

RUNWAY END COORDINATES - NAD 83												
RUNWAY 1		RUNWAY 10		RUNWAY 15 DISPLACED		RUNWAY 33		RUNWAY 2		RUNWAY 20		
EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	
LATITUDE	42° 02' 17.7300" N	42° 03' 55.7970" N	42° 03' 44.5500" N	42° 03' 44.5500" N	42° 02' 34.8000" N	42° 03' 34.8000" N	42° 02' 34.8000" N	42° 02' 48.3040" N	CLOSE	42° 03' 41.6860" N	CLOSE	
LONGITUDE	93° 50' 41.9960" W	93° 50' 41.9960" W	93° 50' 41.9960" W	93° 50' 41.9960" W	93° 50' 41.9960" W	93° 50' 41.9960" W	93° 50' 41.9960" W	93° 50' 41.9960" W	CLOSE	93° 50' 41.9960" W	CLOSE	

RUNWAY DATA TABLE						
ITEM	RUNWAY 1/19		15/33		RUNWAY 2/20	
	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE
APPROACH CATEGORY - DESIGN GROUP		C-II		B-II		A-I
RUNWAY LENGTH x WIDTH	5,500/100	4,667/75	4,667/75	3,269/75	3,269/75	3,269/75
WINDROW (L) x (W) AND/OR MSL	1,146.9'	1,138.4'	1,138.4'	1,161.4'	1,161.4'	1,161.4'
ALTERNATE MARKINGS	PR	NP	NP	NP	NP	NP
RUNWAY LIGHTING	HRI	MRI	MRI	MRI	None	None
PAVEMENT MATERIAL	PC	PC	PC	PC	None	None
PAVEMENT STRENGTH (ksi)	155.8T	90 SW	90 SW	90 SW	N/A	N/A
RUNWAY SAFETY AREA (BSA) LENGTH	7,500'	5,287'	5,287'	3,749'	3,749'	3,749'
RUNWAY SAFETY AREA (BSA) WIDTH	500'	150'	150'	150'	150'	150'
RUNWAY OBJECT FREE AREA (OFA) LENGTH	5,500'	5,287'	5,287'	3,749'	3,749'	3,749'
RUNWAY OBJECT FREE AREA (OFA) WIDTH	800'	500'	500'	250'	250'	250'
RUNWAY OBSTACLE FREE ZONE (OFZ) LENGTH	5,500'	5,067'	5,067'	3,669'	3,669'	3,669'
RUNWAY OBSTACLE FREE ZONE (OFZ) WIDTH	400'	350'	350'	250'	250'	250'
TAXIWAY WIDTH	75'	35'	35'	None	None	None
TAXIWAY LIGHTING	HTL	MFL	MFL	N/A	N/A	N/A

BUILDING IDENTIFICATION

I.D.	DESCRIPTION	I.D.	DESCRIPTION
1	EXISTING TEE HANGAR	10	ULTIMATE POOL 80'x60'
2	EXISTING TEE HANGAR	11	ULTIMATE POOL 80'x60'
3	EXISTING TEE HANGAR	12	ULTIMATE TEE HANGAR 80'x20'
4	EXISTING TEE HANGAR	13	ULTIMATE TEE HANGAR 50'x20'
5	EXISTING TERMINAL - FBO HANGAR 100'x150'	14	ULTIMATE CONVENTIONAL HANGAR 60'x60'
6	EXISTING CONVENTIONAL HANGAR 80'x105'	15	ULTIMATE TEE HANGAR 5'x2'x3'
7	EXISTING BUS BAY	16	ULTIMATE TEE HANGAR 80'x60'
8	EXISTING CONVENTIONAL HANGAR 50'x60'	17	ULTIMATE CONVENTIONAL HANGAR 100'x100'
9	ULTIMATE POOL 80'x60'		

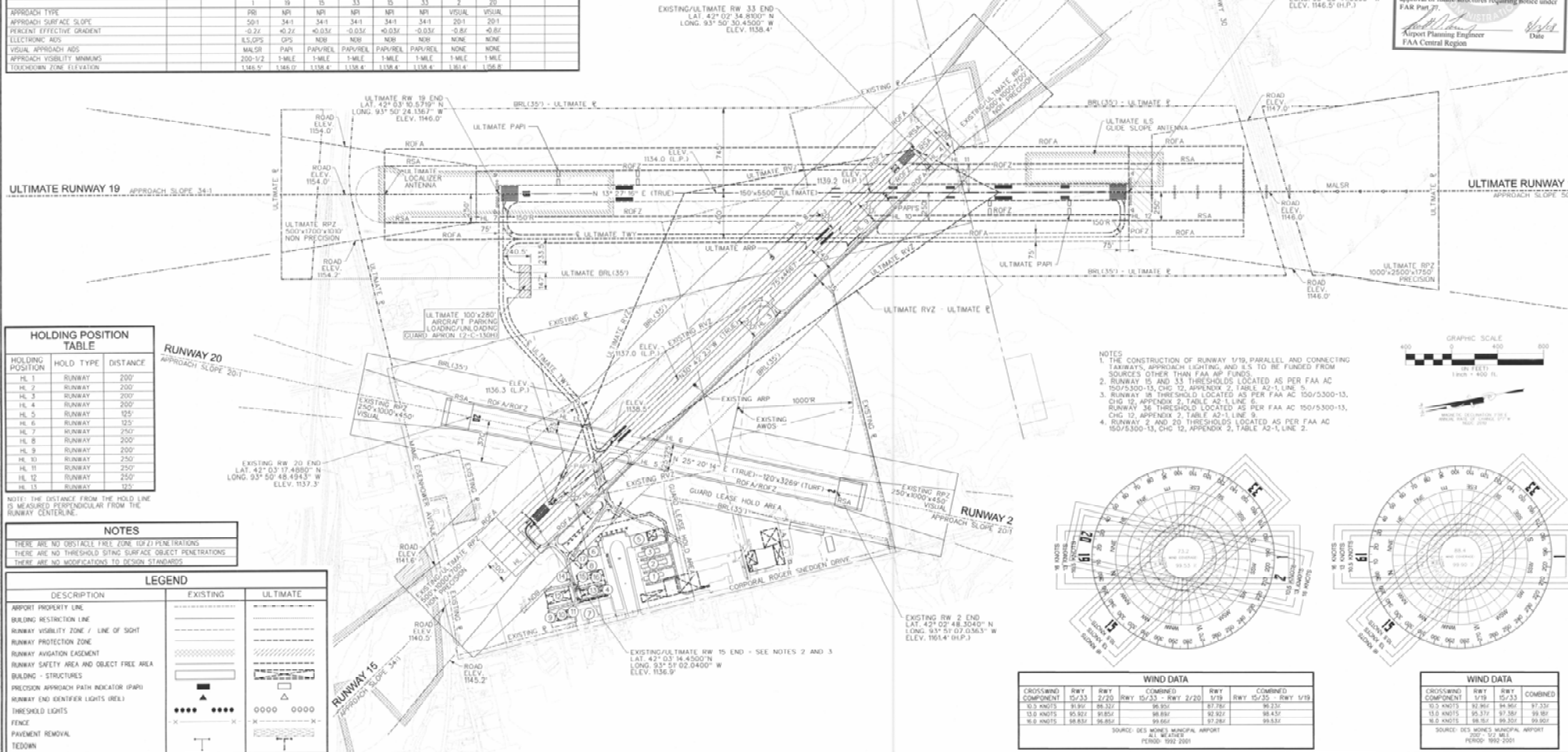
AIRPORT DATA		
ITEM	EXISTING	ULTIMATE
AIRPORT ELEVATION	1364'	1366.5'
AIRPORT REFERENCE POINT (ARP)	42°02'50" N 93°50'37" W	42°02'49" N 93°50'39" W
MEAN MAX. TEMP.	86° F	86° F
AIRPORT NAVIGAS	NDB, CFS	CPS, LS(U)
ROTATING BEACON	YES	YES
SEGMENTED CIRCLE	YES	YES
LIGHTED WIND INDICATOR	YES	YES
AIRPORT REFERENCE CODE	B-9	B-9, C-IV

SURVEY CONTROL AND RUNWAY DOCUMENTATION				
WCS84 COORDINATES (NAD83) DECIMETRE MINUTES DECIMALS			NAVD 88 DATUM US SURVEY FEET	
PO	LATITUDE	LONGITUDE	ELEVATION	DESCRIPTION
1	47°02'34.6600"N	83°50'26.4500"W	1036.4	CEMENTED RUNWAY 15-35 HWY 33 CNO.
2	47°02'35.1400"N	83°50'25.9600"W	1036.9	CEMENTED RUNWAY 15-35 HWY 33 END.
W0750	47°02'37.4000"N	83°50'27.5603"W	1036.4	LOCATED AT THE BOOMERANG AIRFIELD PUNCH MARK IN TOP OF A 5. STL ROD ENCASED IN A 5" PIPE WITH 1000 C/P SURROUNDED BY CONCRETE. LOCATED 145.7' FT SW OF THE CENTER OF THE HWY 34.5 FT SOUTH OF THE CENTER OF THE ENTRANCE RAMP, 28.5 FT SW OF THE CURVED EDGE OF THE RAMP, AND 28.5 FT SW OF A FIBERGLASS WITNESS POST.
W0751	47°02'49.3200"N	83°50'43.5604"W	1050	LOCATED AT THE BOOMERANG AIRFIELD PUNCH MARK IN TOP OF A 5. STL ROD ENCASED IN A 5" PIPE WITH 1000 C/P SURROUNDED BY CONCRETE. LOCATED 1010 FT SW OF THE TURNAROUND, 12.5 FT E OF THE STROBE LIGHT, AND 8.5 FT E OF A FIBERGLASS WITNESS.

The approval indicated by my signature is given subject to the condition that the items identified in our approval letter dated August 13, 2008 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 27.

Airport Planning Engineer
FAA Central Region



WIND DATA						
CROSSWIND COMPONENT	RWY 15/33	RWY 2/20	COMBINED RWY 15/33 - RWY 2/20	RWY 1/19	COMBINED RWY 15/35 - RWY 1/19	
0.0 KNOTS	91.9%	86.32%	86.93%	87.78%	86.23%	
10.0 KNOTS	95.92%	91.85%	93.89%	93.92%	94.53%	
16.0 KNOTS	94.83%	94.86%	94.66%	97.28%	94.53%	

SOURCE: DES MOINES MUNICIPAL AIRPORT
ALL WEATHER
PERIOD: 01/01/2000

CROSSWIND COMPONENT	RWY 17/19	RWY 15/33	COMBINE
10.5 KNOTS	92.96%	94.96%	97.33%
13.0 KNOTS	95.37%	97.58%	99.18%
16.0 KNOTS	98.15%	99.32%	99.90%

SOURCE: DES MOINES MUNICIPAL AIRPORT
2002 - 172 MI
PERIOD: 1992-2001