K Airport Layout Plan

AIRPORT LAYOUT PLAN

BRUNSWICK EXECUTIVE AIRPORT, MAINE

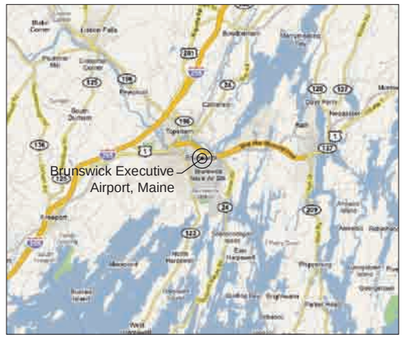
MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY
2010

LOCATION MAP

SHEET INDEX

1. COVER SHEET
2. EXISTING AIRPORT LAYOUT PLAN
3. ULTIMATE AIRPORT LAYOUT PLAN
4. TERMINAL AREA PLAN
5. RUNWAY 01R-19L INNER APPROACH SURFACES
6. RUNWAY 01L-19R INNER APPROACH SURFACES
7. PART 77 AIRSPACE SURFACES
8. LAND USE PLAN WITH 2031 NOISE CONTOURS
9. AIRPORT PROPERTY MAP

VICINITY MAP



Hoyle, Tanner & Associates, Inc.

150 Dow Street
Manchester, NH 03101-1227
Tel 603-669-5555
Fax 603-669-4168
Web Page: www.hoyletanner.com

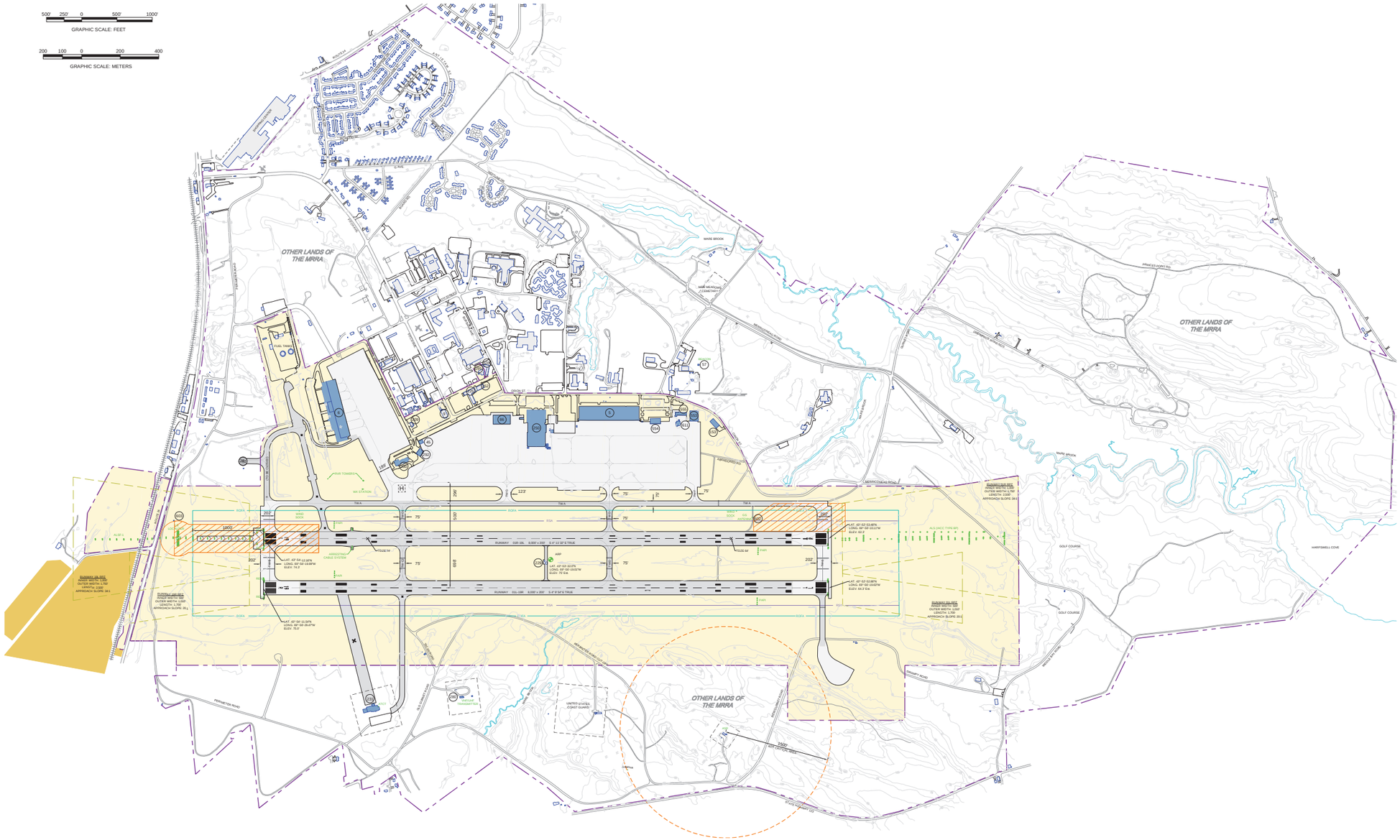
AECOM

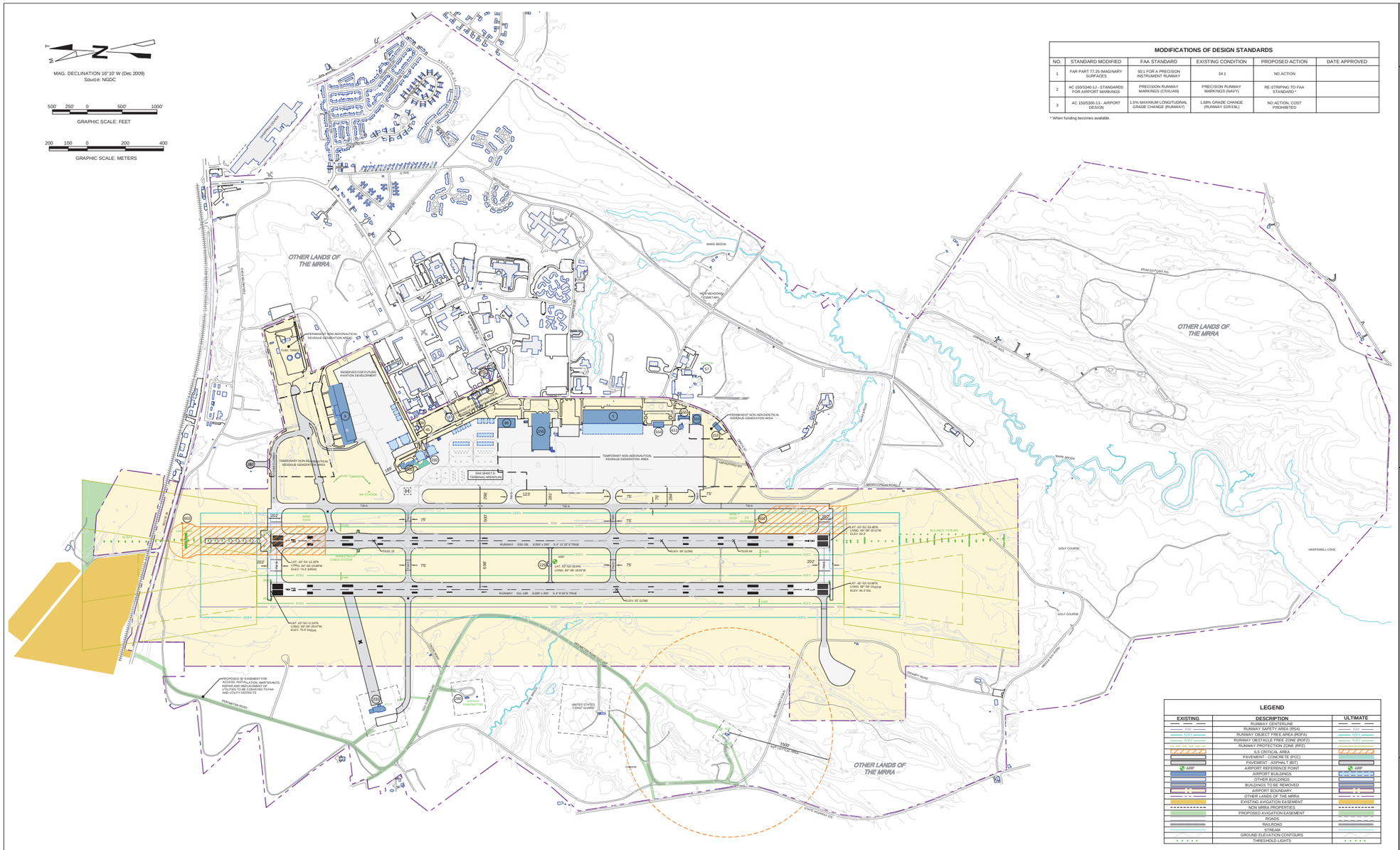
1700 Market Street Suite 1600
Philadelphia, PA 19103
Tel: 215.399.4300
Fax: 215.399.4350

MAG. DECLINATION 16°10' W (Dec 2009)
Source: NGDC

500' 250' 0 500' 1000'
GRAPHIC SCALE: FEET

200 100 0 200 400
GRAPHIC SCALE: METERS


OTHER LANDS OF THE MRRA
OTHER LANDS OF THE MRRA
OTHER LANDS OF THE MRRA
RUNWAY 01-19
INNER WIDTH: 1,000'
OUTER WIDTH: 1,700'
LENGTH: 7,000'
APPROACH SLOPE: 34:1
RUNWAY 14-32
INNER WIDTH: 1,000'
OUTER WIDTH: 1,000'
LENGTH: 5,000'
APPROACH SLOPE: 20:1
RUNWAY 04-22
INNER WIDTH: 1,000'
OUTER WIDTH: 1,000'
LENGTH: 3,000'
APPROACH SLOPE: 20:1
RUNWAY 09-27
INNER WIDTH: 1,000'
OUTER WIDTH: 1,000'
LENGTH: 3,000'
APPROACH SLOPE: 20:1
RUNWAY : 01/19 - 6,800 x 150 5.4° 12' 32" E TRUE
RUNWAY : 14/32 - 5,000 x 150 0.4° 12' 32" E TRUE
RUNWAY : 04/22 - 3,000 x 150 5.4° 0' 0" E TRUE
RUNWAY : 09/27 - 3,000 x 150 5.4° 0' 0" E TRUE
ARP
LAT. 43° 53' 22.07N
LONG. 69° 56' 19.02"W
ELEV. 70' 6in
LAT. 43° 54' 11.16"N
LONG. 69° 56' 19.89"W
ELEV. 74.3'
LAT. 43° 54' 11.54"N
LONG. 69° 56' 28.47"W
ELEV. 70.0'
LAT. 43° 52' 53.68"N
LONG. 69° 56' 19.11"W
ELEV. 63.0'
LAT. 43° 52' 53.68"N
LONG. 69° 56' 19.02"W
ELEV. 64.2 6in
ILS (VOCC TYPE SP)
GS ANTENNA
WIND SOCK
ARRESTING CABLE SYSTEM
FUEL FARM
WX STATION
HIGH TOWERS
GOLF COURSE
GOLF COURSE
HARPSWELL COVE
UNITED STATES COAST GUARD
TRANSMITTER
PERRY ROAD
PERRYMOUNT ROAD
BRUNSWICK ROAD
MERRYCONEAG ROAD
PRINCES POINT RD
WARE BROOK
WARE MEMORIAL CEMETERY
GRIFFIN ST
CLARK ST
ARMSTRONG ST
ARMSTRONG ROAD
ROBERTS ROAD
ROBERTS LANE
ROBERTS ROAD
ROBERTS LANE
ROBERTS ROAD
ROBERTS ROAD
ROBERTS ROAD



MODIFICATIONS OF DESIGN STANDARDS

NO.	STANDARD MODIFIED	FAA STANDARD	EXISTING CONDITION	PROPOSED ACTION	DATE APPROVED
1	FAR PART 77.25 IMAGINARY SURFACES	50:1 FOR A PRECISION INSTRUMENT RUNWAY	34:1	NO ACTION	
2	AC 150/5340-1J - STANDARDS FOR AIRPORT MARKINGS	PRECISION RUNWAY MARKINGS (CIVILIAN)	PRECISION RUNWAY MARKINGS (NAVY)	RE-STRIPING TO FAA STANDARD *	
3	AC 150/5300-13 - AIRPORT DESIGN	1.5% MAXIMUM LONGITUDINAL GRADE CHANGE (RUNWAY)	1.68% GRADE CHANGE (RUNWAY 01R/19L)	NO ACTION, COST PROHIBITED	

* When funding becomes available.

LEGEND

EXISTING	DESCRIPTION	ULTIMATE
	RUNWAY CENTERLINE	
RSA	RUNWAY SAFETY AREA (RSA)	RSA
ROFA	RUNWAY OBJECT FREE AREA (ROFA)	ROFA
ROFZ	RUNWAY OBSTACLE FREE ZONE (ROFZ)	ROFZ
RPZ	RUNWAY PROTECTION ZONE (RPZ)	
	ILS CRITICAL AREA	
	PAVEMENT - CONCRETE (PCC)	
	PAVEMENT - ASPHALT (BIT)	
ARP	AIRPORT REFERENCE POINT	ARP
	AIRPORT BUILDINGS	
	OTHER BUILDINGS	
	BUILDINGS TO BE REMOVED	
	AIRPORT BOUNDARY	
	OTHER LANDS OF THE MRRA	
	EXISTING AVIATION EASEMENT	
	NON MRRA PROPERTIES	
	PROPOSED AVIGATION EASEMENT	
	ROADS	
	RAILROAD	
	STREAM	
	GROUND ELEVATION CONTOURS	
	THRESHOLD LIGHTS	

RUNWAY DATA

ITEM	RUNWAY 01R/19L EXISTING	RUNWAY 01R/19L ULTIMATE			RUNWAY 01L/19R EXISTING		RUNWAY 01L/19R ULTIMATE	
RUNWAY LENGTH	8,000'	SAME			8,000'		8,000'	
RUNWAY WIDTH	200'	150'			200'		150'	
SURFACE TYPE	ASPHALT PCN 38 R / C / W / U	SAME			ASPHALT PCN 38 R / C / W / T		SAME	
PAVEMENT STRENGTH (lbs)								
SINGLE WHEEL	75,000	SAME			75,000		SAME	
DUAL WHEEL	200,000	SAME			200,000		SAME	
DUAL TANDEM	400,000	SAME			400,000		SAME	
OBJECT FREE ZONE	NO OFZ PENETRATIONS	SAME			NO OFZ PENETRATIONS		SAME	
TRUE BEARING	5 4° 11 32" E	SAME			5 4° 0 54" E		SAME	
RUNWAY HIGH POINT ELEVATION	74'	SAME			75'		SAME	
RUNWAY LOW POINT ELEVATION	60'	SAME			62'		SAME	
EFFECTIVE GRADIENT (%)	0.15%	SAME			0.14%		SAME	
LINE OF SIGHT VARIATIONS	NO	SAME			NO		SAME	
MAXIMUM GRADE CHANGE	1.68% *	SAME			1.1%		SAME	
MAXIMUM GRADE	0.97%	SAME			1.50%		SAME	
FAR PART 77 CATEGORY	PRECISION INSTRUMENT RUNWAY (PIR)	SAME			VISUAL		PRECISION INSTRUMENT RUNWAY (PIR)	
	RUNWAY 01R	**RUNWAY 19L**	**RUNWAY 01R**	**RUNWAY 19L**	**RUNWAY 01L**	**RUNWAY 19R**	**RUNWAY 01L**	**RUNWAY 19R**
DISPLACED THRESHOLD	N/A	N/A	SAME	SAME	N/A	N/A	SAME	SAME
APPROACH SURFACE SLOPE	34:1 *	34:1 *	SAME *	SAME *	20:1	20:1	34:1 *	34:1 *
APPROACH MINIMUMS	SAME	200FT / 1/2 MILE	SAME	200FT / 1/2 MILE	1,000FT / 3 MILES (VIS)	1,000FT / 3 MILES (VIS)	200FT / 3/4 MILE	200FT / 3/4 MILE
VISUAL APPROACH AIDS	IACC TYPE BP / PAPI	ALSF-1 / PAPI	MALSR / PAPI / PCL	MALSR / PAPI / PCL	PAPI	PAPI	PAPI / PCL	PAPI / PCL
INSTRUMENT APPROACH AIDS	ILS	PRECISION LPV	ILS / PRECISION LPV	SAME	NONE	NONE	PRECISION LPV	PRECISION LPV
RUNWAY LIGHTING	HIRL / CL / TDZ / REIL	HIRL / CL / TDZ / REIL	HIRL / REIL / PCL	HIRL / REIL / PCL	HIRL / REIL	HIRL / REIL	SAME	SAME
RUNWAY MARKING	PRECISION (NON-STD) *	PRECISION (NON-STD) *	PRECISION (STD)	PRECISION (STD)	PRECISION (NON-STD) *	PRECISION (NON-STD) *	PRECISION (STD)	PRECISION (STD)
RUNWAY OBJECT FREE AREA (ROFA)								
LENGTH BEYOND RUNWAY END	1,000'	1,000'	SAME	SAME	1,000'	1,000'	SAME	SAME
WIDTH	800'	800'	SAME	SAME	800'	800'	SAME	SAME
RUNWAY SAFETY AREA (RSA)								
LENGTH BEYOND RUNWAY END	1,000'	1,000'	SAME	SAME	1,000'	1,000'	SAME	SAME
WIDTH	500'	500'	SAME	SAME	500'	500'	SAME	SAME
RUNWAY END COORDINATES (NAD 83)								
LATITUDE	43° 52' 53.479" N	43° 54' 12.162" N	SAME	SAME	43° 52' 52.858" N	43° 54' 11.539" N	SAME	SAME
LONGITUDE	69° 56' 10.113" W	69° 56' 19.994" W	SAME	SAME	69° 56' 19.634" W	69° 56' 29.466" W	SAME	SAME
RUNWAY END ELEVATION (MSL)	62.3'	74.3'	SAME	SAME	64.7'	75.0'	SAME	SAME
DISPLACED THRESHOLD ELEVATION (MSL)	N/A	N/A	SAME	SAME	N/A	N/A	SAME	SAME
TDZ ELEVATION (MSL)	64'	75'	SAME	SAME	N/A	75'	SAME	SAME
RUNWAY PROTECTION ZONE (RPZ)								
INNER WIDTH	1,000'	1,000'	SAME	SAME	500'	500'	1,000'	1,000'
OUTER WIDTH	1,750'	1,750'	SAME	SAME	1,010'	1,010'	1,750'	1,750'
LENGTH	2,500'	2,500'	SAME	SAME	1,700'	1,700'	2,500'	2,500'

* Modification of Standard

BUILDINGS

NO.	FACILITY NAME	NO.	FACILITY NAME
5	HANGAR 5	252	AUTO EQUIP REPAIR SHOP
6	HANGAR 6	280	TRANSMITTER BUILDING VHF/UHF
9	ADMINISTRATIVE SPACE (VACANT)	282	COMPASS ROSE
45*	HAZMAT TRANSFER FACILITY	292*	ARFF FACILITY
57	AIRPORT ROTATING BEACON TOWER	295	RESERVOIR / PUMPHOUSE
86	MECHANICAL SHOP	538	GAS STATION
153	RECYCLING CENTER	553	AIRFIELD SUPPORT BUILDING
200	FBO / TERMINAL BUILDING	554	P3 SUPPORT FACILITY
209	ELECTRIC DISTRIBUTION BLDG/SHELTER	559*	SONOBOUY / VEHICLE STORAGE
225	AUTOMOTIVE EQUIP REPAIR SHOP	602	GLIDE SLOPE EQUIPMENT SHELTER
229*	GCA TURNTABLE	603	LOCALIZER EQUIPMENT SHELTER
231	AIR TRAFFIC CONTROL TOWER (ATCT)	611*	T-56 ENGINE TEST FACILITY
250	HANGAR 4		

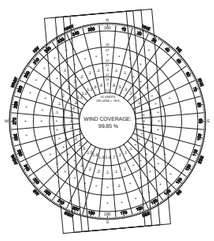
* To Be Removed

AIRPORT DATA

ITEM	EXISTING	ULTIMATE
AIRPORT ELEVATION (MSL)	75'	SAME
AIRPORT REFERENCE POINT (ARP)		
LATITUDE	43° 53' 32" N	SAME
LONGITUDE	69° 56' 19.01" W	SAME
MEAN MAX TEMPERATURE (JULY)	73.9° F	SAME
AIRPORT TERMINAL AREA NAVAIDS	ROTATING BEACON	SAME
NPIAS SERVICE LEVEL	GENERAL AVIATION	SAME
STATE SERVICE LEVEL	LEVEL 1	SAME
AIRPORT REFERENCE CODE	D-V	C-III
DESIGN AIRCRAFT	B747	B737-800
AIRPORT BOUNDARY (ACRES)	974	SAME

Reference: Horizontal Datum - NAD 83
Vertical Datum - NAVD 88

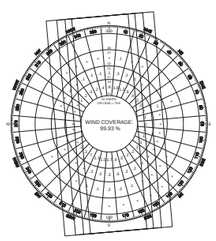
Notes:
1. Ground contour intervals are 10 feet (shown) based on 2-foot contour intervals (not shown). Topographic mapping provided by the MRRA.



ALL WEATHER WIND COVERAGE

RUNWAY 01/19				
CROSSWIND COMPONENT (KTS)	10.5	13	16	20
WIND COVERAGE	95.41%	97.83%	99.33%	99.85%

Source: U.S. Department of Commerce, National Climatic Data Center (NCDC)
Station: Naval Air Station, ME, Station 74392
Period: 1999-2008 (78,863 observations)
Note: Wind Coverage Categories are as follows:
VMC (84.28%), IMC (11.98%) Closed (2.97%)



IMC WIND COVERAGE

RUNWAY 01/19				
CROSSWIND COMPONENT (KTS)	10.5	13	16	20
WIND COVERAGE	97.33%	98.73%	99.70%	99.93%

FEDERAL AVIATION ADMINISTRATION NEW ENGLAND REGION AIRPORT'S DIVISION	MAINE DEPARTMENT OF TRANSPORTATION	MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY
APPROVED: _____	APPROVED: _____	APPROVED: _____
DATE: _____		
REFERENCE LETTER DATED: _____	DATE: _____	DATE: _____

FAA's approval of this Airport Layout Plan (ALP) represents acceptance of the general location of future facilities depicted. During the preliminary design phase, the airport owner is required to resubmit for approval the final locations, heights and exterior finish of structures. FAA's concern is obstructions, impact on electronic aids or adverse effects on controller view of aircraft approach and ground movement areas which could adversely affect the safety, efficiency or utility of the airport.

ENGINEER'S SEAL

AECOM
TRANSPORTATION
FACSIMILE USA, Inc.
100 MIDDLESEX TURNPIKE, SUITE 100
THE CENTRAL, PENNSYLVANIA, 17015
TEL: 717.599.7000 FAX: 717.599.7010
www.aecom.com

Hoyle, Tanner & Associates, Inc.
160 Dow Street
Manchester, NH 03101-1127
Tel: 603-669-5555
Fax: 603-669-7036
Web Page: www.hoyletanner.com
Hoyle Tanner & Associates © 2009

DRAWN BY	CHECKED BY
RAM	JDM

DESIGNED BY	SCALE:	DATE:
BAD	1" = 500'	08/06/2010

DO NOT SCALE DRAWING

BRUNSWICK EXECUTIVE AIRPORT
BRUNSWICK, MAINE

ULTIMATE AIRPORT LAYOUT PLAN

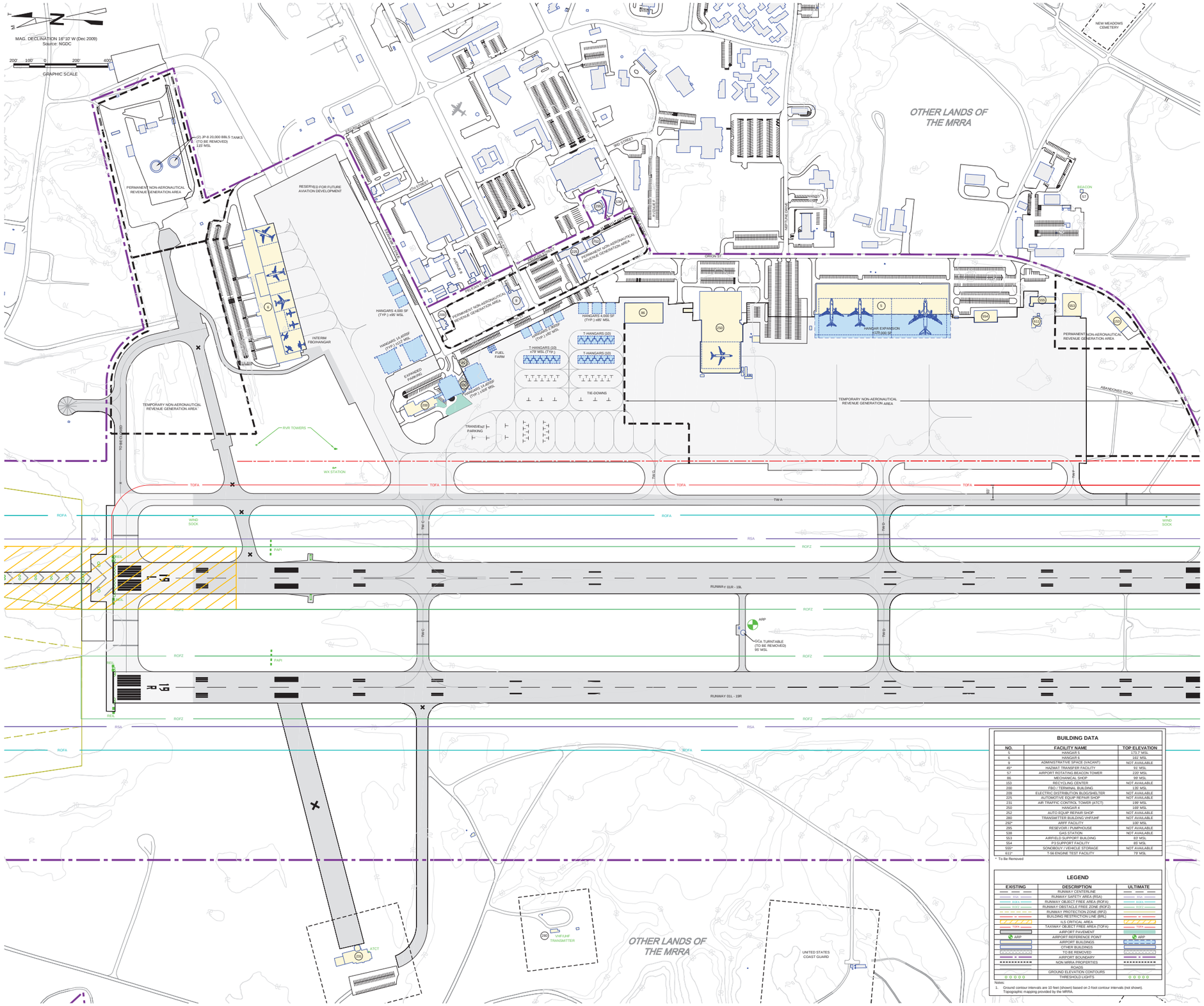
REVISIONS

REV NO.	DATE	BY

PROJ. No.: 391101
FILE NAME: 2814-PL002-PALP
AIP No.:
DRAWING NO.

SHEET 3 OF 9

LAT 43-53 BY: RC/DRB/ JB Layer: L_001
PLOT BY: RAMAIN
PLOT DATE: Aug 06, 2010 - 8:00:24 PM



BUILDING DATA

NO.	FACILITY NAME	TOP ELEVATION
5	HANGAR 5	171.7' MSL
6	HANGAR 6	161' MSL
9	ADMINISTRATIVE SPACE (VACANT)	NOT AVAILABLE
45*	HAZMAT TRANSFER FACILITY	91' MSL
57	AIRPORT ROTATING BEACON TOWER	220' MSL
86	MECHANICAL SHOP	99' MSL
153	RECYCLING CENTER	NOT AVAILABLE
200	FBO / TERMINAL BUILDING	135' MSL
209	ELECTRIC DISTRIBUTION BLDG/SHELTER	NOT AVAILABLE
225	AUTOMOTIVE EQUIP REPAIR SHOP	NOT AVAILABLE
231	AIR TRAFFIC CONTROL TOWER (ATCT)	199' MSL
250	HANGAR 4	169' MSL
252	AUTO EQUIP REPAIR SHOP	NOT AVAILABLE
280	TRANSMITTER BUILDING VHF/UHF	NOT AVAILABLE
290*	ARFF FACILITY	100' MSL
295	RESEVOIR / PUMPHOUSE	NOT AVAILABLE
538	GAS STATION	NOT AVAILABLE
553	AIRFIELD SUPPORT BUILDING	83' MSL
554	P-3 SUPPORT FACILITY	85' MSL
555*	SONOBUOY / VEHICLE STORAGE	NOT AVAILABLE
611*	T-56 ENGINE TEST FACILITY	79' MSL

* To Be Removed

LEGEND

EXISTING	DESCRIPTION	ULTIMATE
	RUNWAY CENTERLINE	
RSA	RUNWAY SAFETY AREA (RSA)	RSA
ROFA	RUNWAY OBJECT FREE AREA (ROFA)	ROFA
ROFZ	RUNWAY OBSTACLE FREE ZONE (ROFZ)	ROFZ
	RUNWAY PROTECTION ZONE (RPZ)	
	BUILDING RESTRICTION LINE (BRL)	
	ILS CRITICAL AREA	
TOFA	TAXIWAY OBJECT FREE AREA (TOFA)	TOFA
	AIRPORT PAVEMENT	
ARP	AIRPORT REFERENCE POINT	ARP
	AIRPORT BUILDINGS	
	OTHER BUILDINGS	
	TO BE REMOVED	
	AIRPORT BOUNDARY	
	NON MRRA PROPERTIES	
	ROADS	
	GROUND ELEVATION CONTOURS	
	THRESHOLD LIGHTS	

Notes:
1. Ground contour intervals are 10 feet (shown) based on 2-foot contour intervals (not shown). Topographic mapping provided by the MRRA.

ENGINEER'S SEAL

AECOM
TRANSPORTATION
AECOM USA, Inc.
625 MARKET STREET, SUITE 100
THE CENTRAL, PITTSBURGH, PA 15222
TEL 412.429.3000 FAX 412.429.3010
www.aecom.com

Hoyle, Tanner & Associates, Inc.
160 Dow Street
Manchester, NH 03101-1127
Tel 603-669-5555
Fax 603-669-7036
Web Page www.hoyletanner.com
Hoyle Tanner & Associates © 2009

DESIGNED BY	DRAWN BY	CHECKED BY
BAD	RAM	JDM

DO NOT SCALE DRAWING

BRUNSWICK EXECUTIVE AIRPORT
BRUNSWICK, MAINE

TERMINAL AREA PLAN

SCALE: 1" = 200'
DATE: 08/06/2010

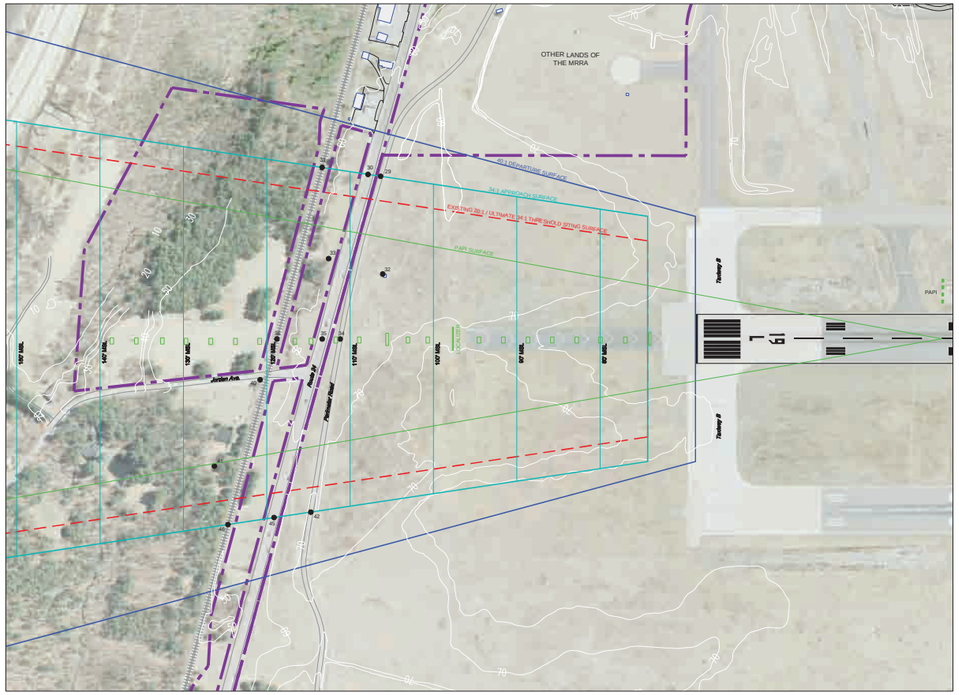
REVISIONS

NO.	DATE	DESCRIPTION	BY

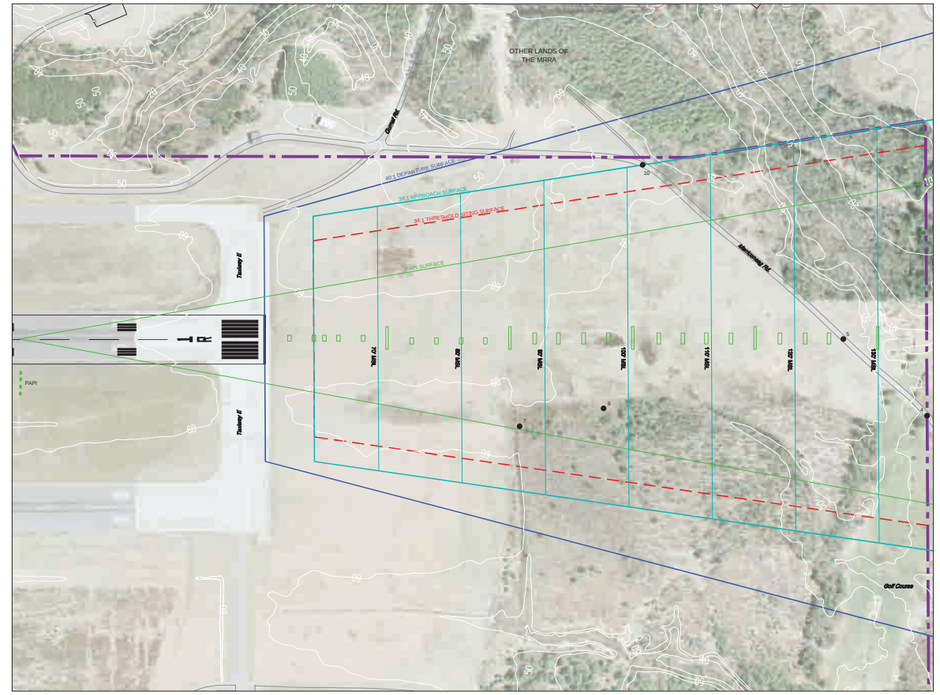
PROJ. No.: 391101
FILE NAME: 2814-PL201-TERM
AIP No.:
DRAWING NO.

SHEET 4 OF 9

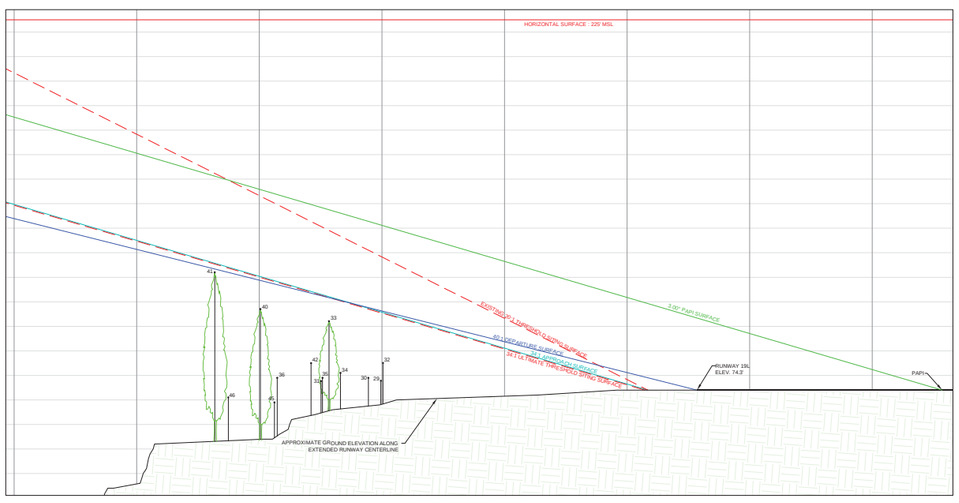
LAST SAVED BY: BTORRES on Friday August 6, 2010
PLOTTED BY: Richard Morrison
PLOT DATE/TIME: August 6, 2010 - 10:51:12 AM



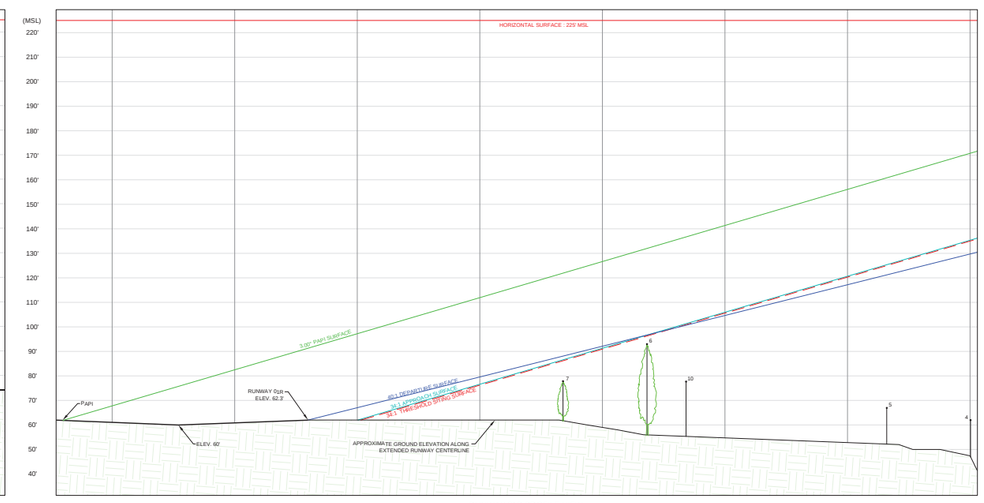
RUNWAY 19L PLAN VIEW
SCALE 1" = 200'



RUNWAY 01R PLAN VIEW
SCALE 1" = 200'



RUNWAY 19L PROFILE VIEW
VERTICAL SCALE 1" = 20'
HORIZONTAL SCALE 1" = 200'



RUNWAY 01R PROFILE VIEW
VERTICAL SCALE 1" = 20'
HORIZONTAL SCALE 1" = 200'

RUNWAY 19L OBSTRUCTION DISPOSITION CHART

NO.	DESCRIPTION	TOP ELEVATION (MSL)	PART 77 HEIGHT	PENETRATION	DISPOSITION
29	PERIMETER RD	78'	106.3'	-28.3'	NO ACTION
30	ROUTE 24	79'	107.8'	-28.8'	NO ACTION
31	RAILROAD	77'	113.4'	-36.4'	NO ACTION
32	NEW ILS DME ANTENNA (OE)	85.86'	106.1'	-20.24'	NO ACTION
33	TREES (OE)	102.9'	112.6'	-9.7'	NO ACTION
34	PERIMETER RD	81'	111.2'	-30.2'	NO ACTION
35	ROUTE 24	79'	113.3'	-34.3'	NO ACTION
36	RAILROAD	79'	118.8'	-39.8'	NO ACTION
40	TREES (OE)	107.4'	120.8'	-13.4'	NO ACTION
41	TREES (OE)	122.4'	126.3'	-3.9'	NO ACTION
42	PERIMETER RD	85'	114.7'	-29.7'	NO ACTION
45	ROUTE 24	69'	119.1'	-50.1'	NO ACTION
46	RAILROAD	71'	124.7'	-53.7'	NO ACTION

Note: Positive values denote penetration; negative values (-) denote clearance.
(OE) designates obstruction data provided by the Navy.

LEGEND

EXISTING	DESCRIPTION	ULTIMATE
	OTHER BUILDINGS	
	AIRPORT BOUNDARY	
	OTHER LANDS OF THE MRRA	
	ROADS	
	RAILROAD	
	GROUND ELEVATION CONTOURS	
	APPROACH LIGHT SYSTEM	

RUNWAY 01R OBSTRUCTION DISPOSITION CHART

NO.	DESCRIPTION	TOP ELEVATION (MSL)	PART 77 HEIGHT	PENETRATION	DISPOSITION
4	MERRICONEAG ROAD	62'	135.3'	-73.3'	NO ACTION
5	MERRICONEAG ROAD	67'	125.8'	-58.8'	NO ACTION
6	TREES (OE)	93'	97'	-4'	NO ACTION
7	TREES (OE)	78.7'	86.9'	-8.2'	NO ACTION
10	MERRICONEAG ROAD	77'	101.8'	-24.8'	NO ACTION

Note: Positive values denote penetration; negative values (-) denote clearance.
(OE) designates obstruction data provided by the Navy.

MAG. DECLINATION 16°10' W (Dec 2009)
Source: NGDC

Reference: Horizontal Datum - NAD 83
Vertical Datum - NAVD 88

Notes:
1. Ground contour intervals are 10 feet (shown) based on 2-foot contour intervals (not shown). Aerial photography and topographic mapping provided by the MRRA.

Part 77 Additional Elevation
1. 17' for an interstate Highway
2. 15' for any other public roadway
3. 23' for a Railroad

ENGINEER'S SEAL

AECOM
TRANSPORTATION
AECOM USA, Inc.
100 MIDDLESEX PARKWAY, SUITE 160
THE CENTRAL, PRINCETON JUNCTION
TEL 609.896.1000 FAX 609.896.1010
www.aecom.com

Hoyle, Tanner & Associates, Inc.
160 Dow Street
Manchester, NH 03101-1127
Tel 603-669-5555
Fax 603-669-7400
Web Page www.hoyletanner.com
Hoyle Tanner & Associates © 2008

DESIGNED BY	DRAWN BY	CHECKED BY
BAD	RAM	JDM

DO NOT SCALE DRAWING

BRUNSWICK EXECUTIVE AIRPORT
BRUNSWICK, MAINE

RUNWAY 01R-19L INNER APPROACH SURFACES

SCALE: AS SHOWN
DATE: 08/06/2010

REVISIONS

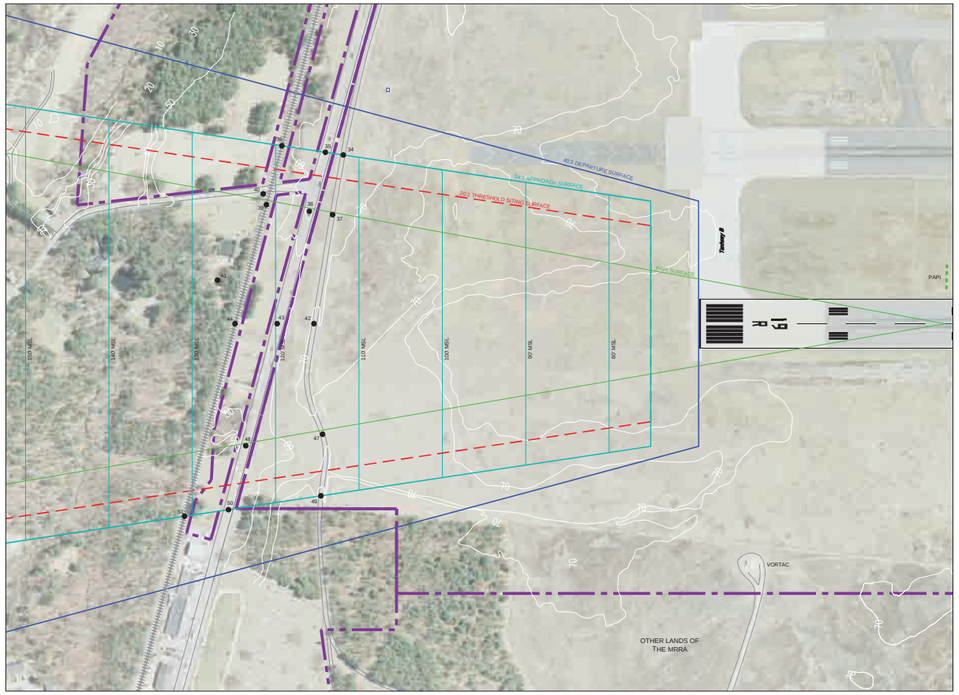
REV. NO.	DATE	DESCRIPTION	BY

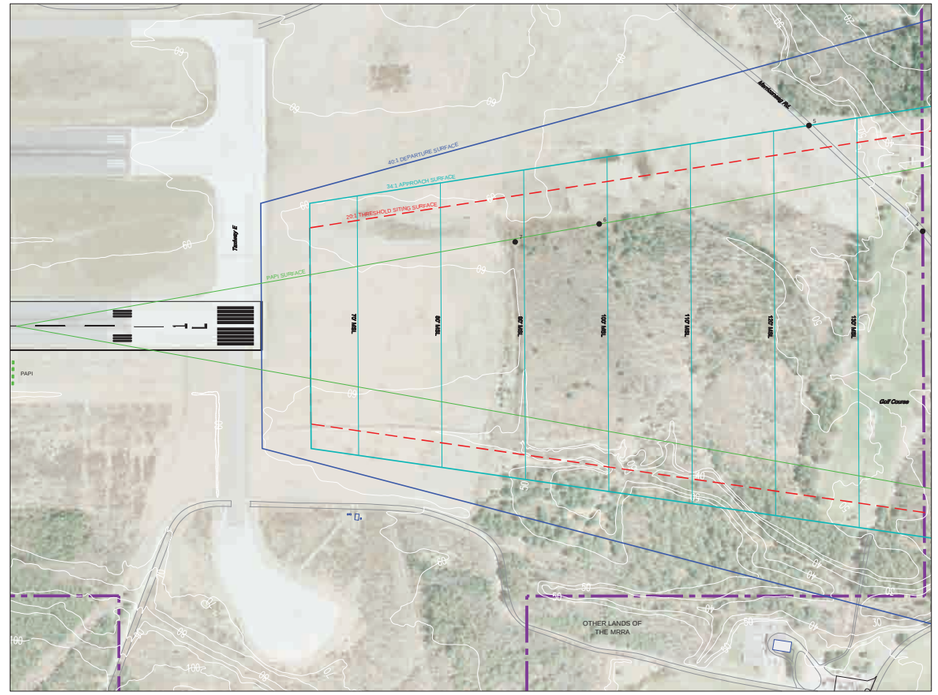
PROJ. No. 391101
FILE NAME 2814-PL401-APP-1R
AIP NO.
DRAWING NO.

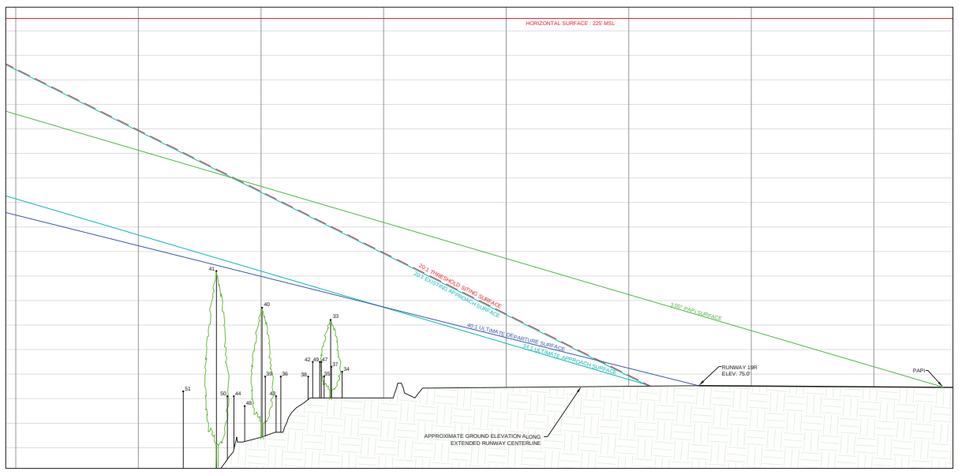
SHEET 5 OF 9

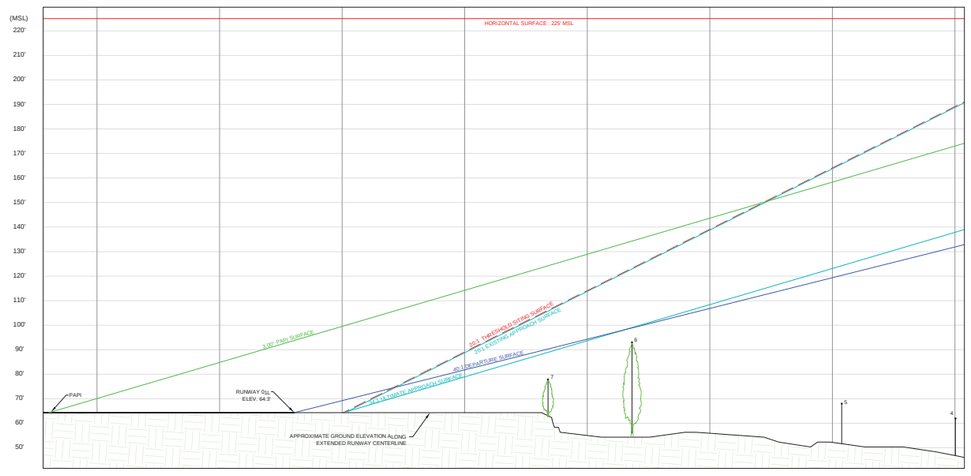
LAST SAVED BY: MCVORIS ON August 6, 2010

PLOT DATE: 8/6/2010
PLOTTED BY: Mark A. Voris
PLOT SCALE: 1:1
PLOT DEVICE: DWG To PDF.pc3









RUNWAY 19L OBSTRUCTION DISPOSITION CHART

NO.	DESCRIPTION	TOP ELEVATION (MSL)	PART 77 HEIGHT	PENETRATION	DISPOSITION
34	PERIMETER RD	81'	111.9'	-30.9'	NO ACTION
35	ROUTE 24	79'	114.0'	-36'	NO ACTION
36	RAILROAD	79'	119.2'	-40.2'	NO ACTION
37	PERIMETER RD	83'	113.2'	-30.2'	NO ACTION
38	ROUTE 24	79'	116.0'	-37'	NO ACTION
39	RAILROAD	79'	121.1'	-42.1'	NO ACTION
40	TREES (OE)	107.4'	121.5'	-14.1'	NO ACTION
41	TREES (OE)	122.4'	127.0'	-4.6'	NO ACTION
42	PERIMETER RD	85'	115.4'	-30.4'	NO ACTION
43	ROUTE 24	71'	119.8'	-48.8'	NO ACTION
44	RAILROAD	71'	124.9'	-53.9'	NO ACTION
47	PERIMETER RD	85'	114.4'	-29.4'	NO ACTION
48	ROUTE 24	67'	123.6'	-56.6'	NO ACTION
49	PERIMETER RD	85'	114.6'	-29.6'	NO ACTION
50	ROUTE 24	71'	125.7'	-54.7'	NO ACTION
51	RAILROAD	73'	130.9'	-57.9'	NO ACTION

Note: Positive values denote penetration; negative values (-) denote clearance.
(OE) designates obstruction data provided by the hiaxy.

LEGEND

EXISTING	DESCRIPTION	ULTIMATE
	OTHER BUILDINGS	
	AIRPORT BOUNDARY	
	OTHER LANDS OF THE MRRA	
	ROADS	
	RAILROAD	
	GROUND ELEVATION CONTOURS	

RUNWAY 01R OBSTRUCTION DISPOSITION CHART

NO.	DESCRIPTION	TOP ELEVATION (MSL)	PART 77 HEIGHT	PENETRATION	DISPOSITION
4	MERRICONEAG ROAD	62'	137.8'	-75.8'	NO ACTION
5	MERRICONEAG ROAD	68'	124.1'	-56.1'	NO ACTION
6	TREES (OE)	93'	98.9'	-5.9'	NO ACTION
7	TREES (OE)	78.7'	88.9'	-10.2'	NO ACTION

MAG. DECLINATION 16°10' W (Dec 2009)
Source: NGDC

Reference: Horizontal Datum - NAD 83
Vertical Datum - NAVD 88

Notes:
1. Ground contour intervals are 10 feet (shown) based on 2-foot contour intervals (not shown). Aerial photography and topographic mapping provided by the MRRA.

Part 77 Additional Elevation
1. 17' for an interstate Highway
2. 15' for any other public roadway
3. 23' for a Railroad

ENGINEER'S SEAL

AECOM
TRANSPORTATION
AECOM USA, Inc.
100 MIDDLESEX PARKWAY, SUITE 160
TOL-CENTRAL OFFICE PARK, BUILDING 3
TOLL FREE: 1-800-272-7337
TEL: 609-896-7600
www.aecom.com

Hoyle, Tanner & Associates, Inc.
160 Dow Street
Manchester, NH 03101-1127
Tel: 603-669-5555
Fax: 603-669-7958
Web Page: www.hoyletanner.com
Hoyle Tanner & Associates © 2009

DESIGNED BY	DRAWN BY	CHECKED BY
BAD	RAM	JDM

DO NOT SCALE DRAWING

BRUNSWICK EXECUTIVE AIRPORT
BRUNSWICK, MAINE

RUNWAY 01L-19R INNER APPROACH SURFACES

SCALE: AS SHOWN
DATE: 08/06/2010

REVISIONS

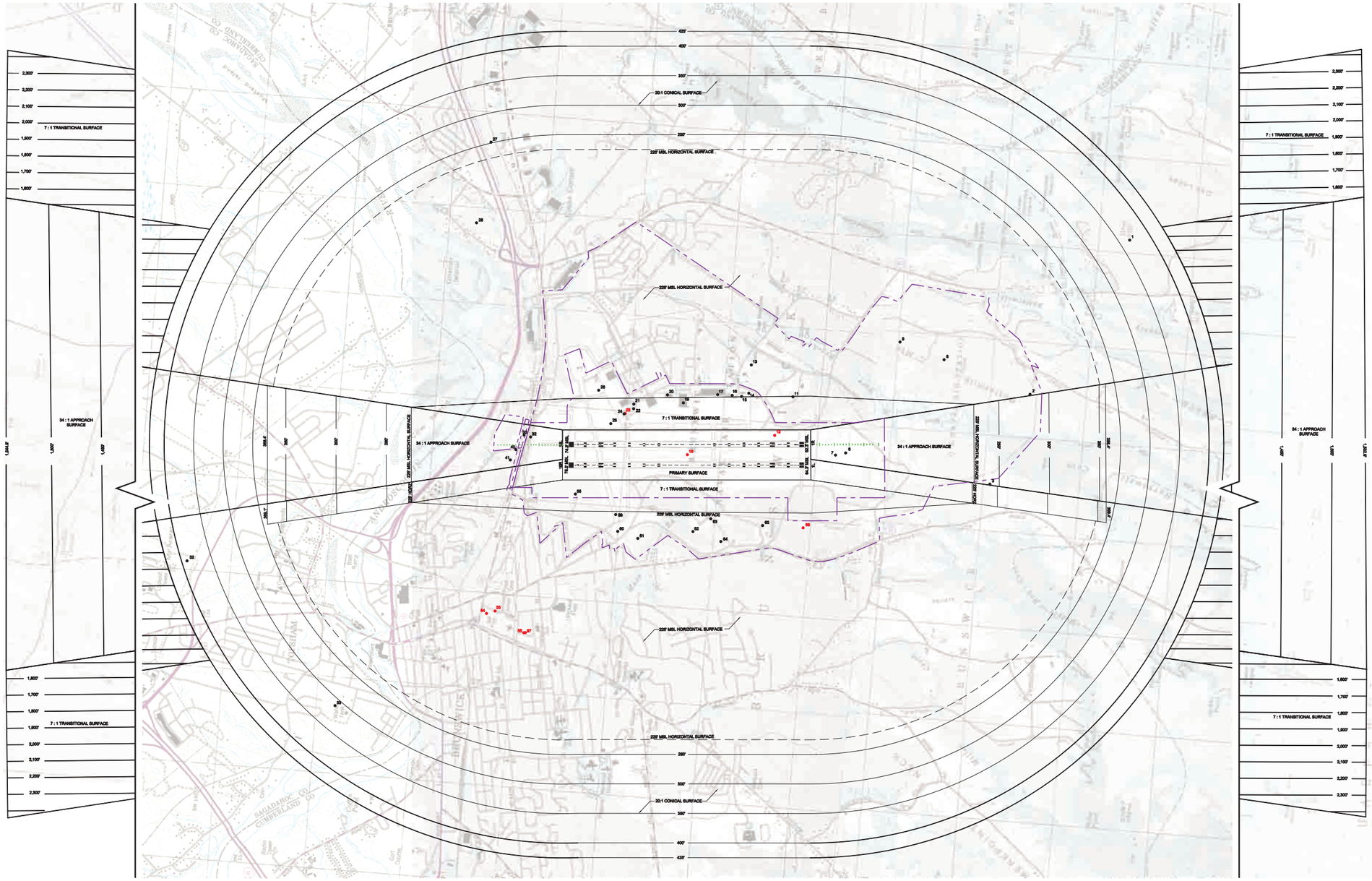
REV. NO.	DATE	DESCRIPTION	BY

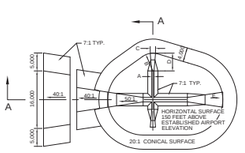
PROJ. No. 391101
FILE NAME 2814-PL402-APP-1L
AIP NO.
DRAWING NO.

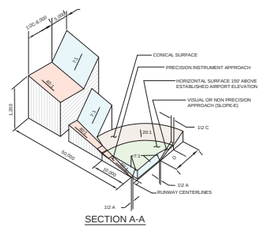
SHEET 6 OF 9

LAT NAD 83: 40°02'03.38 August 6, 2010

N:\MCL\391101\Acad\Plans-Profiles\2814-PL402-APP-1L.DWG







SECTION A-A

PART 77 ISOMETRIC

D/M	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	C	D	
A	WIDTH OF PRIMARY SURFACE AND WIDTH OF FIRST SECTION OF APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	"
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	"

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET
Source: FAA AC 150/5300-13
Note: See Sheet 3: Airport Layout Plan depicting modification to standard for approach surface slopes.

FAA's approval of this Airport Layout Plan (ALP) represents acceptance of the general location of future facilities depicted. During the preliminary design phase, the airport owner is required to resubmit for approval the final locations, heights and exterior finish of structures. FAA's concern is obstructions, impact on electronic aids or adverse effects on controller view of aircraft approach and ground movement areas which could adversely affect the safety, efficiency or utility of the airport.

Note:
1. Refer to inner portion of approach drawings for details on any close-in approach obstructions. (Sheet 5 & 6)

2. Land Use - See Sheet 8: Land-Use Plan

OBSTRUCTIONS

NO.	DESCRIPTION	TOP ELEVATION (MSL)	PART 77 HEIGHT	PENETRATION	DISPOSITION	NO.	DESCRIPTION	TOP ELEVATION (MSL)	PART 77 HEIGHT	PENETRATION	DISPOSITION
1	ORRS HILL / TREES (OE)	254'	366.9'	-112.9'	NO ACTION	26	HANGAR 6 (OE)	161'	22'0	-64'	NO ACTION
2	WTA / TREES (OE)	194'	225'	-31'	NO ACTION	27	TOWER (2003 - ANE - 835 - OE)	240'	251.6'	-11.6'	NO ACTION
3	WTA / TREES (OE)	154'	240.6'	-86.6'	NO ACTION	28*	POWER PYLON (OE)	207'	22'0	-18'	NO ACTION
6	TREES (OE)	93'	97'	-4'	NO ACTION	32	NEW ILS DME ANTENNA (OE)	85.80'	106.1'	-20.34'	NO ACTION
7	TREES (OE)	78.7'	86.9'	-8.2'	NO ACTION	33	TREES (OE)	102.9'	112.6'	-9.7'	NO ACTION
8	BUTTERMILK MOUNTAIN / TREES (OE)	214'	225'	-11'	NO ACTION	40	TREES (OE)	107.4'	120.8'	-13.4'	NO ACTION
9	TACAN ANTENNA (OE)	181'	225'	-44'	NO ACTION	41	TREES (OE)	122.4'	126.3'	-3.9'	NO ACTION
11	TOWER (OE)	139'	222.1'	-83.1'	NO ACTION	52	WTA / TREES	234'	391'	-157'	NO ACTION
12	GLIDE SLOPE ANTENNA (OE)	197.5504'	62'	45.5504'	NO ACTION	53	TOWER (2006 - ANE - 1028 - OE)	292'	311.4'	-19.4'	NO ACTION
13	AIRPORT ROTATING BEACON TOWER (OE)	220'	225'	-5'	NO ACTION	54	TOWER	220'	22'0	'0	TBD
14	AIRFIELD SUPPORT BUILDING (OE)	83'	225'	-142'	NO ACTION	55	CRANE (1000) (2006 - ANE - 1458 - OE)	313'	22'0	90'	TBD
15	T-56 ENGINE TEST FACILITY (OE)	79'	225'	-146'	TO BE REMOVED	56	ANTENNA (2006 - ANE - 930 - OE)	24'0'	22'0	20'	TBD
16	F3 SUPPORT FACILITY (OE)	80'	225'	-146'	NO ACTION	57	STUDENT UNION BUILDING	25'0'	22'0	3'0'	TBD
17	HANGAR 5 (OE)	173.7'	225'	-51.3'	NO ACTION	58	TOP VORTAC	120.9'	178.2'	-57.3'	NO ACTION
18	GCA TURNTABLE (PP663) (OE)	35'	68'	27'	TO BE REMOVED	59	ATC TOWER (SE CORNER)	199'	22'0	-26'	NO ACTION
19	HANGAR 4 (OE)	169'	197'	-28'	NO ACTION	60	ANTENNA	19'0'	22'0	-30'	NO ACTION
20	MECHANICAL / SHOP BUILDING (OE)	99'	225'	-126'	NO ACTION	61	ANTENNA	202'	22'0	-23'	NO ACTION
21	HAZMAT TRANSFER FACILITY (OE)	91'	195.6'	-104.6'	TO BE REMOVED	62	ANTENNA	211.2'	22'0	-11.8'	NO ACTION
22	ARFF / SRE FACILITY (OE)	10'0'	17'2'	-72'	TO BE REMOVED	63	XMTR POLE	16'0'	22'0	-60'	NO ACTION
23	FBO TOWER (ANTENNA) (OE)	156.7'	160.0'	3.3'	NO ACTION	64	ANTENNA	20'0'	22'0	-19'	NO ACTION
24	FBO TOWER (ROOF) (OE)	13'0'	146.8'	-13.8'	NO ACTION	65	ASR ANTENNA	183.9'	22'0	-41.1'	NO ACTION
25	WEATHER STATION (LIMO 5) (OE)	86.9'	102.1'	-15.2'	NO ACTION	66	ANTENNA	246.3'	22'0	21.3'	TBD

Note: Positive values denote penetration; negative values (-) denote clearance.
Red Text denotes object penetration of surfaces.
Source: USGS Digital Raster Graphic (DRG) data received for the following quadrangle locations: Bowdoinham, Brunswick, Orrs Island, and Bailey Island. Obstruction data points provided by the U.S. Navy.

* Power Pylons are 79' AGL in multiple rows surrounding the Northern side of the airport; obstruction # 28 is the most critical.

LEGEND

EXISTING	DESCRIPTION
	OTHER LANDS OF THE MRRA
	AIRPORT BOUNDARY
	ROADS
	APPROACH LIGHT SYSTEM

N

1,200' 600' 0 1,200' 2,400'

GRAPHIC SCALE: FEET

ENGINEER'S SEAL

AECOM

TRANSPORTATION

FECHEIMER BLDG. Inc.
TWO CHAUNCY PLACE, SUITE 100
THE CHAUNCY, 2 PRINCE LUNA, 12103
TEL 518.689.0500 FAX 518.689.0501
WWW.AECOM.COM

Hoyle, Tanner & Associates, Inc.
100 Dow Street
Manchester, NH 03101-1127
Tel 603-669-5555
Fax 603-669-8928
Web Page www.hoyletanner.com
Hoyle, Tanner & Associates © 2008

DO NOT SCALE DRAWING

DESIGNED BY	DRAWN BY	CHECKED BY
BAD	RAM	JDM

BRUNSWICK EXECUTIVE AIRPORT
BRUNSWICK, MAINE

PART 77 AIRSPACE SURFACES

SCALE: 1" = 1,200'
DATE: 08/06/2010

REVISIONS

REV.	DATE	BY

PROJ. No. 391101
FILE NAME 2814–PL404–AIRS
AIP No.
DRAWING NO.

SHEET 7 OF 9

LAST SAVED BY: METERS OR August 4, 2010
J:\2814\PROJECTS\PLANS\PART 77\PART 77 AIRSPACE SURFACES.DWG

ENGINEER'S SEAL

AECOM
TRANSPORTATION
AECOM USA, Inc.
100 MIDDLESEX PARKWAY, SUITE 100
TIC-CENTRAL, PRINCETON, NJ 08540
TEL: 609.936.2000 FAX: 609.936.2020
www.aecom.com

Hoyle, Tanner & Associates, Inc.
160 Dow Street
Manchester, NH 03101-1127
Tel: 603-669-5555
Fax: 603-669-7036
Web Page: www.hoyletanner.com
Hoyle Tanner & Associates © 2009

DESIGNED BY	DRAWN BY	CHECKED BY
BAD	RAM	JDM

DO NOT SCALE DRAWING

BRUNSWICK EXECUTIVE AIRPORT
BRUNSWICK, MAINE

LAND USE PLAN WITH 2031 NOISE CONTOURS

DATE: 08/06/2010
SCALE: 1" = 600'

REVISIONS

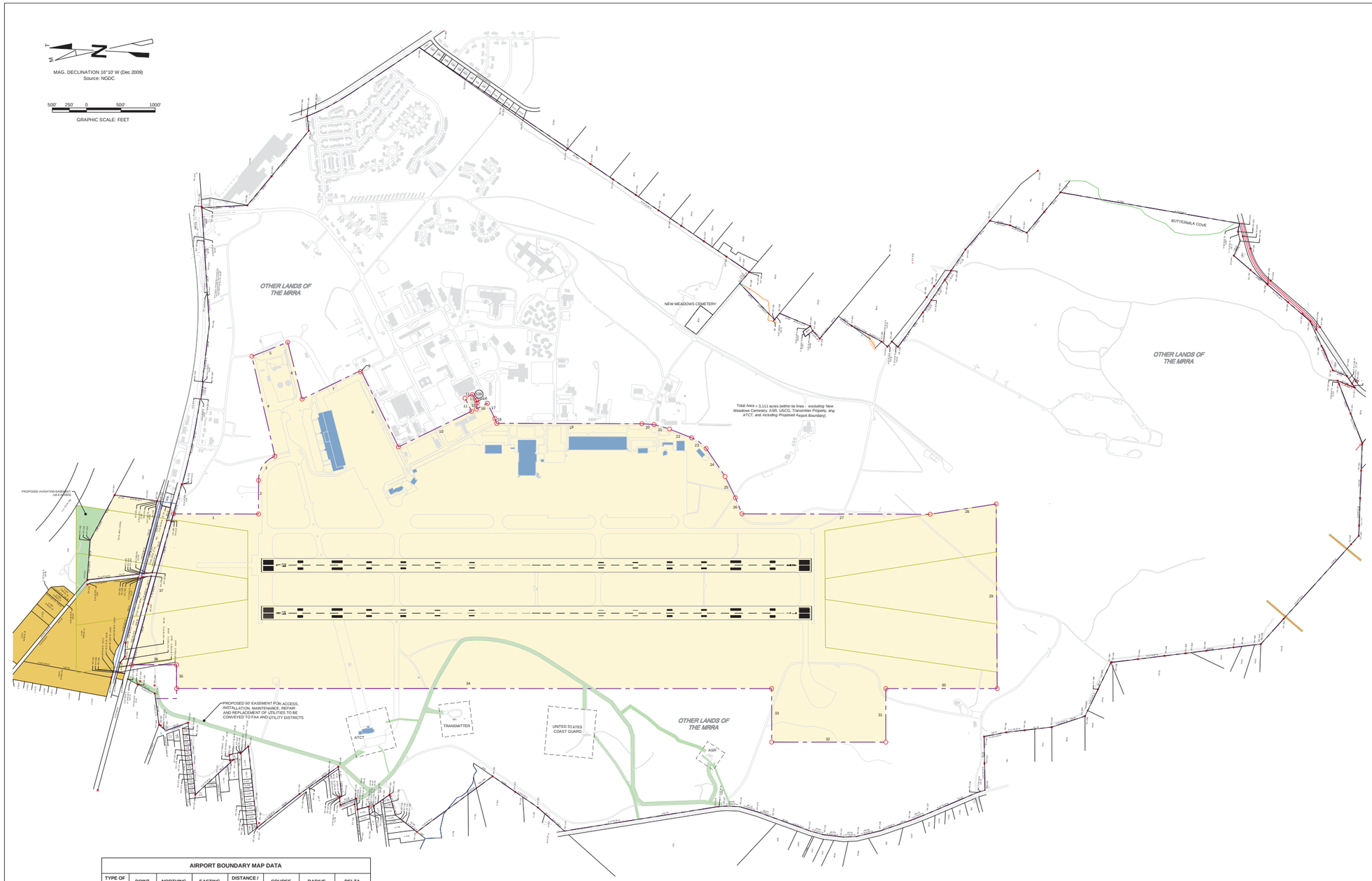
REV.	DATE	DESCRIPTION	BY

PROJ. No.: 391101
FILE NAME: 2814–PL501–LAND–NOIS
AIP No.:
DRAWING NO.

SHEET 8 OF 9

LAST SAVED BY: MCRISE ON August 18, 2010

PLOTTED BY: MCRISE ON AUGUST 18, 2010
H:\CAD\BNA\BNA-MASTER-PLAN\BNA-MASTER-PLAN-LAND-NOISE.DWG



AIRPORT BOUNDARY MAP DATA

TYPE OF DATA	POINT	NORTHING	EASTING	DISTANCE / ARC LENGTH	COURSE	RADIUS	DELTA
Line	1	90910.2906	605693.3557	1239.1197	S 4° 3' 49" E		
Line	2	89674.2467	605781.1674	491.3896	N 85° 56' 11" E		
Arc	3	89708.0696	606271.3216	1857.1782		367.5161'	289° 32' 3"
Line	4	89496.5750	606638.2777	1494.7887	N 72° 53' 12" E		
Line	5	89936.4342	608066.8844	561.2989'	S 25° 39' 25" E		
Line	6	89430.4776	608309.9160	855.2532'	S 71° 37' 42" W		
Line	7	89160.9154	607498.2546	913.6342'	S 30° 9' 0" E		
Arc	8	88314.8488	607942.5805	91.0458'		54.4294'	64° 15' 38"
Line	9	88314.6692	607942.3888	1200.0897'	S 59° 44' 57" W		
Line	10	87710.0788	606905.7184	1185.2709'	S 30° 7' 37" E		
Line	11	86684.9209	607505.6287	214.2962	N 59° 11' 50" E		
Line	12	86794.6588	607684.6952	120.0942'	S 30° 31' 55" E		
Line	13	86691.2160	607745.7092	105.0102'	S 55° 59' 23" W		
Line	14	86625.1161	607664.1088	37.8311'	S 72° 44' 55" W		
Line	15	86613.8967	607627.9796	89.5906'	N 88° 25' 9" W		
Line	16	86616.3685	607538.4231	181.3009'	S 31° 48' 13" E		
Line	17	86462.2880	607633.9701	246.3817'	S 59° 36' 32" W		
Line	18	86337.6438	607421.4431	76.7484'	S 65° 44' 47" W		
Line	19	86306.1172	607351.4688	2116.3944'	S 4° 0' 55" E		
Line	20	84194.9178	607499.6668	178.1768'	S 0° 17' 42" E		
Arc	21	84016.7434	607500.5846	11459.0722'		1860.7721'	352° 50' 27"
Line	22	83789.4853	607452.1955	348.4326'	S 17° 16' 38" W		
Arc	23	83455.8195	607348.4158	3562.1084'		605.09'	335° 4' 47"
Line	24	83233.2144	607208.6709	492.769'	S 51° 54' 23" W		
Line	25	82929.2002	606820.8609	344.2725'	S 59° 47' 55" W		
Line	26	82756.0176	606523.3187	253.2049'	S 63° 39' 51" W		
Line	27	82643.6875	606296.3943	2742.862	S 4° 2' 11" E		
Line	28	79907.8282	606489.4462	673.2681	S 13° 2' 43" E		
Line	29	78959.6782	606706.1330	2690.6087	S 85° 30' 29" W		
Line	30	78746.9513	604026.7889	1623.0646'	N 4° 9' 54" W		
Line	31	80367.7493	603908.9044	781.0241'	S 85° 51' 59" W		
Line	32	80311.4495	603125.9122	1663.8125'	N 4° 6' 25" W		
Line	33	81870.9896	603010.7530	779.3361	N 85° 49' 22" E		
Line	34	82027.7595	603788.0187	8674.7569'	N 4° 9' 54" W		
Line	35	90679.6458	603157.9688	345.1420'	N 85° 49' 48" E		
Line	36	90704.7432	603502.1971	654.0346'	N 4° 4' 59" W		
Line	37	91357.2344	603455.6017	2281.9592'	S 78° 42' 15" E		

LEGEND

EXISTING	DESCRIPTION
	AIRPORT BOUNDARY
	OTHER LANDS OF THE MRRA
	EXISTING AVIGATION EASEMENT
	PROPOSED AVIGATION EASEMENT
	RUNWAY PROTECTION ZONE (RPZ)

Notes:

1. The proposed Airport Boundary (as shown) is presented in the following geodetic coordinates.
   a. Horizontal datum (State Plane) - NAD 83 - 1801 Maine East (1983)
   b. Vertical datum - NAVD 88
2. The proposed Airport Boundary (as shown) is approximately 974 acres.
3. The underlying base map (as shown) was provided by the MRRA and is not dated.
4. The Other Lands of the MRRA is property data provided by the U.S. Navy.

Disclaimer:

This Airport Property Map is a graphic illustration for airport planning and discussion purposes only. This map should not be used for conveyances or for any other legal use without the signature and seal of a licensed professional engineer or land surveyor.

ENGINEER'S SEAL

AECOM
TRANSPORTATION
AECOM USA, Inc.
1600 RIVERSIDE AVENUE, SUITE 100
THE CENTRAL, PITTSBURGH, 15233
TEL: 412-921-7090 FAX: 412-921-7093
www.aecom.com

Hoyle, Tanner & Associates, Inc.
160 Dow Street
Manchester, NH 03101-1127
Tel: 603-669-5555
Fax: 603-669-7411
Web Page: www.hoyletanner.com
Hoyle Tanner & Associates © 2009

DESIGNED BY	DRAWN BY	CHECKED BY
BAD	RAM	JDM

DO NOT SCALE DRAWING

BRUNSWICK EXECUTIVE AIRPORT
BRUNSWICK, MAINE

AIRPORT PROPERTY MAP

SCALE: 1" = 500'
DATE: 08/06/2010

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. No.: 391101
FILE NAME: 2814--PL601--PMAP
AIP No.:
DRAWING NO.

SHEET 9 OF 9

LAST SAVED BY: MCTORE ON August 6, 2010

PLOT SCALE 1:1000
PLOT DATE 8/6/2010 9:11:41 AM
P:\PROJECTS\2814 - PLAN - PROP.DWG