

SOUTH CENTRAL REGIONAL AIRPORT AGENCY

Meeting of the Board

January 4, 2013 - 5:00 p.m.

Pella Public Safety Complex

614 Main Street

Revised Agenda

1. Call to Order
2. Approval of the October 11, 2012 minutes
3. Call to the public (limited to 3 minutes per person)
4. Motion to submit candidate sites to the Federal Aviation Administration for airspace review.
5. Resolution authorizing the submittal of the attached airport improvement program data sheet for possible FY2013 Federal Aviation Administration Grants and Iowa Department of Transportation Grants.
6. Future agenda items
7. Staff reports (if needed)
8. Discussion of next meeting date/time
9. Adjourn



MINUTES
SOUTH CENTRAL REGIONAL AIRPORT AGENCY
MEETING
THURSDAY, OCTOBER 11, 2012
5:30 P.M.

Committee Members Present: David Barnes, Pamela Blomgren, James Hansen, Donna Smith, Steve Van Weelden and Joe Warrick. Also present: David Krutzfeldt, Mayor of Oskaloosa; Tom Walling, Oskaloosa City Council Member; Willie Van Weelden, Mahaska County Supervisor; Mike Nardini, Pella City Administrator; Michael Schrock Jr., Oskaloosa City Manager; Jerry Nusbaum, Mahaska County Engineer; Jerry Searle and Mwasi Mwamba, Snyder & Associates; Ken Allsup and Charlie Comfort, Osky News; Andy Goodell, Oskaloosa Herald; and Marilyn Johannes.

Meeting called to order by Chairman Hansen at 5:35 p.m. in the City Council Chambers, Oskaloosa City Hall.

It was moved by Barnes, seconded by Blomgren to approve the August 14, 2012 meeting minutes. Motion carried unanimously.

Hansen asked for comments from the public. There were no comments received.

Nardini said the SCRAA and the FAA had approved the selection of Snyder & Associates as the consultant to provide engineering services for the regional airport. Nardini explained the components of the engineering services agreement, and noted the total cost is \$511,790.71 which includes the following studies: Site Selection, Master Plan and Environmental Assessment.

Nardini said staff is recommending proceeding only with the site selection process at this time for an amount of \$89,439.12. Nardini explained the next cycle for planning grants is in the spring of 2013. Therefore, the cities of Oskaloosa and Pella would need to cover the cost of the site selection study and then be reimbursed once a grant for the project is approved by the FAA. ~~and once an airport site has been identified, the board will determine how to best proceed with the remaining Task Orders within the master plan and environmental assessments.~~

Nardini also gave an overview of the timeline for the project and provided information regarding determination of the site. Nardini told the board the FAA air space analysis would help with evaluation of candidate sites.

Nardini said there would be a master plan, operational plan and financial plan, indicating that 90% of funding would be entitlement funds and 10% would come from Pella and Oskaloosa according to the 28E Agreement. ~~and told the board that timing of funding for the project was off with FAA grant availabilities so Pella and Oskaloosa~~

~~would have to cover the cost of the environmental assessment and be reimbursed by the FAA grant in the spring.~~

Discussion of adoption of the resolution followed. Searle explained his firm looks at FAA sources and explained the procedure. Searle said the firm relies on local sources and compares, looks at total activity at the airport, concentrates on businesses that use the airport because they are typically larger than aircraft generated locally, based on purpose and need. Searle said FAA and IDOT concurrence is required during the process.

Searle said the number of sites is a board decision. Schrock said to expedite the process need to limit number of candidate sites, perhaps three or less. Nardini said the Pella city attorney had reviewed the contract.

It was moved by Barnes, seconded by Blomgren to approve the resolution entitled, "RESOLUTION APPROVING AIRPORT ENGINEERING SERVICES CONTRACT FOR PLANNING STUDIES REQUIRED TO CONTRUCT A CATEGORY C AIRPORT WITH SNYDER & ASSOCIATES, INC." Motion carried unanimously.

Searle gave a PowerPoint presentation that outlined the process and parameters to identify reasonable sites for consideration to provide to the FAA for concurrence. Searle explained the service area is defined by purpose and need; runway would be up to 7,000 feet but would begin with construction of a 5,500 foot runway and extend it to 7,000 feet. Searle said the number of sites in the area would be limited due to drainage and number of roads in the area. Searle then went over the 31 scoring criteria with the board.

Searle said want to accommodate 60-80 airplanes at this location. Searle pointed out the FAA rates airports on national significance and the Pella airport is identified as being of national significance and the new airport should rank within the top 15.

Nardini mentioned the 28E Agreement requirements and pointed out there are discrepancies of the plan with the agreement that would need to be worked out. For example, the 28E Agreement says the airport runway will be expanded to 7,500 feet instead of 7,000 because the runway has to be able to accommodate a precision airport approach.

Searle said his firm opts to minimize impacting people's livelihoods during their evaluation of sites. Discussion of the number of candidate sites followed with the consensus of the board being to provide at least three sites with a maximum of five if more reasonable sites are determined and bring them to the board for consideration with the ultimate goal to provide three sites to the FAA.

Hansen asked what process is to be followed before submitting sites to the FAA and wanted to know if there would be a public hearing. Schrock said after the next meeting. Searle pointed out the board might want to get comments from the FAA first because the public wants FAA information too. Nardini said after airspace analysis from the FAA which is the process that was followed before.

Hansen asked for future agenda items for the next meeting and asked Searle how much time he needed before the next meeting. Searle said he would like to meet with the board monthly. Schrock said that meeting in November and then not until March would work. Nardini said goal should be to have monthly meetings if necessary. Future items for the agenda named were adoption of the rating system and review of sites themselves.

It was moved by Smith, seconded by Barnes to adjourn. Motion carried unanimously.

The meeting adjourned at 6:42 p.m.

Minutes by Marilyn Johannes

ITEM NO: 4

SUBJECT: Motion to submit candidate airport sites to the Federal Aviation Administration for airspace review.

DATE: December 20, 2012

BACKGROUND:

Jerry Searle from Snyder and Associates will be in attendance to review candidate airport sites for the new South Central Regional Airport. As background, Snyder and Associates originally evaluated nine sites located within the search area for the new regional airport as stated in the 28E Agreement between Mahaska County, the City of Oskaloosa, and the City of Pella (see Exhibit '1'). As the Board is aware, the site for the new airport must be within 10 miles of the corporate limits of both the City of Oskaloosa and the City of Pella and be able to accommodate a precision approach landing. In addition, the primary runway for the new airport also needs to be able to expand up to 7,500 feet in length to accommodate future growth.

After rating each of the sites and consulting with the Mahaska County Engineer, the Oskaloosa City Manager, and the Pella City Administrator, Snyder and Associates is recommending sites A, B, and C be submitted to the Federal Aviation Administration for airspace review. It is important to note, each of these sites has been adjusted since Snyder's original evaluation to improve wind coverage for the primary runway and to minimize the impacts on the Mahaska County transportation network.

Included in the Board packet are the following items for review:

- Exhibit '1' - The original sites evaluated by Snyder and Associates.
- Exhibit '2' - The site screening criteria for the candidate sites.
- Exhibit '3' - The site ratings for candidate sites A, B, and C.
- Exhibit '4' - Map of candidate sites A, B, and C.
- Exhibit '5' - Site A Topography Map.
- Exhibit '6' - Site B Topography Map.
- Exhibit '7' - Site C Topography Map

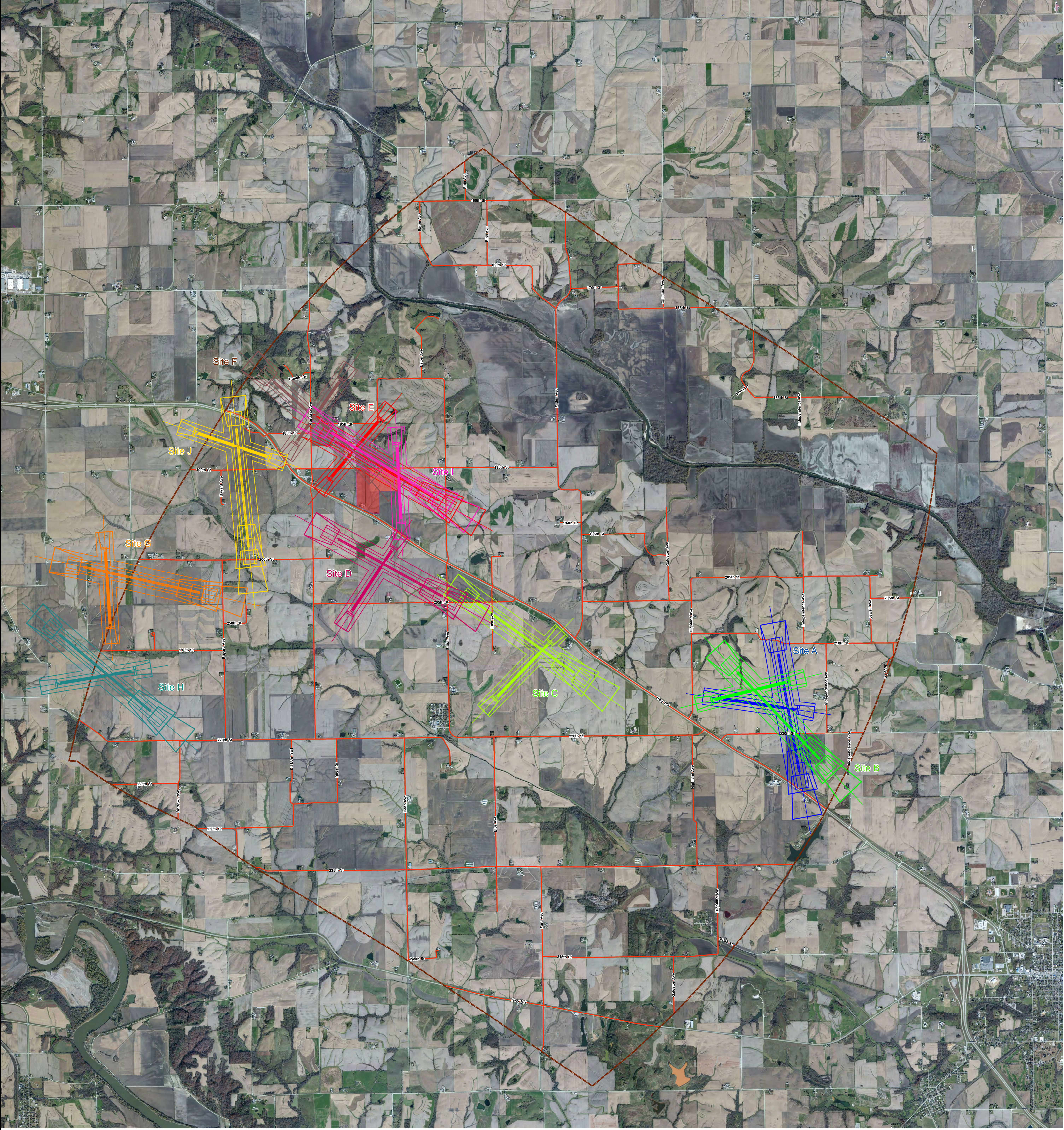
Recommendation

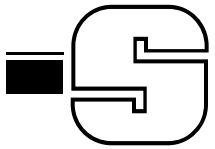
Based on Snyder and Associates analysis, staff is recommending candidate sites A, B, and C be submitted to the Federal Aviation Administration for airspace analysis, which will likely take between 3 to 6 months to complete. Once the airspace analysis is completed, each of the sites will be rerated and a recommendation will be submitted to the Board for a primary and a secondary regional airport site.

ATTACHMENTS: Exhibits '1' through '7'.

REPORT PREPARED BY: Staff

RECOMMENDED ACTION: Submit sites A, B, and C to the Federal Aviation Administration for airspace review.





Memorandum

To: Mike Nardini, Mike Schrock, Jerry Nusbaum

Date: 12-6-2012

From: Jerry Searle

CC:

RE: Site A Concept Plan
Site B Concept Plan
Site C Concept Plan
Preliminary Site Scoring
Site Scoring Criteria

Attached is the Preliminary Site Scoring and Site Scoring Criteria and one of the Site exhibits. Due to the size of the files, there will be several emails with attachments.

SITE SCREENING

Thirty-two (32) site screening measures were developed for purposes of scoring each of the sites being carried forward. Each of the screening measures were assigned a numerical value from zero (0) to 100. For example, a site where the crosswind runway intersected the primary runway at midpoint on the primary runways was given a score of 100 whereas a concept that placed the intersection at the end of the primary runway received zero (0) points.

SCORING CRITERIA

- 1. Primary Runway (7,000')**
 - 100 – RPZ and runway all on site
 - 70 – Part of RPZ and all of runway on site
 - 30 – Runway only on site
 - 0 – Only part of runway on site
- 2. Crosswind (4,100')**
 - 100 – RPZ and runway all on site
 - 70 – Part of RPZ and all of runway on site
 - 30 – Runway only on site
 - 0 – Only part of runway on site
- 3. Terminal Area Expansion**
 - 100 – Unlimited expansion area
 - 70 – Slightly limited
 - 30 – Greatly limited
 - 0 – No expansion possibilities
- 4. Approach Minima (Can obtain with mitigation)**
 - 100 – 200' – ½ mile (2 runways)
 - 70 – 200' – ½ mile (1 runway)
 - 30 – NPI only
 - 0 – Visual only
- 5. Airport Geometry**
 - 100 – Crosswind intersects primary at midpoint
 - 70 – Crosswind intersects primary ¾ distance from instrument end
 - 30 – Crosswind intersections primary ¼ distance from instrument end
 - 0 – Crosswind intersects primary at end of runway length
- 6. Topography**
 - 100 – Minimal amount of grading
 - 70 – Moderate amount of grading
 - 30 – Acceptable amount of grading
 - 0 – Excessive amount of grading
- 7. Soils**
 - 100 – Excellent for borrow
 - 70 – Good for borrow
 - 30 – Fair for borrow
 - 0 – Poor/unsuitable borrow

SITE SCREENING

- 8. Drainage**
 - 100 – Minor drainage swale
 - 70 – Major drainage swale
 - 30 – Major ditch or stream on site
 - 0 – Major ditch or stream through site
- 9. Obstructions/Air Space-FAA**
 - 100 – No obstructions
 - 70 – Obstructions mark and light
 - 30 – Obstructions lower, mark and light
 - 0 – Obstructions remove
- 10. Distance form Solid Waste Landfill**
 - 100 – Over 10.0 miles from landfill
 - 70 – 5.0-9.9 miles from landfill
 - 30 – 2.0-4.9 miles from landfill
 - 0 – 0.1-1.9 miles from landfill
- 11. Power Transmission Lines/Towers**
 - 100 – Over 2 miles from site
 - 70 – 1-2 miles from site
 - 30 – 0.5-1 miles from site
 - 0 – Less than 0.5 mile from site
- 12. Pipe Lines**
 - 100 – Over 0.25 miles away
 - 70 – Adjacent-0.25 miles away
 - 30 – Immediately adjacent to site
 - 0 – On site
- 13. Sanitary Sewer**
 - 100 – Available at terminal area
 - 70 – 0-0.25 miles away
 - 30 – Install septic tank
 - 0 – Can't install septic tank
- 14. Water**
 - 100 – Public water at terminal area
 - 70 – Public water 0-0.25 miles away
 - 30 – Public water 0.25-0.50 miles away
 - 0 – Drill well
- 15. Electrical**
 - 100 – Power adjacent to terminal area
 - 70 – Power 0-0.25 miles away
 - 30 – Power 0.25-0.5 miles away
 - 0 – Power over 0.5 miles away
- 16. Natural Gas**
 - 100 – Gas adjacent to terminal area
 - 70 – Gas 0-0.25 miles away
 - 30 – Gas 0.25-0.5 miles away
 - 0 – Gas over 0.5 miles away

SITE SCREENING

- 17. Road Access**
 - 100 – Adjacent to State or Federal Highway-4 lane
 - 70 – On State or Federal Highway-2 lane
 - 30 – On major county road
 - 0 – On local county road
- 18. Accessibility from Service Area Centroid**
 - 100 – 0.0-2.0 miles from centroid
 - 70 – 2.1-4.0 miles from centroid
 - 30 – 4.1-6.0 miles from centroid
 - 0 – Above 6.1 miles
- 19. Accessibility from State or Federal Numbered Highway**
 - 100 – 0.0-0.5 miles
 - 70 – 0.5-1.0 miles
 - 30 – 1.0-3.0 miles
 - 0 – Over 3.0 miles
- 20. Hard Surfaced Road**
 - 100 – On four sides of site
 - 70 – On three sides of site
 - 30 – On two sides of site
 - 0 – On one side of site
- 21. Wetlands/Floodplain**
 - 100 – None on site
 - 70 – Sensitive area on site but no effect on operations
 - 30 – Sensitive area on site and within 100 feet of any operations
 - 0 – Unavoidable sensitive area
- 22. Flora, Fauna, Endangered Species**
 - 100 – None known on site
 - 70 – Sensitive area more than 300 feet from any operations
 - 30 – Sensitive area 100 –300 feet from any operations
 - 0 – Unavoidable sensitive area
- 23. Historic/Archaeological**
 - 100 – None known on site
 - 70 – Sensitive area more than 300 feet from any operations
 - 30 – Sensitive area 100 –300 feet from any operations
 - 0 – Unavoidable sensitive area
- 24. Parks and Recreation, See 4(f) Resource**
 - 100 – None within 1 mile of site
 - 70 – Within 0.5-1 miles of site
 - 30 – Within 0.1-0.5 miles of site
 - 0 – Facility on site
- 25. Prime Agricultural Land**
 - 100 – Less than 90% prime
 - 70 – 91%-93% prime
 - 30 – 93%-95% prime
 - 0 – Over 95% prime

SITE SCREENING

- 26. Road Disconnect/Relocation**
100 – None required
70 – Less than 0.5 mile required
30 – 0.5-1 mile required
0 – More than 1 mile required
- 27. Property Impact/Property Owners, Environmental Justice**
100 6 -7 Property Owner
70 8-9 Property Owner
30 10-11 Property Owner
0 12+ Property Owner
- 28. Urban Residential, Hospital Schools, Noise**
100 – No subdivisions within 1 mile of site
70 – Subdivisions 0.5-1 mile of site
30 – Subdivision 0.1-0.5 miles of site
0 – Subdivisions adjacent to site
- 29. Adjacent Land Use**
100 – Agricultural, Industrial
70 – 0-3 residential units per square mile
30 – 3-6 residential units per square mile
0 – Over 7 units per square mile
- 30. Zoning**
100 – Airports permitted use
70 – Airports permitted as conditional use
30 – Rezoning required
0 – Airports not permitted
- 31. Century Farm**
100 –none
70 – 1-2
30 – 3-5
0 – 5 plus
- 32. Potential Relocations**
100 –none
70 – 1
30 – 2
0 – 3 or more

The 32 site screening measures were then placed in two (2) categories:

- Facility Components and accessibility
- Environmental/Property Acquisition

Each of the two category screening measures were assigned a weighted value by the Aviation Task Force (following table).

SITE SCREENING

TABLE
WEIGHTING-SCREENING MEASURES

Categories	Weighting	Point Allocation
Facility Components & Accessibility	65%	
1 – Primary Runway	10	6.50
2 – Crosswind Runway	6	3.90
3 – Terminal Area Expansions	2	1.30
4 – Approach Minima	10	6.50
5 – Airport Geometry/Wind Coverage	6	3.90
6 – Topography	10	6.50
7 – Soils	4	2.60
9 – Obstruction/Air Space -FAA	20	13.00
11 – Power Transmission Lines/Towers	5	3.25
12 – Pipelines	2	1.30
13 – Sanitary Sewer	1	.65
14 – Water	1	.65
15 – Electrical	1	.65
16 – Natural Gas	1	.65
17 – Road Access	3	1.95
18 – Accessibility from Centroid	10	6.50
19 – Accessibility from U.S./State Hwy. #,miles	3	1.95
20 – Hard Surfaced Road	5	3.25
Subtotal	100	65.00
Environmental/Property Acquisition Concerns	35%	
21 – Wetland/Floodplain	7	2.45
22 – Flora, Fauna	7	2.45
23 – Historic/Archaeological	7	2.45
24 – Parks and Recreation, Sec 4(f)	7	2.45
25 - Prime Agricultural Land	7	2.45
8 – Drainage	3	1.05
10 – Distance from Solid Waste Landfill	2	.70
26 – Road Disconnect/Relocation	10	3.50
27 - #Property Impacts	10	3.50
28 – Residential, Hospital, Schools	10	3.50
29 – Adjacent Land Use	10	3.50
30 – Zoning	4	1.40
31 - #Century Farms	4	1.40
32-Relocations	10	3.50
Subtotal	100	35.00
Total Points Allocated	100	

SITE SCREENING

SITE SCORING

Scoring Categories	Weighting*	CANDIDATE AIRPORT SITES					
		Site A		Site B		Site C	
		Rating	Score	Rating	Score	Rating	Score
Facility Components & Accessibility	65%						
1 - Primary Runway	10	30	300	30	300	0	0
2 - Crosswind Runway	6	100	600	100	600	70	420
3 - Terminal Area Expansion	2	100	200	100	200	100	200
4 - Approach Minima	10	70	700	70	700	70	700
5 - Airport Geometry/Wind Coverage	6	70	420	30	180	70	420
6 - Topography	10	0	0	70	700	30	300
7 - Soils	4	30	120	30	120	30	120
9 - Obstructions/Air Space-FAA	20	30	600	0	0	700	1,400
11 - Power Transmission Lines/Towers	5	0	0	0	0	30	150
12 - Pipelines	2	100	200	100	200	100	200
13 - Sanitary Sewer	1	30	30	30	30	30	30
14 - Water	1	100	100	100	100	100	100
15 - Electrical	1	100	100	100	100	100	100
16 - Natural Gas	1	0	0	0	0	0	0
17 - Road Access	3	100	300	100	300	100	300
18 - Accessibility From Centroid	10	70	700	100	1,000	70	700
19 - Accessibility From U.S./State Hwy, # miles	3	100	300	100	300	100	300
20 - Hard Surfaced Road	5	0	0	70	350	30	150
	100						
Weighted Score		1,030	4,670	1,130	5,180	1,730	5,590
Environmental/Acquisition Concerns	35%						
8 - Drainage	3	0	0	0	0	0	0
21 - Wetland/Floodplain	7	0	0	70	490	30	210
22 - Flora, Fauna	7	30	210	70	490	70	490
23 - Historic/Archaeological	7	100	700	100	700	100	700
24 - Parks and Recreation, Sec. 4(f)	7	100	700	100	700	70	490
26 - Road Disconnect/Relocation	10	70	700	0	0	70	700
10 - Distance From Solid Waste Landfill	2	100	200	100	200	100	200
27 - # Property Impacts	10	70	700	70	700	70	700
28 - Residential, Hospital, School	10	100	1,000	100	1,000	100	1,000
29 - Adjacent Land Use	10	100	1,000	100	1,000	100	1,000
30 - Zoning	6	70	420	70	420	70	420
31 - # Century Farms	4	0	0	0	0	0	0
25 - Prime Agricultural Land	7	100	700	100	700	100	700
32 - Potential Relocations	10	30	300	70	700	70	700
	100						
Weighted Score		870	6,630	950	7,100	950	7,310
Weighted Score totals			11,300		12,280		12,900

***Weighting, points and ratings shown (Right) for demonstration purposes only. Actual weighting, points and ratings to be assigned by the Task Force.**

1. Assign percentage weighting to each category (accommodate Facility Components Infrastructure Support to Facility etc.)
2. Assign points weighting to each item within each category. Points per category to add up to 100.
3. Assign rating to each item per Site Selection Criteria.
4. Sites will be ranked based on total points under their respective weighted score columns.

Minimum requirements for all sites:

1. 7,000' primary runway
2. 4,100' crosswind runway
3. Accommodate at least one precision approach

WORKING PAPER
Airfield Design Parameters
(for discussion only)

12-20-2012

112.0865.01

South Central Regional Airport Agency

I. Runway Design Code-Primary Runway

- (A) Aircraft Approach Speed-“C”
 - (1) 121 knots or more but less than 141 knots
- (B) Airplane Design Group-“II”
 - (1) Tail Height: 20 feet but less than 30 feet
 - (2) Wing Span: 49 feet but less than 79 feet
- (C) Visibility Minimums-Runway Visual Range (RVR)
 - (1) Precision Approach End
 - a. Lower than $\frac{3}{4}$ mile but not lower than $\frac{1}{2}$ mile
 - b. RVR-2,400 feet
 - c. CAT I=PA
 - (2) Approach Procedure with Vertical Guidance
 - a. Lower than 1 mile but not lower than $\frac{3}{4}$ mile
 - b. RVR-4,000 feet
 - c. APV $\geq \frac{3}{4}$ mile but < 1 mile

II. Runway Design Code-Crosswind Runway

- (A) Aircraft Approach Speed – “A & B”
 - (1) Less than 121 knots
- (B) Airplane Design Group –“I”
 - (1) Tail Height: less than 20 feet
 - (2) Wing Span: less than 49 feet
- (C) Visibility Minimums-Runway Visual Range (RVR)
 - (1) Non-Precision Instrument (horizontal only)-both runway ends
 - (2) NPA 1-mile straight in

**South Central Regional Airport Agency
Primary Runway-ARC C-II
Runway Design Standards Matrix C/D/E-II**

Runway Design Code (RDC)		C/D/E-II			
ITEM	DIM ¹	VISIBILITY MINIMUMS			
		Visual	Not Lower than 1 mile	Not Lower than 3/4 mile	Lower than 3/4 mile
RUNWAY DESIGN					
Runway Length	A	Refer to paragraphs 302 and 304			
Runway Width	B	100 ft	100 ft	100 ft	100 ft
Shoulder Width		10 ft	10 ft	10 ft	10 ft
Blast Pad Width		120 ft	120 ft	120 ft	120 ft
Blast Pad Length		150 ft	150 ft	150 ft	150 ft
Crosswind Component		16 knots	16 knots	16 knots	16 knots
RUNWAY PROTECTION					
Runway Safety Area (RSA)					
Length beyond departure end ¹⁰	R	1,000 ft	1,000 ft	1,000 ft	1,000 ft
Length prior to threshold	P	600 ft	600 ft	600 ft	600 ft
Width	C	500 ft	500 ft	500 ft	500 ft
Runway Object Free Area (ROFA)					
Length beyond runway end	R	1,000 ft	1,000 ft	1,000 ft	1,000 ft
Length prior to threshold	P	600 ft	600 ft	600 ft	600 ft
Width	Q	800 ft	800 ft	800 ft	800 ft
Runway Obstacle Free Zone (ROFZ)					
Length		Refer to paragraph 308			
Width		Refer to paragraph 308			
Precision Obstacle Free Zone (POFZ)					
Length		N/A	N/A	N/A	200 ft
Width		N/A	N/A	N/A	800 ft
Approach Runway Protection Zone (RPZ)					
Length	L	1,700 ft	1,700 ft	1,700 ft	2,500 ft
Inner Width	U	500 ft	500 ft	1,000 ft	1,000 ft
Outer Width	V	1,010 ft	1,010 ft	1,510 ft	1,750 ft
Acres		29.465	29.465	48.978	78.914
Departure Runway Protection Zone (RPZ)					
Length	L	1,700 ft	1,700 ft	1,700 ft	1,700 ft
Inner Width	U	500 ft	500 ft	500 ft	500 ft
Outer Width	V	1,010 ft	1,010 ft	1,010 ft	1,010 ft
Acres		29.465	29.465	29.465	29.465
RUNWAY SEPARATION					
Runway centerline to:					
Parallel runway centerline	H	Refer to paragraph 316			
Holding Position ¹⁵		250 ft	250 ft	250 ft	250 ft
Parallel taxiway/taxilane centerline ^{2,4}	D	300 ft	300 ft	300 ft	400 ft
Aircraft parking area	G	400 ft	400 ft	400 ft	500 ft
Helicopter touchdown pad		Refer to AC 150/5390-2			

Note: Values in the table are rounded to the nearest foot. 1 foot=0.305 meters.

Lower than ¾ mile (Precision Instrument Approach) End

Lower than 1 mile but not lower than ¾ mile (Approach Procedure with Vertical Guidance-APV) end

**South Central Regional Airport Agency
Crosswind Runway-ARC A/B-I Small Aircraft
Runway Design Standards Matrix**

Runway Design Code (RDC)		A/B - I Small Aircraft			
ITEM	DIM ¹	VISIBILITY MINIMUMS			
		Visual	Not Lower than 1 mile	Not Lower than 3/4 mile	Lower than 3/4 mile
RUNWAY DESIGN					
Runway Length	A	Refer to paragraphs 302 and 304			
Runway Width	B	60 ft	60 ft	60 ft	75 ft
Shoulder Width		10 ft	10 ft	10 ft	10 ft
Blast Pad Width		80 ft	80 ft	80 ft	95 ft
Blast Pad Length		60 ft	60 ft	60 ft	60 ft
Crosswind Component		10.5 knots	10.5 knots	10.5 knots	10.5 knots
RUNWAY PROTECTION					
Runway Safety Area (RSA)					
Length beyond departure end ¹⁰	R	240 ft	240 ft	240 ft	600 ft
Length prior to threshold	P	240 ft	240 ft	240 ft	600 ft
Width	C	120 ft	120 ft	120 ft	300 ft
Runway Object Free Area (ROFA)					
Length beyond runway end	R	240 ft	240 ft	240 ft	600 ft
Length prior to threshold	P	240 ft	240 ft	240 ft	600 ft
Width	Q	250 ft	250 ft	250 ft	800 ft
Runway Obstacle Free Zone (ROFZ)					
Length		Refer to paragraph 308			
Width		Refer to paragraph 308			
Precision Obstacle Free Zone (POFZ)					
Length		N/A	N/A	N/A	N/A
Width		N/A	N/A	N/A	N/A
Approach Runway Protection Zone (RPZ)					
Length	L	1,000 ft	1,000 ft	1,700 ft	2,500 ft
Inner Width	U	250 ft	250 ft	1,000 ft	1,000 ft
Outer Width	V	450 ft	450 ft	1,510 ft	1,750 ft
Acres		8.035	8.035	48.978	79.000
Departure Runway Protection Zone (RPZ)					
Length	L	1,000 ft	1,000 ft	1,000 ft	1,000 ft
Inner Width	U	250 ft	250 ft	250 ft	250 ft
Outer Width	V	450 ft	450 ft	450 ft	450 ft
Acres		8.035	8.035	8.035	8.035
RUNWAY SEPARATION					
Runway centerline to:					
Parallel runway centerline	H	Refer to paragraph 316			
Holding Position ¹⁵		125 ft	125 ft	125 ft	175 ft
Parallel taxiway/taxilane centerline ^{2,4}	D	150 ft	150 ft	150 ft	200 ft
Aircraft parking area	G	125 ft	125 ft	125 ft	400 ft

Note: Values in the table are rounded to the nearest foot. 1 foot=0.305 meters.

Not Lower than 1 mile

South Central Regional Airport Agency
Primary Runway
Standards for Precision Approach Procedures with Vertical Guidance (APV)
Lower than 250 ft. Height Above Threshold (HATH)

Visibility Minimums ¹	< 3/4-statute mile	< 1-statute mile
HATH ²	200 ft	250 ft
TERPS GQS ³	← Table 3-2, Row 8 → clear	
TERPS precision final surfaces	Clear	See Note 4
TERPS Chapter 3, Section 3	34:1 Clear	20:1 Clear
Precision Obstacle Free Zone (POFZ) 200 ft. x 800 ft.	Required	Not Required
Airport Layout Plan ⁵	← Required →	
Minimum Runway Length	← 4,200 ft(Paved) →	
Runway Markings (See AC 150/5340-1)	Precision	Non-precision
Holding Position Signs & Markings (See AC 150/5340-1 and AC 150/5340-18)	Precision	Non-precision
Runway Edge Lights ⁶	← HIRLMIRL →	
Parallel Taxiway ⁷	← Required →	
Approach Lights ⁸	MALS, SSALR, OR ALSF	Recommended
Applicable Runway Design Standards; e.g., OFZ	<3/4-statute mile approach visibility minimums	>3/4-statute mile approach visibility minimums
Threshold Siting Criteria To Be Met ⁹	Reference paragraph 303 and Table 3-2, rows 7&8	Reference paragraph 303 and Table 3-2, rows 6&8
Survey Required for Lowest Minima	Vertically Guided Airport Airspace Analysis Survey criteria in AC 150/5300-18	

Notes:

- 1 Visibility minimums are subject to the application of FAA Order 8260.3 (TERPS) and associated orders or this table, whichever is higher.
- 2 The HATH indicated is for planning purposes only. Actual obtainable HATH is determined by TERPS.
- 3 The GQS is applicable to approach procedures providing vertical path guidance.
- 4 If the final surface is penetrated, HATH and visibility will be increased as required by TERPS.
- 5 An ALP is only required for obligated airports in the NPIAS; it is recommended for all others.
- 6 Runway edge lighting is required for night minimums. High intensity lights are required for RVR-based minimums.
- 7 A full-length parallel taxiway meeting separation requirements. See Table 3-8.
- 8 Circling procedures to a secondary runway from the primary approach will not be authorized when the secondary runway does not meet threshold siting (reference paragraph 303), OFZ (reference paragraph 308) criteria, and TERPS Chapter 3, Section 3.

Precision Approach End (200-1/2 mile)

Opposite Precision Approach End (250'-3/4 mile)

South Central Regional Airport Agency
Crosswind Runway
Standards for Non-Precision Approach (NPAs)
and APV with ≥ 250 ft. HATh

Visibility Minimums ¹	< 3/4-statute mile	< 1-statute mile	≥ 1 -statute mile Straight In	Circling ¹⁰
HATh ²	250	400	450 ft	Varies
TERPS GQS (APV only)	Table 3-2, row 8 Clear			
TERPS Chapter 3, Section 3	34:1 clear	20:1 clear	20:1 clear or penetrations lighted for night minimums (See AC 70/7460-1)	
Airport Layout Plan ³	Required		ALP	Recommended
Minimum Runway Length	4,200 ft (Paved)	3,200 ft ⁴ (Paved)	3,200 ft ^{4,5}	
Runway Markings (See AC 150/5340-1)	Precision	Nonprecision ⁵		Visual (Basic) ⁵
Holding Position Signs & Markings (See AC 150/5340- 1 and AC 150/5340-18)	Precision	Nonprecision		Visual (Basic) ⁵
Runway Edge Lights ⁶	HIRL / MIRL		MIRL / LIRL	MIRL / LIRL (Required only for night minima)
Parallel Taxiway ⁷	Required		Recommended	
Approach Lights ⁸	MALSR, SSALR, or ALSF Required	Required ⁹	Recommended ⁹	Not Required
Applicable Runway Design Standards, e.g. OFZ ¹⁰	<3/4-statute mile approach visibility minimums	$\geq 3/4$ -statute mile approach visibility minimums		Not Required
Threshold Siting Criteria To Be Met ¹¹ (Reference paragraph 303)	Table 3-1, Row 7	Table 3-2, Row 6	Table 3-2, Rows 1–5	Table 3-2, Rows 1–4
Survey Required for Lowest Minimums	Vertically Guided Airport Airspace Analysis Survey AC 150/5300-18	Non-Vertically Guided Airport Airspace Analysis Survey AC 150/5300-18		

Notes:

1. Visibility minimums are subject to the application of FAA Order 8260.3 (TERPS) and associated orders or this table, whichever is higher.
2. The HATh indicated is for planning purposes only. Actual obtainable HAT is determined by TERPS.
3. An ALP is only required for obligated airports in the NPIAS; it is recommended for all others.
4. Runways less than 3,200 feet are protected by Part 77 to a lesser extent. However runways as short as 2,400 feet could support an instrument approach provided the lowest HATh is based on clearing any 200-foot (61m) obstacle within the final approach segment.
5. Unpaved runways require case-by-case evaluation by the RAPT.
6. Runway edge lighting is required for night minimums. High intensity lights are required for RVR-based minimums.
7. A full-length parallel taxiway must lead to the threshold.
8. To achieve lower visibility minimums based on credit for lighting, a full approach light system (ALSF-1, ALSF-2, SSALR, or MALSR) is required for visibility < 1-statute mile. Intermediate (MALSF, MALS, SSALF, SSALS, SALS/SALSF) or Basic (ODALS) systems will result in higher visibility minimums.
9. ODALS, MALS, SSALS, SALS are acceptable.
10. Circling procedures to a secondary runway from the primary approach will not be authorized when the secondary runway does not meet threshold siting (reference paragraph 303), OFZ (reference paragraph 308), and TERPS Chapter 3, Section 3.

South Central Regional Airport Agency
Table
Approach/Departure Standards

Runway Type		Dimensional Standards* Feet (Meters)					Slope/ OCS
		A	B	C	D	E	
1	Approach end of runways expected to serve small airplanes with approach speeds less than 50 knots. (Visual runways only, day/night)	0 (0)	120 (35)	300 (191)	500 (152)	2,500 (762)	15:1
2	Approach end of runways expected to serve small airplanes with approach speeds of 50 knots or more. (Visual runways only, day/night)	0 (0)	250 (76)	700 (213)	2,250 (686)	2,750 (838)	20:1
3	Approach end of runways expected to serve large airplanes (Visual day/night); or instrument minimums ≥ 1 statute mile (day only).	0 (0)	400 (122)	1,000 (305)	1,500 (457)	8,500 (2,591)	20:1
4	Approach end of runways expected to support instrument night operations, serving approach Category A and B aircraft only. ¹	200 (61)	400 (122)	3,800 (1,158)	10,000 ² (3,048)	0 (0)	20:1
5	Approach end of runways expected to support instrument night operations, serving greater than approach Category B aircraft. ¹	200 (61)	800 (244)	3,800 (1,158)	10,000 ² (3,048)	0 (0)	20:1
6	Approach end of runways expected to accommodate instrument approaches having visibility minimums $\geq 3/4$ but < 1 statute mile (≥ 1.2 km) but < 1.6 km), day or night.	200 (61)	800 (244)	3,800 (1,158)	10,000 ² (3,048)	0 (0)	20:1
7	Approach end of runways expected to accommodate instrument approaches having visibility minimums $\leq 3/4$ statute mile (1.2 km) or precision approach (ILS or GLS), day or night.	200 (61)	800 (244)	3,800 (1,158)	10,000 ² (3,048)	0 (0)	34:1
8 ³ , 5,6,7	Approach end of runways expected to accommodate approaches with vertical guidance (Glide Path Qualification Surface [GQS]).	0 (0)	Runway width+ 200 (61)	1,520 (463)	10,000 ² (3,048)	0 (0)	30:1
9	Departure runway ends for all instrument operations.	0 ⁴ (0)					40:1

*The letters are keyed to those shown in Figure 3-2.

Source: AC 150/5300-13 Chg. 17

Notes:

- Marking and lighting of obstacle penetrations to this surface or the use of a Visual Guidance Slope Indicator (VGSI), as defined by the TERPS order, may avoid displacing the threshold.
- 10,000 feet (3,048m) is a nominal value for planning purposes. The actual length of these areas is dependent upon the visual descent point position for 20:1 and 34:1 and DA point for the 30:1.
- When objects exceed the height of the GQS, an APV (ILS, PAR, LPV, LNAV/VNAV, etc.) is not authorized. Refer to Table 3-4 and its footnote 3 for further information on GQS.
- Dimension A is measured relative to TODA (to include clearway).
- Surface dimensions/ OCS slope represent a nominal approach with 3 degree Glide Path Angle (GPA), 50 feet (15m) TCH, $< 500'$ (152m) HATh. For specific cases refer to Oder 8260.3. The OCS slope (30:1) supports a nominal approach of 3 degrees (also known as the GPA). This assumes a TCH of 50 feet (15 m). Three degrees is commonly used for ILS systems and VGSI aiming angles. This approximates a 30:1 approach slope that is between the 34:1 and the 20:1 approach surfaces of Part 77. Surfaces cleared to 34:1 should accommodate a 30:1 approach without any obstacle clearance problems.
- For runways with vertically guided approaches the criteria in Row 8 is in addition to the basic criteria established within the table, to ensure the protection of the GQS.
- For planning purposes, determine a tentative DA based on a 3 degree GPA and a 50-foot (15m) TCH.



Crosswind Runway- Both Ends



Primary Runway-Opposite Approach End (250' -3/4 mile)



Primary Runway-Precision Approach End (200' -1/2 mile)

WORKING PAPER
RUNWAY LENGTH REQUIREMENTS
(for discussion only)

12-20-2012

112.0865.01

Runway Length

Analysis of existing users as well as the analysis of expected future fleet mix composition indicates the runways be designed to accommodate large airplanes in Approach Category C and Design Group II. This would include most of the general aviation corporate turboprop aircraft in common use today, and use by corporate jets with a gross weight of 60,000 pounds or less.

Table 1 identifies those airplanes that comprise 75 percent of fleet having a maximum certificated takeoff weight of more than 12,500 pounds up to and including 60,000 pounds. Table 2 identifies the remaining 25 percent of the fleet having a maximum takeoff weight more than 12,500 pounds up to and including 60,000 pounds.

Table 1
Airplanes that Make up 75 Percent of the Fleet

Manufacturer	Model	Manufacturer	Model
Aerospatiale	Sn-601 Corvette	Dassault	Falcon 10
Bae	125-700	Dassault	Falcon 20
Beech Jet	400A	Dassault	Falcon 50/50 EX
Beech Jet	Premier 1	Dassault	Falcon 900/900B
Beech Jet	2000 Starship	Israel Aircraft Industries (IAI)	Jet Commander 1121
Bombardier	Challenger 300	IAI	Westwind 1123/1124
Cessna	500 Citation/501 Citation SP	Learjet	20 Series
Cessna	Citation I/II/III	Learjet	31/31A/31A ER
Cessna	525A Citation II (CJ-2)	Learjet	35/35A/36/36A
Cessna	550 Citation Bravo	Learjet	40/45
Cessna	550 Citation II/Special	Mitsubishi	Mu-300 Diamond
Cessna	551 Citation II/Special	Raytheon	390 Premier
Cessna	552 Citation	Raytheon Hawker	400/400 XP
Cessna	560 Citation Encore	Raytheon Hawker	600
Cessna	560/560 XL Citation Excel	Sabreliner	40/60
Cessna	560 Citation V Ultra	Sabreliner	75A
Cessna	650 Citation VII	Sabreliner	80
Cessna	680 Citation Sovereign	Sabreliner	T-39

Source: FAA AC 150/5325-4B, Runway Length 7-1-05

Table 2
Remaining 25 Percent of Airplanes that Make up 100 Percent of Fleet

Manufacturer	Model	Manufacturer	Model
Bae	Corporate 800/1000	Israel Aircraft Industries (IAI)	Astra 1125
Bombardier	600 Challenger	IAI	Galaxy 1126
Bombardier	601/601-3A/ER Challenger	IAI	Galaxy 1126
Bombardier	604 Challenger	Learjet	45 XR
Bombardier	BD-100 Continental	Learjet	55/55B/55C
Cessna	S550 Citation S/II	Learjet	60
Cessna	650 Citation III/IV	Raytheon/Hawker	Horizon
Cessna	750 Citation X	Raytheon/Hawker	800/800 XP
Dassault	Falcon 900C/900 EX	Raytheon/Hawker	1000
Dassault	Falcon 2000/2000EX	Sabreliner	65/75
Cessna	680 Citation Sovereign	Sabreliner	T-39

Source: FAA AC 150/5300-4B, Runway Length 7-1-05

The recommended runway length is based on performance curves developed from FAA approved flight manuals. The runway length should accommodate on a regular basis operations by turbojet-powered airplanes weighing up to and including 60,000 pounds maximum certificated takeoff weight in conjunction with other airplanes.

**Table 3
Business Jet Data**

Type	#MFG	ARC	1.3 X Stall Speed Knots	Wing Span Feet	MX T.O. Lbs.	T.O Dist. ISO	Land Dist. ISO
Aerospatial SN-601 Corvette	40	B-I	118	42.2	14,550		
Beechjet 400A/T/T-1A Jayhawk	581	C-I	121	43.5	16,100	4,169	2,960
Bombardier CL-600 Challenger	85	C-II	125	61.8	41,250	5,700	2,775
Bombardier CL-601 Challenger	66	C-II	125	61.8	41,250	5,700	2,775
Bombardier CL-601-3A/3R	194	C-II	125	61.8	41,250	5,700	2,775
Bombardier CL-604 Challenger	180	C-II	125	61.8	47,600	5,700	2,775
Bombardier BD-700 Global Express	85	C-III	126	94	93,500	6,300	2,700
Cessna 500 Citation	418	B-I	108	47.1	11,850	2,930	2,270
Cessna 501 Citation 1/SP	325	B-I	112	46.8	11,850	2,830	2,350
Cessna 525 Citation (CJ-1)	430	B-I	107	46.7	10,400	3,080	2,750
Cessna 525A CitationJet II (CJ-2)	30	B-II	118	49.5	12,500	3,420	2,980
Cessna 550 Citation II	733	B-II	108	51.7	13,300	2,990	2,270
Cessna 550 Citation Bravo	161	B-II	112	52.2	14,800	3,600	3,180
Cessna 551 Citation II/SP	94	B-II	108	51.8	12,500	2,650	2,210
Cessna 552/T-47A	15	B-II	107	52.2	16,300	3,180	2,800
Cessna S550 Citation S/II	162	B-II		52.2	15,900		
Cessna 560 Citation V Ultra	538	B-II	108	52.2	16,300	3,180	
Cessna 560 Citation Encore	25	C-II	108	52.2	16,830	3,560	2,865
Cessna 560 Citation Excel	160	B-II	107	55.7	2,000	3,590	3,180
Cessna 650 Citation III/VI	241	C-II	131	53.3	21,000	5,150	2,900
Cessna 650 Citation VII	119	C-II	126	53.6	23,000	4,850	3,220
Cessna 750 Citation X	160	C-II	131	63.6	36,100	5,140	3,410
Dassault Falcon 10	226	B-I	104	42.9	18,740		
Dassault Falcon 20	515	B-II	107	53.5	28,660		
Dassault Falcon 2000	140	B-II	114	63.5	35,800	5,240	5,220
Dassault Falcon 50	310	B-II	113	61.9	37,480	4,715	4,875
Dassault Falcon 900	190	B-II	100	63.4	45,500	4,680	5,880
Dassault Falcon 900 Ex	85	C-II	126	63.5	48,300	4,985	5,880
Gulfstream II	258	D-II	141	68.8	65,300		
Gulfstream III	199	C-II	136	77.8	68,700		
Gulfstream IV	469	D-II	149	77.8	71,780	5,450	3,190
Gulfstream V	160	D-III	160	98.6	89,000	5,990	2,950
Hawker-Siddeley 125-400	291	C-I	124	47	23,300		
Hawker-Siddeley 125-600	71	C-I	125	47	25,000		
Bae 125-700	212	C-I	125	47	24,200		
Raytheon/Hawker 125-800	533	B-I	120	51.3	28,000	5,380	4,500
Raytheon/Hakwer 125-1000 Horizon	50	C-II	130	61.9	36,000	5,250	2,340
Israel Aircraft Industries (IAI) Jet Commander 1121 & Westwind 1123/1124							
	442	C-I	130	43.3	23,500		
IAI-Astra 1125	135	C-II	126	52.8	23,500	5,300	3,500
IAI-Galaxy 1126	33	C-II	140	58.2	34,850	5,500	3,500
Learjet 23	100		124		12,500	4,000	4,300
Learjet 24	257	C-I	128	35.6	13,000		
Learjet 25	373	C-I	137	35.6	15,000		
Learjet 28/29	9	B-I	120	43.7	15,000		
Learjet 31	220	C-I	124	43.1	16,500	3,410	2,870
Learjet 35/36	739	C-I	133	39.5	18,300	5,000	2,900
Learjet 45	145	C-I	129	47.1	20,200	4,220	3,140
Learjet 55	147	C-I	138	43.7	21,500	5,310	3,250
Learjet 60	210	D-I	149	43.9	23,500	5,360	3,420

Table 3-Continued

Type	#MFG	ARC	1.3 X Stall Speed Knots	Wing Span Feet	MX T.O. Lbs.	T.O Dist. ISO	Land Dist. ISO
Mitsubishi MU-300 Diamond	111	B-I	109	43.5	14,630	4,300	3,200
Raytheon 90 Premier	42	B-I	120	44	12,500	3,792	3,300
Sabreliner T-39	140						
Sabreliner 40	137	B-I	120	44.5	18,650	4,900	2,950
Sabreliner 60	146	C-I	134	44.6	20,200	3,500	3,400
Sabreliner 65	76	C-II	124	50.5	24,000	5,450	3,345
Sabreliner 75	9	C-I	137	44.5	23,300	5,500	3,750
Sabreliner 75a/80	72	C-II	128	50.4	24,500	4,460	2,450

Source: FAA Central Regional Newsletter October 2001

Notes:

- 1.3 x stall speed is used rather than approach speed.
- Takeoff distance is based on max. takeoff weight.
- Landing distance is based on max. landing weight.
- ISO = sea level at 59 degrees.
- Distances are for dry pavement.
- Distances are for no wind conditions.
- Distances are for no gradient.
- Most data has been checked against the approved flight manuals.
- This data is intended to be used only for general airport design purposed, not for flight planning.

Given the present based aircraft mix and operational mix, the runway length curves representing 100 percent of the fleet is used. Given the haul distance, 60 percent useful load curve in Exhibit 2 is recommended.

Useful load is defined as the difference between the maximum allowable structured gross weight and the operating empty weight. Runway length curves were not developed by FAA for operations at “100 percent useful” load because many of the aircraft were limited in the second segment of climb.

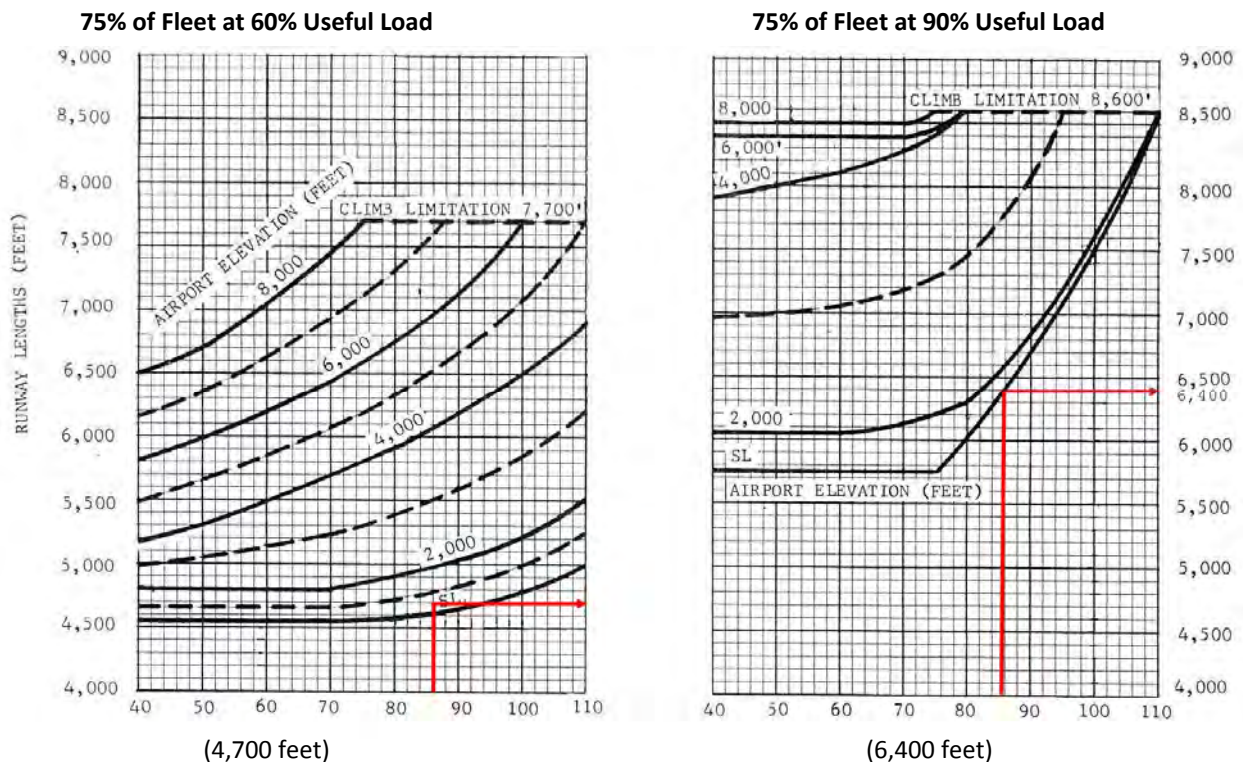


Exhibit 1
75 Percent of Fleet at 60 or 90 Percent Useful Load

Source: FAA AC 150/5325-4B, Runway Length 7-1-05

The mean maximum temperature (85.5 degrees Fahrenheit) occurs in July. A ground elevation of 840 to 850 feet above mean sea level was selected as being representative of the candidate airport sites.

The runway lengths obtained from Exhibit 1 and 2 must also be adjusted for runway gradient and wet/slippery conditions. Based on 75 percent of the fleet and 60 percent useful load, a runway length of 4,700 is required. Based on 90 percent useful load, a runway length of 6,400 feet is required (see Exhibit 1). To accommodate 100 percent of the fleet at 60 percent useful load, a runway 5,400 feet in length is recommended (see Exhibit 2).

The runway length curves are based on no wind, a dry runway and zero (0) effective runway gradient. The effective runway gradient is defined as the difference in runway elevation between the lowest and highest point divided by the runway length. The runway lengths obtained from Exhibits 1 and 2 are also adjusted for runway gradient and wet/slippery conditions.

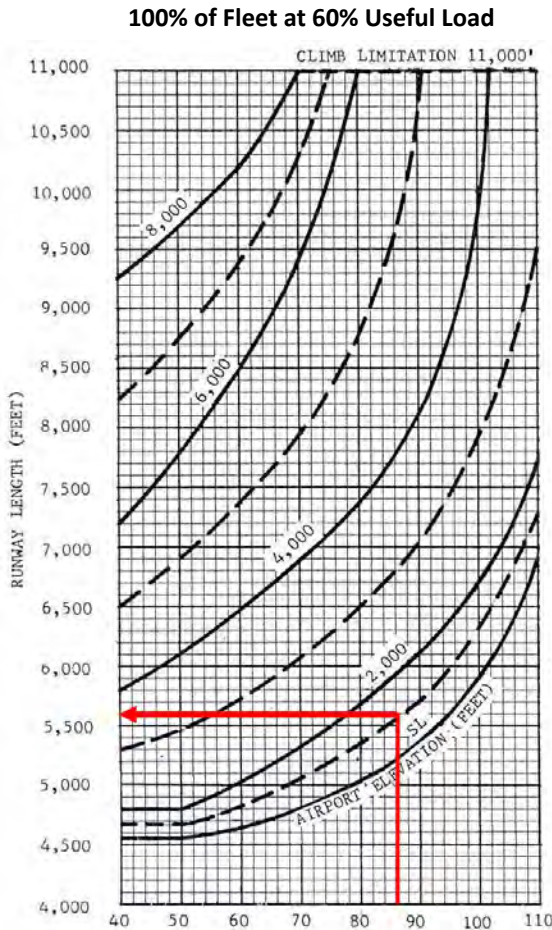
Effective Runway Gradient (Takeoff only)

The runway length obtained from Exhibits 1 and 2 are increased by 10 feet for each one (1) foot of elevation difference between the runway centerline high and low points. For purposes here, a 20 foot difference in elevations was used.

Wet and Slippery Runways (Applicable Only to Turbojet Landings)

By regulation, the runway length for turbojet-powered airplanes obtained from the 60 percent useful load curves are increased by 15 percent, or up to 5,500 feet whichever is less. For 90 percent useful load, the curves are increased by 15 percent or up to 7,000 feet whichever is less. There are no adjustments required for turbo-prop airplanes.

The landing distance is 5,405 feet or up to 5,500 feet whichever is less.



(5,400 feet)

Exhibit 2

100 Percent of Fleet at 60 Percent Useful Load

Source: FAA AC 150/5325-4B, Runway Length 7-1-05

Based on 100% of the fleet at 60% useful load, the primary runway at the proposed airport should be no less than 5,600 feet in length.

Since the Primary Runway provides in excess 95% wind coverage at a crosswind components value of 13 knots, the crosswind runway should be designed to accommodate small airplanes only in Design Group I.

75% of Fleet at 60% Useful Load

Take off: $4,700' + 200' = 4,900'$

Landing: 5,405' or up to 5,500' whichever is less = 5,405'

75% of Fleet at 90% Useful Load

Take off: $6,400' + 200' = 6,600'$

Landing: 7,360' or up to 7,000' whichever is less = 7,000'

100% of Fleet at 60% Useful Load

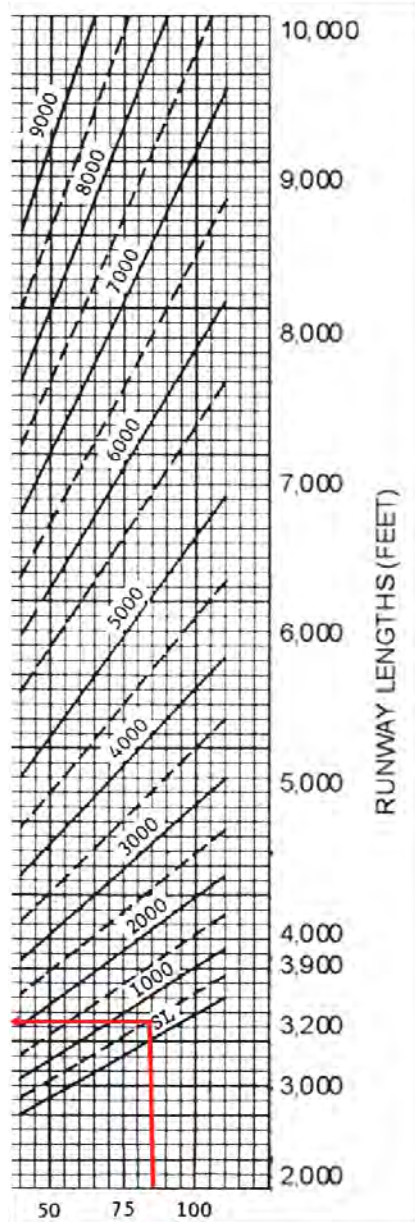
Take off: $5,400' + 200' = 5,600'$

Landing: 6,210' or up to 5,500' whichever is less = 5,500'

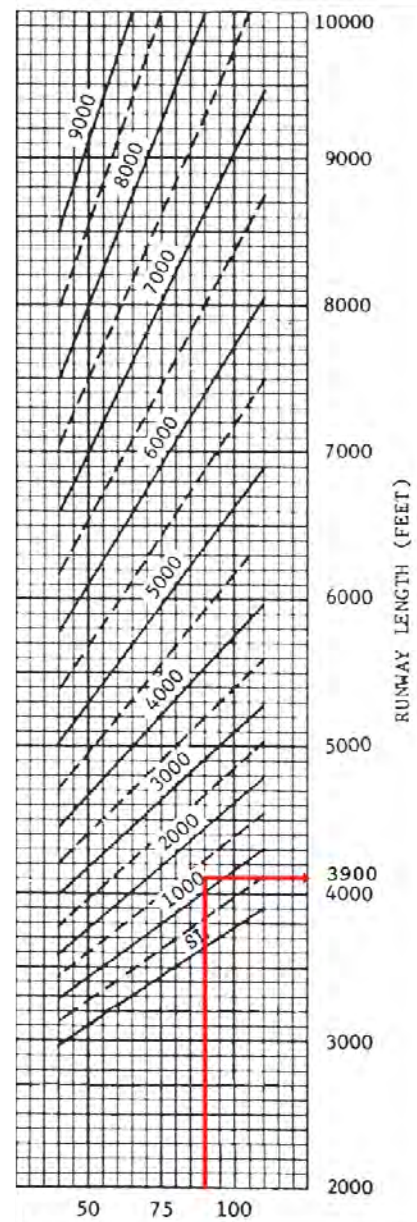
100% of Fleet at 90% Useful Load

Take off: $8,000' + 200' = 8,200'$

Landing: 9,200' or up to 7,000' whichever is less = 7,000'



95% of Fleet



100% of Fleet

Mean Daily Maximum Temperature of the Hottest Month of the Year Degrees F)

Exhibit 3
A+B Aircraft
Small Airplanes with Fewer than 10 Passenger Seats

A runway 3,900 feet in length would accommodate 100 percent of the small airplanes with fewer than 10 passenger seats.

WORKING PAPER
Wind Coverage
Candidate Sites A,B,C
(for discussion only)

12-20-2012

Wind Coverage All Weather

Wind Coverage	Site A	Site B	Site C	
10.5 Knots				
Primary	90.38	90.52	90.51	Design for small airplanes A-I, B-I
Crosswind	80.47	83.33	83.09	
Combined	96.35	95.81	95.88	
13.0 Knots				
Primary	95.01	95.08	95.08	
Crosswind	88.20	89.94	89.78	
Combined	98.89	98.40	98.45	
16.0 Knots				
Primary	98.43	98.48	95.87	
Crosswind	95.71	95.94	98.47	
Combined	99.70	99.51	99.52	

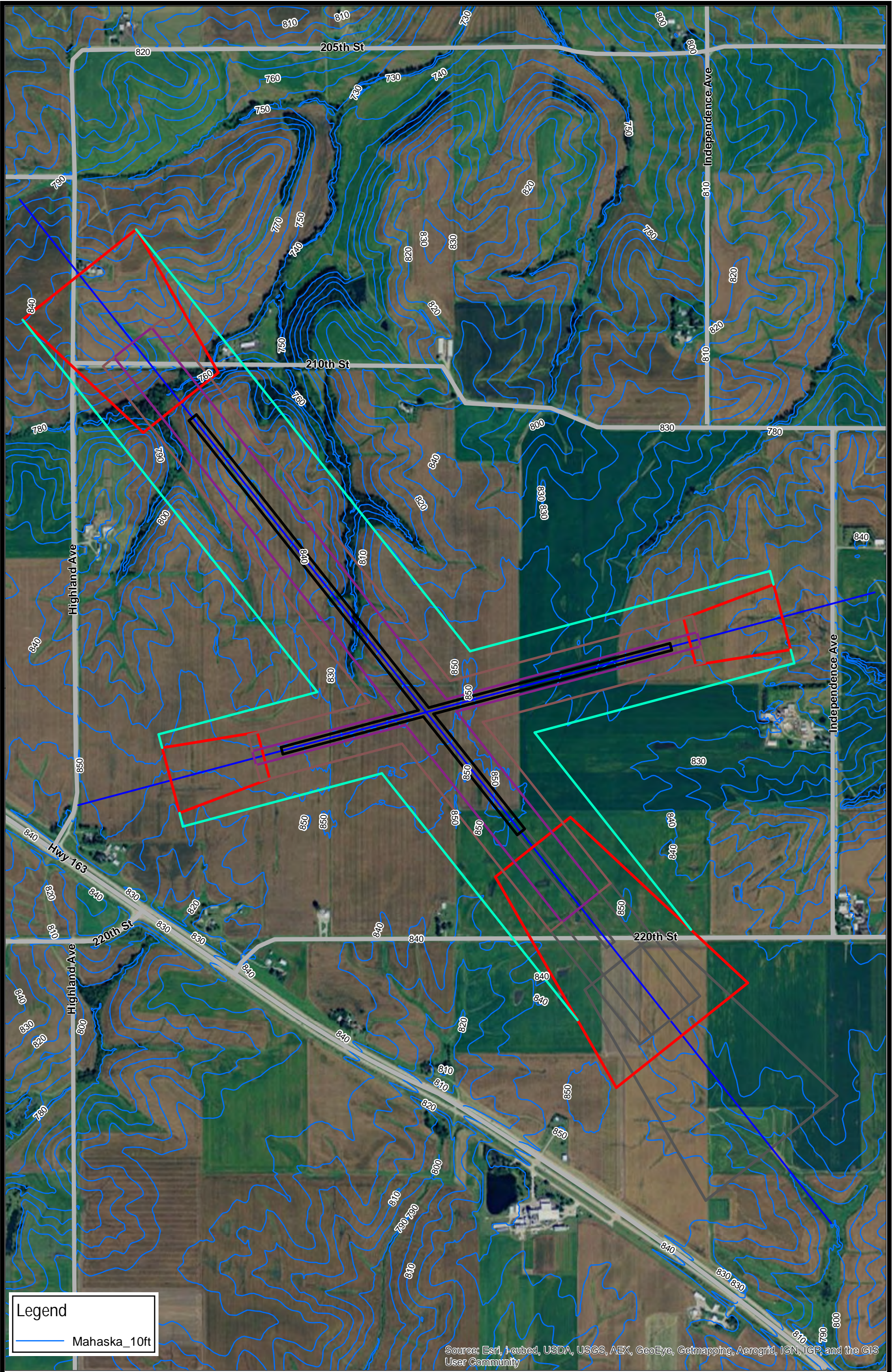
10.5 Knots: ARC A-I, B-I
13.0 Knots: ARC A-II, B-II
16.0 Knots: A-III, B-III, C-I to D-III



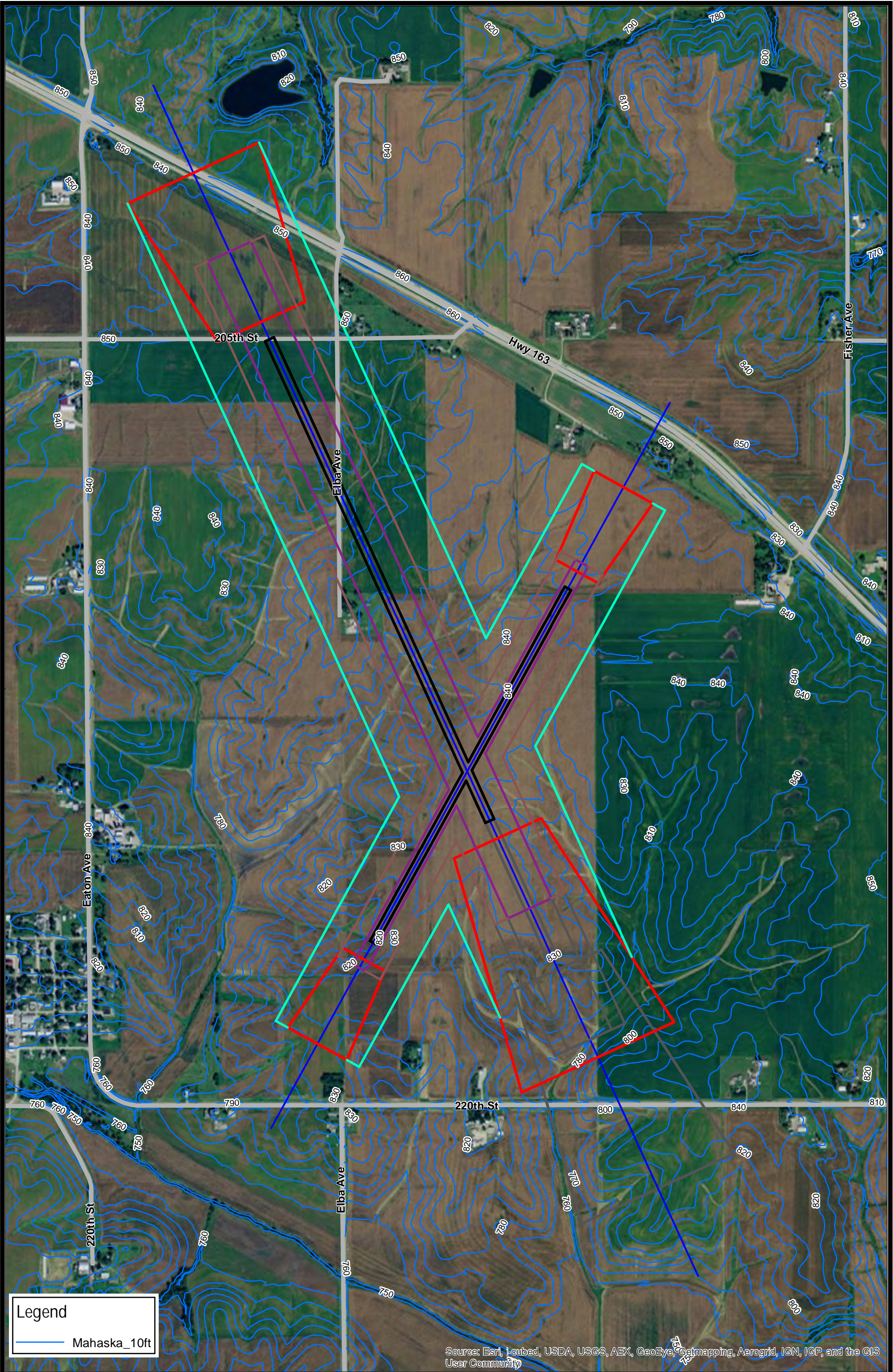
Site C

Site B

Site A



Site A Topography



Legend

Mahaska_10ft

Source: Esri, DeLorme, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

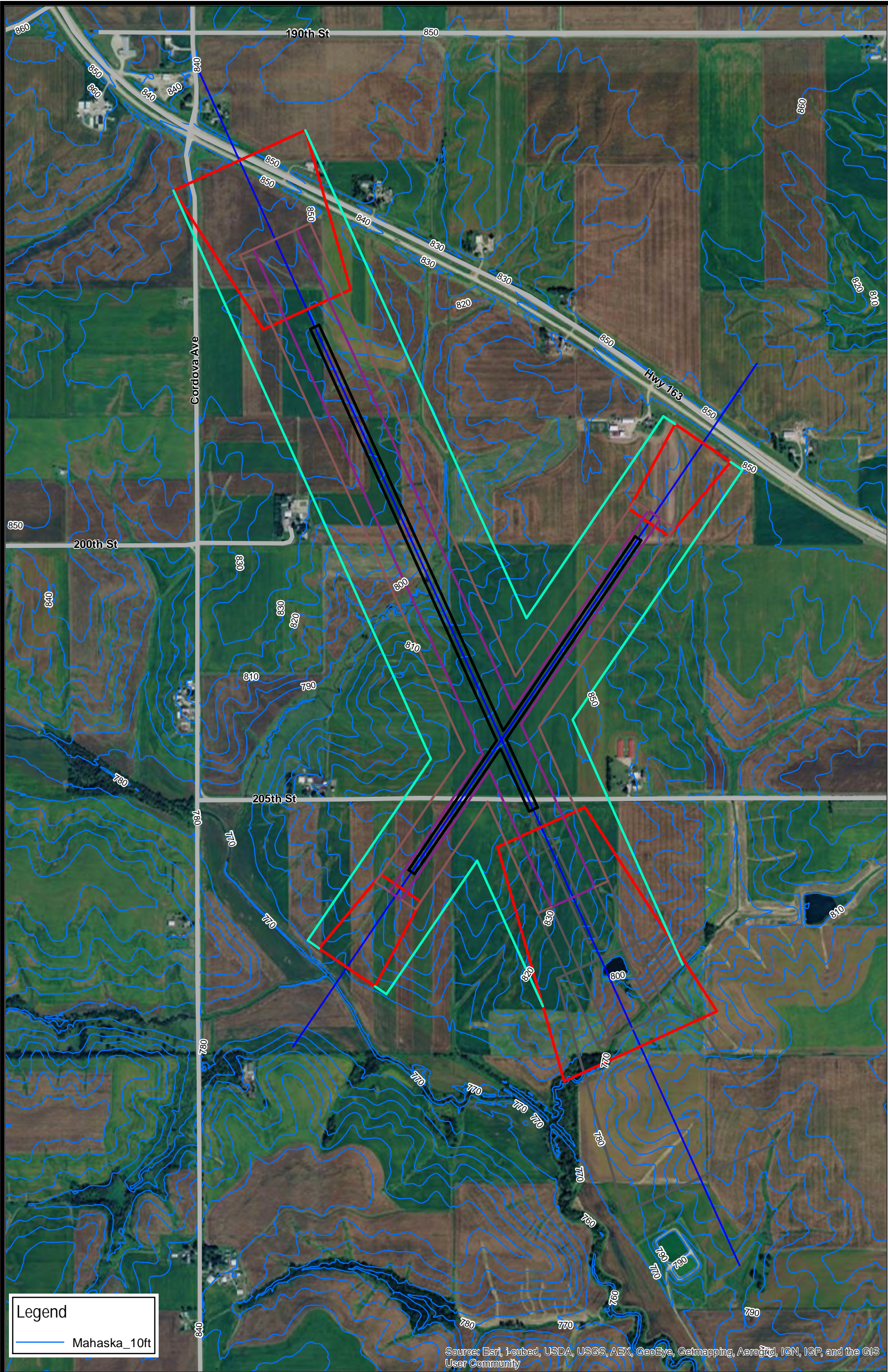


SNYDER & ASSOCIATES
Engineers and Planners

Graphic Not To Scale
Map Elevations in NAVD88



Site B Topography



Legend
Mahaska_10ft

Source: Esri, Intel, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



Graphic Not To Scale
Map Elevations in NAVD88



Site C Topography

ITEM NO: 5

SUBJECT: Resolution Authorizing the Submittal of the Attached Airport Improvement Program Data Sheet for Possible FY2013 Federal Aviation Administration Grants and Iowa Department of Transportation Grants

DATE: January 4, 2013

BACKGROUND: Annually, the South Central Regional Airport Agency (SCRAA) is required to submit to the Federal Aviation Administration (FAA) a projected five year Capital Improvement Program (CIP) and Long Range Needs Assessment.

Since no candidate site has been identified at this time, the five year CIP includes only the required FAA planning studies for a new regional airport. A summary of the studies is listed below:

- FY 2013 Airport Planning Studies to accommodate the development of a new airport to replace the existing Pella Municipal Airport and Oskaloosa Municipal Airport. These studies include site selection, Airport Master Plan, ALP and Environmental Assessment--\$511,791.00

Funding for the CIP projects will be 90% from federal funds with the 10% local match being equally divided between the City of Oskaloosa and the City of Pella as shown below.

	Federal--90%	Local--5% City of Oskaloosa	Local—5% City of Pella	Total
FY 2013	\$460,612.00	\$25,589.50	\$25,589.50	\$511,791.00

ATTACHMENTS: Resolution,

REPORT PREPARED BY: Staff

RECOMMENDED ACTION: Approve the resolution

RESOLUTION NO. 2

RESOLUTION AUTHORIZING THE SUBMITTAL OF THE ATTACHED AIRPORT
IMPROVEMENT PROGRAM DATA SHEET FOR POSSIBLE FY2013 FEDERAL
AVIATION ADMINISTRATION GRANTS AND IOWA DEPARTMENT OF
TRANSPORTATION GRANTS

Moved by _____ and seconded by _____ that the
following resolution be adopted:

WHEREAS, as a condition to receiving State and Federal aid for the proposed South
Central Regional Airport, the following provisions must be met:

- The Airport Master Plan when completed in FFY14 will establish a 5-Year
Capital Improvement Program
- Approved Airport Improvement Program data sheet (Site Selection Airport
Master Plan, eALP and Environmental Assessment) with the Sponsor's Signature
- Certification that the local match exists if the grant is awarded
- Authorization to submit the proposed projects for Federal and/or State Grants; and

WHEREAS, the Airport Improvement Program data sheet is attached listing projects
deemed to be in the best interests of the proposed South Central Regional Airport.

NOW, THEREFORE, BE IT RESOLVED that the South Central Regional Airport
Agency authorizes the submittal of the attached airport improvement program data sheet
for possible FY2013 Federal Aviation Administration Grants and Iowa Department of
Transportation Grants, and certifies that the local match is available for the FY2013
projects if grants are awarded.

Passed and approved this 4th day of January, 2013.

SOUTH CENTRAL REGIONAL AIRPORT AGENCY

Jim Hansen, Board Chairman

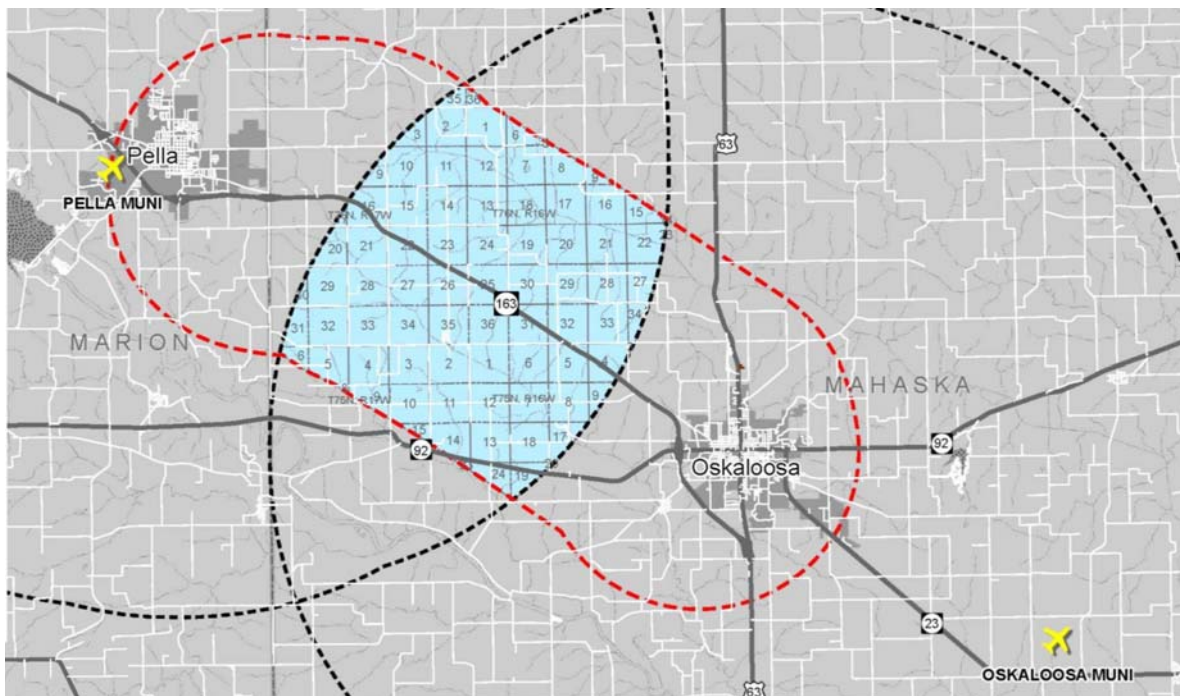
ATTEST:

Joe Warrick, Secretary/Treasurer

CIP DATA SHEET

AIRPORT	South Central Iowa Regional Airport	LOCID	N/A	LOCAL PRIORITY	1
PROJECT DESCRIPTION	Site Selection, Airport Master Plan, Airport Layout Plan, Environmental Assessment			Identify FFY that you desire to construct (FFY: Oct. 1-Sept. 30)	2013

SKETCH:



JUSTIFICATION: Site selection to accommodate the development of a new airport to replace the existing Pella Municipal Airport and Oskaloosa Municipal Airport. Prepare Airport Master Plan, ALP and Environmental Assessment.

COST ESTIMATE: (Attach detailed cost estimate)

Federal (90%)	\$460,612.00	State	\$0.00	Local (10%)	\$51,179.00	Total	\$511,791.00
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SPONSOR'S VERIFICATION:

For each and every project as applicable

Date	(see instruction sheet)
N/A	<ul style="list-style-type: none"> - Date of approved ALP with project shown - Date of environmental determination (ROD, FONSI, CE), or cite CE paragraph # (307-312) in Order 1050.1E - Date of land acquisition or signed purchase agreement - Date of pavement maintenance program - Snow removal equipment inventory & sizing worksheet (for SRE acquisition) - Apron sizing worksheet (for apron projects) ---- Revenue producing facilities (for fuel farms, hangers, etc.) - Date statement submitted for completed airside development - Date statement submitted for runway approaches are clear of obstructions

FAA USE ONLY

FAA Verification: (initial/date)

SPONSOR'S SIGNATURE: _____ DATE: _____

PRINTED NAME: _____ TITLE: _____

PHONE NUMBER: _____

FAA USE ONLY

PREAPP NUMBER	GRANT NUMBER	NPIAS CODE	WORK CODE	FAA PRIORITY	FEDERAL \$