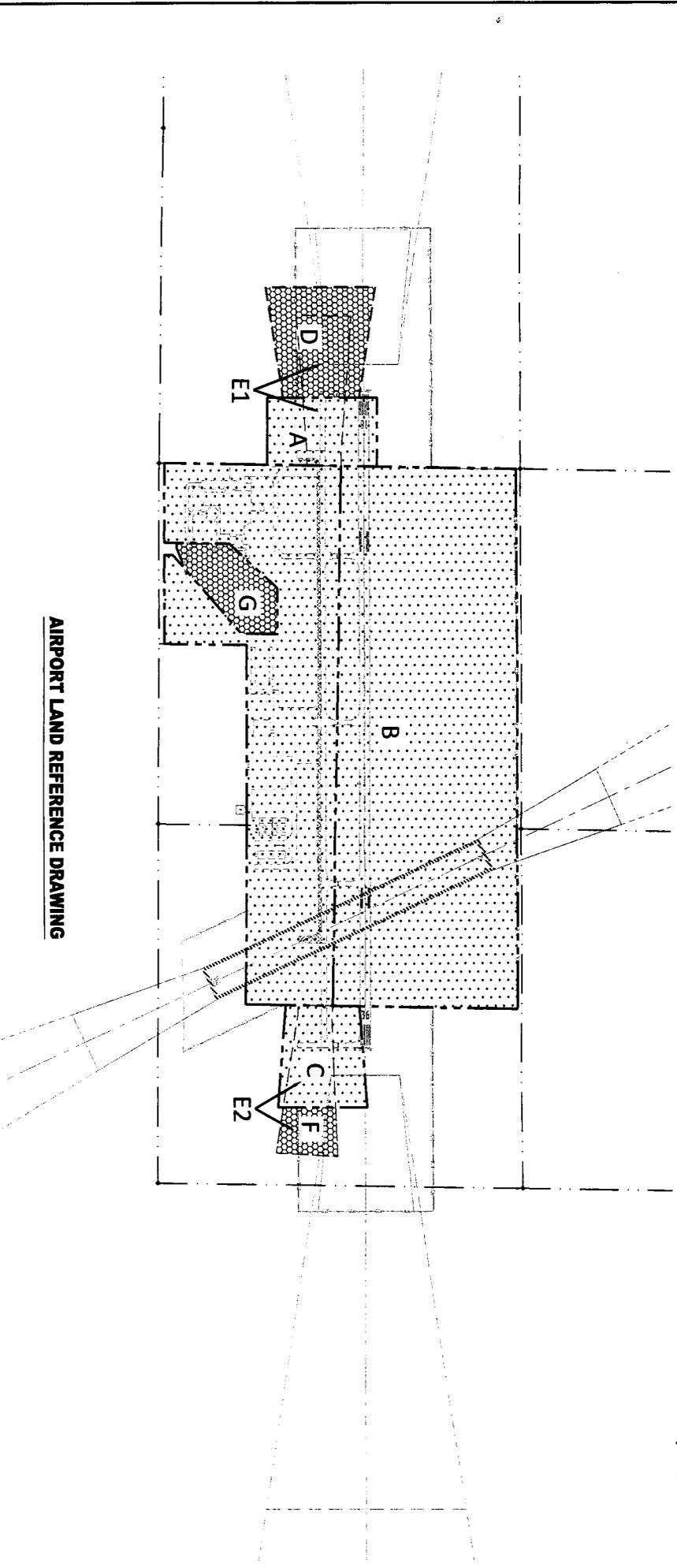
Note: no Tract E is shown on the map

Tract F  
1963 Peltier  
easement  
3.32 acres, originally  
8.03 acres

A tract of about 8.03 acres in the South Half (S/2) of the Southeast Quarter (SE/4) of Section Nine (9) in Township Six (6) South, Range Three (3) West of the Sixth Principal Meridian in Cloud County, Kansas, described as follows: Beginning at a point on the South boundary of the land heretofore acquired by the City of Concordia, Kansas, for airport purposes, to wit, on the boundary between the south half and the north half of said quarter section, which point is 1,325 feet west of the east boundary of said section, and running thence South 3 degrees 30 minutes west a distance of 94.3 feet, thence South 2 degrees 1 minutes east a distance of 94.3 feet, thence South 2 degrees 12 minutes east a distance of 1,005 feet, thence north 86 degrees 30 minutes west a distance of 450 feet, thence North 9 degrees 12 minutes east a distance of 1,005 feet, thence North 3 degrees 30 minutes east a distance of 93.7 feet to the south boundary of said airport, and thence east on the boundary between the south half and the north half of said quarter section a distance of 250 feet more or less to the point of beginning, all bearings being measured from a true meridian.

Tract G  
1954 Kansas  
Military Board  
easement  
7.1 acres

A tract of land in the Northeast Quarter (NE/4) of Section Nine (9) in Township Six (6) South, Range Three (3) West of the Sixth Principal Meridian, described as follows: Beginning on the east right-of-way line of U.S. Highway No. 81 at a point 579.84 feet South 0 degrees - 45 minutes East of the intersection of the east line of said highway and north line of said Section 9 (which point of intersection is 2571.1 feet west of the northeast (NE) corner of said Section 9), and running thence South 0 degrees - 45 minutes East a distance of 90.16 feet; thence East 0 degrees - 45 minutes North a distance of 63 feet; thence East 48 degrees - 14 minutes South a distance of 761.2 feet; thence East a distance of 263.76 feet; thence North 1 degree - 00 minutes west a distance of 338.25 feet; thence North 48 degrees - 06 minutes West a distance of 477.27 feet; and thence West a distance of 473.94 feet to the place of beginning; containing 7.1 acres, more or less.



AIRPORT LAND REFERENCE DRAWING

PROPERTY ACQUISITION				
TRACT NO.	FAM PROJECT NO.	FEE OR EASEMENT	ACQUISITION OR RELEASE DATE	ACRES
A	3-20-0013-01	FEE WITH REVERTER CLAUSE	JULY 1985	9.15 ±
B	3-20-0016-01	FEE WITH REVERTER CLAUSE	DECEMBER 1945	190.35 ±
C	3-20-0013-01	FEE	DECEMBER 1985	10.11 ±
D	3-20-0013-01	CLEAR ZONE EASEMENT	JULY 1985	12.82 ±
E1	9-14-007-5802	EASEMENT	JUNE 1981	8.03 ±
E2	9-14-007-5802	EASEMENT	JUNE 1981	8.03 ±
F	9-14-007-5802	EASEMENT	AUGUST 1983	3.32 ±
G	FAM RELEASE	EASEMENT	JUNE 1954	7.10 ±

NOTE 1: TRACT E1 (BLOSSER EASEMENT) WAS FULLY EXTINGUISHED WITH PURCHASE OF TRACTS E2 (PILGER EASEMENT) WAS PARTIALLY EXTINGUISHED WITH PURCHASE OF TRACT C. REMAINDER BECAME 3.32 ACRES OF TRACT F.

PROPERTY LEGEND	
	EXISTING FEE FOR TITLE
	EXISTING EASEMENT

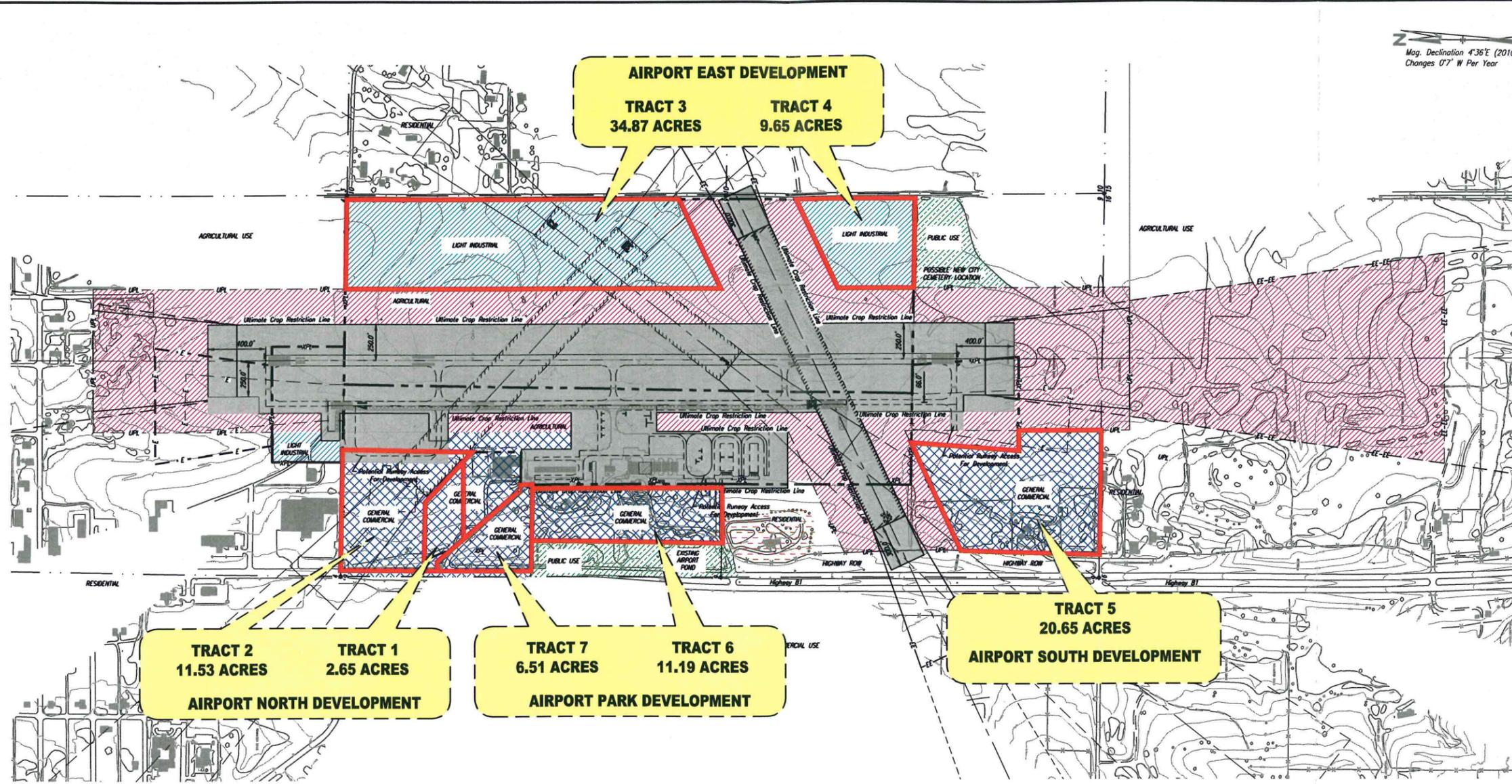


NO.	REVISIONS	DATE



**BLOSSER MUNICIPAL AIRPORT  
CONCORDIA, KANSAS**

**APPENDIX E  
AIRPORT LAND  
REFERENCE DRAWING**



Mag. Declination 4°36'E (2010)  
Changes 0'7" W Per Year

**AIRPORT LAND AND ADJACENT CITY OF CONCORDIA LAND FOR DEVELOPMENT PURPOSES REFERENCE DRAWING**

**AGRICULTURAL MINIMUM DISTANCE FROM RUNWAY/TAXIWAY FEATURE TABLE**

RUNWAY	RUNWAY ARC	RUNWAY APP. VS. MIN.	RUNWAY		TAXIWAY	
			DISTANCE IN FEET FROM RUNWAY CENTERLINE TO CROP	DISTANCE IN FEET FROM RUNWAY END TO CROP	DISTANCE IN FEET FROM CENTERLINE OF TAXIWAY TO CROP	DISTANCE IN FEET FROM EDGE OF APRON TO CROP
Primary 18/36	B-II	>1 Mile / >3/4 Mile	250	400	66	58
Crosswind 6/24	A-1 (Small Aircraft Exclusively)	Visual / Visual	200	300	45	40

\* OFA Is Used As Crop Restriction Line For Turf Runways

LEGEND		
	AGRICULTURAL DISTRICT (A-L)	
	AVIATION USE	
	GENERAL COMMERCIAL DISTRICT (C-3)	
	LIGHT INDUSTRIAL DISTRICT (I-1)	
	LOW DENSITY RESIDENTIAL DISTRICT (R-1)	
	PUBLIC USE DISTRICT (P)	
DESCRIPTION	EXISTING	ULTIMATE
Part 77 Approach Slopes	AS	AS-AS
Property Line	XPL	UPL
Easement	E	EE
Tree Mass		
Section Corner		



NO.	REVISIONS	DATE

**APPENDIX F  
AIRPORT LAND AND ADJACENT CITY OF  
CONCORDIA LAND FOR DEVELOPMENT  
PURPOSES REFERENCE DRAWING**

**BLOSSER MUNICIPAL AIRPORT  
CONCORDIA, KANSAS**

**benesch**  
engineers - scientists - planners  
Alfred Benesch & Company  
825 J Street  
Lincoln, Nebraska 68508  
402-479-2200  
Job No. -

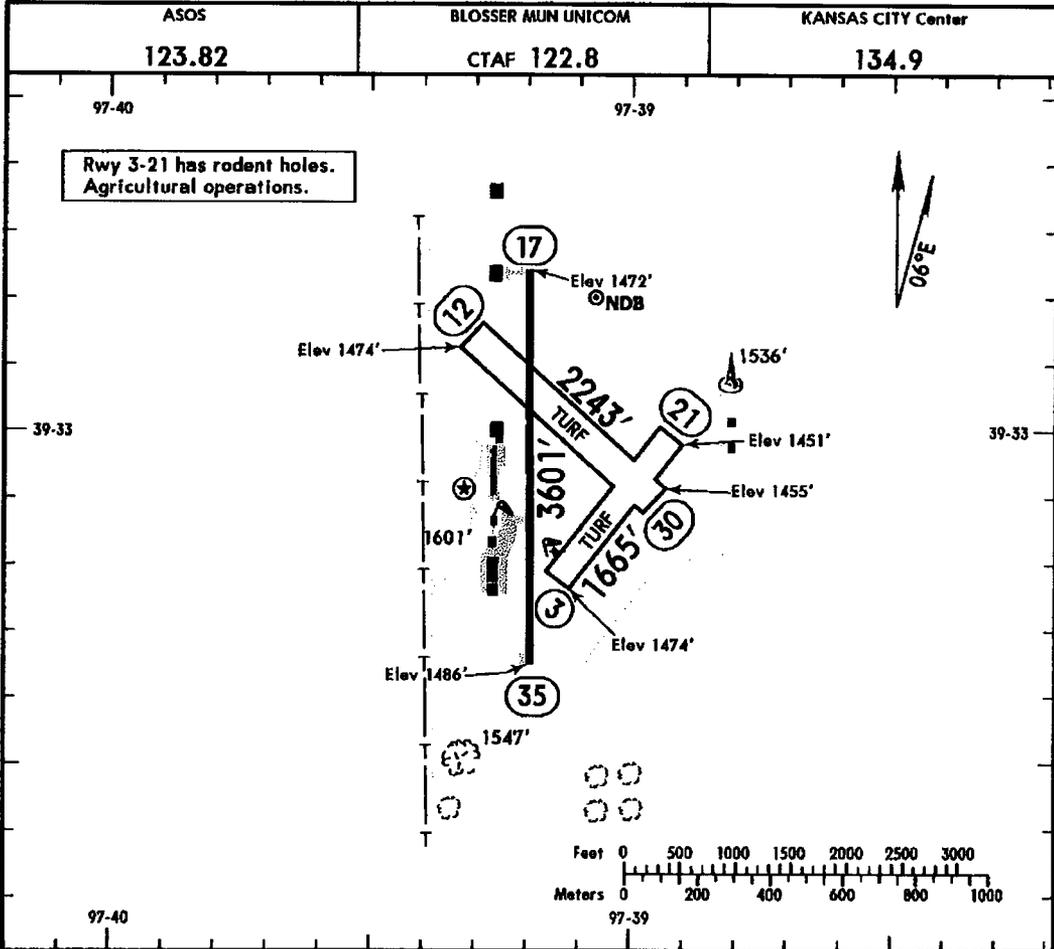
PROJECT  
MASTERPLAN UPDATE  
DATE  
NOVEMBER 2012  
JOB NO.  
57-68-2002

I:\Projects\57682002 - Concordia Master Plan & AUP Update\Final Draft Report\20 - Appendix F - Development Map\Appendix F.dwg

**KCNK/CNK**  
 Apt Elev 1486'  
 N39 33.0 W097 39.1

**JEPPESEN**  
 30 MAR 12 (10-9) Eff 5 Apr

**CONCORDIA, KAN**  
**BLOSSER MUN**



**ADDITIONAL RUNWAY INFORMATION**

RWY	USABLE LENGTHS	LANDING BEYOND	TAKE-OFF	WIDTH
3 21				255'
12 30				265'
17 35	① MIRL	aggregate friction seal coat		60'

① Activate on 122.8 after 2200 LT.

TAKE-OFF			FOR FILING AS ALTERNATE	
Rwys 17, 35		Rwys 3, 21, 12, 30	Authorized Only When Local Weather Available	
Adequate Vis Ref	STD		NDB-A	RNAV (GPS) Rwy 17 RNAV (GPS) Rwy 35
1 & 2 Eng	1/4	1	800-2	800-2
3 & 4 Eng	1/4	1/2	NA	NA

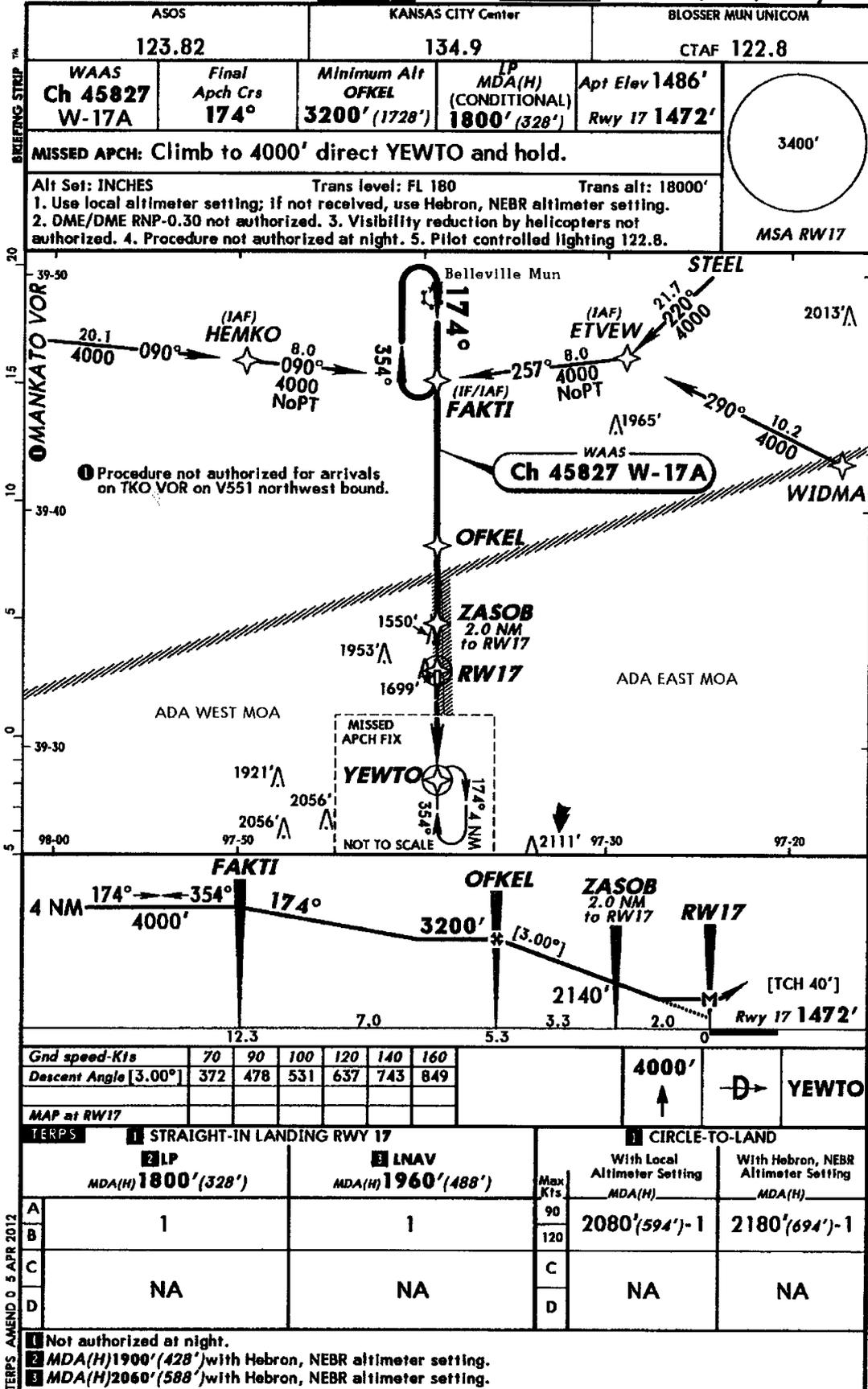
CHANGES: Chart reindexed, runway lengths, alternate minimums.

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**KCNK/CNK  
 BLOSSER MUN**

**JEPPESEN**  
 30 MAR 12  
 ETC 5 Apr (12-1) CAT A & B

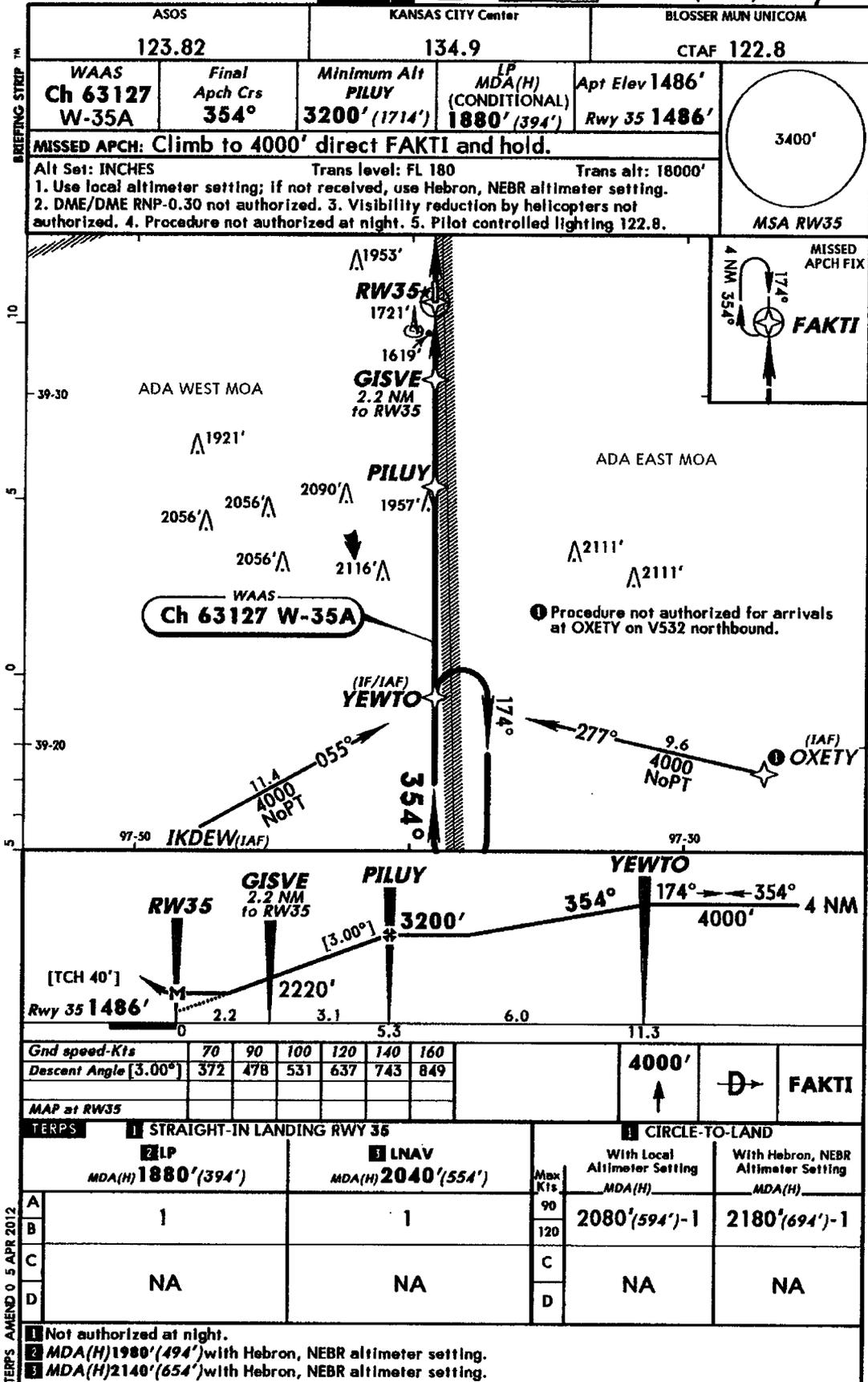
**CONCORDIA, KAN  
 RNAV (GPS) Rwy 17**



**KCNK/CNK  
 BLOSSER MUN**

**JEPPESEN**  
 30 MAR 12  
 Eff 5 Apr (12-2) CAT A & B

**CONCORDIA, KAN  
 RNAV (GPS) Rwy 35**

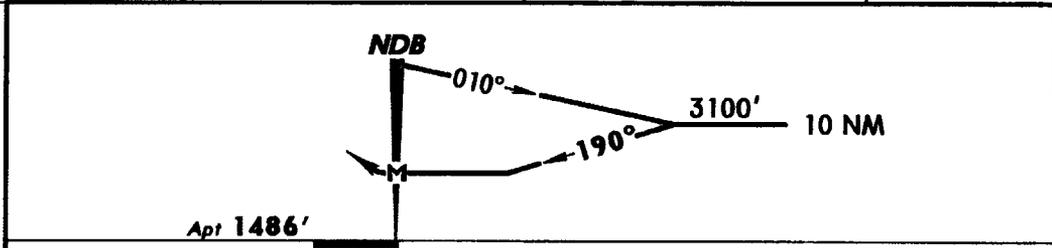
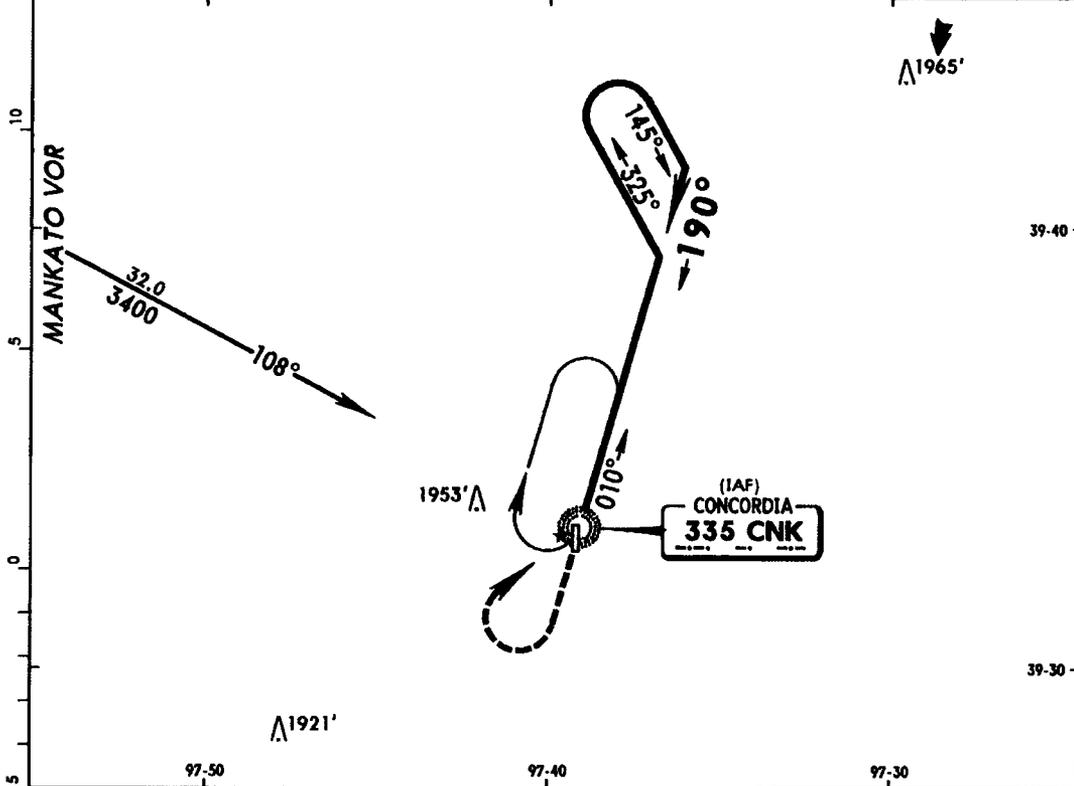


**KCNK/CNK**  
**BLOSSER MUN**

**JEPPESEN**  
 30 MAR 12 (16-1) Eff 5 Apr

**CONCORDIA, KAN**  
**NDB-A**  
 CAT A & B

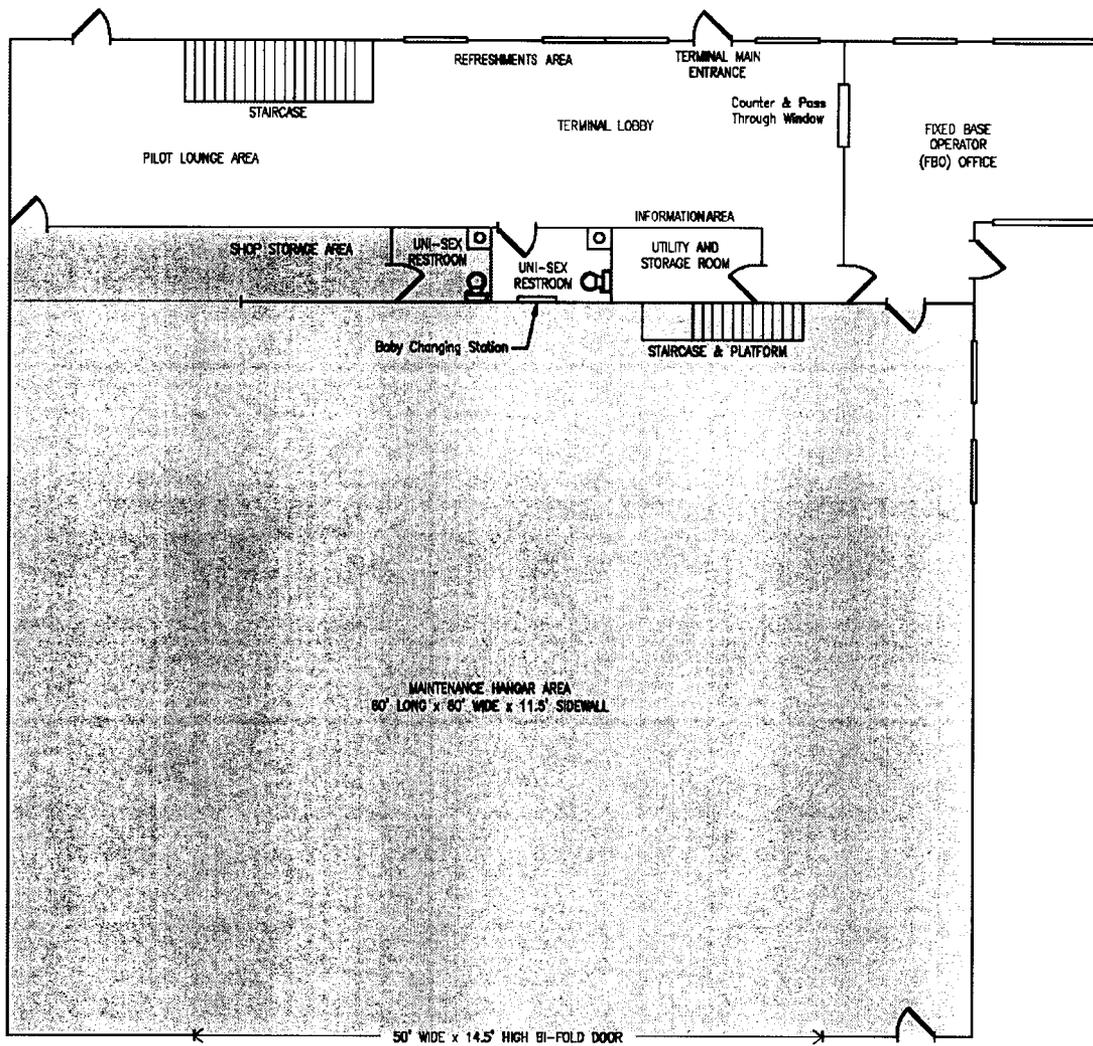
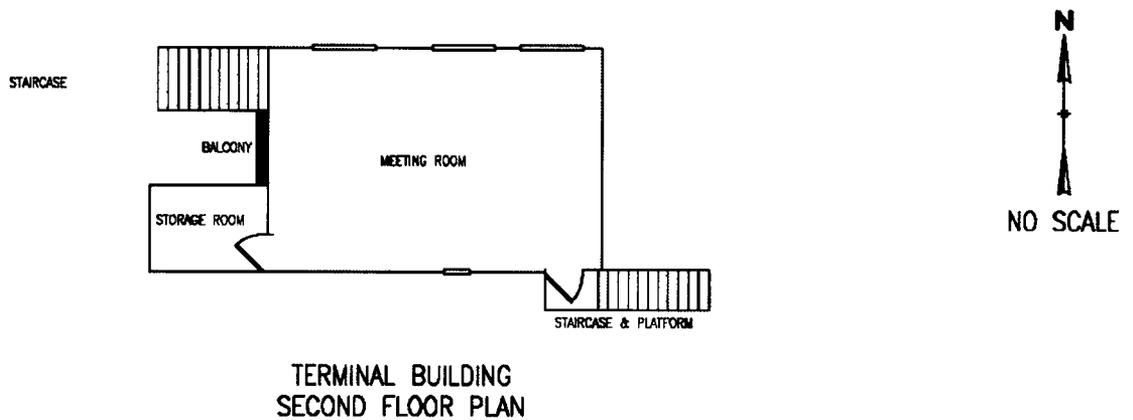
ASOS 123.82		KANSAS CITY Center 134.9		BLOSSER MUN UNICOM CTAF 122.8	
NDB CNK 335	Final Apch Crs 190°	No FAF	MDA(H) Refer to Minimums	Apt Elev 1486'	
MISSED APCH: Climb to 2400' then climbing RIGHT turn to 3100' direct CNK NDB and hold.					3300'
Alt Set: INCHES		Trans level: FL 180		Trans alt: 18000'	
1. Pilot controlled lighting 122.8.					MSA CNK NDB



				2400'	3100'	→	CNK 335
MAP at NDB				↑	RT		
				CIRCLE-TO-LAND			
				Max Kts.	MDA(H)		
				A 90	2080'(594')-1		
				B 120			
				C	NA		
				D			

CHANGES: Printing sequence.

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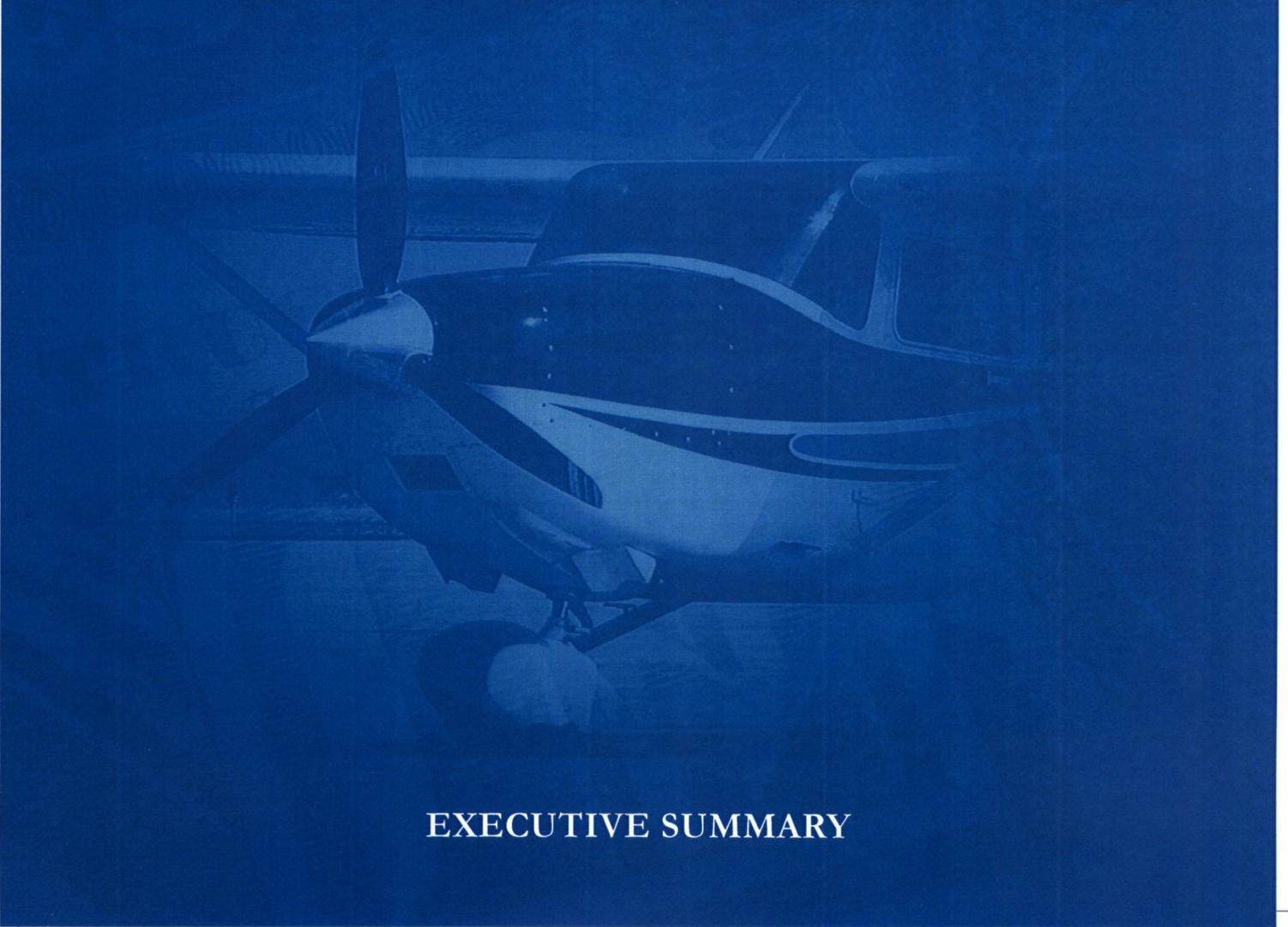
TERMINAL BUILDING & MAINTENANCE HANGAR  
FIRST FLOOR PLAN

BLOSSER MUNICIPAL AIRPORT  
FLOOR PLAN DRAWING - TERMINAL BUILDING & MAINTENANCE HANGAR

# Kansas AVIATION



## Kansas Aviation Economic Impact Study

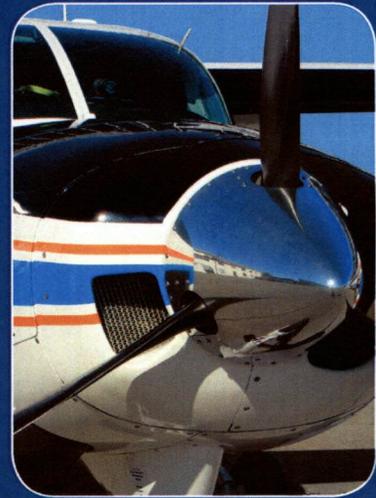


EXECUTIVE SUMMARY

## INTRODUCTION

The history of aviation and Kansas are intertwined. The state is home to many aviation pioneers, including Clyde Cessna, Lloyd Stearman, and Walter and Olive Beech. Wichita’s early commitment to aircraft manufacturing earned it the title “Air Capital of the United States” in the 1920s. Cities and towns across Kansas are now home to some of the world’s leading aerospace manufacturing companies as well as their suppliers. Without the rich history of aircraft manufacturing in Kansas, the aviation industry would not be what it is today, and the Kansas economy would be drastically smaller in size.

Air transportation benefits Kansas in a variety of ways. Airports in Kansas are the gateway to the nation’s air transportation system and the world’s economy. Air transportation is essential in today’s global marketplace. It helps attract and retain businesses in communities throughout the state. Air transportation is not only important to businesses in Kansas, it also helps to support tourism, agriculture, emergency medical services, the military, and public safety. Each airport is an important component of the Kansas Aviation System.



## STUDY OVERVIEW

Economic impacts were identified for eight commercial and 132 general aviation airports. This study focused on identifying economic benefits associated with the businesses and tenants that are located on each of the airports. Spending by visitors who arrive in Kansas by air also results in significant economic impacts each year, and this study calculated these benefits.

Airports throughout the state contribute to Kansas’ economy through a variety of activities. This study explored several unique industries and aviation-related areas that help Kansas in ways that are not as easily quantified. This study analyzed the aviation benefits residents of Kansas derive from:

- Airport and Heliport Use by Hospitals
- Agricultural Application
- Off-Airport Aerospace Manufacturing
- Value Added Benefits from Off-Airport Aviation Dependent Businesses
- Qualitative Airport Benefits
- Kansas City International Airport

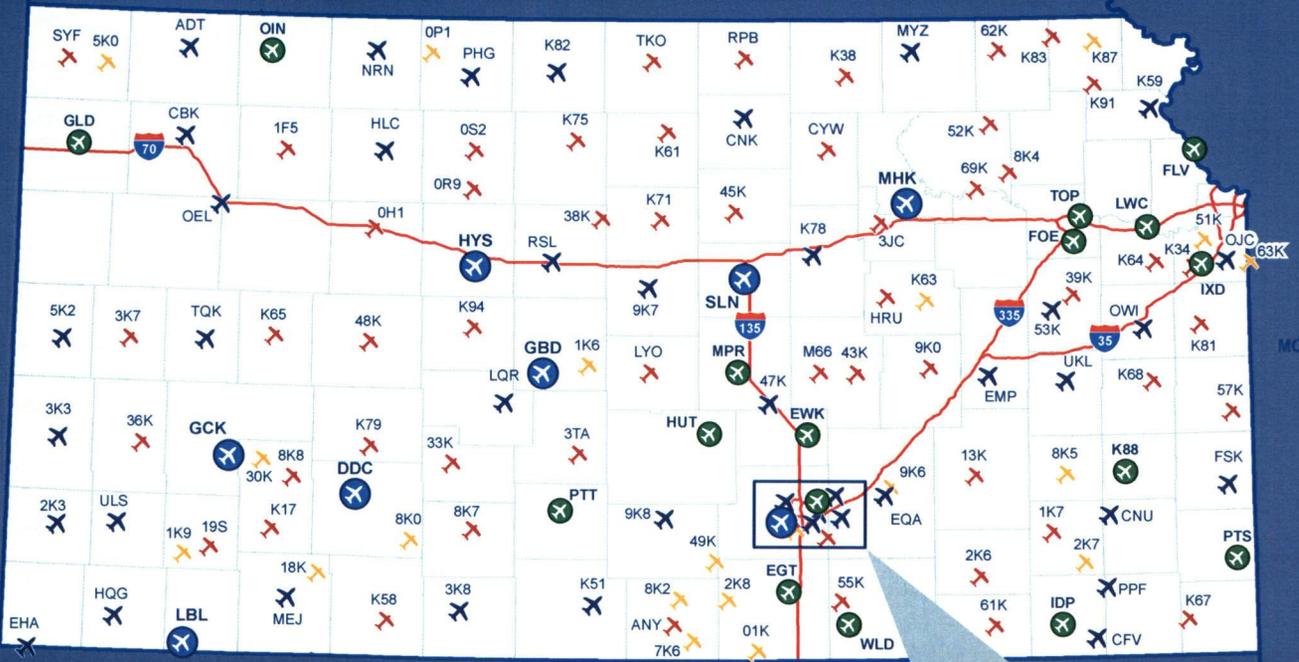
### Airports in Kansas:

Support  
**47,651**  
JOBS

Generate  
**\$2.3 BILLION**  
IN PAYROLL

Produce  
**\$10.4 BILLION**  
IN ECONOMIC ACTIVITY

IMPACTS



- Commercial Service
- Regional
- Business
- Community
- Basic
- Interstate Highways
- Kansas Counties
- States



## AIRPORT ROLE

**COMMERCIAL SERVICE AIRPORTS** – Airports that accommodate scheduled commercial airline service

**REGIONAL AIRPORTS** – Airports that accommodate regional economic activities, connect the state and national economies, and serve all types of general aviation users

**BUSINESS AIRPORTS** – Airports that accommodate local business activities and general aviation users

**COMMUNITY AIRPORTS** – Airports that serve a supplemental role in local economies, primarily serving smaller business, and personal flying

**BASIC AIRPORTS** – Airports that serve a limited role in the local economy, primarily serving personal flying



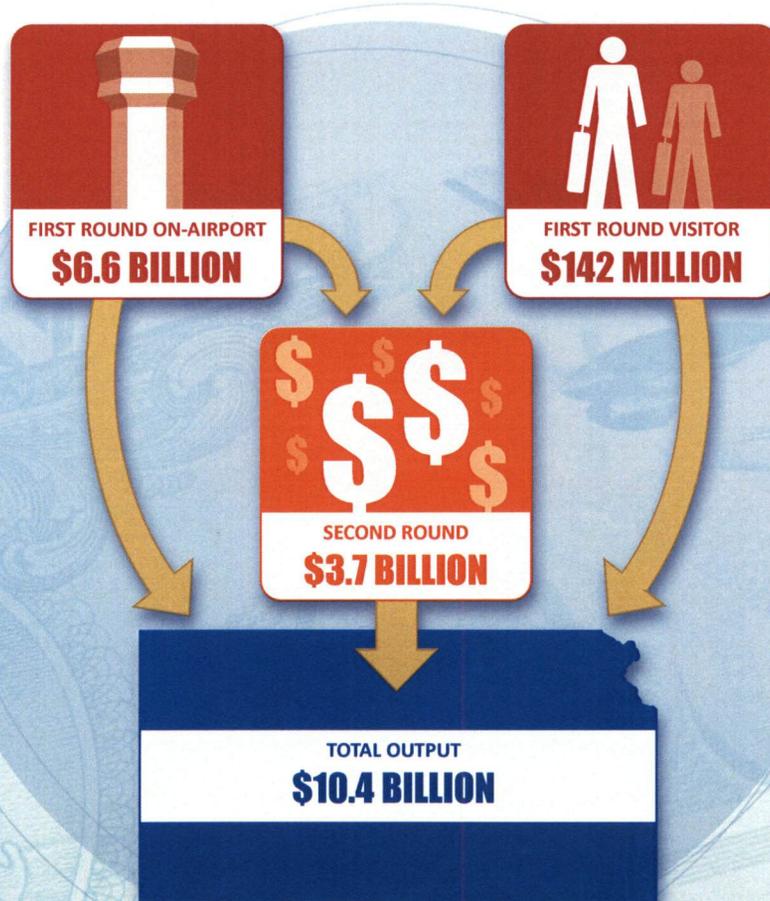
## STUDY METHODOLOGY

Airports create economic impacts in a variety of ways. On-airport businesses, such as airlines, flight schools, agricultural sprayers, corporate flight departments, aircraft mechanics, and government entities including airport sponsors and the Federal Aviation Administration are responsible for tens of thousands of jobs and extensive capital projects at airports throughout Kansas. These are the first round direct benefits of Kansas airports. Visitors arriving on commercial service airlines and general aviation aircraft spend money for hotels, restaurants, retail, and entertainment, which creates additional jobs and economic benefits. These are the first round indirect benefits of Kansas airports.

The methodology used to quantitatively estimate these benefits involved on-site data gathering and surveys mailed to airports and their tenants to tabulate the direct benefits of airports and their tenants. A survey also sampled general aviation visitors' spending habits while traveling to determine their indirect benefits. Kansas specific ratios were used to convert this spending into jobs and payroll. As these first

round benefits are released into the statewide economy, additional second round benefits are created. For example, when airport managers use their salary to buy groceries, this spending helps support additional economic activity. This spending recirculates or multiplies until the benefits ultimately leak outside of Kansas. Second round benefits for this study were calculated using Kansas specific multipliers. In general, for every \$100 of first round benefits generated by aviation-related businesses, an additional second round benefit of \$55 is created. The total economic benefit is the sum of first round and second round benefits.

The quantitative benefits of Kansas' airport system are expressed as jobs, payroll, and output. Jobs are expressed as full-time equivalents, where any part-time job is treated as half a full-time job. Payroll includes all wages, salaries, and benefits paid to employees. Output is a measure of annual economic activity equivalent to the annual revenues of a business or the annual expenditures of a visitor or organization that does not generate revenues.



## IMPACT MEASURES

For this study, economic impacts are expressed in terms of employment, payroll, and total economic activity or output. For each of these measures, first round and second round impacts were calculated.

### EMPLOYMENT

Thousands of jobs in Kansas are directly created by businesses, tenants, and other activities located at commercial service and general aviation airports. In addition to on-airport jobs, spending by Kansas visitors arriving via a commercial service or general aviation airport supports additional indirect employment. For this study, jobs were measured in terms of full-time equivalents, where any part-time job was treated as half a full-time job. In total, Kansas airports support 47,651 jobs.

### PAYROLL

As noted above, aviation in Kansas supports an estimated 47,651 first and second round jobs. All of these jobs have annual wages, salaries, and benefits that contribute to the payroll impacts identified in this study. Study findings estimate that the commercial service and general aviation airports generate \$2.3 billion in annual payroll benefits.

### OUTPUT

The value of the goods and services produced by airports and related aviation activities is the economic output of that airport. The output of on-airport businesses is estimated as the sum of annual gross revenues and average annual capital expenditures. For organizations that do not produce revenues (such as corporate flight departments), annual payroll and expenses are substituted for annual revenues. This study concluded that commercial service and general aviation airports in Kansas currently contribute \$10.4 billion in total economic impacts to state, regional, and local economies each year. Aerospace manufacturing is tied to 83 percent of this output.

GENERAL AVIATION AIRPORTS	
JOB	<b>23,266</b>
PAYROLL	<b>\$1.1 BILLION</b>
OUTPUT	<b>\$5.4 BILLION</b>



COMMERCIAL SERVICE AIRPORTS	
JOB	<b>24,385</b>
PAYROLL	<b>\$1.3 BILLION</b>
OUTPUT	<b>\$5.0 BILLION</b>



TOTAL IMPACTS	
JOB	<b>47,651</b>
PAYROLL	<b>\$2.3 BILLION</b>
OUTPUT	<b>\$10.4 BILLION</b>



ANNUAL ECONOMIC IMPACT OF  
**COMMERCIAL SERVICE AIRPORTS**

Associated City	ID	Airport	Total Employment	Total Payroll	Total Output
Dodge City	DDC	Dodge City Regional	159	\$5,267,500	\$19,582,400
Garden City	GCK	Garden City Regional	187	\$5,774,100	\$25,296,900
Great Bend	GBD	Great Bend Municipal	119	\$4,482,500	\$12,199,000
Hays	HYS	Hays Regional	179	\$5,769,100	\$24,579,200
Liberal	LBL	Liberal Mid-America Regional	200	\$6,122,500	\$28,725,500
Manhattan	MHK	Manhattan Regional	233	\$6,483,200	\$22,888,900
Salina	SLN	Salina Municipal	995	\$39,613,600	\$146,843,800
Wichita	ICT	Wichita Mid-Continent	22,313	\$1,196,316,900	\$4,685,303,200
<b>Commercial Service Airports Total</b>			<b>24,385</b>	<b>\$1,269,829,400</b>	<b>\$4,965,418,900</b>



ANNUAL ECONOMIC IMPACT OF  
**GENERAL AVIATION AIRPORTS**

Associated City	ID	Airport	Total Employment	Total Payroll	Total Output
Goodland	GLD	Renner Field-Goodland Municipal	125	\$3,721,200	\$15,465,400
Hutchinson	HUT	Hutchinson Municipal	169	\$5,336,400	\$15,182,400
Independence	IDP	Independence Municipal	2,066	\$88,226,500	\$578,142,300
Iola	K88	Allen County	31	\$711,700	\$2,871,600
Lawrence	LWC	Lawrence Municipal	96	\$3,558,900	\$10,722,800
Leavenworth	FLV	Sherman Army Airfield	30	\$960,300	\$2,701,000
McPherson	MPR	McPherson	34	\$856,600	\$2,369,800
Newton	EWK	Newton City/County	440	\$16,712,000	\$56,889,300
Oberlin	OIN	Oberlin Municipal	12	\$177,900	\$805,600
Olathe	IXD	New Century AirCenter	478	\$24,907,400	\$92,854,500
Pittsburg	PTS	Atkinson Municipal	54	\$1,727,900	\$7,114,500
Pratt	PTT	Pratt Regional	47	\$1,228,100	\$5,319,900
Topeka	FOE	Forbes Field	1,303	\$54,134,500	\$99,960,000
Topeka	TOP	Phillip Billard Municipal	199	\$6,800,700	\$14,258,300
Wellington	EGT	Wellington Municipal	35	\$1,025,400	\$4,660,400
Wichita	AAO	Col. James Jabara	738	\$33,592,300	\$89,923,600
Winfield/Arkansas City	WLD	Strother Field	1,669	\$156,983,300	\$1,542,667,500

REGIONAL AIRPORTS



BUSINESS AIRPORTS

Abilene	K78	Abilene Municipal	18	\$359,400	\$1,069,600
Atchison	K59	Amelia Earhart	7	\$162,900	\$499,400
Atwood	ADT	Atwood-Rawlins County	30	\$814,400	\$5,908,500
Augusta	3AU	Augusta Municipal	122	\$5,048,700	\$23,753,300
Benton	1K1	Stearman Field	22	\$519,600	\$2,675,200
Burlington	UKL	Coffey County	15	\$433,500	\$1,993,900
Chanute	CNU	Chanute-Martin Johnson	35	\$1,077,800	\$3,160,000
Coffeyville	CFV	Coffeyville Municipal	15	\$220,000	\$1,120,900
Colby	CBK	Shalz Field	20	\$596,000	\$4,036,800
Coldwater	3K8	Comanche County	1	\$19,400	\$72,000
Concordia	CNK	Blosser Municipal	8	\$134,800	\$437,000
El Dorado	EQA	Capt. Jack Thomas	13	\$496,500	\$1,778,600
Elkhart	EHA	Elkhart-Morton County	11	\$333,000	\$2,440,900



ANNUAL ECONOMIC IMPACT OF  
**GENERAL AVIATION AIRPORTS** *CONTINUED*

Associated City	ID	Airport	Total Employment	Total Payroll	Total Output
Ellsworth	9K7	Ellsworth Municipal	8	\$242,800	\$1,494,600
Emporia	EMP	Emporia Municipal	53	\$2,160,100	\$6,330,100
Fort Scott	FSK	Fort Scott Municipal	8	\$200,100	\$1,238,000
Hill City	HLC	Hill City Municipal	13	\$292,700	\$1,513,700
Hugoton	HQG	Hugoton Municipal	16	\$490,000	\$2,154,000
Johnson	2K3	Stanton County Municipal	41	\$999,900	\$6,142,200
Kingman	9K8	Kingman-Clyde Cessna Field	13	\$228,500	\$994,100
Larned	LQR	Larned-Pawnee County	11	\$326,900	\$2,243,100
Marysville	MYZ	Marysville Municipal	7	\$334,600	\$813,400
Meade	MEJ	Meade Municipal	7	\$178,400	\$1,178,600
Medicine Lodge	K51	Medicine Lodge	less than 1	\$27,600	\$146,400
Moundridge	47K	Moundridge Municipal	16	\$583,700	\$2,559,700
Norton	NRN	Norton Municipal	10	\$299,100	\$2,304,100
Oakley	OEL	Oakley Municipal	26	\$557,300	\$3,916,000
Olathe	OJC	Johnson County Executive	377	\$10,012,500	\$36,608,900
Osage City	53K	Osage City Municipal	45	\$2,077,100	\$7,071,600
Ottawa	OWI	Ottawa Municipal	10	\$233,000	\$875,100
Parsons	PPF	Tri-City	19	\$407,800	\$1,810,700
Phillipsburg	PHG	Phillipsburg Municipal	8	\$262,100	\$1,977,700
Russell	RSL	Russell Municipal	13	\$340,900	\$1,856,700
Scott City	TQK	Scott City Municipal	17	\$394,600	\$1,916,700
Smith Center	K82	Smith Center Municipal	17	\$470,600	\$3,018,100
Syracuse	3K3	Syracuse-Hamilton County Municipal	29	\$724,100	\$4,532,200
Tribune	5K2	Tribune Municipal	5	\$151,800	\$899,700
Ulysses	ULS	Ulysses	39	\$1,189,400	\$5,716,500
Wichita	BEC	Beech Factory	11,014	\$486,998,500	\$1,783,759,000
Wichita	CEA	Cessna Aircraft Field	3,020	\$133,614,700	\$890,973,900
Wichita	K32	Riverside	8	\$177,700	\$582,300
Anthony	ANY	Anthony Municipal	3	\$92,300	\$517,200
Ashland	K58	Harold Krier Field	4	\$120,200	\$858,900
Baldwin City	K64	Vinland Valley Aerodrome	82	\$2,959,200	\$3,536,400
Belleville	RPB	Belleville Municipal	4	\$111,100	\$692,100
Beloit	K61	Moritz Memorial	18	\$577,300	\$2,265,100
Cimarron	8K8	Cimarron Municipal	1	\$23,100	\$130,300
Clay Center	CYW	Clay Center Municipal	14	\$291,100	\$1,081,400
Dighton	K65	Dighton	less than 1	\$30,100	\$66,800
Eureka	13K	Eureka Municipal	5	\$189,000	\$561,700
Fredonia	1K7	Fredonia	1	\$4,400	\$15,200
Gardner	K34	Gardner Municipal	15	\$282,400	\$1,008,800
Garnett	K68	Garnett Municipal	8	\$277,400	\$669,100
Greensburg	8K7	Paul Windle Municipal	1	\$56,200	\$424,000
Herington	HRU	Herington Regional	12	\$249,400	\$1,141,400
Hillsboro	M66	Alfred Schroeder Field	1	\$41,500	\$223,600
Hoxie	1F5	Hoxie-Sheridan County	13	\$452,700	\$3,485,800
Jetmore	K79	Jetmore Municipal	less than 1	\$2,900	\$16,900
Junction City	3JC	Freeman Field	91	\$3,333,200	\$12,608,600

BUSINESS AIRPORTS CONTINUED

COMMUNITY AIRPORTS





## ADDITIONAL AREAS OF ECONOMIC BENEFIT TO KANSANS

Certain areas of aviation provide benefits to Kansas that are not captured in the traditional economic model process described previously. This study evaluated several additional areas of economic benefit to Kansas and its residents.



*Economic impact for airport and heliport use by hospitals:*

**Lives, Health, Service**

### AIRPORT AND HELIPORT USE BY HOSPITALS

In purely economic terms, aviation use by the healthcare industry is only a tiny part of aviation's overall impact. However, aviation serves a critical role in providing communities, especially those in rural areas, with access to medical services. The ability to rapidly and safely move patients and medical personnel throughout Kansas is an aviation benefit that cannot be measured solely in terms of jobs, payroll, and economic output. Lives are improved, in some cases saved, and these outcomes are difficult to assign an economic value. Through a survey of nearly 200 hospitals across Kansas, it was determined that hospitals on average host eight specialty clinics a month with doctors flying long distances from major cities to conduct the clinics. Hospitals also rely on the use of helicopters and fixed wing aircraft to transfer patients both in and out of Kansas. In addition to using airports to move doctors and patients around the state, hospitals also use airports to move a variety of medical items and important paperwork via air cargo or overnight delivery services.

### AGRICULTURAL APPLICATION

As part of the "Grain Belt," Kansas plays a major role in the production of agriculture products for the nation and the world. In 2009, Kansas harvested more than 21 million acres of crops valued at nearly \$7 billion, which places Kansas among the top 10 states in agriculture production. Aviation has a significant role in supporting the Kansas agriculture industry. In general, agricultural applicators apply pesticides to crops without negatively impacting yield as ground rigs can to certain crops. Agricultural applicators are also used to respond quickly to outbreaks of plant disease or insect infestation. Without these actions by agricultural application operators, some or even all of the economic value of a crop can be lost.



*Economic impact of crop value attributed to agricultural applicators:*

**Up to \$1.2 billion**

### OFF-AIRPORT AEROSPACE MANUFACTURING

Aviation and aerospace companies make up a large sector of the Kansas economy. The state has attracted many businesses that are engaged in the development, production, and manufacturing of aircraft, aviation support systems, aircraft components, and other aviation and aerospace-related products. In some instances, these aviation-related businesses are located on-airport. However, a substantial portion of the aerospace manufacturing industry takes place at locations other than airports. With a rich aviation history, it is no surprise that aerospace manufacturing plays such an important role in the Kansas economy.



*Economic impact for off-airport aerospace manufacturing:*

<b>Jobs</b>	<b>47,000</b>
<b>Payroll</b>	<b>\$1.6 billion</b>
<b>Output</b>	<b>\$9.5 billion</b>

**OFF-AIRPORT AVIATION DEPENDENT BUSINESSES**

Many employers in Kansas, while not located directly on the airport, benefit from the proximity and availability of the state’s airports. Businesses rely on airports to provide transportation or to move goods quickly. Without these airports, many companies in the state would experience adverse effects in business activity levels. A survey of Kansas businesses found that many businesses in the region depend on the state’s airports for the transport of employees, clients and suppliers as well as goods. Without access to these airports, some companies would be forced to cut employment or possibly locate outside of Kansas. Based on this survey, an estimated 67,000 Kansas jobs exist in non-aviation companies because of the availability of aviation services in Kansas.



*Off-Airport Aviation Dependent Businesses support:*  
**Increased Jobs & Business Activity**

**KANSAS CITY INTERNATIONAL AIRPORT**

This study examined the positive benefits that airports within Kansas provide the state and its people. However, one major airport outside the state – Kansas City International Airport – is close enough and has a large enough market area that its influence is felt within Kansas. In fact, two reliever airports that support metropolitan general aviation activity, are located in Kansas. With 12 airlines providing scheduled service and 5.8 million annual passenger enplanements, Kansas City International was evaluated to determine its economic benefit to Kansas.



*Kansas economic impact for Kansas City International Airport:*

<b>Jobs</b>	<b>25,400</b>
<b>Payroll</b>	<b>\$537.9 million</b>
<b>Output</b>	<b>\$1.8 billion</b>

**QUALITATIVE AIRPORT BENEFITS**

Beyond the quantitative aspects of aviation benefits, there are also qualitative benefits that deserve consideration when the total value of an airport system is analyzed. Qualitative benefits are those activities which take place at an airport on a regular basis that add to the quality of life, but are difficult to assign a dollar value. One example is the use of aviation in disaster response plans. The Kansas Highway Patrol, Civil Air Patrol, and Kansas National Guard all use aviation assets during emergencies to provide aid. For example, during winter storms, the Kansas Highway Patrol uses aircraft to locate stranded motorists, and the Kansas National Guard flies food to cattle that ranchers are unable to reach. Aviation is also an integral part of the Western Kansas Weather Modification Program. Cloud seeding by aircraft was estimated to produce \$4 million in annual benefits through the reduction of crop-damaging hail.

Qualitative benefits typically enhance the health, welfare, or safety of individuals in the airport’s market area. While it may be difficult to place a dollar value on these activities, the benefits resulting from these activities improve the quality of life of Kansas’ residents in numerous ways.



*Some examples of the qualitative benefits of aviation at Kansas system airports include:*

- Supporting rangeland firefighting efforts
- Supporting the U.S. military and other government organizations
- Conducting search-and-rescue operations
- Serving as a staging area for community events
- Providing police support
- Assisting with prisoner transport
- Providing entertainment opportunities, such as air shows
- Hosting school field trips and other educational events

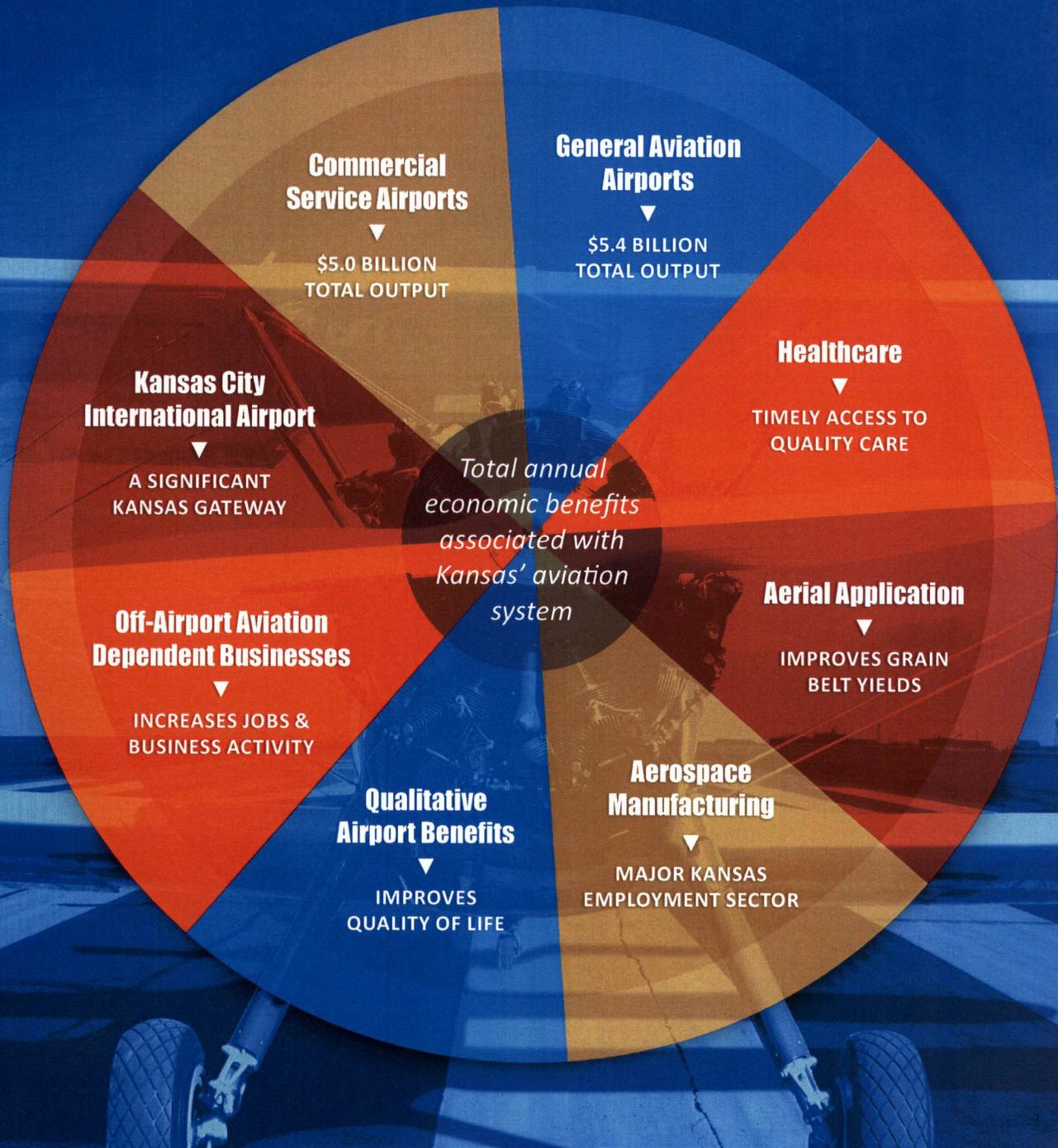
## SUMMARY

In 2009, \$10.4 billion in annual economic activity was supported by Kansas' Aviation System. To put things into perspective, the recently completed Kansas Airport System Plan concluded that approximately \$665 million will be needed over the next 20 years to improve airports. This 20-year need is roughly 6 percent of what the Kansas Aviation System contributed to Kansas' economy in 2009!

Furthermore, the benefits of aviation extend well beyond the economic value found at Kansas' airports. Kansas farm-

ers owe as much as \$1.2 billion in crop value to the efforts of aerial applicators. Off-airport aerospace manufacturing contributes significantly to the Kansas economy. And, without aviation, the healthcare network in Kansas would not operate as effectively as it does.

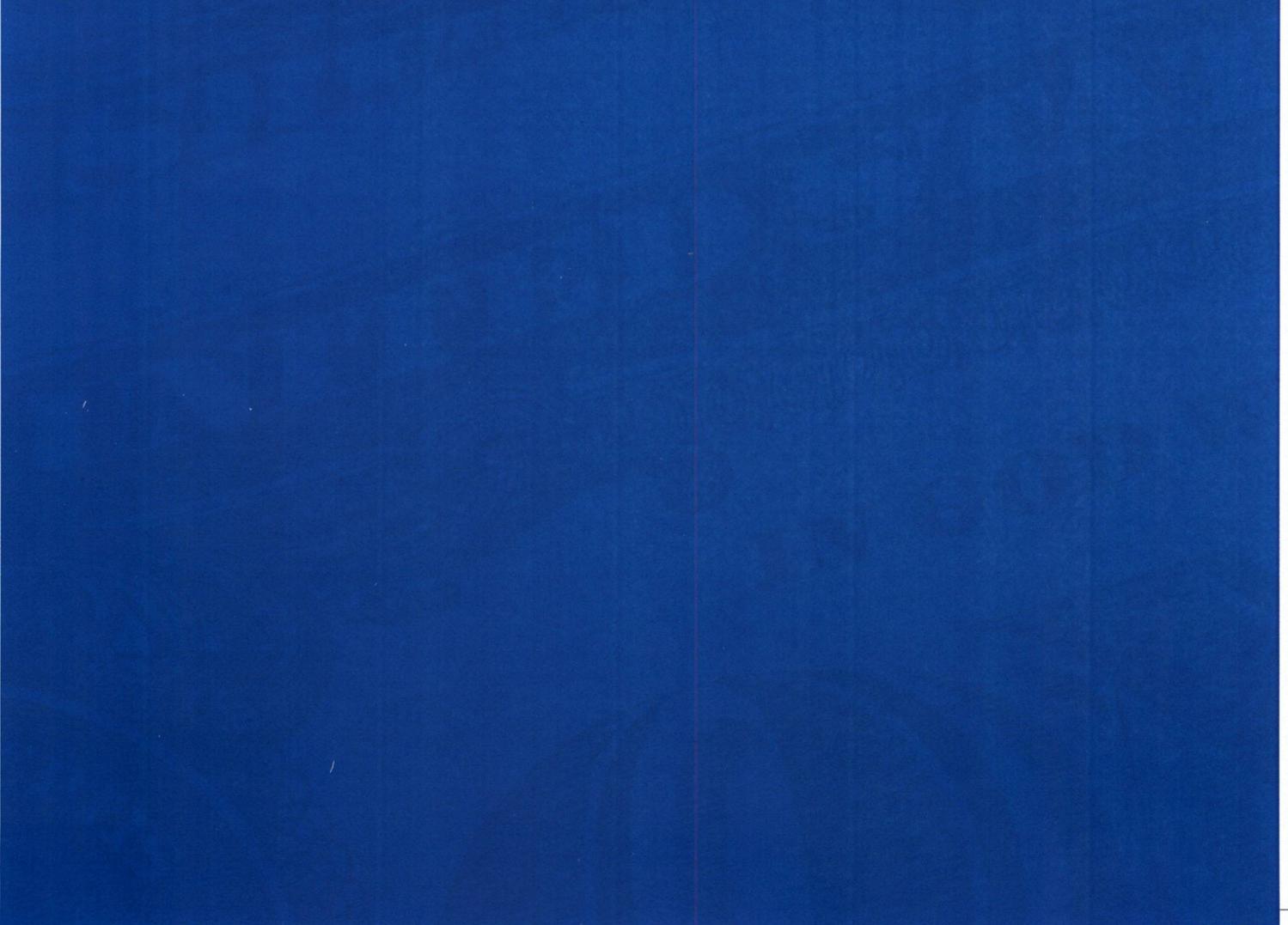
It is clear that aviation and airports in Kansas have a significant positive impact on the economy and quality of life of the people of Kansas.



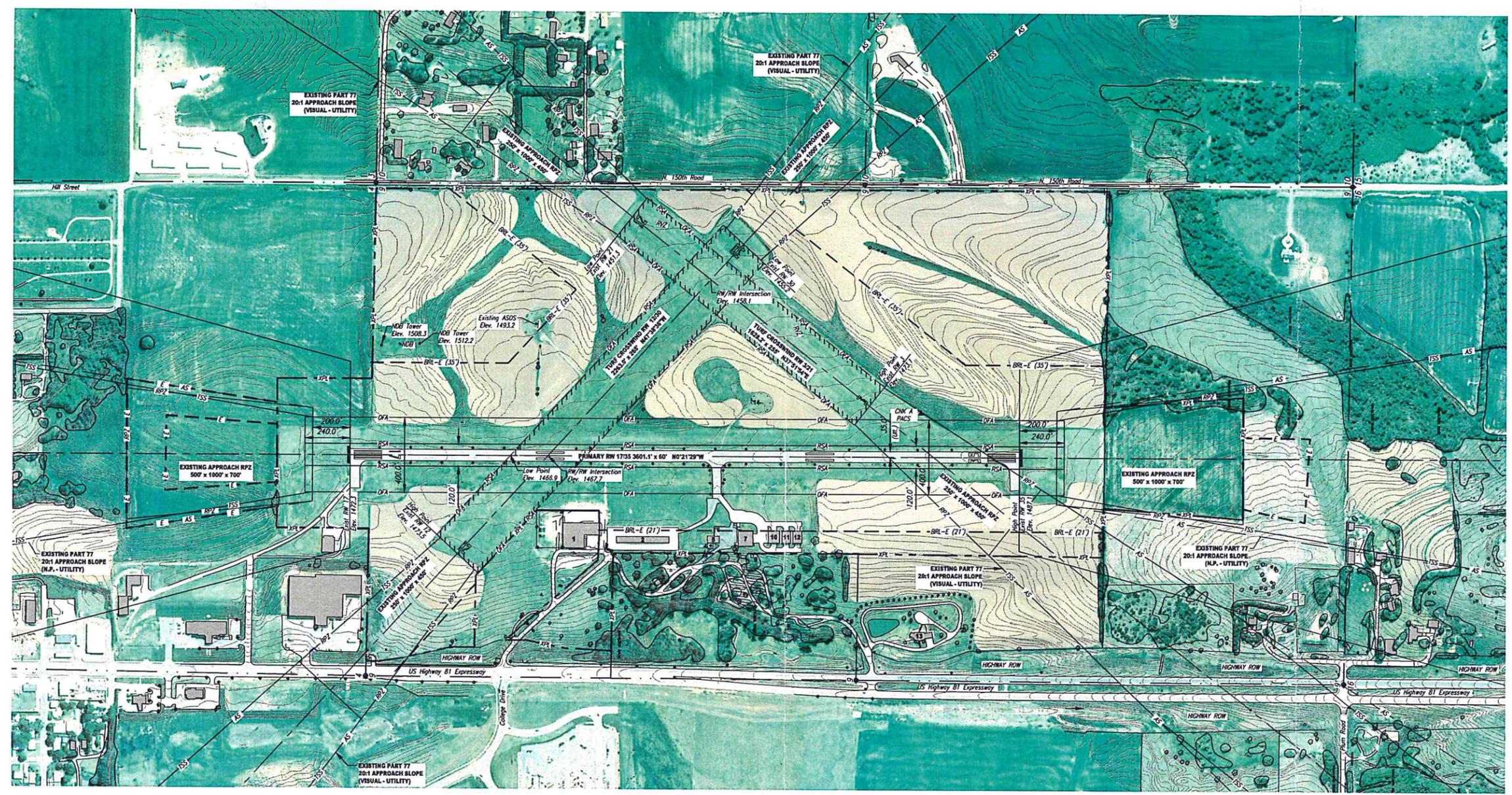
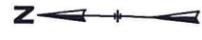


*For more information contact:*  
Kansas Department of Transportation  
700 SW Harrison  
Topeka, KS 66603-3754  
785.296.2553  
[www.ksdot.org/divaviation/](http://www.ksdot.org/divaviation/)

*Prepared by:*  
**WilburSmith**  
ASSOCIATES



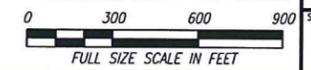




**EXISTING AIRPORT LAYOUT, AERIAL PHOTO AND SKETCH**

**LEGEND**

- AS - Approach Slope
- ASOS - Automated Surface Observing System
- BRL - Building Restriction Line With Height
- E - Easement
- Elev - Elevation
- NDB - Non-Directional Beacon
- OFA - Object Free Area
- PACS - Primary Airport Control Station
- ROW - Right-Of-Way
- RPZ - Runway Protection Zone
- RSA - Runway Safety Area
- RVA - Runway Visibility Zone
- RW - Runway
- TSS - Threshold Siting Surface
- XPL - Existing Property Line



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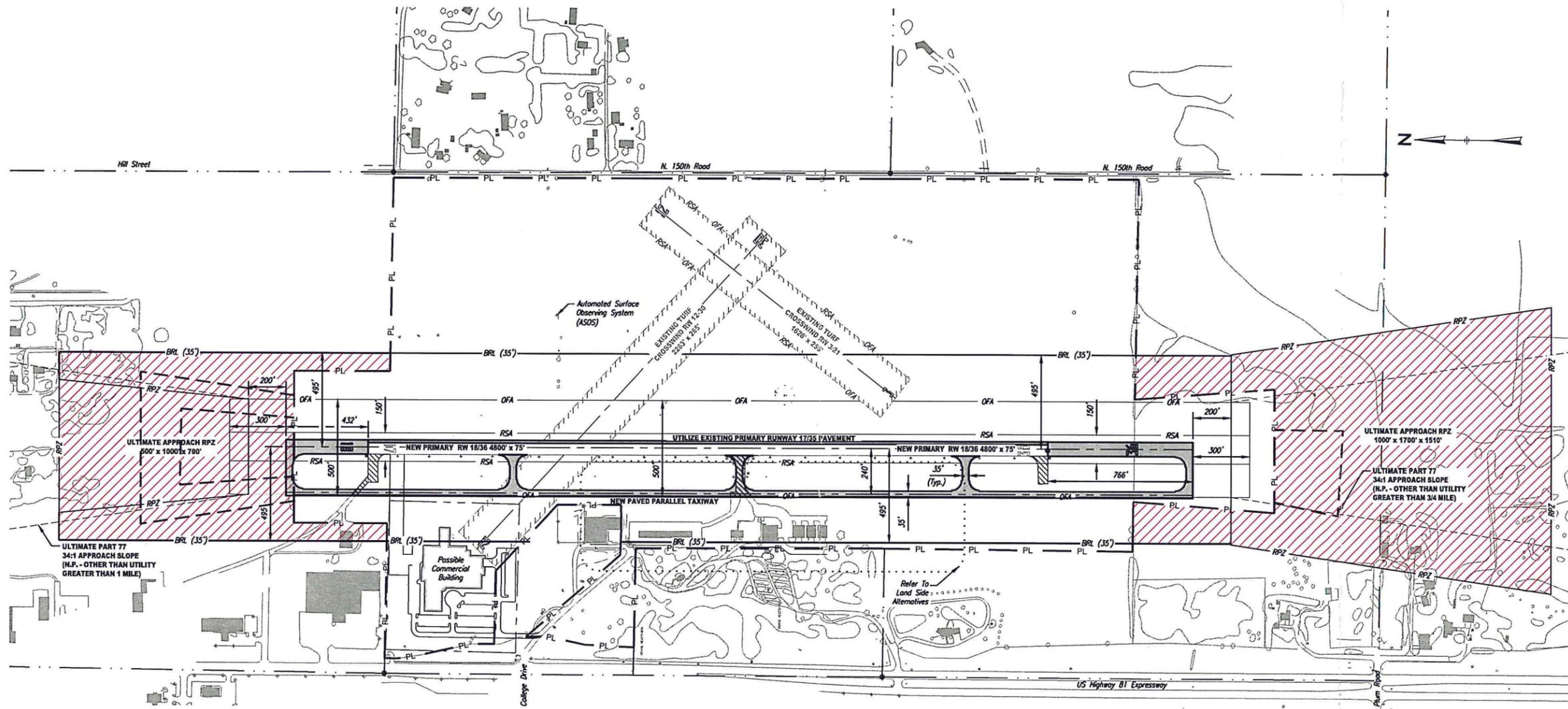
**EXISTING AIRPORT LAYOUT,  
AERIAL PHOTO AND SKETCH**

**BLOSSER MUNICIPAL AIRPORT  
CONCORDIA, KANSAS**

**benesch**  
engineers - scientists - planners  
Alfred Benesch & Company  
825 J Street  
Lincoln, Nebraska 68508  
402-479-2200  
Job No. -

PROJECT ALTERNATIVES	
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PRIMARY RUNWAY ALTERNATIVE ONE (P-1)

**PROS OF ALTERNATIVE**

- 1) Utilizes Existing Primary Runway 17/35 Pavement (Asphalt)
- 2) Lower Minimum Approach At South End Of Primary Runway (Greater Than 3/4 Mile)
- 3) Option With Least Additional Land Purchases

**CONS OF ALTERNATIVE**

- 1) Have To Close Existing Primary Runway 17/35 While New Primary Runway Improvements Are Constructed
- 2) Existing Hangars And Buildings In 35 Foot Building Restriction Line (BRL) Area Thus Restricting Landside Expansion
- 3) Construct New Parallel Taxiway In Lieu Of Utilizing Existing Pavement
- 4) North Primary Runway Approach Directly Over The Concordia Community
- 5) Higher Minimum On North Approach Of Primary Runway
- 6) Must Upgrade Primary Runway Pavement Strength
- 7) Height Of Possible Commercial Building Is Minimized
- 8) Residences Are Located In Runway Protection Zone (RPZ) Areas

**MAJOR IMPROVEMENTS NEEDED:**

- 1) Purchase Land For Construction Of Primary Runway Out To 35 Foot Building Restriction Line (BRL) (Non-Precision Runway 495 Feet Each Side Of Runway Centerline) And Runway Protection Zone (RPZ) And Approach Protection To The South Of Existing Airport Property Line (50.54 Acres)
- 2) Purchase Land For Construction Of Primary Runway Out To 35 Foot Building Restriction Line (BRL) (Non-Precision Runway 495 Feet Each Side Of Runway Centerline) And Runway Protection Zone (RPZ) And Approach Protection To The North Of Existing Airport Property Line (30.34 Acres)
- 3) Extend Existing Primary Runway 17/35 Approximately 434 Feet To North And Approximately 766 Feet To The South Making Enhance Primary Runway 18/36 4,800 Feet Long
- 4) Upgrade Existing Primary Runway 17/35 Pavement Strength
- 5) Widen Existing Primary Runway 17/35 Pavement From 60 Feet To 75 Feet (15 Feet To The East)
- 6) Construct New Parallel And Connecting Taxiways To New Primary Runway 18/36

**LEGEND**

- Land Acquisition - Easement
- Land Acquisition - Fee-For-Title
- Remove Existing Pavement
- New Pavement

BRL - Building Restriction Line With Height  
 N.P. - Non-Precision  
 OFA - Object Free Area  
 PL - Existing Property Line  
 RPZ - Runway Protection Zone  
 RSA - Runway Safety Area  
 RW - Runway



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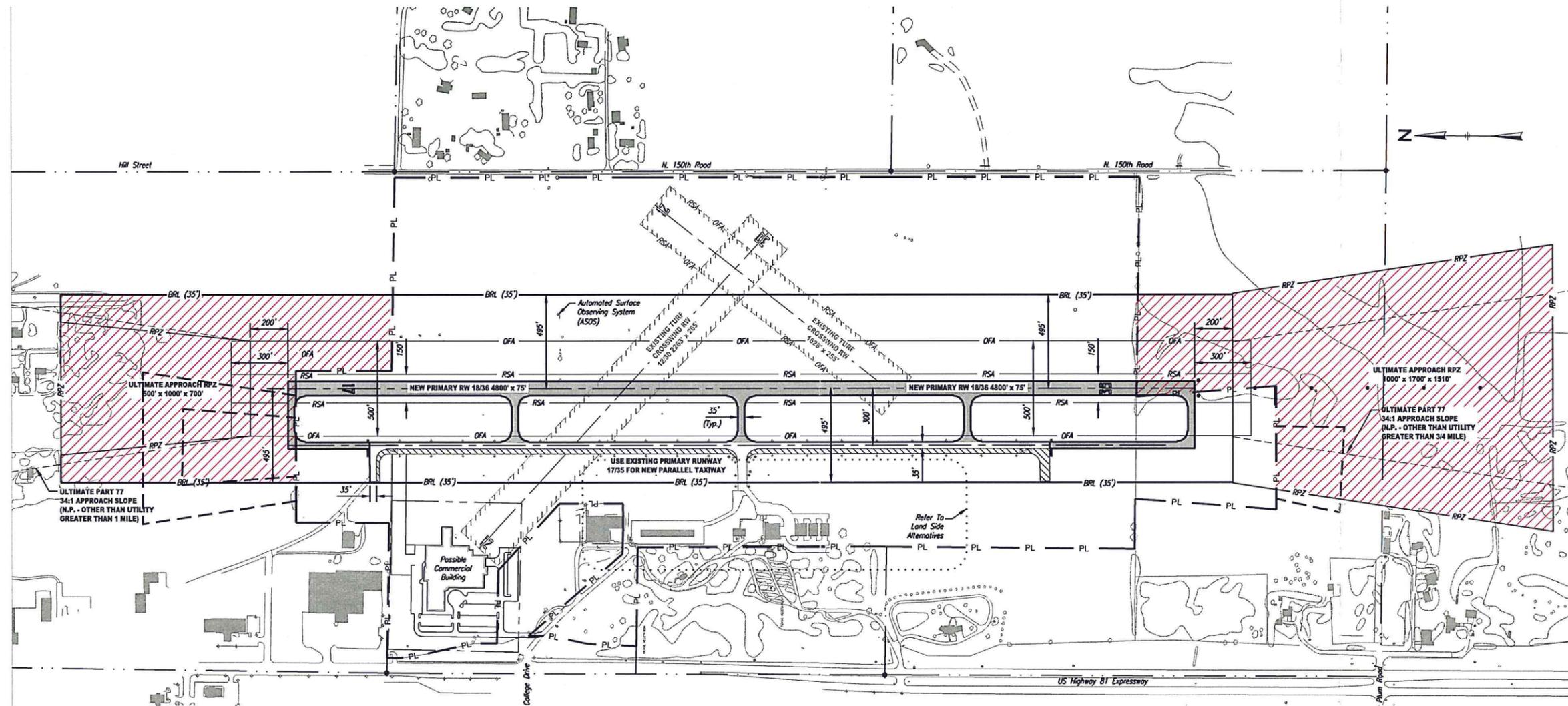
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**PRIMARY RUNWAY ALTERNATIVE ONE (P-1)**

**BLOSSER MUNICIPAL AIRPORT  
CONCORDIA, KANSAS**

**benesch**  
 engineers - scientists - planners  
 Alfred Benesch & Company  
 825 L Street  
 Lincoln, Nebraska 68508  
 402-478-2200  
 Job No. -

PROJECT: ALTERNATIVES  
 DATE: JANUARY 2013  
 JOB NO.: 157-68-2002



PRIMARY RUNWAY ALTERNATIVE TWO (P-2)

**PROS OF ALTERNATIVE**

- 1) Utilizes Existing Primary Runway 17/35 Pavement For Parallel Taxiway
- 2) Primary Runway To Taxiway Centerline Separation Would Allow For Lower Approach Minimums
- 3) Provides Room For Additional Landside Expansion
- 4) Existing Buildings Are Clear Of 35 Foot Building Restriction Line (BRL) Area
- 5) Lower Minimum For Approach On South End Of Primary Runway (Greater Than 3/4 Mile)
- 6) Could Keep Existing Primary Runway 17/35 Open While Constructing New Primary Runway 18/36
- 7) New Concrete Or Asphalt Pavement Used In New Primary Runway Rather Than Parallel Taxiway
- 8) Possible Commercial Building Can Be Taller Than With P-1 Alternative
- 9) No Residences Are Located In Runway Protection Zone (RPZ) Areas

**CONS OF ALTERNATIVE**

- 1) Additional Pavement Removal To Make 60 Foot Wide Primary Runway A 35 Foot Wide Parallel Taxiway
- 2) More New Pavement Required Than The P-1 Alternative
- 3) North Primary Runway Approach Directly Over The Concordia Community
- 4) Automated Surface Observing System (ASOS) Location Conflict

**MAJOR IMPROVEMENTS NEEDED:**

- 1) Purchase Land For Construction Of Primary Runway 18/36 Out To 35 Foot Building Restriction Line (BRL) (Non-Precision Runway 495 Feet Each Side Of Runway Centerline) And Runway Protection Zone (RPZ) And Approach Protection To The South Of Existing Airport Property Line (52.43 Acres)
- 2) Purchase Land For Construction Of Primary Runway 18/36 Out To 35 Foot Building Restriction Line (BRL) (Non-Precision Runway 495 Feet Each Side Of Runway Centerline) And Runway Protection Zone (RPZ) And Approach Protection To The North Of Existing Airport Property Line (32.83 Acres)
- 3) Construct New Primary Runway 18/36 4,800 Feet By 75 Feet
- 4) Upgrade Existing Primary Runway 17/35 Pavement Strength For Taxiway Pavement
- 5) Reduce Existing Primary Runway 17/35 Pavement Width From 60 Feet To 35 Feet For Parallel Taxiway
- 6) Construct Partial Parallel And Connecting Taxiways To New Primary Runway 18/36
- 7) Relocate Automated Surface Observing System (ASOS)

**LEGEND**

- Land Acquisition - Easement
- Land Acquisition - Fee-For-Title
- Remove Existing Pavement
- New Pavement

BRL - Building Restriction Line With Height  
 N.P. - Non-Precision  
 OFA - Object Free Area  
 PL - Existing Property Line  
 RPZ - Runway Protection Zone  
 RSA - Runway Safety Area  
 RW - Runway



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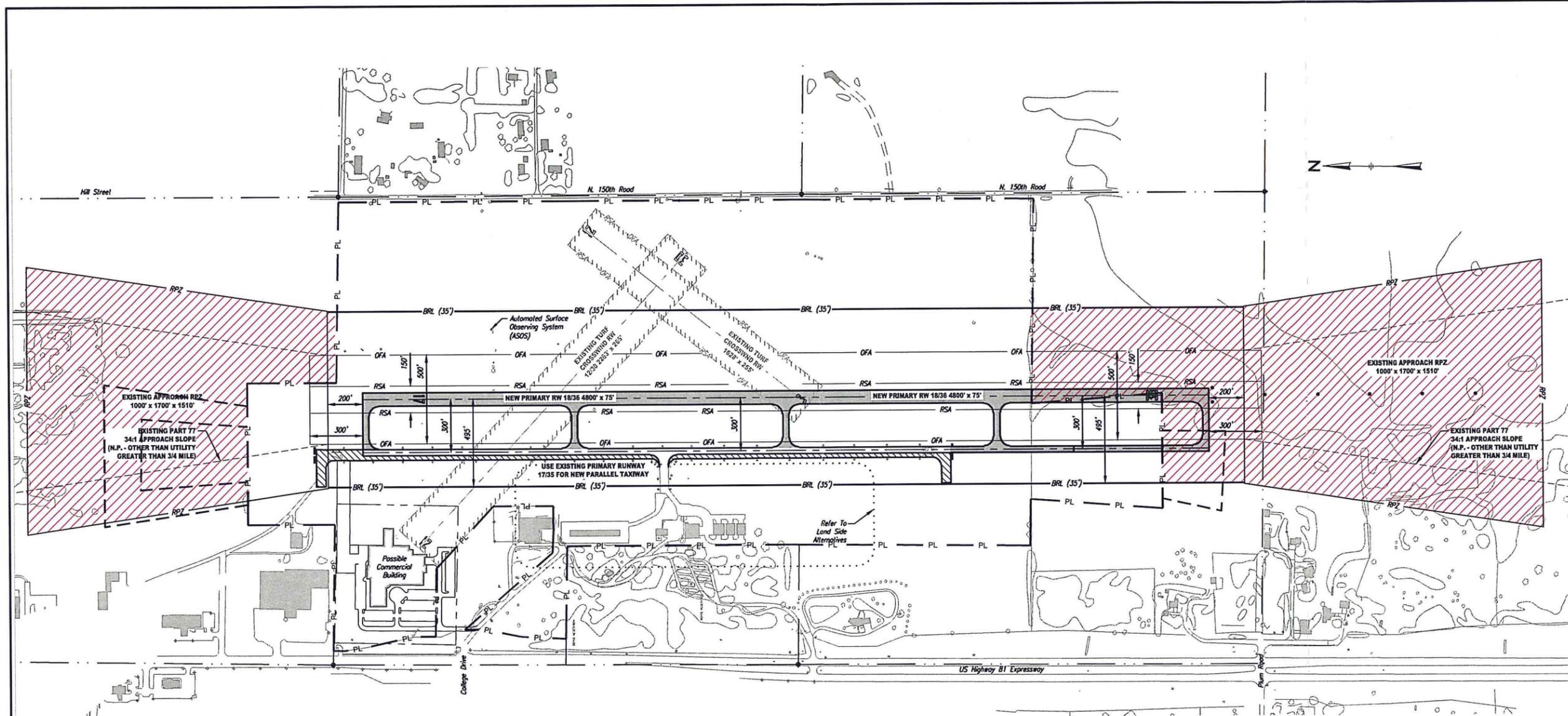
**PRIMARY RUNWAY ALTERNATIVE TWO (P-2)**

**BLOSSER MUNICIPAL AIRPORT CONCORDIA, KANSAS**

**benesch**  
 engineers - scientists - planners  
 Alfred Benesch & Company  
 625 J Street  
 Lincoln, Nebraska 68508  
 402-479-1200  
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PRIMARY RUNWAY ALTERNATIVE THREE (P-3)

**PROS OF ALTERNATIVE**

- 1) Utilizes Existing Primary Runway 17/35 Pavement For Parallel Taxiway
- 2) Runway To Taxiway Centerline Separation Would Allow For Lower Approach Minimums In Future
- 3) Provides Room For Additional Landside Expansion
- 4) Existing Buildings Are Clear Of 35 Foot Building Restriction Line (BRL)
- 5) Lower Minimums For Approach On Both North And South End Of Primary Runway (Greater Than 3/4 Mile)
- 6) Could Keep Existing Primary Runway 17/35 Open While Constructing New Primary Runway 18/36
- 7) No Residences Located Within Primary Runway Protection Zone (RPZ) Area
- 8) New Concrete Or Asphalt Pavement Used For New Primary Runway Rather Than Parallel Taxiway
- 9) Possible Commercial Building Can Be Taller Than With P-1 Alternative

**CONS OF ALTERNATIVE**

- 1) Additional Pavement Removal To Make 60 Foot Wide Existing Primary Runway 17/35 A 35 Foot Wide Parallel Taxiway
- 2) More New Pavement Required Than P-1 And P-2 Alternatives
- 3) North Primary Runway Approach Directly Over The Concordia Community
- 4) Most Land That Must Be Purchased
- 5) Automated Surface Observing System (ASOS) Location Conflict

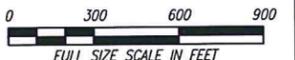
**MAJOR IMPROVEMENTS NEEDED:**

- 1) Purchase Land For Construction Of Primary Runway 18/36 Out To 35 Foot Building Restriction Line (BRL) (Non-Precision Runway 495 Feet Each Side Of Runway Centerline) And Runway Protection Zone (RPZ) And Approach Protection To The South Of Existing Airport Property Line (68.37 Acres)
- 2) Purchase Land For Construction Of Primary Runway 18/36 Out To 35 Foot Building Restriction Line (BRL) (Non-Precision Runway 495 Feet Each Side Of Runway Centerline) And Runway Protection Zone (RPZ) And Approach Protection To The North Of Existing Airport Property Line (42.80 Acres)
- 3) Construct New Primary Runway 18/36 4,800 Feet By 75 Feet
- 4) Upgrade Existing Primary Runway 17/35 Pavement Strength For Parallel Taxiway Pavement
- 5) Reduce Existing Primary Runway 17/35 Pavement Width From 60 Foot To 35 Foot Wide For Parallel Taxiway
- 6) Construct Partial Parallel And Connecting Taxiways To New Primary Runway 18/36
- 7) Remove Existing Pavement On North And West Side Of Existing Primary Runway 17/35
- 8) Relocate Automated Surface Observing System (ASOS)

**LEGEND**

- Land Acquisition - Easement
- Land Acquisition - Fee-For-Title
- Remove Existing Pavement
- New Pavement

BRL - Building Restriction Line With Height  
 N.P. - Non-Precision  
 OFA - Object Free Area  
 PL - Existing Property Line  
 RPZ - Runway Protection Zone  
 RSA - Runway Safety Area  
 RW - Runway



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**PRIMARY RUNWAY ALTERNATIVE THREE (P-3)**

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CONCORDIA, KANSAS**

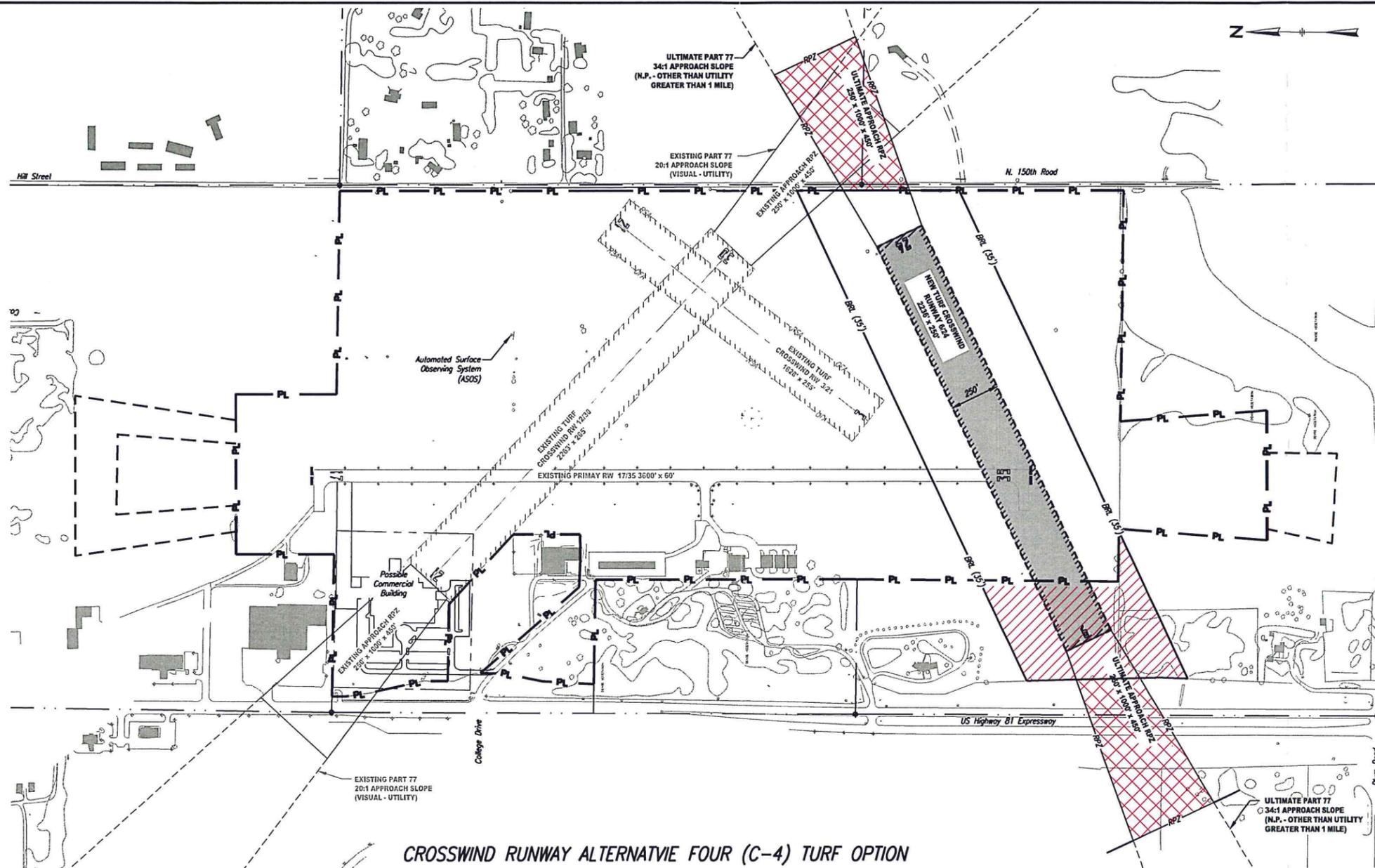
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 engineers - scientists - planners  
 Alfred Benesch & Company  
 825 J Street  
 Lincoln, Nebraska 68508  
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**CROSSWIND RUNWAY ALTERNATIVE FOUR (C-4) TURF OPTION**

**PROS OF ALTERNATIVE**

- 1) Provides Site In Airport North Development For Possible Commercial Building
- 2) No Residences Are Located Within Required Land Acquisition Area
- 3) Does Not Restrict Landside Expansion As Much As Crosswind C-1 And C-3 Alternatives
- 4) Turf Option Provides A Cheaper Construction Cost
- 5) Less Land Is Required To Be Purchased Than All Other Crosswind Alternatives
- 6) Automated Surface Observing System (ASOS) Is Not A Location Conflict
- 7) N. 150th Road Is Not Closed Or Relocated

**CONS OF ALTERNATIVE**

- 1) Restricts Landside Expansion South Of Terminal Area

**MAJOR IMPROVEMENTS NEEDED:**

- 1) Purchase Land For Construction Of New Turf Crosswind Runway 6/24 Out To 35 Foot Building Restriction Line (BRL) (Non-Precision Runway 495 Feet Each Side Of Runway Centerline) And Runway Protection Zone (RPZ) And Approach Protection To The South And West Of Existing Airport Property Line (9.55 Acres)
- 2) Acquire Easement For The Construction Of Crosswind Runway 6/24 Runway Protection Zone (RPZ) And Approach Protection To The South And West Of Existing Airport Property Line (6.72 Acres)
- 3) Acquire Easement For The Construction Of The Crosswind Runway 6/24 Runway Protection Zone (RPZ) And Approach Protection To The North And East Of Existing Airport Property Line (6.42 Acres)
- 5) Construct New Turf Crosswind Runway 6/24 2,236 Feet By 250 Feet
- 6) Decommission Existing Turf Crosswind Runway 12/30 And Turf Crosswind Runway 3/21

**LEGEND**

- Land Acquisition - Easement
- Land Acquisition - Fee-For-Title
- Remove Existing Pavement
- New Pavement

BRL - Building Restriction Line With Height  
 N.P. - Non-Precision  
 DFA - Object Free Area  
 PL - Existing Property Line  
 RPZ - Runway Protection Zone  
 RSA - Runway Safety Area  
 RW - Runway



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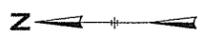
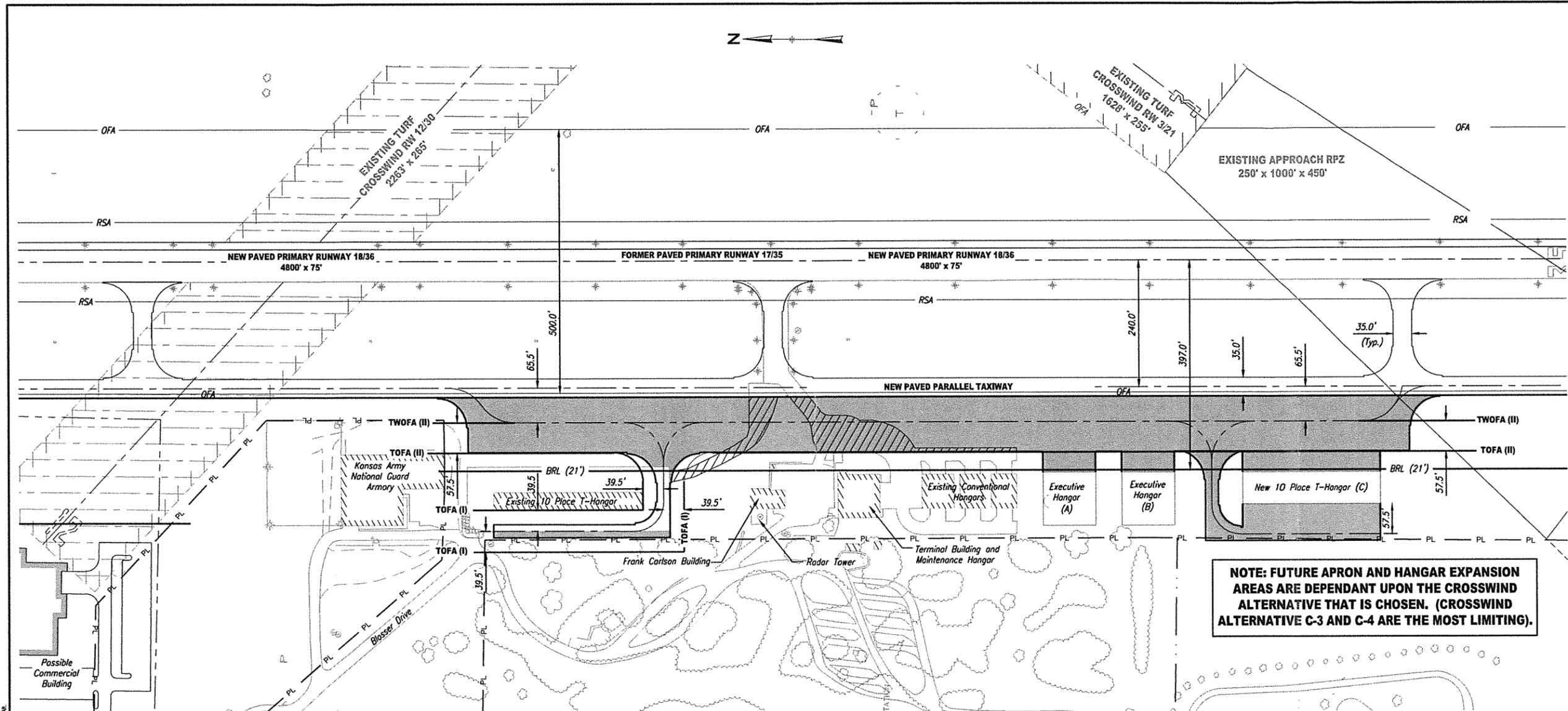
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**CROSSWIND RUNWAY ALTERNATIVE FOUR (C-4) TURF OPTION**

**BLOSSER MUNICIPAL AIRPORT CONCORDIA, KANSAS**

**benesch**  
 engineers - scientists - planners  
 Allied Benesch & Company  
 Lincoln, Nebraska 68508  
 Job No. - 402-479-2200

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LANDSIDE ALTERNATIVE ONE (L-1)

**NOTE: FUTURE APRON AND HANGAR EXPANSION AREAS ARE DEPENDANT UPON THE CROSSWIND ALTERNATIVE THAT IS CHOSEN. (CROSSWIND ALTERNATIVE C-3 AND C-4 ARE THE MOST LIMITING).**

**LEGEND**

- Existing Buildings
- New Pavement
- New Building
- Remove Existing Pavement

BRL - Building Restriction Line With Height  
 OFA - Object Free Area  
 PL - Existing Property Line  
 RPZ - Runway Protection Zone  
 RSA - Runway Safety Area  
 RW - Runway

TOFA (I) - Taxiway Object Free Area, Aircraft Design Group ADG-I  
 TOFA (II) - Taxiway Object Free Area, Aircraft Design Group ADG-II  
 TWOPA (II) - Taxiway Object Free Area, Aircraft Design Group ADG-II

**PROS OF ALTERNATIVE**

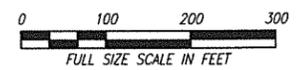
- 1) Provides Executive Hangar Space.
- 2) Provides Eight (8) Aircraft Tie-Downs.
- 3) Has Options For Future Hangar And Apron Expansion
- 4) Allows the East Side Of New Buildings To Be In Line With Existing Buildings

**CONS OF ALTERNATIVE**

- 1) More New Pavement Required Than Landside L-2 And L-3 Alternatives
- 2) No New Space For Additional Aircraft Tie-Downs.
- 3) Pavement Drainage Is An Issue
- 4) Does Not Meet Federal Aviation Administration (FAA) Regulations Concerning Buildings Being Located Outside The 35 Foot Building Restriction Line (BRL) Area
- 5) Existing Buildings Are Located Within the 35 Foot Building Restriction Line (BRL) Area And May Have To Be Relocated

**MAJOR IMPROVEMENTS NEEDED:**

- 1) New Apron
- 2) New Buildings
- 3) Demolition Of Existing Taxiway



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 Project: 17182002 - Concordia Master Plan & AUP Update

<b>LANDSIDE ALTERNATIVE ONE (L-1)</b>	<b>BLOSSER MUNICIPAL AIRPORT CONCORDIA, KANSAS</b>
<p>engineers - scientists - planners          Allied Benesch &amp; Company          625 South Webster Street          Lincoln, Nebraska 68508          402-479-2200</p>	
PROJECT ALTERNATIVES DATE: JANUARY 2013 JOB NO.: 57-68-2002	SHEET <b>10 of 12</b>





**BLOSSER MUNICIPAL AIRPORT**

DESCRIPTION (BID ITEM)	Quantity	Unit	Unit Price	Total Cost
<b>Miscellaneous</b>				
Site Preparation	1	L.S.	\$ 200,000.00	\$ 200,000.00
Place And Maintain X's	1	EA.	\$ 2,500.00	\$ 2,500.00
Construction Staking	1	L.S.	\$ 75,000.00	\$ 75,000.00
Earthwork	40,000	C.Y	\$ 5.00	\$ 200,000.00
Seeding	65	Acre	\$ 1,500.00	\$ 97,500.00
Erosion Control	1	Acre	\$ 40,000.00	\$ 40,000.00
<b>Land Acquisition</b>				
South End (Easement)	0	Acre	\$ 500.00	\$ -
South End (Fee)	50.54	Acre	\$ 6,000.00	\$ 303,240.00
North End (Easement)	0	Acre	\$ 500.00	\$ -
North End (Fee)	30.34	Acre	\$ 6,000.00	\$ 182,040.00
Residence Relocation	2	EA	\$ 250,000.00	\$ 500,000.00
<b>Pavement</b>				
6" Portland Cement Concrete	34,000	S.Y.	\$ 45.00	\$ 1,530,000.00
4" P-208 Crushed Aggregate Base Course	42,000	S.Y.	\$ 20.00	\$ 840,000.00
Repair Existing Joints And Cracks	1,000	L.F.	\$ 2.00	\$ 2,000.00
Asphalt Overlay (Approximately 4" Thick)	5,400	Tons	\$ 100.00	\$ 540,000.00
Full Depth Asphalt (6" Thick)	2,500	Tons	\$ 100.00	\$ 250,000.00
Pavement Removal	4,000	S.Y.	\$ 15.00	\$ 60,000.00
<b>Lighting</b>				
L-861 Base Mounted MIRL	54	EA.	\$ 700.00	\$ 37,800.00
L-861SE Base Mounted MIRL	16	EA.	\$ 800.00	\$ 12,800.00
L861T Base Mounted MITL	126	EA.	\$ 700.00	\$ 88,200.00
1-Way 2" Schedule 40 PVC Duct	24,000	L.F.	\$ 4.00	\$ 96,000.00
1/c #8 5KV L-824 Cable In Duct (RW/TW Lights)	26,000	L.F.	\$ 2.50	\$ 65,000.00
1/c #6 Safety Ground AWG XHHW In Duct (RW/TW Light)	26,000	L.F.	\$ 1.50	\$ 39,000.00
#6 Solid Bare Counterpoise In Trench	24,000	L.F.	\$ 1.25	\$ 30,000.00
Duct Markers	8	EA.	\$ 250.00	\$ 2,000.00
Vault Work (New Regulator)	1	L.S.	\$ 40,000.00	\$ 40,000.00
PAPI	2	EA.	\$ 50,000.00	\$ 100,000.00
<b>Drainage</b>				
Storm Sewer	1	L.S.	\$ 40,000.00	\$ 40,000.00
<b>Marking</b>				
Paint/Reflective Media	1	L.S.	\$ 50,000.00	\$ 50,000.00
<b>Total Construction Cost</b>			<b>\$</b>	<b>5,423,080.00</b>
<b>Engineering, Administration (25%)</b>			<b>\$</b>	<b>1,355,770.00</b>
<b>Total Construction Cost</b>			<b>\$</b>	<b>6,778,850.00</b>

HWS CONSULTING GROUP INC.  
 825 "J" STREET  
 LINCOLN, NEBRASKA

**BLOSSER MUNICIPAL AIRPORT**

DESCRIPTION (BID ITEM)	Quantity	Unit	Unit Price	Total Cost
<b>Miscellaneous</b>				
Site Preparation	1	L.S.	\$ 200,000.00	\$ 200,000.00
Place And Maintain X's	1	EA.	\$ 2,500.00	\$ 2,500.00
Construction Staking	1	L.S.	\$ 40,000.00	\$ 40,000.00
Earthwork	225,000	C.Y	\$ 5.00	\$ 1,125,000.00
Seeding	95	Acre	\$ 1,500.00	\$ 142,500.00
Erosion Control	1	Acre	\$ 40,000.00	\$ 40,000.00
<b>Land Acquisition</b>				
South End (Easement)	0	Acre	\$ 500.00	\$ -
South End (Fee)	52.43	Acre	\$ 6,000.00	\$ 314,580.00
North End (Easement)	0	Acre	\$ -	\$ -
North End (Fee)	32.83	Acre	\$ 6,000.00	\$ 196,980.00
Residence Relocation	0	Acre	\$ 250,000.00	\$ -
<b>Pavement</b>				
6" Portland Cement Concrete	50,000	S.Y.	\$ 50.00	\$ 2,500,000.00
4" P-208 Crushed Aggregate Base Course	55,000	S.Y.	\$ 20.00	\$ 1,100,000.00
Repair Existing Joints And Cracks	1,000	L.F.	\$ 2.00	\$ 2,000.00
Asphalt Overlay (Approximately 4" Thick)	3,650	Tons	\$ 100.00	\$ 365,000.00
Full Depth Asphalt (6" Thick)	0	Tons	\$ 100.00	\$ -
Pavement Removal	12,000	S.Y.	\$ 15.00	\$ 180,000.00
<b>Lighting</b>				
L-861 Base Mounted MIRL	54	EA.	\$ 700.00	\$ 37,800.00
L-861SE Base Mounted MIRL	16	EA.	\$ 800.00	\$ 12,800.00
L861T Base Mounted MITL	134	EA.	\$ 700.00	\$ 93,800.00
1-Way 2" Schedule 40 PVC Duct	24,000	L.F.	\$ 5.00	\$ 120,000.00
1/c #8 5KV L-824 Cable In Duct (RW/TW Lights)	27,000	L.F.	\$ 4.00	\$ 108,000.00
1/c #6 Safety Ground AWG XHHW In Duct (RW/TW Light)	27,000	L.F.	\$ 1.50	\$ 40,500.00
#6 Solid Bare Counterpoise In Trench	24,000	L.F.	\$ 1.25	\$ 30,000.00
Duct Markers	8	EA.	\$ 250.00	\$ 2,000.00
Vault Work (New Regulator)	1	L.S.	\$ 40,000.00	\$ 40,000.00
PAPI	2	EA.	\$ 50,000.00	\$ 100,000.00
<b>Drainage</b>				
Storm Sewer	1	L.S.	\$ 70,000.00	\$ 70,000.00
<b>Marking</b>				
Paint/Reflective Media	1	L.S.	\$ 50,000.00	\$ 50,000.00
<b>Total Construction Cost</b>				<b>\$ 6,913,460.00</b>
<b>Engineering, Administration (25%)</b>				<b>\$ 1,728,365.00</b>
<b>Total Construction Cost</b>				<b>\$ 8,641,825.00</b>

HWS CONSULTING GROUP INC.  
 825 "J" STREET  
 LINCOLN, NEBRASKA

**BLOSSER MUNICIPAL AIRPORT**

DESCRIPTION (BID ITEM)	Quantity	Unit	Unit Price	Total Cost
<b>Miscellaneous</b>				
Site Preparation	1	L.S.	\$ 200,000.00	\$ 200,000.00
Place And Maintain X's	1	EA.	\$ 2,500.00	\$ 2,500.00
Construction Staking	1	L.S.	\$ 40,000.00	\$ 40,000.00
Earthwork	250,000	C.Y.	\$ 5.00	\$ 1,250,000.00
Seeding	95	Acre	\$ 1,500.00	\$ 142,500.00
Erosion Control	1	Acre	\$ 40,000.00	\$ 40,000.00
<b>Land Acqulstion</b>				
South End (Easement)	0	Acre	\$ 500.00	\$ -
South End (Fee)	68.37	Acre	\$ 6,000.00	\$ 410,220.00
North End (Easement)	0	Acre	\$ -	\$ -
North End (Fee)	42.80	Acre	\$ 6,000.00	\$ 256,800.00
Residence Relocation	0	Acre	\$ 250,000.00	\$ -
<b>Pavement</b>				
6" Portland Cement Concrete	50,000	S.Y.	\$ 50.00	\$ 2,500,000.00
4" P-208 Crushed Aggregate Base Course	55,000	S.Y.	\$ 20.00	\$ 1,100,000.00
Repair Existing Joints And Cracks	1,000	L.F.	\$ 2.00	\$ 2,000.00
Asphalt Overlay (Approximately 4" Thick)	3,100	Tons	\$ 100.00	\$ 310,000.00
Full Depth Asphalt (6" Thick)	0	Tons	\$ 100.00	\$ -
Pavement Removal	13,000	S.Y.	\$ 15.00	\$ 195,000.00
<b>Lighting</b>				
L-861 Base Mounted MIRL	54	EA.	\$ 700.00	\$ 37,800.00
L-861SE Base Mounted MIRL	16	EA.	\$ 800.00	\$ 12,800.00
L861T Base Mounted MITL	134	EA.	\$ 700.00	\$ 93,800.00
1-Way 2" Schedule 40 PVC Duct	24,000	L.F.	\$ 5.00	\$ 120,000.00
1/c #8 5KV L-824 Cable In Duct (RW/TW Lights)	27,000	L.F.	\$ 4.00	\$ 108,000.00
1/c #6 Safety Ground AWG XHHW In Duct (RW/TW Light)	27,000	L.F.	\$ 1.50	\$ 40,500.00
#6 Solid Bare Counterpoise In Trench	24,000	L.F.	\$ 1.25	\$ 30,000.00
Duct Markers	8	EA.	\$ 250.00	\$ 2,000.00
Vault Work (New Regulator)	1	L.S.	\$ 40,000.00	\$ 40,000.00
PAPI	2	EA.	\$ 50,000.00	\$ 100,000.00
<b>Drainage</b>				
Storm Sewer	1	L.S.	\$ 70,000.00	\$ 70,000.00
<b>Marking</b>				
Paint/Reflective Media	1	L.S.	\$ 50,000.00	\$ 50,000.00
<b>Total Construction Cost</b>			<b>\$</b>	<b>7,153,920.00</b>
<b>Engineering, Administration (25%)</b>			<b>\$</b>	<b>1,788,480.00</b>
<b>Total Construction Cost</b>			<b>\$</b>	<b>8,942,400.00</b>

HWS CONSULTING GROUP INC.  
 825 "J" STREET  
 LINCOLN, NEBRASKA

**BLOSSER MUNICIPAL AIRPORT**

DESCRIPTION (BID ITEM)	Quantity	Unit	Unit Price	Total Cost
<b>Miscellaneous</b>				
Site Preparation	1	L.S.	\$ 175,000.00	\$ 175,000.00
Place And Maintain X's	1	EA.	\$ 2,500.00	\$ 2,500.00
Construction Staking	1	L.S.	\$ 40,000.00	\$ 40,000.00
Earthwork (Excavation)	220,000	C.Y	\$ 5.00	\$ 1,100,000.00
Seeding	65	Acre	\$ 1,500.00	\$ 97,500.00
Erosion Control	1	Acre	\$ 40,000.00	\$ 40,000.00
<b>Land Acquisition</b>				
Southeast End (Easement)	0.00	Acre	\$ 500.00	\$ -
Southeast End (Fee)	77.11	Acre	\$ 6,000.00	\$ 462,660.00
Northwest End (Easement)	4.67	Acre	\$ 500.00	\$ 2,335.00
Northwest End (Fee)	0.00	Acre	\$ 6,000.00	\$ -
Residence Relocation	0	EA.	\$ 250,000.00	\$ -
<b>Pavement</b>				
6" Portland Cement Concrete	39,000	S.Y.	\$ 50.00	\$ 1,950,000.00
4" P-208 Crushed Aggregate Base Course	44,500	S.Y.	\$ 20.00	\$ 890,000.00
<b>Lighting</b>				
L-861 Base Mounted MIRL	46	EA.	\$ 700.00	\$ 32,200.00
L-861SE Base Mounted MIRL	16	EA.	\$ 800.00	\$ 12,800.00
L861T Base Mounted MITL	92	EA.	\$ 700.00	\$ 64,400.00
1-Way 2" Schedule 40 PVC Duct	19,000	L.F.	\$ 4.00	\$ 76,000.00
1/c #8 5KV L-824 Cable In Duct (RW/TW Lights)	20,000	L.F.	\$ 2.50	\$ 50,000.00
1/c #6 Safety Ground AWG XHHW In Duct (RW/TW Light)	20,000	L.F.	\$ 1.50	\$ 30,000.00
#6 Solid Bare Counterpoise In Trench	19,000	L.F.	\$ 1.25	\$ 23,750.00
Duct Markers	4	EA.	\$ 250.00	\$ 1,000.00
<b>Drainage</b>				
Storm Sewer	1	L.S.	\$ 50,000.00	\$ 50,000.00
<b>Marking</b>				
Paint/Reflective Media	1	L.S.	\$ 50,000.00	\$ 50,000.00
<b>Total Construction Cost</b>			<b>\$</b>	<b>5,150,145.00</b>
<b>Engineering, Administration (25%)</b>			<b>\$</b>	<b>1,287,536.25</b>
<b>Total Construction Cost</b>			<b>\$</b>	<b>6,437,681.25</b>

HWS CONSULTING GROUP INC.  
 825 "J" STREET  
 LINCOLN, NEBRASKA

**BLOSSER MUNICIPAL AIRPORT**

DESCRIPTION (BID ITEM)	Quantity	Unit	Unit Price	Total Cost
<b>Miscellaneous</b>				
Site Preparation	1	L.S.	\$ 175,000.00	\$ 175,000.00
Place And Maintain X's	1	EA.	\$ 2,500.00	\$ 2,500.00
Construction Staking	1	L.S.	\$ 40,000.00	\$ 40,000.00
Earthwork (Embankment)	400,000	C.Y.	\$ 5.00	\$ 2,000,000.00
Seeding	65	Acre	\$ 1,500.00	\$ 97,500.00
Erosion Control	1	Acre	\$ 40,000.00	\$ 40,000.00
<b>Land Acquisition</b>				
Southwest End (Easement)	18.82	Acre	\$ 500.00	\$ 9,410.00
Southwest End (Fee)	13.19	Acre	\$ 6,000.00	\$ 79,140.00
Northeast End (Easement)	0.00	Acre	\$ 500.00	\$ -
Northeast End (Fee)	66.29	Acre	\$ 6,000.00	\$ 397,740.00
Residence Relocation	0	EA.	\$ 250,000.00	\$ -
<b>Pavement</b>				
6" Portland Cement Concrete	39,000	S.Y.	\$ 50.00	\$ 1,950,000.00
4" P-208 Crushed Aggregate Base Course	44,500	S.Y.	\$ 20.00	\$ 890,000.00
<b>Lighting</b>				
L-861 Base Mounted MIRL	48	EA.	\$ 700.00	\$ 33,600.00
L-861SE Base Mounted MIRL	16	EA.	\$ 800.00	\$ 12,800.00
L861T Base Mounted MITL	94	EA.	\$ 700.00	\$ 65,800.00
1-Way 2" Schedule 40 PVC Duct	19,500	L.F.	\$ 4.00	\$ 78,000.00
1/c #8 5KV L-824 Cable In Duct (RW/TW Lights)	21,000	L.F.	\$ 2.50	\$ 52,500.00
1/c #6 Safety Ground AWG XHHW In Duct (RW/TW Light)	21,000	L.F.	\$ 1.50	\$ 31,500.00
#6 Solid Bare Counterpoise In Trench	19,500	L.F.	\$ 1.25	\$ 24,375.00
Duct Markers	4	EA.	\$ 250.00	\$ 1,000.00
<b>Drainage</b>				
Storm Sewer	1	L.S.	\$ 70,000.00	\$ 70,000.00
<b>Marking</b>				
Paint/Reflective Media	1	L.S.	\$ 50,000.00	\$ 50,000.00
			<b>Total Construction Cost</b>	<b>\$ 6,100,865.00</b>
			<b>Engineering, Administration (25%)</b>	<b>\$ 1,525,216.25</b>
			<b>Total Construction Cost</b>	<b>\$ 7,626,081.25</b>

HWS CONSULTING GROUP INC.  
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 LINCOLN, NEBRASKA

**BLOSSER MUNICIPAL AIRPORT**

DESCRIPTION (BID ITEM)	Quantity	Unit	Unit Price	Total Cost
<b>Miscellaneous</b>				
Site Preparation	1	L.S.	\$ 175,000.00	\$ 175,000.00
Place And Maintain X's	1	EA.	\$ 2,500.00	\$ 2,500.00
Construction Staking	1	L.S.	\$ 40,000.00	\$ 40,000.00
Earthwork (Embankment)	185,000	C.Y	\$ 5.00	\$ 925,000.00
Seeding	65	Acre	\$ 1,500.00	\$ 97,500.00
Erosion Control	1	Acre	\$ 40,000.00	\$ 40,000.00
<b>Land Acquisition</b>				
Southwest End (Easement)	4.19	Acre	\$ 500.00	\$ 2,095.00
Southwest End (Fee)	21.09	Acre	\$ 6,000.00	\$ 126,540.00
Northeast End (Easement)	3.97	Acre	\$ 500.00	\$ 1,985.00
Northeast End (Fee)	29.72	Acre	\$ 6,000.00	\$ 178,320.00
Residence Relocation	0	EA.	\$ 250,000.00	\$ -
<b>Pavement</b>				
6" Portland Cement Concrete	39,000	S.Y.	\$ 50.00	\$ 1,950,000.00
4" P-208 Crushed Aggregate Base Course	44,500	S.Y.	\$ 20.00	\$ 890,000.00
<b>Lighting</b>				
L-861 Base Mounted MIRL	48	EA.	\$ 700.00	\$ 33,600.00
L-861SE Base Mounted MIRL	16	EA.	\$ 800.00	\$ 12,800.00
L861T Base Mounted MITL	94	EA.	\$ 700.00	\$ 65,800.00
1-Way 2" Schedule 40 PVC Duct	19,500	L.F.	\$ 4.00	\$ 78,000.00
1/c #8 5KV L-824 Cable In Duct (RW/TW Lights)	20,500	L.F.	\$ 2.50	\$ 51,250.00
1/c #6 Safety Ground AWG XHHW In Duct (RW/TW Light)	20,500	L.F.	\$ 1.50	\$ 30,750.00
#6 Solid Bare Counterpoise In Trench	19,500	L.F.	\$ 1.25	\$ 24,375.00
Duct Markers	4	EA.	\$ 250.00	\$ 1,000.00
<b>Drainage</b>				
Storm Sewer	1	L.S.	\$ 70,000.00	\$ 70,000.00
<b>Marking</b>				
Paint/Reflective Media	1	L.S.	\$ 50,000.00	\$ 50,000.00
<b>Total Construction Cost</b>			<b>\$</b>	<b>4,846,515.00</b>
<b>Engineering, Administration (25%)</b>			<b>\$</b>	<b>1,211,628.75</b>
<b>Total Construction Cost</b>			<b>\$</b>	<b>6,058,143.75</b>

HWS CONSULTING GROUP INC.  
 825 "J" STREET  
 LINCOLN, NEBRASKA