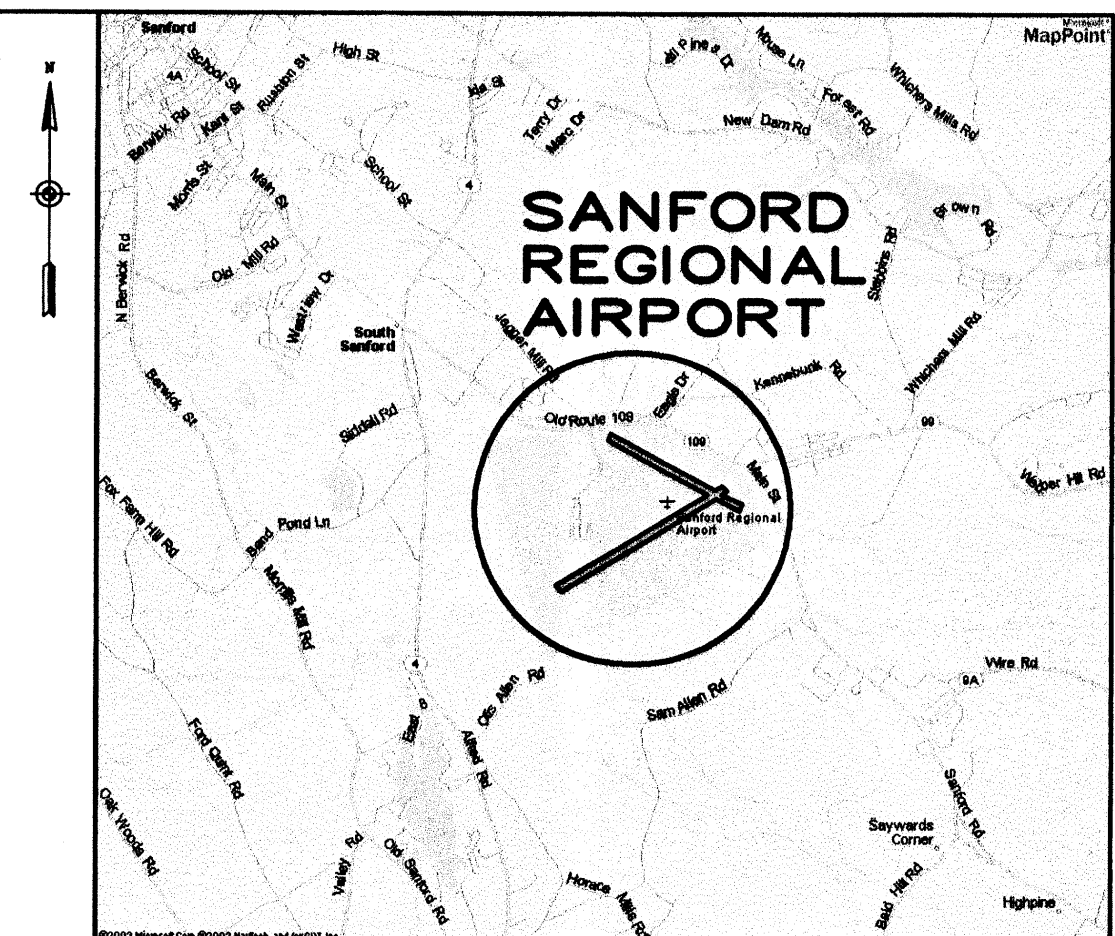


VICINITY MAP
NOT TO SCALE

TOWN OF SANFORD MAINE SANFORD REGIONAL AIRPORT



LOCATION MAP
NOT TO SCALE

AIRPORT MASTER PLAN UPDATE

STATE PROJECT NO. SAIP11.1038-15(26)
FEDERAL PROJECT NO. AIP3-23-0044-15

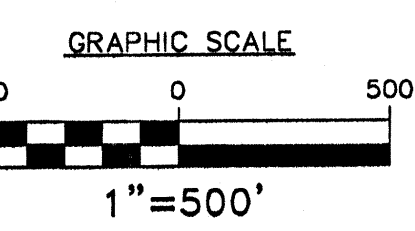
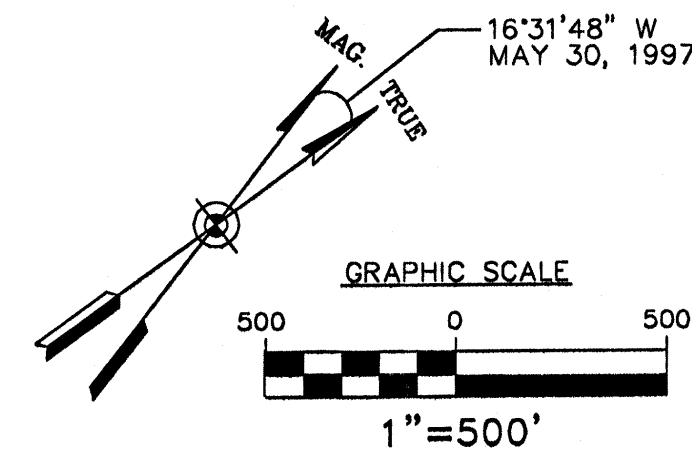
INDEX TO DRAWINGS

1. COVER/TITLE SHEET
2. ALP (EXISTING FACILITIES)
3. ALP (ULTIMATE FACILITIES)
4. ALP DATA SHEET
5. RUNWAY 14-32 PLAN AND PROFILE
6. RUNWAY 7-25 PLAN AND PROFILE
7. LAND USE PLAN (ZONING)/65 DNL NOISE CONTOUR
8. FAR PART 77 SURFACES

DECEMBER, 2003

REVISIONS REV. NO. DATE DESCRIPTION 1 		STATE PROJECT NO. SAIP11.1038-15(26)	FEDERAL PROJECT NO. AIP3-23-0044-15
PROJECT DESIGNER Hoyle, Tanner & Associates, Inc. 150 DOW STREET - MANCHESTER, NH 03101 - 1227 Tel: (603) 669-5555 Fax: (603) 669-4168 WEB PAGE: www.hta-nh.com		HIA Consulting Engineers	DES. BY KRS
SANFORD REGIONAL AIRPORT AIRPORT MASTER PLAN UPDATE SANFORD, MAINE		DR. BY TDB	CHKD. BY JRL
COVER/TITLE SHEET		SCALE: AS SHOWN	DATE: DECEMBER, 2003
HTA PROJ. No.: 060216.04 SFMCOVER		DRAWING NO. 1	
SHEET 1 OF 8		REV	

SFM

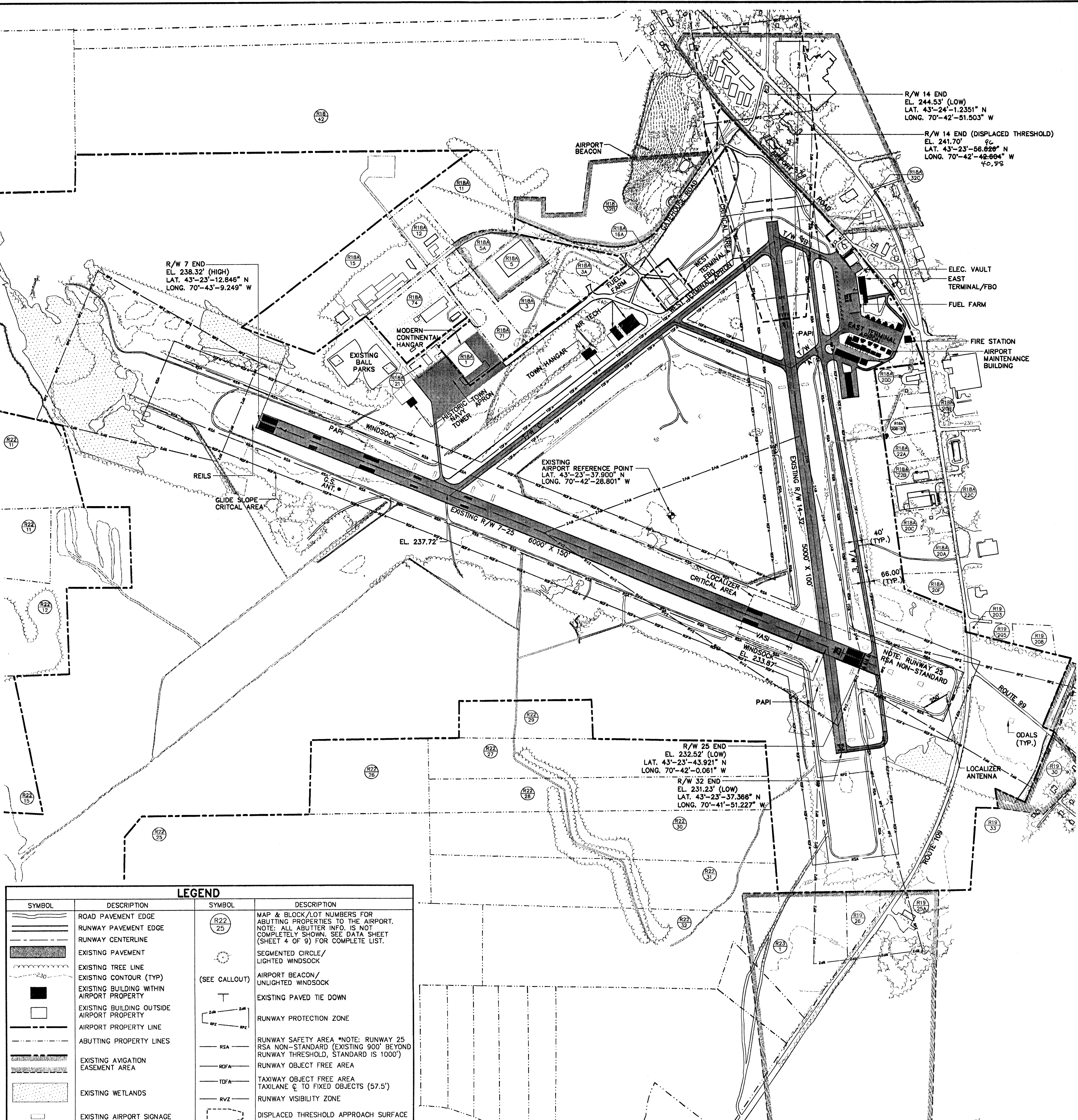


AIRPORT DATA	
ITEM	EXISTING
AIRPORT ELEVATION (U.S.G.S. - M.S.L.)	245'
AIRPORT REFERENCE POINT (ARP)	LAT. 43°23'-37.900"N LONG. 70°42'-28.801"W
MEAN MAX TEMPERATURE HOTTEST MONTH	80°F
NAVIGATIONAL AIDS	RUNWAY 07: ILS/VOR/GPS/NDB & VOR/DME RUNWAY 25: VOR
DISTANCE FROM TOWN OF SANFORD	4SE
LAND OWNED (ACRES)/AIRPORT AREA FEE	1,115.29
AIRPORT AREA EASEMENTS (ACRES)	192
OWNER	TOWN OF SANFORD, MAINE
OPERATIONAL ROLE (NPIAS)	RELIEVER
MAG. DECLINATION MAY 30, 1997	16°15'31.48"W
AIRPORT REFERENCE CODE/AIRPORT DESIGN CODE	D-II

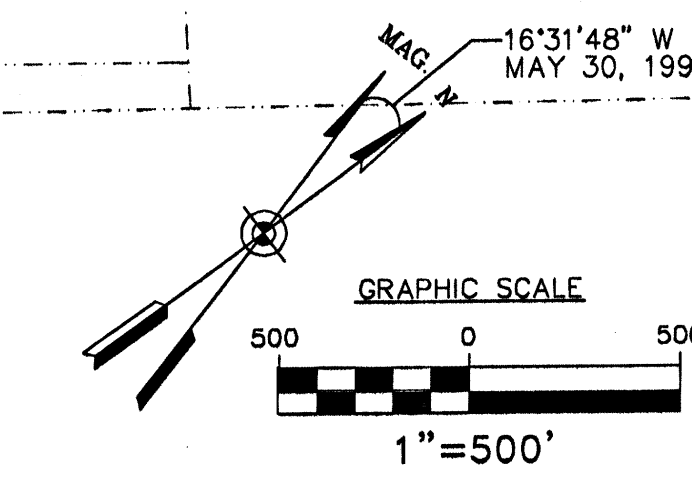
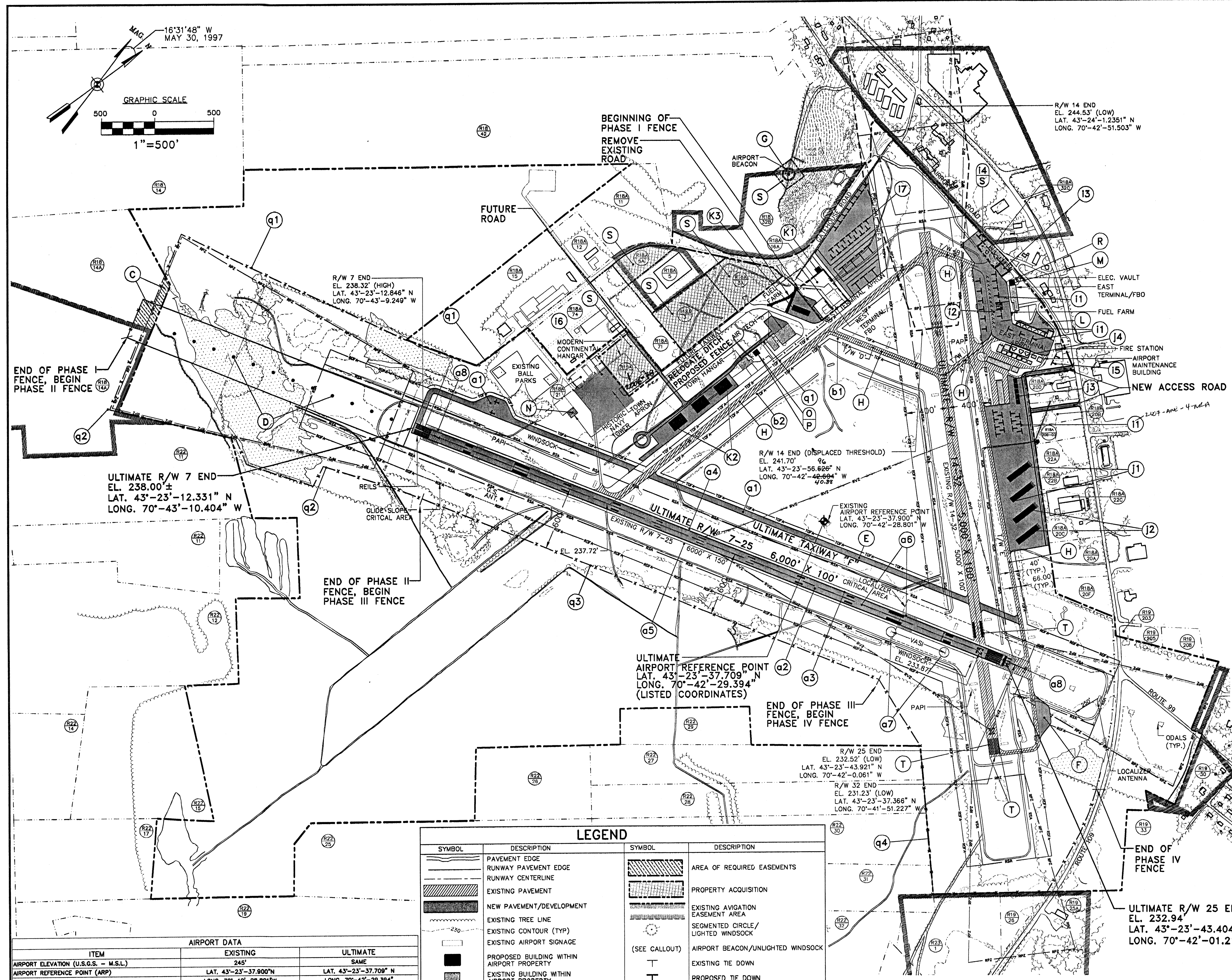
ITEM	RUNWAY DATA	
	RUNWAY 07-25 EXISTING	RUNWAY 14-32 EXISTING
LENGTH	6,000'	5,000' W/ A 885' DISPLACED THRESHOLD TO RUNWAY 14
WIDTH	150'	100'
RUNWAY END COORDINATES - NAD 83	RUNWAY 07 LAT. 43°23'12.848"N LONG. 70°43'8.249"W RUNWAY 25 LAT. 43°23'43.921"N LONG. 70°42'0.061"W	RUNWAY 14 LAT. 43°24'1.2351"N LONG. 70°42'51.503"W RUNWAY 32 LAT. 43°23'37.366"N LONG. 70°41'51.227"W
RUNWAY THRESHOLD COORDINATES - NAD 83	RUNWAY 07 SAME AS RUNWAY END RUNWAY 25 SAME AS RUNWAY END	RUNWAY 14 LAT. 43°23'58.628"N LONG. 70°42'42.604"W RUNWAY 32 SAME AS RUNWAY END
RUNWAY THRESHOLD ELEVATION	RUNWAY 07: 238.32' RUNWAY 25: 232.52' N 58°21'04.017"E	RUNWAY 14: 244.53' (DISPLACED THRESHOLD: 241.70') RUNWAY 32: 231.23' N 61°08'37.479"W
TRUE BEARING		
TAKEOFF RUN AVAILABLE (TORA)(1)	RUNWAY 07: [6,000'] 6,000' RUNWAY 25: [6,000'] 6,000'	RUNWAY 14: [5,000'] 5,000' RUNWAY 32: [5,000'] 5,000'
TAKEOFF DISTANCE AVAILABLE (TODA)(1)	RUNWAY 07: [6,000'] 6,000' RUNWAY 25: [6,000'] 6,000'	RUNWAY 14: [5,000'] 5,000' RUNWAY 32: [5,000'] 5,000'
ACCELERATE-STOP DISTANCE AVAILABLE (ASDA)(1)	RUNWAY 07: [6,000'] 5,900' RUNWAY 25: [6,000'] 6,000'	RUNWAY 14: [5,000'] 5,000' RUNWAY 32: [5,000'] 4,105'
LANDING DISTANCE AVAILABLE (LDA)(1)	RUNWAY 07: [6,000'] 5,900' RUNWAY 25: [6,000'] 6,000'	RUNWAY 14: [5,000'] 4,105' RUNWAY 32: [5,000'] 4,250'
PAVEMENT STRENGTH	50,000 LBS. SINGLE WHEEL 82,000 LBS. DUAL WHEEL	72,000 LBS. DUAL WHEEL
SURFACE MATERIAL	ASPHALT	ASPHALT
EFFECTIVE GRADIENT (%)	RUNWAY 07: (-0.10%) RUNWAY 25: (+0.10%)	RUNWAY 14: (-0.27%) RUNWAY 32: (+0.27%)
CLASSIFICATION/APPROACH CATEGORY	RUNWAY 07: PRECISION RUNWAY 25: NON-PRECISION	RUNWAY 14: VISUAL RUNWAY 32: VISUAL
APPROACH MINIMUMS (VISIBILITY/CEILING)	RUNWAY 07: DH 438' & VS. 3/4 MILE RUNWAY 25: MDA 800' & VS. 1 MILE	RUNWAY 14: VISUAL RUNWAY 32: VISUAL
VISUAL/APPROACH AIDS	RUNWAY 07: REILS, PAPI, WINDSOCK, MM, OM RUNWAY 25: VASI, WINDSOCK, ODALS	RUNWAY 14: PAPI, SEGMENTED CIRCLE W/WINDSOCK RUNWAY 32: PAPI, WINDSOCK
NAVIGATIONAL AIDS	RUNWAY 07: ILS/VOR/GPS/NDB & VOR/DME RUNWAY 25: VOR	RUNWAY 14: NONE RUNWAY 32: NONE
RUNWAY LIGHTING	HIRLS RUNWAY 07: PRECISION RUNWAY 25: NON-PRECISION	MIRLS RUNWAY 14: VISUAL RUNWAY 32: VISUAL
DESIGNATED INSTRUMENT RUNWAY	RUNWAY 07: ILS	NONE
CRITICAL AIRCRAFT (WING SPAN)	GULFSTREAM IV (77.8)	GULFSTREAM III (77.8)
CRITICAL AIRCRAFT APPROACH SPEED	145 KTS	136 KTS
CRITICAL AIRCRAFT MTOW	71,780 LBS.	68,700 LBS.
AIRPLANE DESIGN GROUP	I	I
AIRCRAFT APPROACH CATEGORY	D	C
PARALLEL TAXIWAY	NONE	TAXIWAY E - 5,000' X 40'
TAXIWAY LIGHTING	NONE	MTLS

NOTE:
(1) NUMBERS IN BRACKETS [] REPRESENT EXISTING CONDITIONS BEFORE APPLICATION OF DECLARED DISTANCE CRITERIA

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	ROAD PAVEMENT EDGE	(R22)	MAP & BLOCK/LOT NUMBERS FOR ADJUTING PROPERTIES TO THE AIRPORT. NOTE: ALL ADJUTING INFO IS NOT COMPLETELY SHOWN. SEE DATA SHEET (SHEET 4 OF 9) FOR COMPLETE LIST.
---	RUNWAY PAVEMENT EDGE	(SEE CALLOUT)	SEGMENTED CIRCLE/LIGHTED WINDSOCK
---	RUNWAY CENTERLINE	(SEE CALLOUT)	AIRPORT BEACON/UNLIGHTED WINDSOCK
---	EXISTING PAVEMENT	(SEE CALLOUT)	EXISTING PAVED TIE DOWN
---	EXISTING TREE LINE	(SEE CALLOUT)	RUNWAY PROTECTION ZONE
---	EXISTING CONTOUR (TYP)	(SEE CALLOUT)	RUNWAY SAFETY AREA *NOTE: RUNWAY 25 RSA NON-STANDARD (EXISTING 900' BEYOND RUNWAY THRESHOLD, STANDARD IS 1000')
---	EXISTING BUILDING WITHIN AIRPORT PROPERTY	(SEE CALLOUT)	RUNWAY OBJECT FREE AREA
---	EXISTING BUILDING OUTSIDE AIRPORT PROPERTY	(SEE CALLOUT)	TAXIWAY OBJECT FREE AREA TAXIWAY C TO FIXED OBJECTS (57.5')
---	AIRPORT PROPERTY LINE	(SEE CALLOUT)	RUNWAY VISIBILITY ZONE
---	ADJUTING PROPERTY LINES	(SEE CALLOUT)	DISPLACED THRESHOLD APPROACH SURFACE
---	EXISTING AVIGATION EASEMENT AREA	(SEE CALLOUT)	
---	EXISTING WETLANDS	(SEE CALLOUT)	
---	EXISTING AIRPORT SIGNAGE	(SEE CALLOUT)	



STATE PROJECT NO.	SAIP11.1038-15(26)
FEDERAL PROJECT NO.	AP3-23-0044-15
PROJECT DESIGNER	HIA Hoyle, Tanner & Associates, Inc. 150 DOW STREET - MANCHESTER, NH 03101 - 1227 Tel: (603) 688-5555 Fax: (603) 688-1166 WEB PAGE: www.hia-nh.com
SCALE:	AS SHOWN DATE: DECEMBER, 2003
DES. BY	KRS
DR. BY	TDB
CHKD. BY	JRL
REVISIONS	BY DATE
SANFORD REGIONAL AIRPORT AIRPORT MASTER PLAN UPDATE SANFORD, MAINE AIRPORT LAYOUT PLAN (EXISTING FACILITIES)	
HTA PROJ. No.:	060216.04
SMFALP.DWG	
DRAWING NO.	2
SHEET	2 OF 8



Airport Development	
A	Runway 07-25 Improvements:
a1	Install a parallel taxiway (Phase I)/install a holding bay; approach end of Runway 07
a2	Rehabilitate/groove Runway 07-25
a3	Reduce the width of Runway 07-25 from 150 feet to 100 feet
a4	Redesign drainage along the edges of Runway 07-25
a5	Remove high intensity runway lights (HIRLs) and replace with new HIRLs
a6	Upgrade Runway 07-25 pavement markings
a7	Replace visual approach slope indicators (VASIs) with precision approach path indicators (PAPIs) on Runway 25
a8	Shift entire runway to the west, extending the runway pavement on the Runway 07 end by 100 feet and relocating the thresholds on both runway ends. Providing a 6,000-foot runway for all operations and standard RSAs/OFAs
B	Upgrade lighting on Taxiways C and D:
b1	Provide power to the existing directional signs for Taxiways C and D
b2	Install medium intensity taxiway lights (MITLs) for Taxiways C and D
C	Obtain land easements for property beyond the future approach lighting system for Runway 07
D	Install a MALS approach lighting system for an approach to Runway 07
E	Install a parallel taxiway (Phase II) - Taxiway C to Taxiway E
F	Install a holding bay at the approach end of Runway 32
G	Rehabilitate the airport beacon and purchase a 1 acre parcel of land surrounding the airport beacon, which will place the beacon on airport property.
H	Upgrade taxiway pavement to base course:
H1	Construct additional transient and based apron spaces in the following locations:
H11	Rehabilitate east terminal apron pavement, upgrade/modify airport drainage, relocate existing 12-based aircraft tie-downs, and remove stand alone t-hangers to accommodate 3 transient apron spaces for small multi-engine and small jet aircraft
H12	Construct an additional transient apron to accommodate 6 transient apron spaces for large jet aircraft. Reorganize the location of the existing transient spaces
H13	Remove Aerofab hangar, convert area to apron providing an additional 2 transient parking spaces
H14	Acquire private property owned by Joseph P. Sullivan, which will provide the airport with an additional 5 transient parking spaces for small multi-engine and small jet transient aircraft.
H15	Construct 2 additional based turf or paved apron spaces
H16	Rehabilitate the town apron on the west side of airport to accommodate future aviation related development
H17	Construct an additional apron to accommodate 7 transient apron spaces for small multi-engine/aircraft or 14 based aircraft, 7 transient apron spaces for large multi-engine or large jet aircraft, and 8 based apron spaces for based aircraft
J	Construct additional based apron t-hangers and conventional hangars necessary taxiways, access roads, and automobile parking for the new facilities on the east side of the airport (note must avoid drainage ditch in that area).
J1	Construct a total of 2 t-hangers, which can accommodate approximately 10 aircraft in each hangar for a total of 20 units
J2	Construct 2 conventional hangars, which are made with larger doors and can accommodate approximately 5 aircraft in each hangar for a total of 10 units
J3	Construct 5 stand-alone conventional hangars, to accommodate approximately 5 aircraft
J4	Remove 3 t-hangers and replace with 4 new conventional units
K	Construct additional based apron t-hangers and conventional hangars, necessary taxiways, access roads, and automobile parking for the new facilities on the west side.
K1	Construct one additional conventional hangar, as a stand-alone conventional hangar, to accommodate 1 to 2 based aircraft
K2	Construct 3 additional conventional hangars for larger jet aircraft.
K3	Construct an additional t-hanger for 6 based aircraft.
L	Construct additional automobile parking on the east side of the airport, east of the existing parking lot, to provide for 10 additional automobile parking stalls. Add automobile parking lot lighting to the existing and new east terminal parking lot.
M	Upgrade facilities in the east terminal building
N	Relocate historical Navy control tower
O	Construct a snow removal equipment/maintenance/airport staff building
P	Purchase snow removal equipment
Q	Install airport security fencing around the airport operations area (AOA) in four phases
q1	Phase I - security fence
q2	Phase II - security fence
q3	Phase III - security fence
q4	Phase IV - security fence
R	Purchase emergency generator to supply power to runway and taxiway lights
S	Purchase additional property surrounding the airport boundaries to secure for future aviation use: A total of 6 parcels - 5 parcels on the west side of the airport, 1 parcel on the east
T	Implement a GPS approach to Runway 32, upgrade Runway pavement markings to non-precision markings and install RELS
U	Remove obstructions (see plan and profile - sheets 5 of 9 and 6 of 9) for object penetrations

STATE PROJECT NO.	FEDERAL PROJECT NO.	CHKD. BY
SAIMP11.1038-15(26)	AP3-23-0044-15	JRL

PROJECT DESIGNER	DESIGNER	DATE
Hoyle, Tanner & Associates, Inc.	KRS	DECEMBER, 2003

SCALE	DATE
AS SHOWN	DECEMBER, 2003

AIRPORT DATA		
ITEM	EXISTING	ULTIMATE
AIRPORT ELEVATION (U.S.G.S. - M.S.L.)	245'	SAME
AIRPORT REFERENCE POINT (ARP)	LAT. 43°-23'-37.900" N LONG. 70°-42'-28.801" W	LAT. 43°-23'-37.709" N LONG. 70°-42'-29.394" W
MEAN MAX TEMPERATURE HOTTEST MONTH	SAME	SAME
NAVIGATIONAL AIDS	RUNWAY 07: ILS/VOR/GPS/ND8 & VOR/DME RUNWAY 25: VOR	RUNWAY 07: ILS/VOR/GPS/ND8 & VOR/DME RUNWAY 25: VOR RUNWAY 32: GPS
DISTANCE FROM TOWN OF SANFORD	4SE	SAME
LAND OWNED (ACRES)/AIRPORT AREA FEE	1,115.29	1,136.76
AIRPORT AREA EASEMENTS (ACRES)	192	194.37
OWNER	TOWN OF SANFORD, MAINE	SAME
OPERATIONAL ROLE (NPIAS)	RELIEVER	SAME
MAG. DECLINATION MAY 30, 1997	16°15'31.48" W	VARIES

LEGEND			
	PAVEMENT EDGE		AREA OF REQUIRED EASEMENTS
	RUNWAY PAVEMENT EDGE		PROPERTY ACQUISITION
	RUNWAY CENTERLINE		EXISTING AVIATION EASEMENT AREA
	EXISTING PAVEMENT		SEGMENTED CIRCLE/LIGHTED WINDSOCK
	NEW PAVEMENT/DEVELOPMENT		AIRPORT BEACON/UNLIGHTED WINDSOCK
	EXISTING TREE LINE		PROPOSED TIE DOWN
	EXISTING CONTOUR (TYP)		EXISTING RUNWAY PROTECTION ZONE
	EXISTING AIRPORT SIGNAGE		ULTIMATE RUNWAY PROTECTION ZONE
	PROPOSED BUILDING WITHIN AIRPORT PROPERTY		RUNWAY SAFETY AREA
	EXISTING BUILDING WITHIN AIRPORT PROPERTY		RUNWAY OBJECT FREE AREA
	EXISTING BUILDING OUTSIDE AIRPORT PROPERTY		TAXIWAY OBJECT FREE AREA
	MAP & BLOCK/LOT NUMBERS FOR ABUTTING PROPERTIES TO THE AIRPORT. NOTE: ALL ABUTTER INFO. IS NOT COMPLETELY SHOWN. SEE DATA SHEET (SHEET 4 OF 9) FOR COMPLETE LIST.		EXISTING RUNWAY VISIBILITY ZONE
	AIRPORT PROPERTY LINE		ULTIMATE RUNWAY VISIBILITY ZONE
	ABUTTING PROPERTY LINES		
	EXISTING WETLANDS		
	DISPLACED THRESHOLD APPROACH SURFACE		

NON CONFORMING CONDITIONS	
DESCRIPTION	

FEDERAL AVIATION ADMINISTRATION NEW ENGLAND REGION AIRPORT DIVISION	MAINE DEPARTMENT OFFICE OF PASSENGER TRANSPORTATION	TOWN OF SANFORD
APPROVED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>
DATE: 3/16/2004	DATE: 1-29-04	DATE: 12/14/03

HTA PROJ. No.	DATE
060216.04	DECEMBER, 2003

DRAWING NO.	SHEET	OF	TOTAL SHEETS
3	3	OF	8

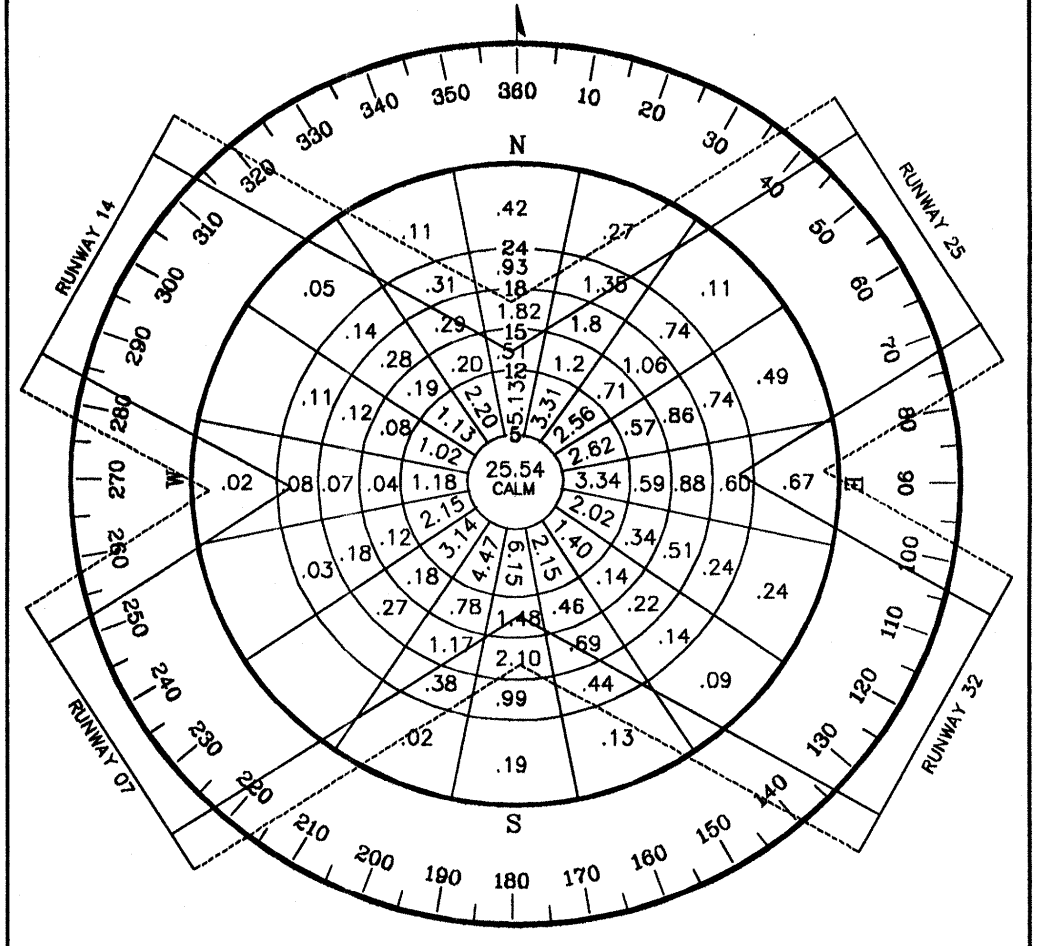
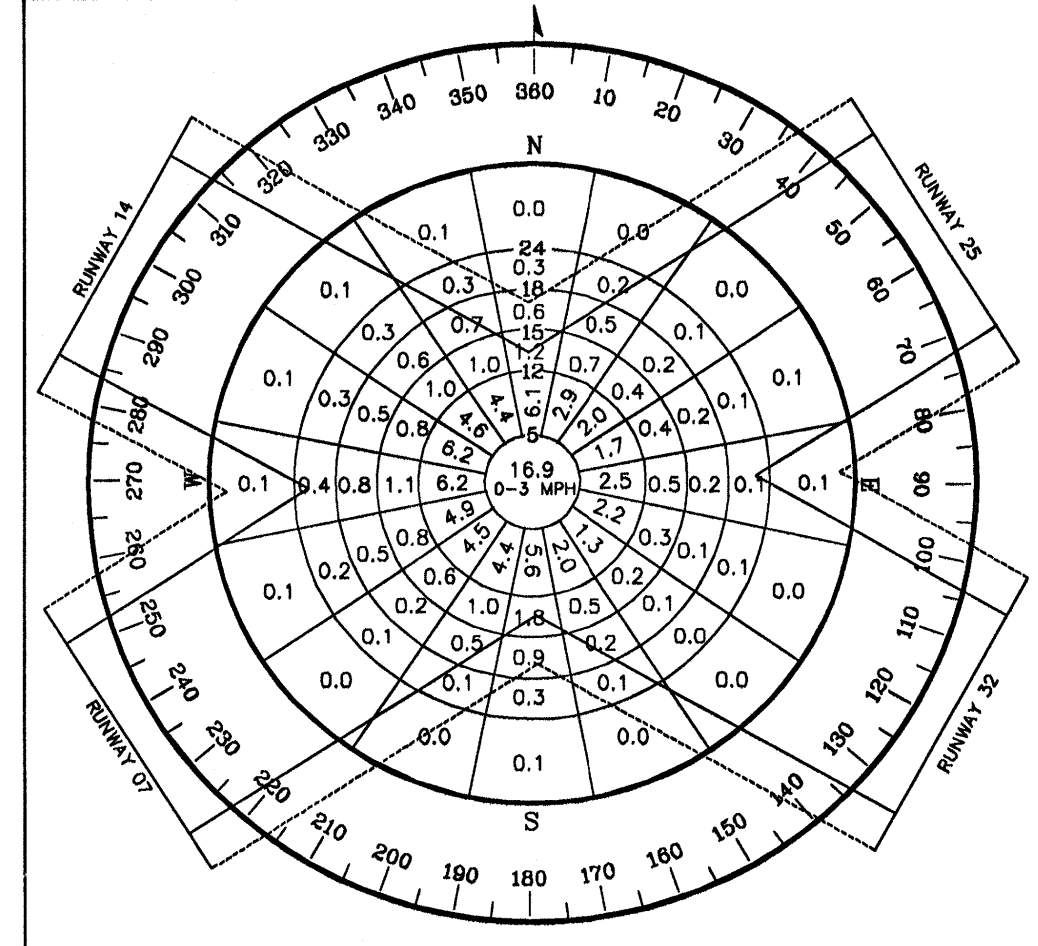
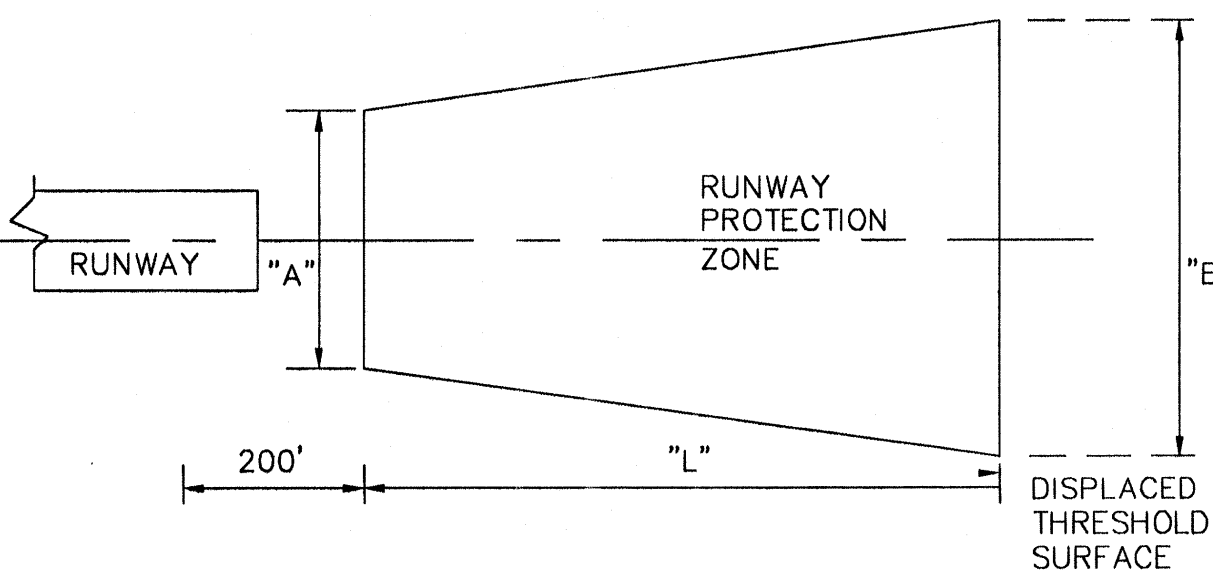
RUNWAY DATA				
ITEM	RUNWAY 07-25		RUNWAY 14-32	
	EXISTING	ULTIMATE	EXISTING	ULTIMATE
LENGTH	6,000'	SAME	5,000' W/ A 895' DISPLACED THRESHOLD TO RUNWAY 14	SAME
WIDTH	150'	100'	100'	SAME
RUNWAY END COORDINATES - NAD 83	RUNWAY 07 LAT. 43°23'12.846"N LONG. 70°43'9.249"W RUNWAY 25 LAT. 43°23'43.921"N LONG. 70°42'0.081"W	RUNWAY 07 43°23'12.331" N 70°43'10.404" W RUNWAY 25 43°23'43.404" N 70°42'01.212" W	RUNWAY 14 LAT. 43°24'1.2351"N LONG. 70°42'51.503"W RUNWAY 32 LAT. 43°23'37.266"N LONG. 70°41'51.227"W	RUNWAY 14 SAME RUNWAY 32 SAME
RUNWAY THRESHOLD COORDINATES - NAD 83	RUNWAY 07 SAME AS RUNWAY END	RUNWAY 07 SAME AS RUNWAY END	RUNWAY 14 LAT. 43°23'36.628"N LONG. 70°42'42.604"W	RUNWAY 14 SAME RUNWAY 32 SAME
RUNWAY THRESHOLD ELEVATION	RUNWAY 25 SAME AS RUNWAY END RUNWAY 07: 238.32' RUNWAY 25: 232.52'	RUNWAY 25 SAME AS RUNWAY END RUNWAY 07: 238.00' RUNWAY 25: 232.94'	SAME AS RUNWAY END RUNWAY 14: 244.53' (DISPLACED THRESHOLD: 241.70') RUNWAY 32: 231.23'	SAME SAME SAME
TRUE BEARING	N 58°21'04.017"E	SAME	N 61°06'37.479"W	SAME
TAKEOFF RUN AVAILABLE (TORA)(1)	RUNWAY 07: [6,000'] 6,000' RUNWAY 25: [6,000'] 6,000'	SAME SAME	RUNWAY 14: [5,000'] 5,000' RUNWAY 32: [5,000'] 5,000'	SAME SAME
TAKEOFF DISTANCE AVAILABLE (TODA)(1)	RUNWAY 07: [6,000'] 6,000' RUNWAY 25: [6,000'] 6,000'	SAME SAME	RUNWAY 14: [5,000'] 5,000' RUNWAY 32: [5,000'] 5,000'	SAME SAME
ACCELERATE-STOP DISTANCE AVAILABLE (ASDA)(1)	RUNWAY 07: [6,000'] 6,000' RUNWAY 25: [6,000'] 6,000'	SAME SAME	RUNWAY 14: [5,000'] 5,000' RUNWAY 32: [5,000'] 4,250'	SAME SAME
LANDING DISTANCE AVAILABLE (LDA)(1)	RUNWAY 07: [6,000'] 6,000' RUNWAY 25: [6,000'] 6,000'	SAME SAME	RUNWAY 14: [5,000'] 5,000' RUNWAY 32: [5,000'] 4,250'	SAME SAME
PAVEMENT STRENGTH	50,000 LBS. SINGLE WHEEL	SAME	72,000 LBS. DUAL WHEEL	SAME
SURFACE MATERIAL	ASPHALT	SAME	ASPHALT	SAME
EFFECTIVE GRADIENT (%)	RUNWAY 07: (-0.10%) RUNWAY 25: (+0.10%)	RUNWAY 07: (-0.10%) RUNWAY 25: (+0.10%)	RUNWAY 14: (-0.27%) RUNWAY 32: (+0.27%)	SAME SAME
CLASSIFICATION/APPROACH CATEGORY	RUNWAY 07: PRECISION	SAME	RUNWAY 14: VISUAL	SAME
APPROACH MINIMUMS (VISIBILITY/CEILING)	RUNWAY 07: DH 438' & VIS. 3/4 MILE	RUNWAY 07: DH(2) & VIS(3)	RUNWAY 14: VISUAL	RUNWAY 32: NON-PRECISION
VISUAL/APPROACH AIDS	RUNWAY 07: REIL, PAPI, WINDSOCK, MM, OM	RUNWAY 07: REIL, PAPI, WINDSOCK, MM, OM, MALSR	RUNWAY 14: PAPI, SEGMENTED CIRCLE W/WINDSOCK	SAME
NAVIGATIONAL AIDS	RUNWAY 07: VASI, WINDSOCK, ODALS	RUNWAY 25: PAPI, WINDSOCK, ODALS	RUNWAY 32: PAPI, WINDSOCK	RUNWAY 14: NONE
RUNWAY LIGHTING	RUNWAY 07: HIRLS	SAME	RUNWAY 14: VISUAL	SAME
RUNWAY MARKING	RUNWAY 07: PRECISION	SAME	RUNWAY 32: VISUAL	RUNWAY 32: NON-PRECISION
DESIGNATED INSTRUMENT RUNWAY	RUNWAY 07: ILS	SAME	NONE	RUNWAY 32: GPS
CRITICAL AIRCRAFT (WING SPAN)	GULFSTREAM IV (77.8)	SAME	GULFSTREAM II (77.8)	SAME
CRITICAL AIRCRAFT APPROACH SPEED	145 KTS	SAME	136 KTS	SAME
CRITICAL AIRCRAFT MTOW	71,780 LBS.	SAME	68,700 LBS.	SAME
AIRPLANE DESIGN GROUP	II	SAME	II	SAME
AIRCRAFT APPROACH CATEGORY	D	SAME	C	SAME
PARALLEL TAXIWAY	NONE	6,000' X 50'	TAXIWAY E - 5,000' X 40'	SAME
TAXIWAY LIGHTING	NONE	MILS	MILS	SAME

DESIGN ELEMENT	AIRPORT DESIGN CRITERIA			
	DESIGN	EXISTING	FUTURE	EXISTING
LENGTH	SEE NOTE 1	6,000'	SAME	5,000' W/ 895' DISPLACED THRESHOLD
WIDTH	100	150'	100'	100'
RUNWAY SAFETY AREA (RSA)				
WIDTH	500	500	500	500
LENGTH BEYOND RUNWAY END	1,000	1,000	900	1,000
RUNWAY OBSTACLE FREE ZONE (ROFZ)				
WIDTH	400	400	400	400
LENGTH BEYOND RUNWAY END	200	200	200	200
INNER APPROACH ROFZ WIDTH (2)	400	N/A	400	N/A
INNER APPROACH ROFZ LENGTH (2)	1,700 (3)	N/A	2,600 (3)	1,700
ROFZ SLOPE (2)	50:1	N/A	50:1	N/A
RUNWAY OBSTACLE FREE AREA (ROFA)				
WIDTH	800	800	800	800
LENGTH BEYOND RUNWAY END	1,000	1,000	900	1,000
TAXIWAY/TAXILANE				
WIDTH	35			
TAXIWAY SAFETY AREA (TSA)	79			
TAXIWAY OBJECT FREE AREA (TOFA) WIDTH	131			
TAXILANE OBJECT FREE AREA WIDTH	115			
RUNWAY SEPARATION STANDARDS				
RUNWAY CENTERLINE TO TAXIWAY/TAXILANE CENTERLINE	300			
TAXIWAY CENTERLINE TO AIRCRAFT PARKING AREA	400			
TAXIWAY AND/OR TAXILANE SEPARATION STANDARDS				
TAXIWAY CENTERLINE TO PARALLEL TAXIWAY/TAXILANE CENTERLINE	105			
TAXIWAY CENTERLINE TO A FIXED OR MOVABLE OBJECT	65.5			
TAXILANE CENTERLINE TO PARALLEL TAXILANE CENTERLINE	97			
TAXILANE CENTERLINE TO A FIXED OR MOVABLE OBJECT	57.5			

MAP	BLOCK NO.	OWNER	BOOK/PAGE
R18A	1	MODERN CONTINENTAL PRECAST	8893/181
R18A	3	MODERN CONTINENTAL PRECAST	10116/217
R18A	3A	MODERN CONTINENTAL PRECAST	10116/217
R18A	5	RAINBOW RUGS INC.	5501/190
R18A	5A	MODERN CONTINENTAL PRECAST	10116/217
R18A	11	RUBB INC.	6885/82
R18A	12	RUBB INC.	6885/253
R18A	15	SANFORD AIRPORT DEVELOPMENT CORP.	1882/452
R18A	16A	PRESIDENTIAL AVIATION OF SANFORD	10973/222
R18A	20A	DOUGLAS A. FARNHAM	8531/146
R18A	20B	TOWN OF SANFORD	9309/282
R18A	20B-03	DRYSDALE & ASSOCIATES	8411/268
R18A	20C	ROBERT Y. & CHERYL A. VACHON	2780/257
R18A	20D	MICHAEL A. GALLO JR.	4390/088
R18A	20F	HAROLD E. WAITT	8783/081
R18A	21	NICK W. KOSTIS	7890/297
R18A	22A	KATHLEEN RIGGER	8690/130
R18A	22B	JOANNE M. & DANIEL R. PAYEUR	9108/132
R18A	22C	SUZANNE & MARCEL PAYEUR	9108/114
R18A	71	RAINBOW RUGS INC.	6923/72
R18A	74	SKYTCH PARK	2400/115
R18A	14A	BAUNEG BEG. COUNTRY CLUB INC.	6435/253
R18A	14	FAYE GOODWIN TRUSTEE	5653/047
R18A	42	ROBERT CURRY	10988/323
R18A	32B	BETTY & ERNEST KOSTIS	10310/178
R18A	32C	JOSEPH P. SULLIVAN	7657/346
R18A	25A	ROBERT A. ROSENFELD	5534/236
R19	26	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	10345/279
R19	30	BRUCE M. JONES	7908/255
R19	33	BRUCE M. JONES	7379/073
R19	203	GEORGE P. ADAMS SR.	2017/693
R19	205	CAROLYN C. DRUMMEY	11385/235
R19	208	PROVINCE ASSOCIATES	3581/079
R22	11	MARCEL PAYEUR	3699/330
R22	12	NORTH COUNTRY LAND, INC.	10198/215
R22	14	STEVEN MORRILL	9158/132
R22	15	ARTHUR DOLAN	1930/843
R22	17	JOAN HARDY	2763/133
R22	19	RENE THERREN	2264/231
R22	25	TOWN OF SANFORD	1913/305
R22	26	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	10345/279
R22	27	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	10345/279
R22	28	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	10345/279
R22	29	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	10345/279
R22	30	VAL-YU VENTURES	10298/201
R22	31	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	10345/279
R22	32	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	7976/321
R23	1	KENNEBUNK, KENNEBUNKPORT, AND WELLS WATER DISTRICT	10345/279

	APPROACH SLOPE DATA		
	RUNWAY	APPROACH CATEGORY	APPROACH SLOPE
FUTURE	7	SAME	SAME
	25	SAME	SAME
	14(a)	SAME	SAME
	32	NON-PRECISION	34:1
EXISTING	7(b)	PRECISION	34:1
	25	NON-PRECISION	34:1
	14(a)	VISUAL	20:1
	32	VISUAL	20:1

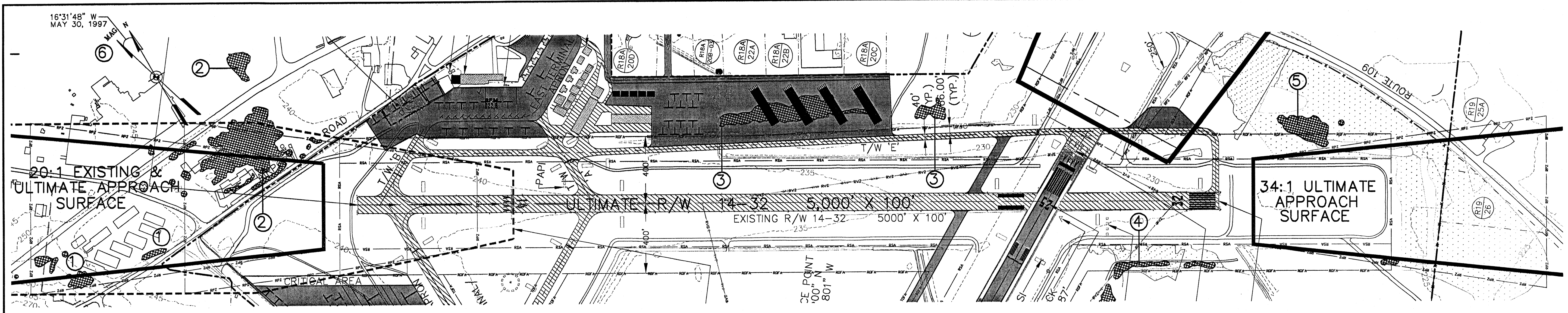
	RUNWAY PROTECTION ZONE DATA				
	RUNWAY	APPROACH CATEGORY	"L"	"A"	"B"
FUTURE	7(a)	SAME	2,500	1,000	1,750
	25	SAME	SAME	SAME	SAME
	14	SAME	SAME	SAME	SAME
	32	NON-PRECISION	1,700	500	1,010
EXISTING	14(d)	SAME	SAME	SAME	SAME
	7(b)	PRECISION	1,700	1,000	1,510
	25	NON-PRECISION	1,700	500	1,010
	14(c)	VISUAL	1,700	500	1,010
	32(c)	VISUAL	1,700	500	1,010
	14(d)	VISUAL	1,700	500	1,010



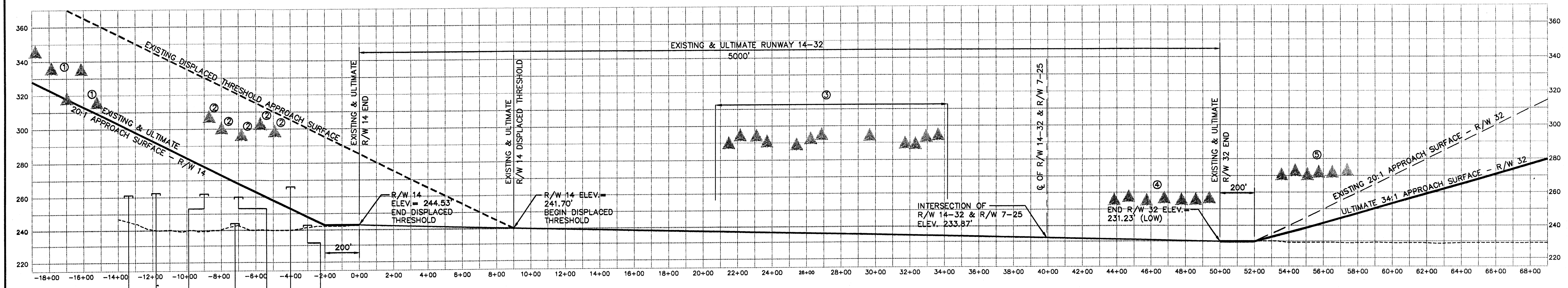
RUNWAY	WIND COVERAGE	
	12 MPH	15 MPH
14	24.53%	27.46%
32	45.30%	51.94%
14-32	69.83%	79.91%
25	45.56%	47.40%
7-25	75.47%	77.64%
14-32 & 7-25	96.98%	99.26%

RUNWAY	WIND COVERAGE	
	12 MPH	15 MPH
14	57.10%	62.30%
32	48.60%	51.20%
14-32	80.00%	88.00%
25	60.50%	64.10%
7-25	51.40%	54.20%
14-32 & 7-25	91.80%	92.70%
		96.60%

STATE PROJECT NO. SA111038-15(26)
 FEDERAL PROJECT NO. AP3-23-0044-15
 PROJECT DESIGNER: **HIA** Hoyle, Tanner & Associates, Inc.
 150 DOW STREET - MANCHESTER, NH 03101 - 1227
 Tel: (603) 669-5555 Fax: (603) 669-4168 www.hia-nh.com
 SCALE: AS SHOWN DATE: DECEMBER, 2003
 DR. BY: JRL
 CHKD. BY: TDB
 DES. BY: KRS
 SANFORD REGIONAL AIRPORT AIRPORT MASTER PLAN UPDATE
 SANFORD, MAINE
 HTA PROJ. No.: 060216.04
 SFMDht.DWG
 DRAWING NO. **4**
 SHEET 4 OF 8



PLAN VIEW
SCALE: 1"=300' H



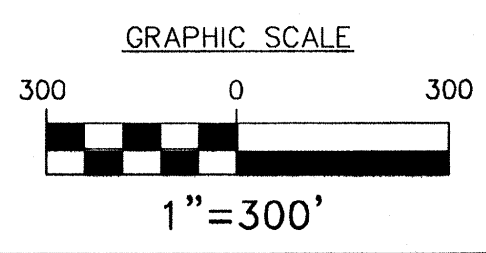
PROFILE
SCALE: 1"=300' H
1"=30' V

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PAVEMENT EDGE		SYMBOL FOR OBSTRUCTION SHOWN IN PROFILE. SEE NOTE 4 THIS SHEET.
	RUNWAY PAVEMENT EDGE		FAR-PART 77 PENETRATIONS
	RUNWAY CENTERLINE		EXISTING AVIATION EASEMENT AREA
	EXISTING PAVEMENT		SEGMENTED CIRCLE/LIGHTED WINDSOCK
	NEW PAVEMENT/DEVELOPMENT		AIRPORT BEACON
	EXISTING TREE LINE		EXISTING TIE DOWN
	EXISTING CONTOUR (TYP)		PROPOSED TIE DOWN
	EXISTING AIRPORT SIGNAGE		EXISTING RUNWAY PROTECTION ZONE
	PROPOSED BUILDING WITHIN AIRPORT PROPERTY		ULTIMATE RUNWAY PROTECTION ZONE
	EXISTING BUILDING WITHIN AIRPORT PROPERTY		DISPLACED THRESHOLD APPROACH SURFACE
	EXISTING BUILDING OUTSIDE AIRPORT PROPERTY		RUNWAY SAFETY AREA
	MAP & BLOCK/LOT NUMBERS FOR ABUTTING PROPERTIES TO THE AIRPORT. NOTE: ALL ABUTTER INFO IS NOT COMPLETELY SHOWN. SEE DATA SHEET (SHEET 4 OF 9) FOR COMPLETE LIST.		RUNWAY OBJECT FREE AREA
	AIRPORT PROPERTY LINE		TAXIWAY OBJECT FREE AREA
	ABUTTING PROPERTY LINES		RUNWAY VISIBILITY ZONE
	EXISTING WETLANDS		

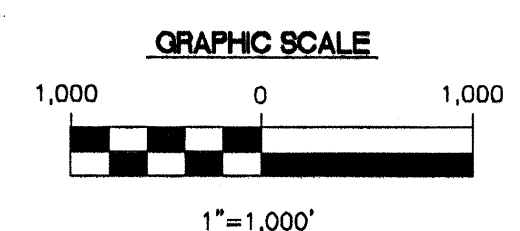
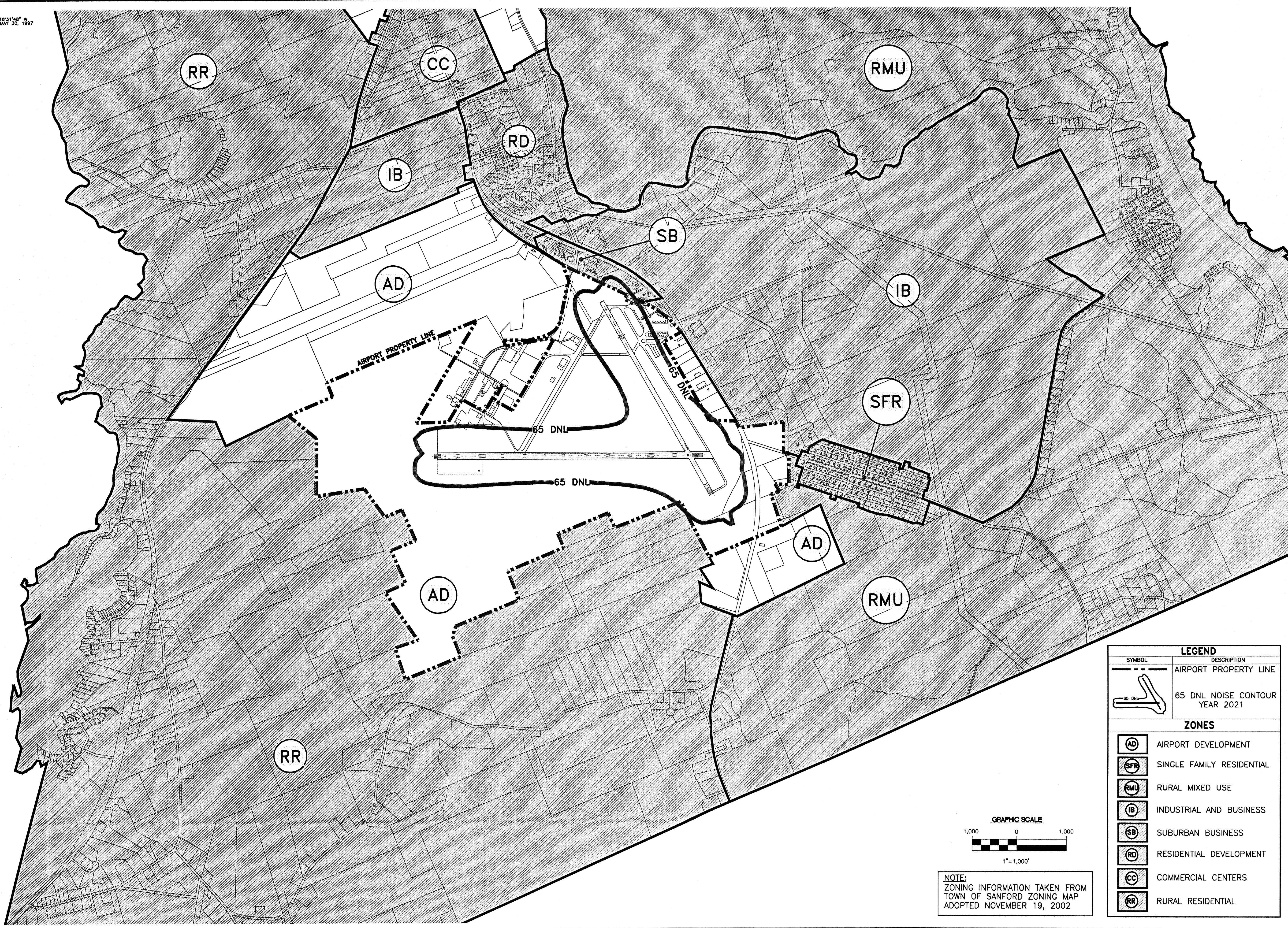
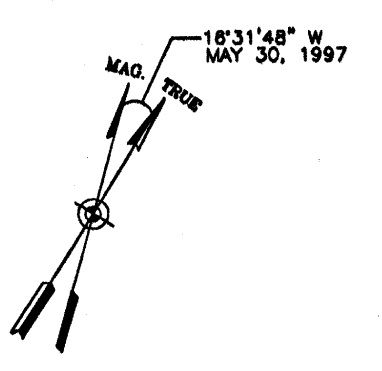
TABLE	
1	Clusters of trees obstructing 7:1 transition surfaces. Approximate Sta. -18+00 and 300' right.
2	Various Penetrations (trees, antennas, etc.) in addition to those identified on previous AMPU. Approximate Sta. -4+00 to Sta. -10+00, 200' to 600' left.
3	Clusters of trees to be removed for ultimate development.
4	Penetrations into the 7:1 transition surfaces. Sta. 42+50 to Sta. 49+50, 275' right.
5	Penetrations into the 7:1 transition surfaces. Sta. 53+00 to Sta. 56+00, 300' to 475' left.
6	Penetrations in approach surface. See Sheet 8 (FAR PART 77) for identification.

NOTES:

- OBSTRUCTIONS SHOWN ON RUNWAY 14-32 (SHT. 5) ARE BY NUMERICAL SEQUENCE.
- OBSTRUCTIONS SHOWN ON RUNWAY 7-25 (SHT. 6) ARE BY ALPHABETICAL SEQUENCE.
- OBSTRUCTION DATA PROVIDED BY MAINE D.O.T. AND PREVIOUS AIRPORT MASTER PLAN UPDATE.
- TREE SYMBOLS SHOWN IN PROFILE ARE REPRESENTATION OF MULTIPLE OBSTRUCTIONS AND DO NOT REPRESENT INDIVIDUAL OBSTRUCTIONS WITHIN THESE AREAS.



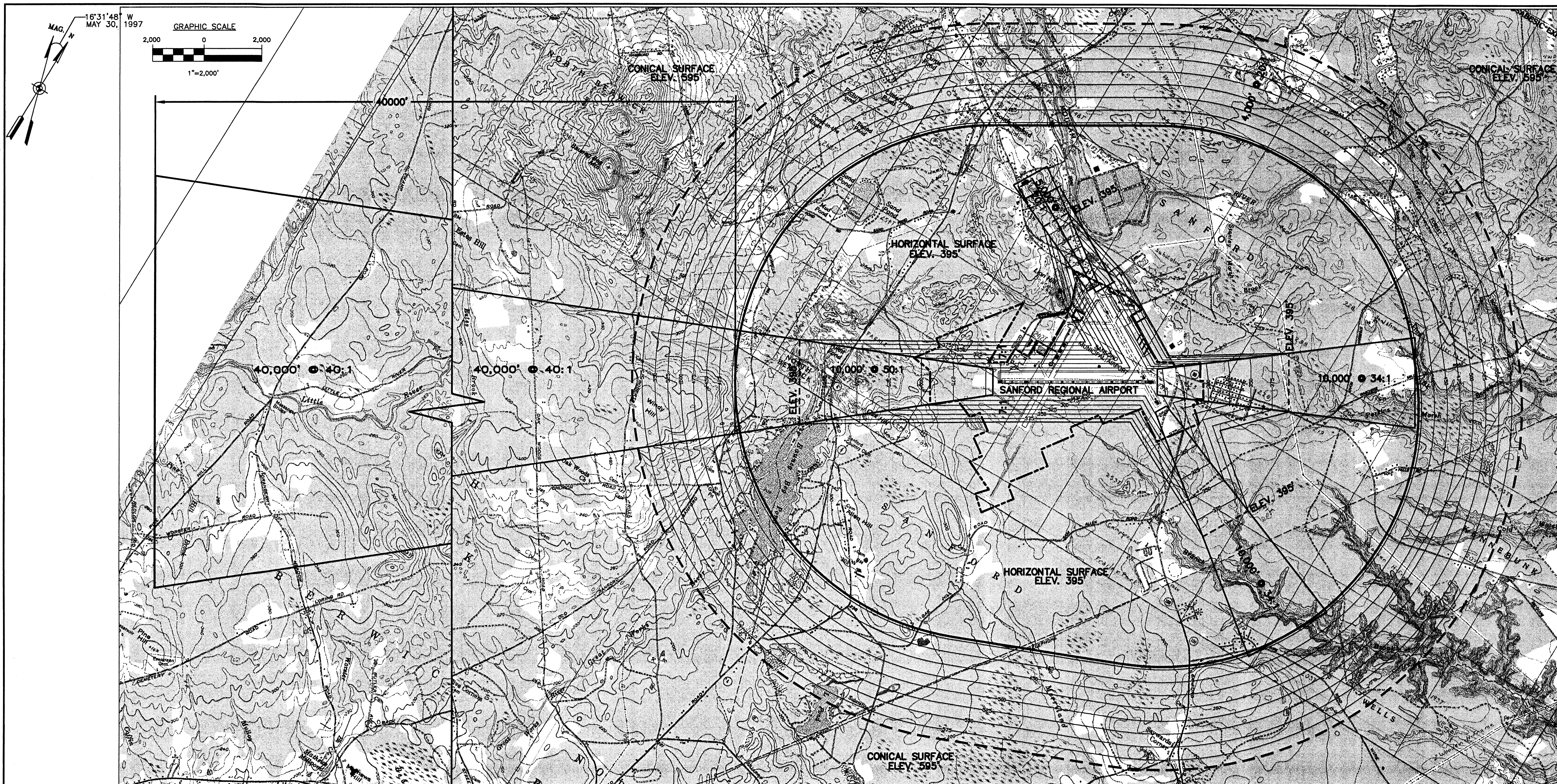
STATE PROJECT NO. SAP11.1038-15(26)	REVISIONS
FEDERAL PROJECT NO. AP3-23-0044-15	BY
	DATE
	DESCRIPTION
HFA Consulting Engineers	
PROJECT DESIGNER Hoyle, Tanner & Associates, Inc.	DR. BY TDB
150 DOW STREET - MANCHESTER, NH 03101 - 1227 Tel: (603) 669-5555 Fax: (603) 669-4168 WEB PAGE: www.hta-nh.com	CHKD. BY JRL
DES. BY KRS	
DATE: DECEMBER, 2003	
SCALE: AS SHOWN	
SANFORD REGIONAL AIRPORT AIRPORT MASTER PLAN UPDATE SANFORD, MAINE	
RUNWAY 14-32 PLAN AND PROFILE	
HTA PROJ. No.: 060216.04 SFMP.LPR01.DWG	
DRAWING NO. 5	
SHEET 5 OF 8	



NOTE:
ZONING INFORMATION TAKEN FROM
TOWN OF SANFORD ZONING MAP
ADOPTED NOVEMBER 19, 2002

SYMBOL	DESCRIPTION
	AIRPORT PROPERTY LINE
	65 DNL NOISE CONTOUR YEAR 2021
ZONES	
	AIRPORT DEVELOPMENT
	SINGLE FAMILY RESIDENTIAL
	RURAL MIXED USE
	INDUSTRIAL AND BUSINESS
	SUBURBAN BUSINESS
	RESIDENTIAL DEVELOPMENT
	COMMERCIAL CENTERS
	RURAL RESIDENTIAL

PROJECT DESIGNER Hoyle, Tanner & Associates, Inc. 150 DOW STREET - MANCHESTER, NH 03101 - 1227 Tel: (603) 669-5555 Fax: (603) 669-4168 WEB PAGE: www.hta-nh.com		STATE PROJECT NO. SAIP11.1038-15(26)	FEDERAL PROJECT NO. AIP3-23-0044-15
DES. BY KRS	DR. BY TDB	CHKD. BY JFL	REVISIONS BY DESCRIPTION DATE
SANFORD REGIONAL AIRPORT AIRPORT MASTER PLAN UPDATE SANFORD, MAINE		LAND USE PLAN (ZONING) / 65 DNL NOISE CONTOUR	
HTA PROJ. No.: 060216.04 06/16/2021		DRAWING NO. 7	
SHEET 7 OF 8		REV	

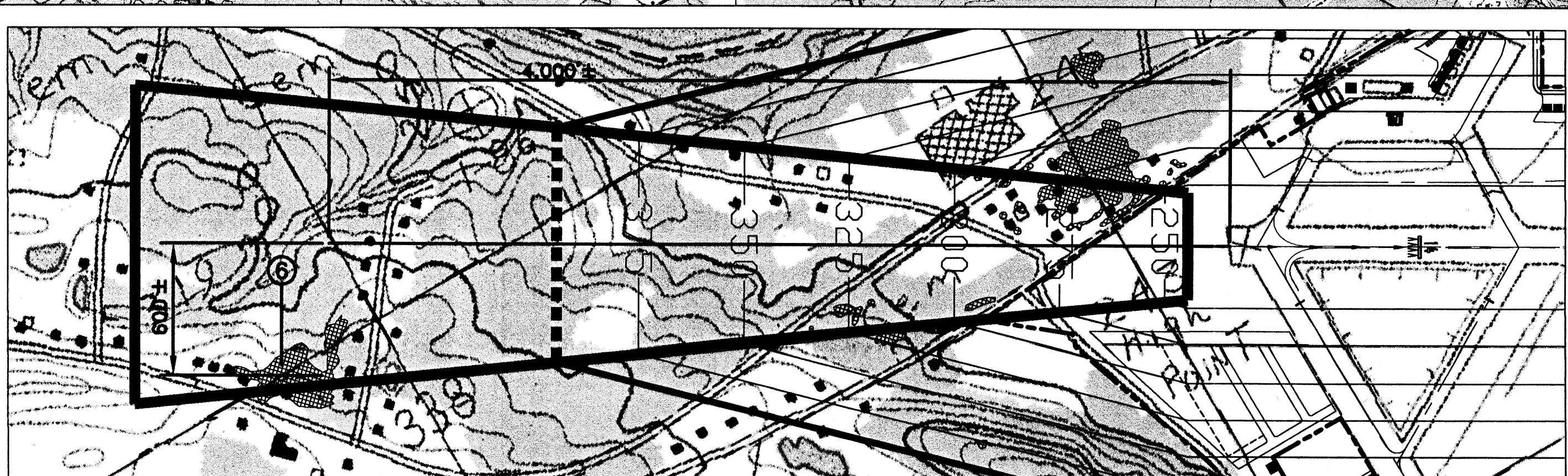
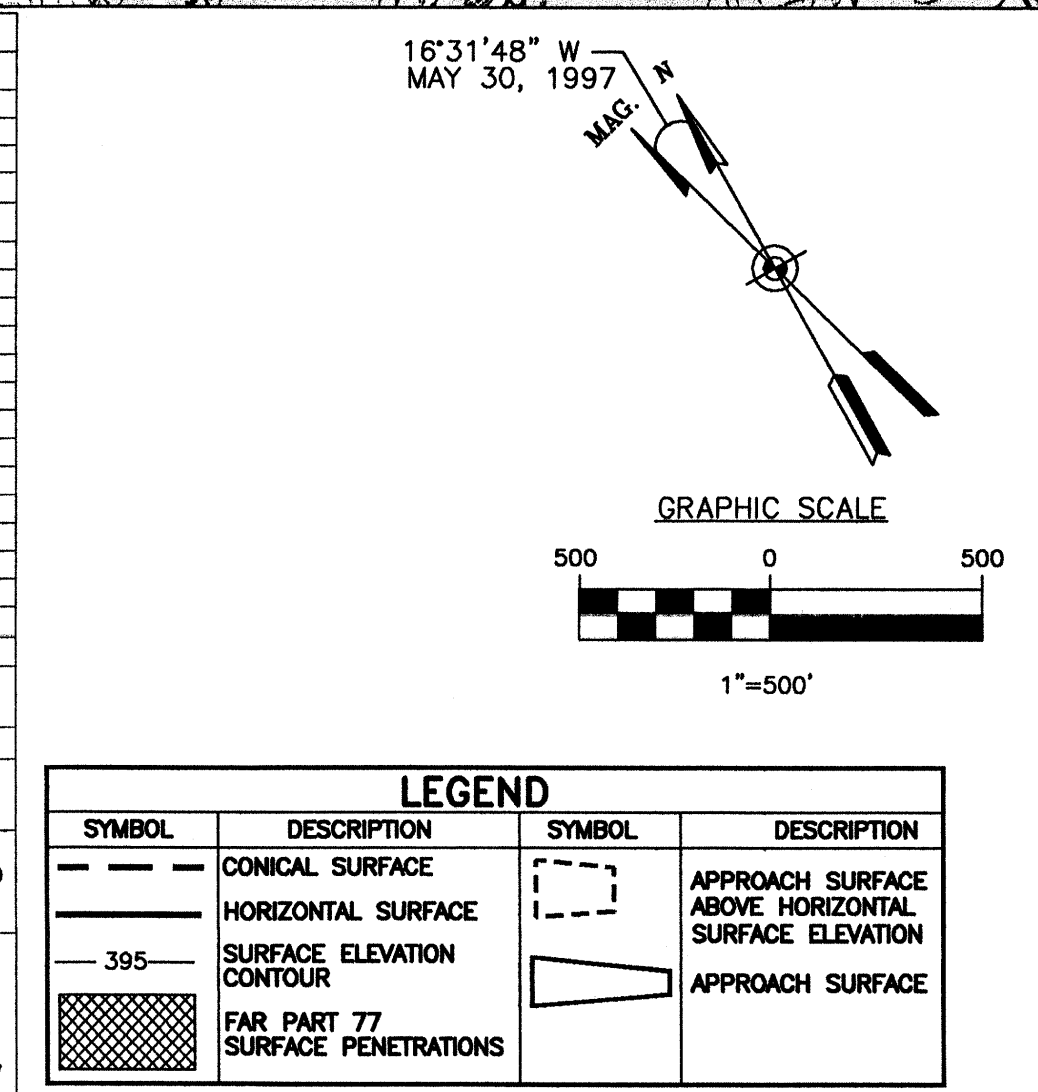


Sanford Regional Airport Part 77 Airspace Surfaces				
Classification	Runway 07 (1)	Runway 25 (1)	Runway 14 (1)	Runway 32 (1)
Approach	Precision	Visual	Visual	Non-precision
Visibility Minimum	Precision 3/4 mile	Non-precision 1 mile	Visual 1 mile	Non-precision 1 mile
Airport Elevation	245			
Airport Imaginary Surface	Runway 07 (1)	Runway 25 (1)	Runway 14 (1)	Runway 32 (1)
Horizontal Surface:				
Horizontal Surface Elevation	10,000	10,000	395	10,000
Horizontal Surface Radius	4,000	4,000	4,000	4,000
Conical Surface:				
Horizontal Distance	4,000	4,000	4,000	4,000
Slope	20:1	20:1	20:1	20:1
Primary Surface:				
Length beyond runway end	200	200	200	200
Width	1,000 (2)	1,000	500 (2)	500
Approach Surface:				
Horizontal Distance	10,000 and 40,000 (3)	10,000	5,000	10,000
Inner Edge Width	1,000	1,000	500	500
Outer Edge Width	19,000	3,500	1,500	3,500
Slope	50:1 and 40:1 (3) (4)	34:1	20:1	34:1
Transitional Surfaces:				
	7:1	7:1	7:1	7:1

Source: FAR Part 77, Objects Affecting Navigable Airspace

Notes:

- Dimensions are in feet unless otherwise noted.
- The width of the primary surface of a runway is the width prescribed for the most precise approach for either end of that runway; therefore, the precision approach to Runway 07 determines the primary surface width of 1,000 feet for Runway 25, as well.
- FAR Part 77's approach surface standards require a horizontal distance of 10,000 feet at a slope of 50 (horizontally) to 1 (vertically) with an additional 40,000 feet at a slope of 40 (horizontally) to 1 (vertically) for all precision instrument runways, such as Runway 07, a precision approach runway with 3/4 mile visibility minimums.
- FAR Part 77's approach surface standards require a 50:1 slope for Runway 07, a precision approach runway with 3/4 mile visibility minimums. However, the FAA accepted a slope of 34:1 due to the surrounding mountainous terrain, a common phenomenon within the New England region. The horizontal distance of the precision approach surface for Runway 07 is 50,000 feet, not 10,000 feet, which is the standard distance required for a 34:1 slope. This is due to the imaginary surface requirements for a precision approach to Runway 07, which should be maintained even if the 50:1 slope correct.



6. OBSTRUCTIONS IN APPROACH SURFACE OF R/W 14. (AS IDENTIFIED ABOVE)

NOTE: ALL OTHER OBSTRUCTIONS DEPICTED IN THE PLAN AND PROFILE DRAWINGS, SHEETS 5 AND 6 OF 9.

STATE PROJECT NO. SAF11-1038-15(26)		FEDERAL PROJECT NO. AP3-23-0044-15	
PROJECT DESIGNER Hoyle, Tanner & Associates, Inc. 150 DOW STREET - MANCHESTER, NH 03101 - 1227 Tel: (603) 669-5555 Fax: (603) 669-4198 WEB PAGE: www.hta-nh.com	DES. BY KRS	DR. BY TDB	CHKD. BY JRL
SCALE: AS SHOWN DATE: DECEMBER, 2003		REVISIONS	
SANFORD REGIONAL AIRPORT AIRPORT MASTER PLAN UPDATE SANFORD, MAINE		DRAWING NO. 8	
SHEET 8 OF 8		REV	