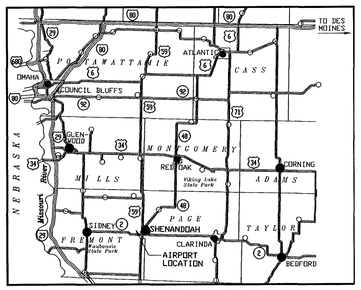
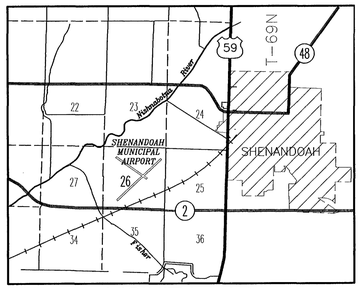


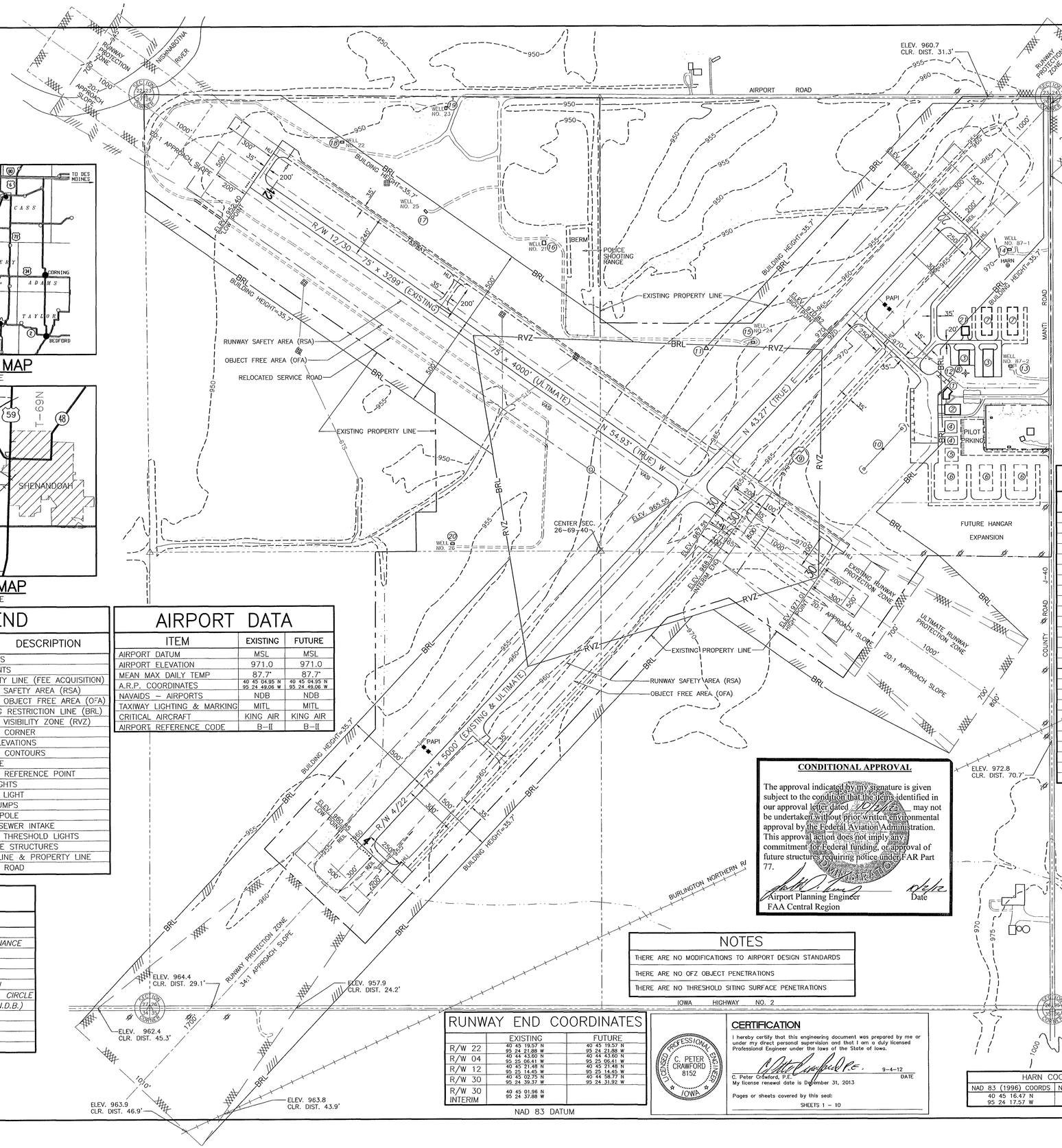
LOCATION MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

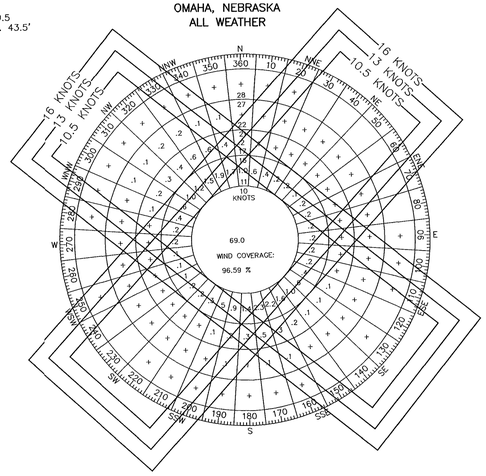


SURFACE WIND VELOCITY

10 YEAR 1991–2000

OMAHA, NEBRASKA

ALL WEATHER



WIND COVERAGE SUMMARY

RUNWAY	12/30	04/22	COMBINED
10.5 KNOTS	91.5%	78.9%	96.6%
13 KNOTS	96.1%	87.6%	99.0%
16 KNOTS	98.9%	95.3%	99.8%

LEGEND

EXISTING	FUTURE	DESCRIPTION
		FACILITIES
		EASEMENTS
		PROPERTY LINE (FEE ACQUISITION)
		RUNWAY SAFETY AREA (RSA)
		RUNWAY OBJECT FREE AREA (OFA)
BRL	BRL	BUILDING RESTRICTION LINE (BRL)
RVZ	RVZ	RUNWAY VISIBILITY ZONE (RVZ)
△		SECTION CORNER
+ 960.5		SPOT ELEVATIONS
955	955	GROUND CONTOURS
		FLOWLINE
◎	◎	AIRPORT REFERENCE POINT
		AREA LIGHTS
	SAME	BEACON LIGHT
		FUEL PUMPS
		POWER POLE
		STORM SEWER INTAKE
		RUNWAY THRESHOLD LIGHTS
		DRAINAGE STRUCTURES
		FENCE LINE & PROPERTY LINE
		SERVICE ROAD

AIRPORT DATA

ITEM	EXISTING	FUTURE
AIRPORT DATUM	MSL	MSL
AIRPORT ELEVATION	971.0	971.0
MEAN MAX DAILY TEMP	87.7°	87.7°
A.R.P. COORDINATES	40 45 04.95 N 95 24 49.06 W	40 45 04.95 N 95 24 49.06 W
NAVAIDS – AIRPORTS	NDB	NDB
TAXIWAY LIGHTING & MARKING	MITL	MITL
CRITICAL AIRCRAFT	KING AIR	KING AIR
AIRPORT REFERENCE CODE	B–II	B–II

BUILDINGS

NO.	STRUCTURE
1	EXISTING TERMINAL
2	EXISTING AIRCRAFT MAINTENANCE
3	EXISTING HANGARS
4	EXISTING PRIVATE HANGAR
5–7	FUTURE HANGARS
8	EXISTING ROTATING BEACON
9	EXISTING WIND TEE & SEG. CIRCLE
10	EXISTING RADIO BEACON (N.D.B.)
11	EXISTING AWOS
12	STORAGE SHED
13–20	CITY WELL HOUSES
21	SRE BUILDING

RUNWAY DATA

ITEM	RUNWAY 12/30			RUNWAY 04/22	
	EXISTING	INTERIM	ULTIMATE	EXISTING	ULTIMATE
APPROACH CATEGORY/DESIGN GROUP	B–I	B–I	B–II	B–II	B–II
RUNWAY LENGTH/WIDTH	3299x75	3439x75	4000x75	5000x75	5000x75
RUNWAY MARKINGS	NPI/BASIC	NPI	NPI	NPI	NPI
RUNWAY LIGHTING	MIRL	MIRL	MIRL	MIRL	MIRL
PAVEMENT MATERIAL	P.C.C.	P.C.C.	P.C.C.	P.C.C.	P.C.C.
PAVEMENT STRENGTH (000)	12.5 S	12.5 S	12.5 S	30 S	30 S
RUNWAY SAFETY AREA (RSA) LENGTH	3779	3919	4600	5600	5600
RUNWAY SAFETY AREA (RSA) WIDTH	150	150	150	300	300
R/W OBJECT FREE AREA (OFA) LENGTH	3779	3919	4600	5600	5600
R/W OBJECT FREE AREA (OFA) WIDTH	400	400	500	500	500
OBSTACLE FREE ZONE (OFZ) LENGTH	3699	3839	4400	5400	5400
OBSTACLE FREE ZONE (OFZ) WIDTH	250	250	400	400	400
TAXIWAY WIDTH	35'	35'	35'	35'	35'
TAXIWAY LIGHTING	––	––	MITL	MITL	MITL
EFFECTIVE GRADIENT %	0.46%	0.46%	0.45%	0.22%	0.22%
	12 30	30	30	12 30	4 22	4 22
APPROACH SURFACE SLOPE	20:1 20:1	20:1	20:1	20:1 20:1	34:1 20:1	34:1 20:1
ELECTRONIC NAV AIDS	GPS/VOR/DME			GPS/VOR/DME	NDB/GPS NDB/GPS	NDB/GPS NDB/GPS
VISUAL APPROACH AIDS		VASI–REIL	VASI–REIL	VASI–REIL VASI–REIL	VASI–REIL VASI–REIL	VASI–REIL VASI–REIL
APPROACH VISIBILITY MINIMUMS	>1 1/4M ≥600'	>1 1/4M ≥600'	>1 1/4M ≥600'	>1M ≥400'	>1M ≥400' >1M ≥700'	>1M ≥700' >1M ≥400'	>1M ≥400'
TOUCHDOWN ZONE ELEVATION	967	967	967	967	966	971	966	971
TAKEOFF RUN AVAILABLE (TORA)	3299	3299	3439	4000	4000	5000	5000	5000	5000
TAKEOFF DISTANCE AVAILABLE (TODA)	3299	3299	3439	4000	4000	5000	5000	5000	5000
ACCEL/STOP DISTANCE AVAILABLE (ASDA)	3299	3299	3439	4000	4000	5000	5000	5000	5000
LANDING DISTANCE AVAILABLE (LDA)	3299	3299	3439	4000	4000	5000	5000	5000	5000

CONDITIONAL APPROVAL

The approval indicated by my signature is given subject to the condition that the items identified in our approval letter dated 10/17/12 may not be undertaken without prior written environmental approval by the Federal Aviation Administration. This approval action does not imply any commitment for Federal funding, or approval of future structures requiring notice under FAR Part 77.

Airport Planning Engineer
FAA Central Region

10/17/12
Date

NOTES

THERE ARE NO MODIFICATIONS TO AIRPORT DESIGN STANDARDS

THERE ARE NO OFZ OBJECT PENETRATIONS

THERE ARE NO THRESHOLD SITING SURFACE PENETRATIONS

RUNWAY END COORDINATES

	EXISTING	FUTURE
R/W 22	40 45 19.57 N 95 24 21.88 W	40 45 19.57 N 95 24 21.88 W
R/W 04	40 44 43.60 N 95 25 06.41 W	40 44 43.60 N 95 25 06.41 W
R/W 12	40 45 21.48 N 95 25 14.45 W	40 45 21.48 N 95 25 14.45 W
R/W 30	40 45 02.75 N 95 24 39.37 W	40 44 58.77 N 95 24 31.92 W
R/W 30 INTERIM	40 45 01.96 N 95 24 37.88 W	

NAD 83 DATUM

LICENSED PROFESSIONAL ENGINEER C. PETER CRAWFORD 8152 IOWA

CERTIFICATION

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

C. Peter Crawford P.E. 9-4-12
C. Peter Crawford, P.E. DATE
My license renewal date is December 31, 2013

Pages or sheets covered by this seal:
SHEETS 1 – 10

HARN COORDINATES

NAD 83 (1996) COORDS	NAVD 88 ELEVATION
40 45 16.47 N 95 24 17.57 W	971.9 FT

APPROVAL BLOCK

Byron Harris
CITY OF SHENANDOAH, IOWA

9/10/12
DATE

NO.	REVISIONS	BY	APPD.	DATE
2	As–Built for Apron Exp. Proj. 3–19–0082–04	TMB	CPC	4/07
3	Updated As–Built for Projs. 3–19–0082–05 & 06	EAK	CPC	9/08
4	Updated As–Built for Projs. 3–19–0082–08	EAK	CPC	12/09
5	Revised per Partial Parallel Taxiway R/W 30	EAK	CPC	4/11
6	Updated As–Built Proj. 3–19–0082–09	EAK	CPC	12/11
7	Revised for Interim R/W 30	EAK	CPC	4/12

DRAWN BY	DATE	APPROVED BY	DATE
LMD/TMB	JUNE 2001	CPC	JUNE 2001

PREPARED BY:

JFSCO ENGINEERING, P.C.
CONSULTING ENGINEERS

SHENANDOAH MUNICIPAL AIRPORT

SHENANDOAH, IOWA

AIRPORT LAYOUT PLAN

SHEET 1 OF 10