

ROBERT A. LAFLEUR MUNICIPAL AIRPORT

WATERVILLE, MAINE



AIRPORT MASTER PLAN UPDATE - PHASE II

AIP NO. 3-23-0047-16

SPONSORED BY:

CITY OF WATERVILLE
 APPROVED BY: *Michael Roy* DATE: 4/6/12
CITY MANAGER

MAINE DEPARTMENT OF TRANSPORTATION
 APPROVED BY: *Scott W. Allen* DATE: 6/7/12
DIRECTOR

FEDERAL AVIATION ADMINISTRATION
 APPROVED BY: _____ DATE: _____
MANAGER OF PLANNING

SUBMITTED BY: _____ DATE: _____
PROJECT MANAGER

PREPARED BY:

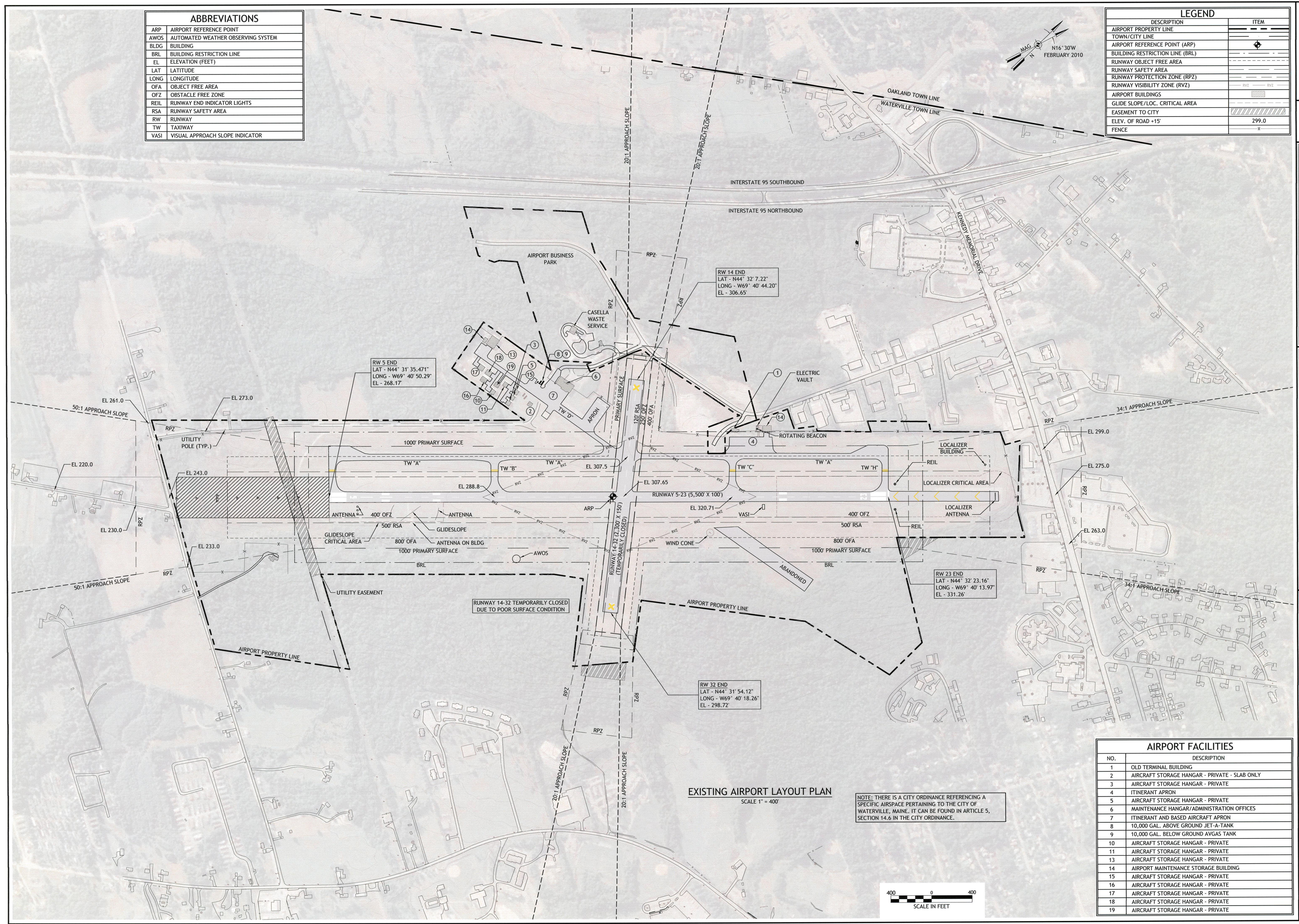
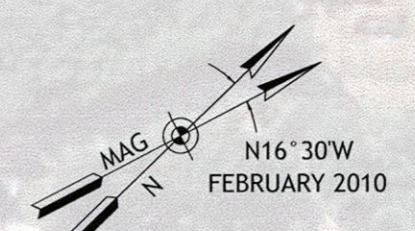
AIRPORT SOLUTIONS GROUP
 INNOVATIVE AIRPORT DEVELOPMENT SPECIALISTS

PHONE (781) 491-0083 FAX (781) 491-0360
 AIRPORT CONSULTANTS WOBURN, MASSACHUSETTS

DATE: _____ DECEMBER 2011

ABBREVIATIONS	
ARP	AIRPORT REFERENCE POINT
AWOS	AUTOMATED WEATHER OBSERVING SYSTEM
BLDG	BUILDING
BRL	BUILDING RESTRICTION LINE
EL	ELEVATION (FEET)
LAT	LATITUDE
LONG	LONGITUDE
OFA	OBJECT FREE AREA
OFZ	OBSTACLE FREE ZONE
REIL	RUNWAY END INDICATOR LIGHTS
RSA	RUNWAY SAFETY AREA
RW	RUNWAY
TW	TAXIWAY
VASI	VISUAL APPROACH SLOPE INDICATOR

LEGEND	
DESCRIPTION	ITEM
AIRPORT PROPERTY LINE	---
TOWN/CITY LINE	---
AIRPORT REFERENCE POINT (ARP)	+
BUILDING RESTRICTION LINE (BRL)	---
RUNWAY OBJECT FREE AREA	---
RUNWAY SAFETY AREA	---
RUNWAY PROTECTION ZONE (RPZ)	---
RUNWAY VISIBILITY ZONE (RVZ)	---
AIRPORT BUILDINGS	---
GLIDE SLOPE/LOC. CRITICAL AREA	---
EASEMENT TO CITY	---
ELEV. OF ROAD +15'	299.0
FENCE	x



RW 5 END
LAT - N44° 31' 35.471"
LONG - W69° 40' 50.29"
EL - 268.17

RW 14 END
LAT - N44° 32' 7.22"
LONG - W69° 40' 44.20"
EL - 306.65

RW 23 END
LAT - N44° 32' 23.16"
LONG - W69° 40' 13.97"
EL - 331.26

RW 32 END
LAT - N44° 31' 54.12"
LONG - W69° 40' 18.26"
EL - 298.72

RUNWAY 14-32 TEMPORARILY CLOSED
DUE TO POOR SURFACE CONDITION

EXISTING AIRPORT LAYOUT PLAN
SCALE 1" = 400'

NOTE: THERE IS A CITY ORDINANCE REFERENCING A SPECIFIC AIRSPACE PERTAINING TO THE CITY OF WATERVILLE, MAINE. IT CAN BE FOUND IN ARTICLE 5, SECTION 14.6 IN THE CITY ORDINANCE.



AIRPORT FACILITIES	
NO.	DESCRIPTION
1	OLD TERMINAL BUILDING
2	AIRCRAFT STORAGE HANGAR - PRIVATE - SLAB ONLY
3	AIRCRAFT STORAGE HANGAR - PRIVATE
4	ITINERANT APRON
5	AIRCRAFT STORAGE HANGAR - PRIVATE
6	MAINTENANCE HANGAR/ADMINISTRATION OFFICES
7	ITINERANT AND BASED AIRCRAFT APRON
8	10,000 GAL. ABOVE GROUND JET-A-TANK
9	10,000 GAL. BELOW GROUND AVGAS TANK
10	AIRCRAFT STORAGE HANGAR - PRIVATE
11	AIRCRAFT STORAGE HANGAR - PRIVATE
13	AIRCRAFT STORAGE HANGAR - PRIVATE
14	AIRPORT MAINTENANCE STORAGE BUILDING
15	AIRCRAFT STORAGE HANGAR - PRIVATE
16	AIRCRAFT STORAGE HANGAR - PRIVATE
17	AIRCRAFT STORAGE HANGAR - PRIVATE
18	AIRCRAFT STORAGE HANGAR - PRIVATE
19	AIRCRAFT STORAGE HANGAR - PRIVATE

CAD FILE:	WW_Exhibit_1_Existing-1-10.dwg
A.I.P. PROJECT NO.	3-23-0047-16
REV.	
DATE	
DESCRIPTION	

AIRPORT SOLUTIONS GROUP
 INNOVATIVE AIRPORT DEVELOPMENT SPECIALISTS
 AIRPORT CONSULTANTS • WOBURN, MASSACHUSETTS

WATERVILLE ROBERT LaFLEUR MUNICIPAL AIRPORT
 1 COMMON STREET • WATERVILLE, ME 04801
 (207) 860-4203

SHEET TITLE: EXISTING AIRPORT LAYOUT PLAN
 PROJECT: AIRPORT MASTER PLAN UPDATE - PHASE II
 DESIGNER: T.J.L. CAD TECH: T.J.L. APPROVED: E.P.L.

DECEMBER, 2011

EXHIBIT I

SHEET 1 OF 8

Robert A. LaFleur Airport - Summary of Airport Design Data

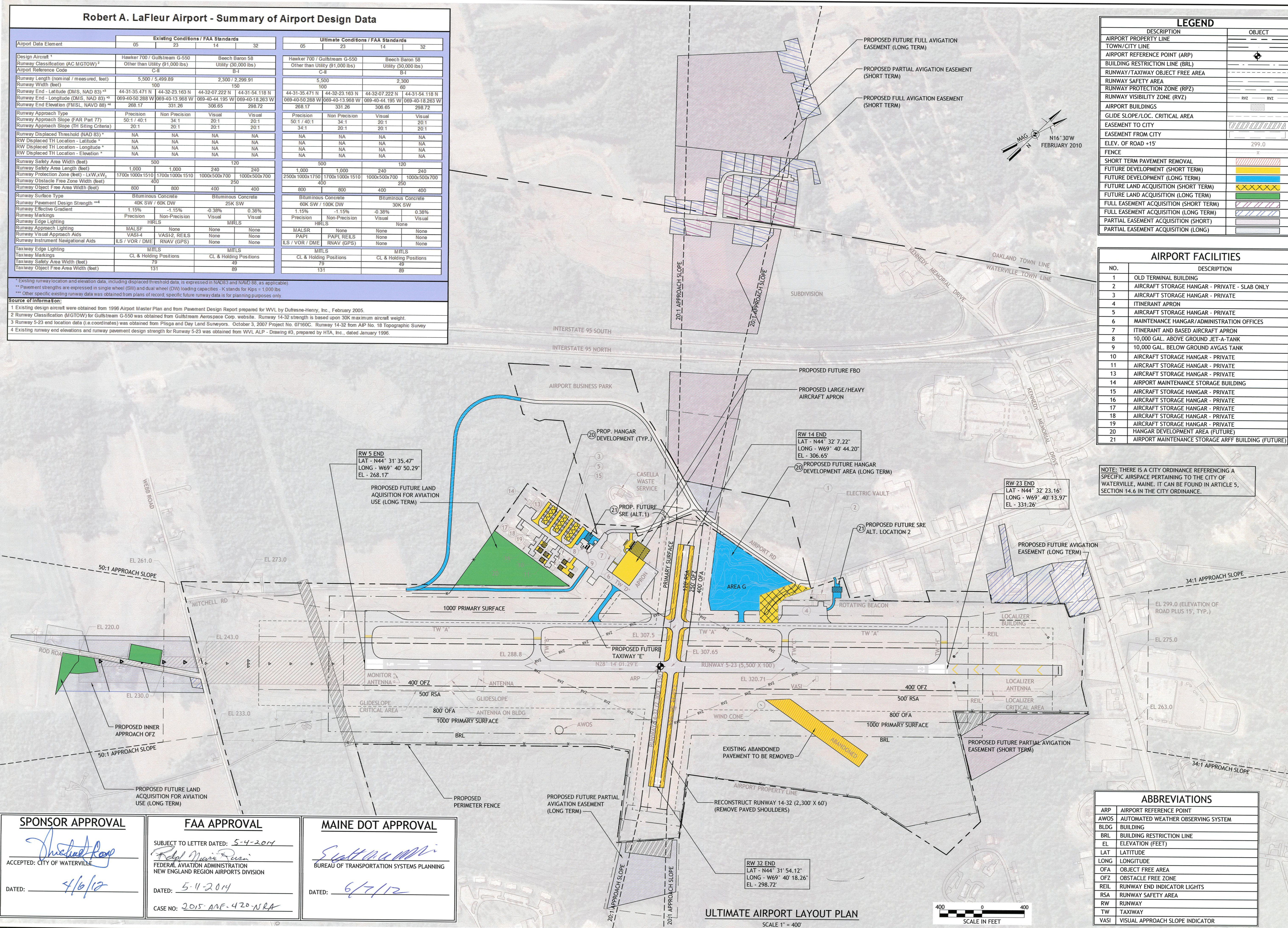
Airport Data Element	Existing Conditions / FAA Standards				Ultimate Conditions / FAA Standards			
	05	23	14	32	05	23	14	32
Design Aircraft *	Hawker 700 / Gulfstream G-550		Beech Baron 58		Hawker 700 / Gulfstream G-550		Beech Baron 58	
Runway Classification (AC/MGTOW) †	Other than Utility (91,000 lbs)		Utility (30,000 lbs)		Other than Utility (91,000 lbs)		Utility (30,000 lbs)	
Airport Reference Code	C-II				C-II			
Runway Length (nominal / measured, feet)	5,500 / 5,499.89		2,300 / 2,299.91		5,500		2,300	
Runway Width (feet)	100		150		100		150	
Runway End - Latitude (DMS, NAD 83) **	44-31-35.471 N	44-32-23.163 N	44-32-07.222 N	44-31-54.118 N	44-31-35.471 N	44-32-23.163 N	44-32-07.222 N	44-31-54.118 N
Runway End - Longitude (DMS, NAD 83) **	069-40-50.288 W	069-40-13.968 W	069-40-44.195 W	069-40-18.263 W	069-40-50.288 W	069-40-13.968 W	069-40-44.195 W	069-40-18.263 W
Runway End Elevation (FMSL, NAVD 88) **	268.17	331.26	306.65	298.72	268.17	331.26	306.65	298.72
Runway Approach Type	Precision	Non Precision	Visual	Visual	Precision	Non Precision	Visual	Visual
Runway Approach Slope (FAAR Part 77)	50:1 40:1	34:1	20:1	20:1	50:1 40:1	34:1	20:1	20:1
Runway Approach Slope (FH Siting Criteria)	20:1	20:1	20:1	23:1	34:1	20:1	20:1	20:1
Runway Displaced Threshold (NAD 83) *	NA	NA	NA	NA	NA	NA	NA	NA
RW Displaced TH Location - Latitude *	NA	NA	NA	NA	NA	NA	NA	NA
RW Displaced TH Location - Longitude *	NA	NA	NA	NA	NA	NA	NA	NA
RW Displaced TH Location - Elevation *	NA	NA	NA	NA	NA	NA	NA	NA
Runway Safety Area Width (feet)	500		120		500		120	
Runway Safety Area Length (feet)	1,000	1,000	240	240	1,000	1,000	240	240
Runway Protection Zone (feet) - LxWxW	1700x1000x1510	1700x1000x1510	1000x500x700	1000x500x700	2500x1000x1750	1700x1000x1510	1000x500x700	1000x500x700
Runway Obstacle Free Zone Width (feet)	400		250		400		250	
Runway Object Free Area Width (feet)	800	800	400	400	800	800	400	400
Runway Surface Type	Bituminous Concrete		Bituminous Concrete		Bituminous Concrete		Bituminous Concrete	
Runway Pavement Design Strength **	40K SW / 60K DW		25K SW		60K SW / 100K DW		30K SW	
Runway Effective Gradient	1.15%	-1.15%	-0.38%	0.38%	1.15%	-1.15%	-0.38%	0.38%
Runway Markings	Precision	Non-Precision	Visual	Visual	Precision	Non-Precision	Visual	Visual
Runway Edge Lighting	HIRLS		MIRLS		HIRLS		None	
Runway Approach Lighting	MALSF	None	None	None	MALSF	None	None	None
Runway Visual Approach Aids	VASI4	VASI2, REELS	None	None	PAPI	PAPI, REELS	None	None
Runway Instrument Navigational Aids	ILS / VOR / DME	RNAV (GPS)	None	None	ILS / VOR / DME	RNAV (GPS)	None	None
Taxiway Edge Lighting	MITLS		MITLS		MITLS		MITLS	
Taxiway Safety Area Width (feet)	79		49		79		49	
Taxiway Object Free Area Width (feet)	131		89		131		89	

* Existing runway location and elevation data, including displaced threshold data, is expressed in NAD83 and NAVD 88, as applicable.
 ** Pavement strengths are expressed in single wheel (SW) and dual wheel (DW) loading capacities. *K stands for Kips = 1,000 lbs.
 *** Other specific existing runway data was obtained from plans of record; specific future runway data is for planning purposes only.
 Source of Information:
 1 Existing design aircraft were obtained from 1996 Airport Master Plan and from Pavement Design Report prepared for WVU by Dufresne-Henry, Inc., February 2005.
 2 Runway Classification (MGTOW) for Gulfstream G-550 was obtained from Gulfstream Aerospace Corp. website. Runway 14-32 strength is based upon 30K maximum aircraft weight.
 3 Runway 5-23 end location data (i.e. coordinates) was obtained from Pilsa and Day Land Surveyors, October 3, 2007 Project No. 07160C. Runway 14-32 from AIP No. 18 Topographic Survey
 4 Existing runway end elevations and runway pavement design strength for Runway 5-23 was obtained from WVU ALP - Drawing #3, prepared by HTA, Inc., dated January 1996.

DESCRIPTION	OBJECT
AIRPORT PROPERTY LINE	---
TOWN/CITY LINE	---
AIRPORT REFERENCE POINT (ARP)	⊕
BUILDING RESTRICTION LINE (BRL)	---
RUNWAY/TAXIWAY OBJECT FREE AREA	---
RUNWAY SAFETY AREA	---
RUNWAY PROTECTION ZONE (RPZ)	---
RUNWAY VISIBILITY ZONE (RVZ)	RVZ RVZ
AIRPORT BUILDINGS	---
GLIDE SLOPE/LOC. CRITICAL AREA	---
EASEMENT TO CITY	---
EASEMENT FROM CITY	---
ELEV. OF ROAD +15'	799.0
FENCE	X
SHORT TERM PAVEMENT REMOVAL	---
FUTURE DEVELOPMENT (SHORT TERM)	---
FUTURE DEVELOPMENT (LONG TERM)	---
FUTURE LAND ACQUISITION (SHORT TERM)	---
FUTURE LAND ACQUISITION (LONG TERM)	---
FULL EASEMENT ACQUISITION (SHORT TERM)	---
FULL EASEMENT ACQUISITION (LONG TERM)	---
PARTIAL EASEMENT ACQUISITION (SHORT)	---
PARTIAL EASEMENT ACQUISITION (LONG)	---

NO.	DESCRIPTION
1	OLD TERMINAL BUILDING
2	AIRCRAFT STORAGE HANGAR - PRIVATE - SLAB ONLY
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12	AIRCRAFT STORAGE HANGAR - PRIVATE
13	AIRCRAFT STORAGE HANGAR - PRIVATE
14	AIRPORT MAINTENANCE STORAGE BUILDING
15	AIRCRAFT STORAGE HANGAR - PRIVATE
16	AIRCRAFT STORAGE HANGAR - PRIVATE
17	AIRCRAFT STORAGE HANGAR - PRIVATE
18	AIRCRAFT STORAGE HANGAR - PRIVATE
19	AIRCRAFT STORAGE HANGAR - PRIVATE
20	HANGAR DEVELOPMENT AREA (FUTURE)
21	AIRPORT MAINTENANCE STORAGE ARFF BUILDING (FUTURE)

NOTE: THERE IS A CITY ORDINANCE REFERENCING A SPECIFIC AIRSPACE PERTAINING TO THE CITY OF WATERVILLE, MAINE. IT CAN BE FOUND IN ARTICLE 5, SECTION 14.6 IN THE CITY ORDINANCE.



SPONSOR APPROVAL

ACCEPTED: CITY OF WATERVILLE

DATED: 4/6/12

FAA APPROVAL

SUBJECT TO LETTER DATED: 5-4-2014

FEDERAL AVIATION ADMINISTRATION
NEW ENGLAND REGION AIRPORTS DIVISION

DATED: 5-11-2014

CASE NO: 2015 ANF-420-NRA

MAINE DOT APPROVAL

BUREAU OF TRANSPORTATION SYSTEMS PLANNING

DATED: 6/7/12

ABBREVIATIONS	
ARP	AIRPORT REFERENCE POINT
AWOS	AUTOMATED WEATHER OBSERVING SYSTEM
BLDG	BUILDING
BRL	BUILDING RESTRICTION LINE
EL	ELEVATION (FEET)
LAT	LATITUDE
LONG	LONGITUDE
OFA	OBJECT FREE AREA
OFZ	OBSTACLE FREE ZONE
REIL	RUNWAY END INDICATOR LIGHTS
RSA	RUNWAY SAFETY AREA
RW	RUNWAY
TW	TAXIWAY
VASI	VISUAL APPROACH SLOPE INDICATOR

CAD FILE: WVL_Exhibit II_Ultimate-1-10.dwg

A.I.P. PROJECT NO. 3-23-0047-16

AIRPORT SOLUTIONS GROUP
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 PHONE (781) 491-0083 FAX (781) 491-0380
 AIRPORT CONSULTANTS • WOBURN, MASSACHUSETTS

WATERVILLE ROBERT LaFLEUR MUNICIPAL AIRPORT
 1 COMMON STREET • WATERVILLE, ME 04901
 (207) 886-4203

SHEET TITLE: ULTIMATE AIRPORT LAYOUT PLAN

PROJECT: AIRPORT MASTER PLAN UPDATE - PHASE II

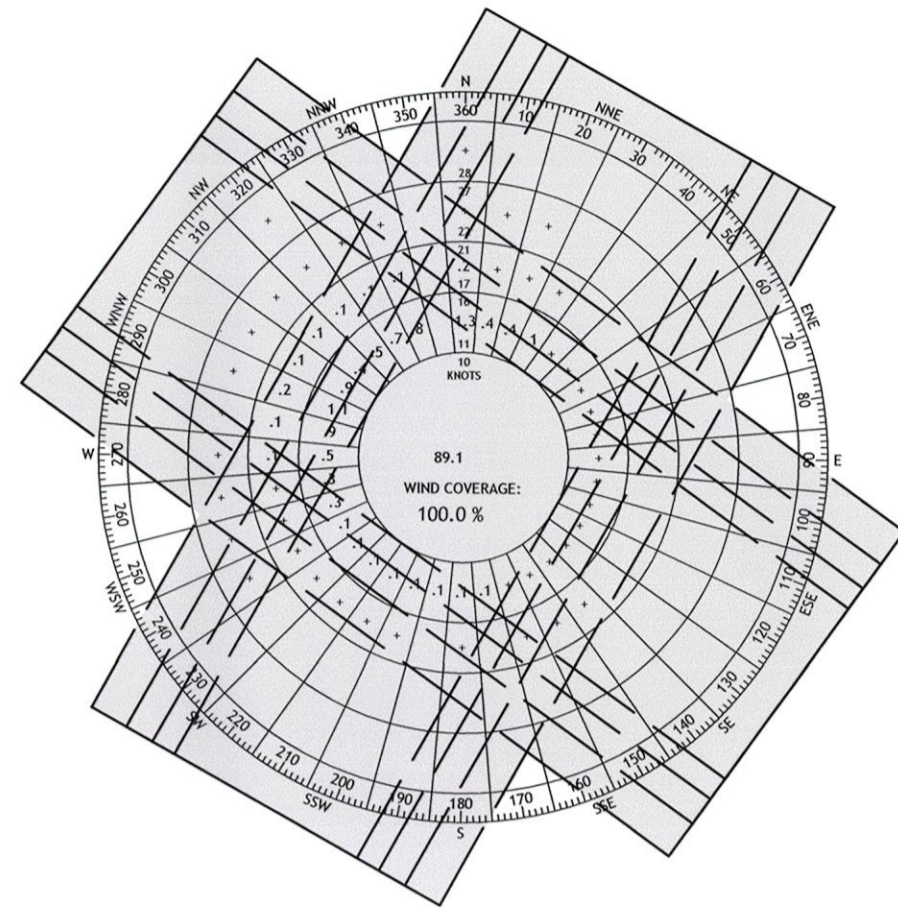
DESIGNER: T.J.L. CAD TECH: T.J.L. APPROVED: EPL

DECEMBER, 2011

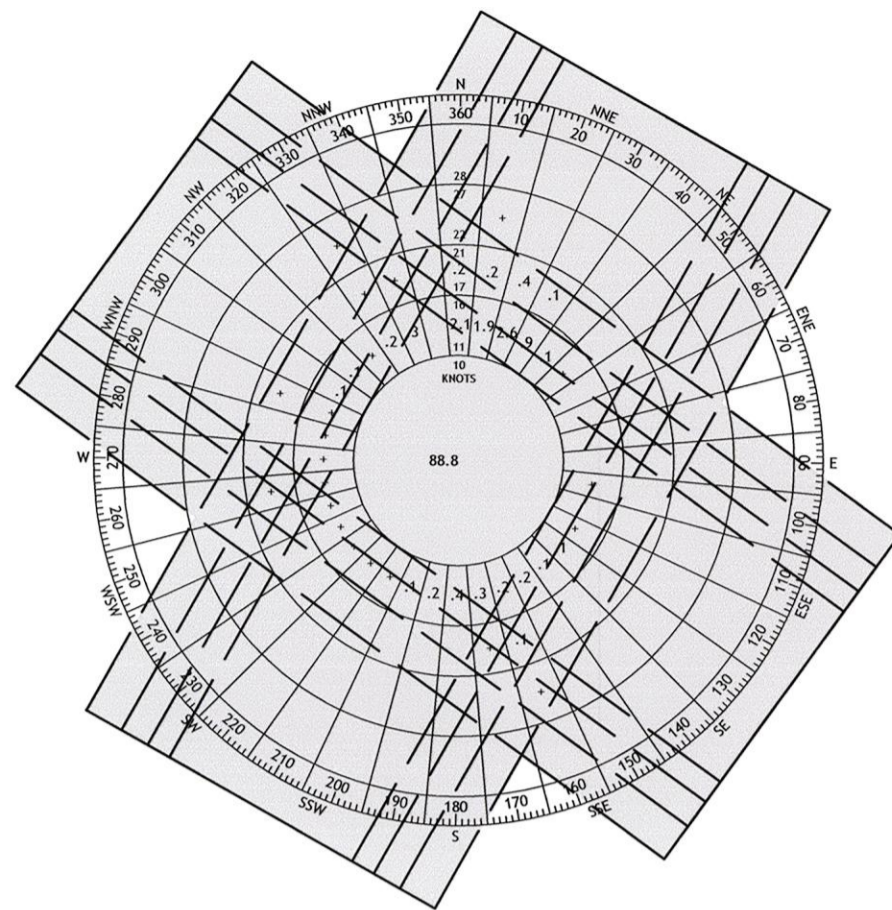
EXHIBIT II

SHEET 2 OF 8

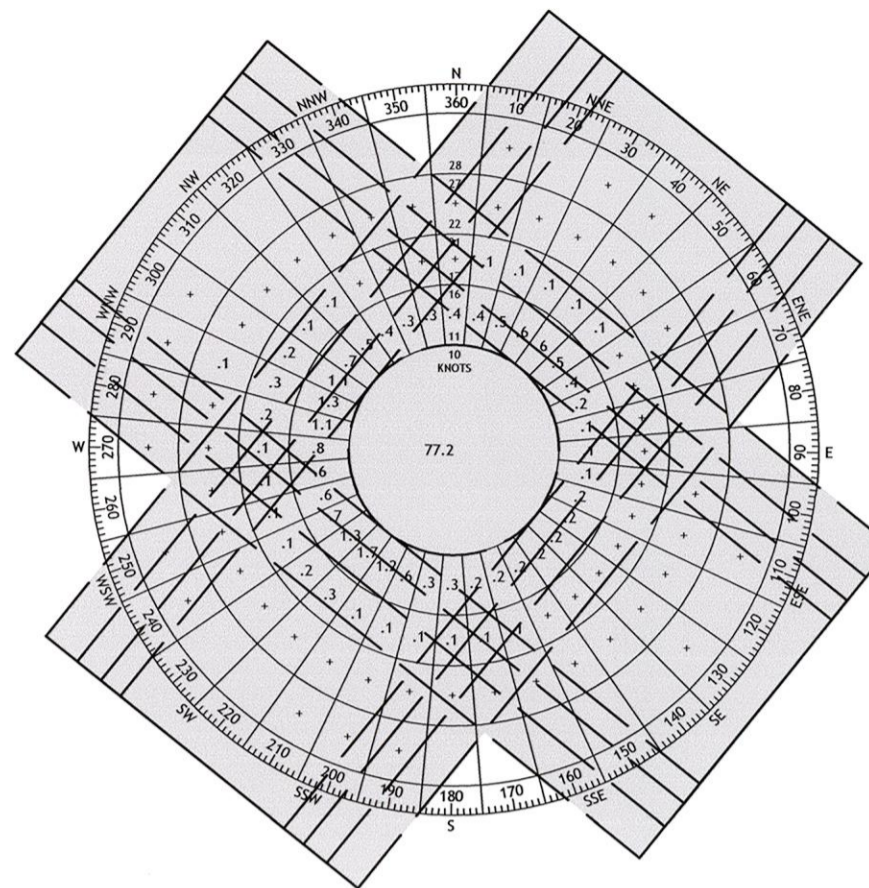
VFR WIND ROSE



IFR WIND ROSE



ALL-WEATHER WIND ROSE



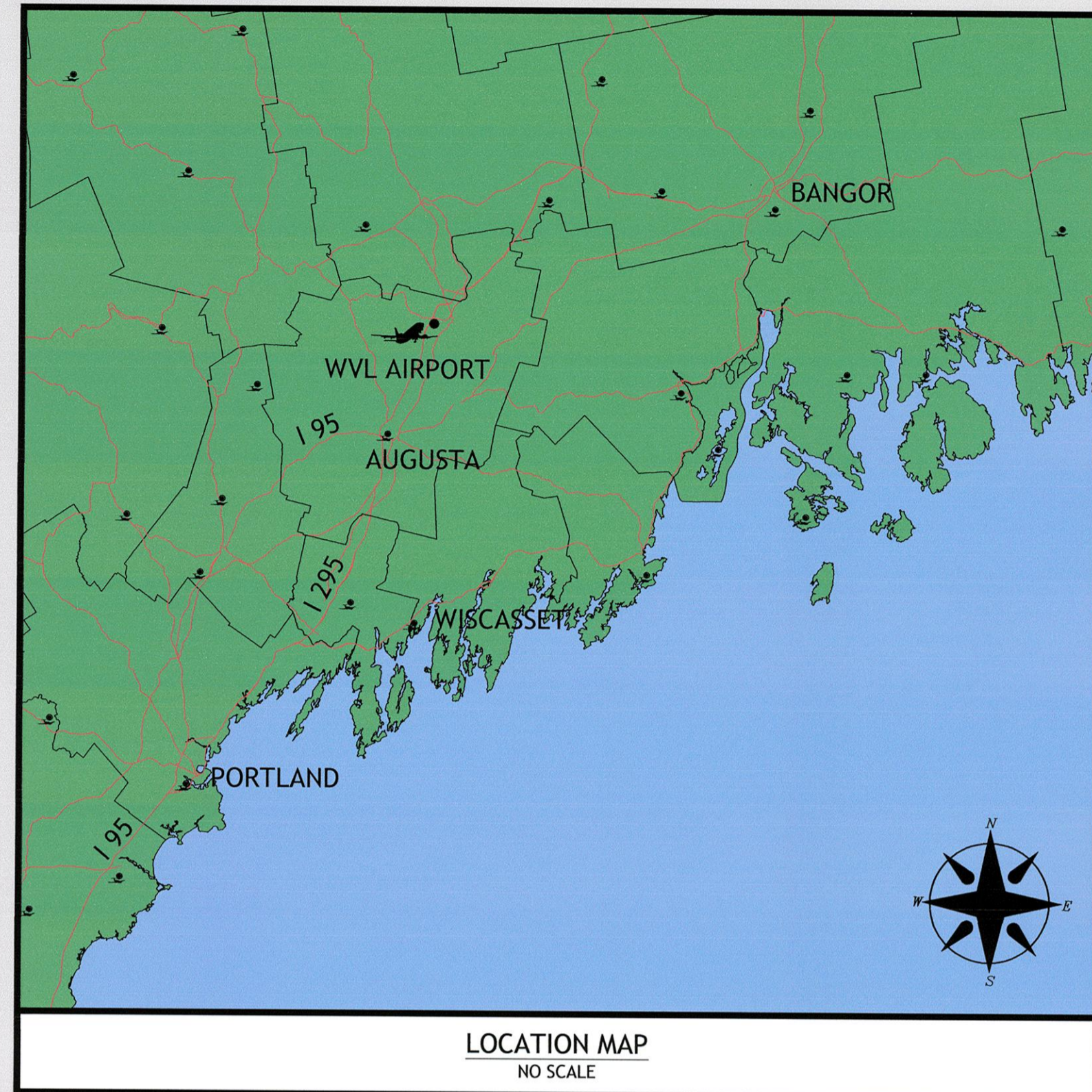
Runway	Wind Coverage Provided Under VFR* Conditions 5-Knot Tailwind to Maximum Headwind			
	10.5-knot	13-knot	16-knot	20-knot
RUNWAY 5	79.35 %	81.57 %	83.77 %	84.36 %
RUNWAY 23	80.74 %	82.69 %	84.89 %	85.50 %
RUNWAY 5/23	93.59 %	96.35 %	99.04 %	99.81 %
RUNWAY 14	74.52 %	75.07 %	75.60 %	75.66 %
RUNWAY 32	94.08 %	95.73 %	96.76 %	96.97 %
RUNWAY 14/32	96.83 %	98.63 %	99.73 %	99.95 %
COMBINED	99.56 %	99.91 %	99.99 %	100.00 %

* Ceiling greater than 1,000 feet and/or visibility greater than three miles.

Runway	Wind Coverage Provided Under IFR* Conditions 5-Knot Tailwind to Maximum Headwind			
	10.5-knot	13-knot	16-knot	20-knot
RUNWAY 5	85.71 %	86.13 %	86.43 %	86.50 %
RUNWAY 23	72.17 %	72.61 %	72.95 %	73.01 %
RUNWAY 5/23	98.72 %	98.44 %	99.88 %	99.97 %
RUNWAY 14	86.50 %	88.59 %	90.63 %	90.92 %
RUNWAY 32	85.57 %	89.09 %	92.31 %	92.99 %
RUNWAY 14/32	91.89 %	95.63 %	99.23 %	99.91 %
COMBINED	99.79 %	99.97 %	100.00 %	100.00 %

* Ceiling less than or equal to 1,000 feet and/or visibility less than 3 miles and ceiling greater than or equal to 250 feet and visibility greater than or equal to 0.75 miles.

Runway	Wind Coverage Provided Under All-Weather Conditions 5-Knot Tailwind to Maximum Headwind			
	10.5-knot	13-knot	16-knot	20-knot
RUNWAY 5	80.50 %	82.48 %	84.42 %	84.95 %
RUNWAY 23	80.02 %	81.72 %	83.63 %	84.15 %
RUNWAY 5/23	94.30 %	96.77 %	99.14 %	99.82 %
RUNWAY 14	78.49 %	77.18 %	77.85 %	77.94 %
RUNWAY 32	93.29 %	95.12 %	96.37 %	96.67 %
RUNWAY 14/32	96.31 %	98.30 %	99.99 %	99.93 %
COMBINED	99.57 %	99.92 %	99.98 %	100.00 %



LOCATION MAP
NO SCALE

Robert A. LaFleur Airport - Summary of Airport Design Data

Airport Data Element	Existing Conditions / FAA Standards				Ultimate Conditions / FAA Standards			
	05	23	14	32	05	23	14	32
Design Aircraft ¹	Hawker 700 / Gulfstream G-550		Beech Baron 58		Hawker 700 / Gulfstream G-550		Beech Baron 58	
Runway Classification (AC MGTOW) ²	Other than Utility (91,000 lbs)		Utility (30,000 lbs)		Other than Utility (91,000 lbs)		Utility (30,000 lbs)	
Runway Reference Code	C-II		B-I		C-II		B-I	
Runway Length (nominal / measured, feet)	5,500 / 5,499.89		2,300 / 2,299.91		5,500		2,300	
Runway Width (feet)	100		150		100		60	
Runway End - Latitude (DMS, NAD 83) ^{3,4}	44-31-35.471 N	44-32-23.163 N	44-32-07.222 N	44-31-54.118 N	44-31-35.471 N	44-32-23.163 N	44-32-07.222 N	44-31-54.118 N
Runway End - Longitude (DMS, NAD 83) ^{3,4}	069-40-50.288 W	069-40-13.968 W	069-40-44.195 W	069-40-18.263 W	069-40-50.288 W	069-40-13.968 W	069-40-44.195 W	069-40-18.263 W
Runway End Elevation (FMSL, NAVD 88) ^{4,5}	268.17	331.26	306.65	298.72	268.17	331.26	306.65	298.72
Runway Approach Type	Precision		Non Precision		Precision		Non Precision	
Runway Approach Slope (FAR Part 77)	50:1 / 40:1	34:1	20:1	20:1	50:1 / 40:1	34:1	20:1	20:1
Runway Approach Slope (TH Siting Criteria)	20:1	20:1	20:1	20:1	34:1	20:1	20:1	20:1
Runway Displaced Threshold (NAD 83) ⁶	NA	NA	NA	NA	NA	NA	NA	NA
RW Displaced TH Location - Latitude ⁶	NA	NA	NA	NA	NA	NA	NA	NA
RW Displaced TH Location - Longitude ⁶	NA	NA	NA	NA	NA	NA	NA	NA
RW Displaced TH Location - Elevation ⁶	NA	NA	NA	NA	NA	NA	NA	NA
Runway Safety Area Width (feet)	500		120		500		120	
Runway Safety Area Length (feet)	1,000	1,000	240	240	1,000	1,000	240	240
Runway Protection Zone (feet) - LxWxW ₂	1700x1000x1510	1700x1000x1510	1000x500x700	1000x500x700	2500x1000x1750	1700x1000x1510	1000x500x700	1000x500x700
Runway Obstacle Free Zone Width (feet)	400		250		400		250	
Runway Object Free Area Width (feet)	800	800	400	400	800	800	400	400
Runway Surface Type	Bituminous Concrete		Bituminous Concrete		Bituminous Concrete		Bituminous Concrete	
Runway Pavement Design Strength ^{4,5}	40K SW / 60K DW		25K SW		60K SW / 100K DW		30K SW	
Runway Effective Gradient	1.15%	-1.15%	-0.38%	0.38%	1.15%	-1.15%	-0.38%	0.38%
Runway Markings	Precision	Non-Precision	Visual	Visual	Precision	Non-Precision	Visual	Visual
Runway Edge Lighting	HIRLS		MIRLS		HIRLS		None	
Runway Approach Lighting	MALSF	None	None	None	MALS	None	None	None
Runway Visual Approach Aids	VASI-4	VASI-2, REILS	None	None	PAPI	PAPI, REILS	None	None
Runway Instrument Navigational Aids	ILS / VOR / DME	RNAV (GPS)	None	None	ILS / VOR / DME	RNAV (GPS)	None	None
Taxiway Edge Lighting	MITLS		MITLS		MITLS		MITLS	
Taxiway Markings	CL & Holding Positions		CL & Holding Positions		CL & Holding Positions		CL & Holding Positions	
Taxiway Safety Area Width (feet)	79		49		79		49	
Taxiway Object Free Area Width (feet)	131		89		131		89	

¹ Existing runway location and elevation data, including displaced threshold data, is expressed in NAD83 and NAVD 88, as applicable.
² Pavement strengths are expressed in single wheel (SW) and dual wheel (DW) loading capacities - K stands for Kips = 1,000 lbs
³ Other specific existing runway data was obtained from plans of record; specific future runway data is for planning purposes only.
Source of information:
 1 Existing design aircraft were obtained from 1996 Airport Master Plan and from Pavement Design Report prepared for WVL by Dufresne-Henry, Inc., February 2005.
 2 Runway Classification (MGTOW) for Gulfstream G-550 was obtained from Gulfstream Aerospace Corp. website. Runway 14-32 strength is based upon 30K maximum aircraft weight.
 3 Runway 5-23 end location data (i.e. coordinates) was obtained from Plisga and Day Land Surveyors. October 3, 2007 Project No. 07160C. Runway 14-32 from AIP No. 18 Topographic Survey
 4 Existing runway end elevations and runway pavement design strength for Runway 5-23 was obtained from WVL ALP - Drawing #3, prepared by HTA, Inc., dated January 1996.

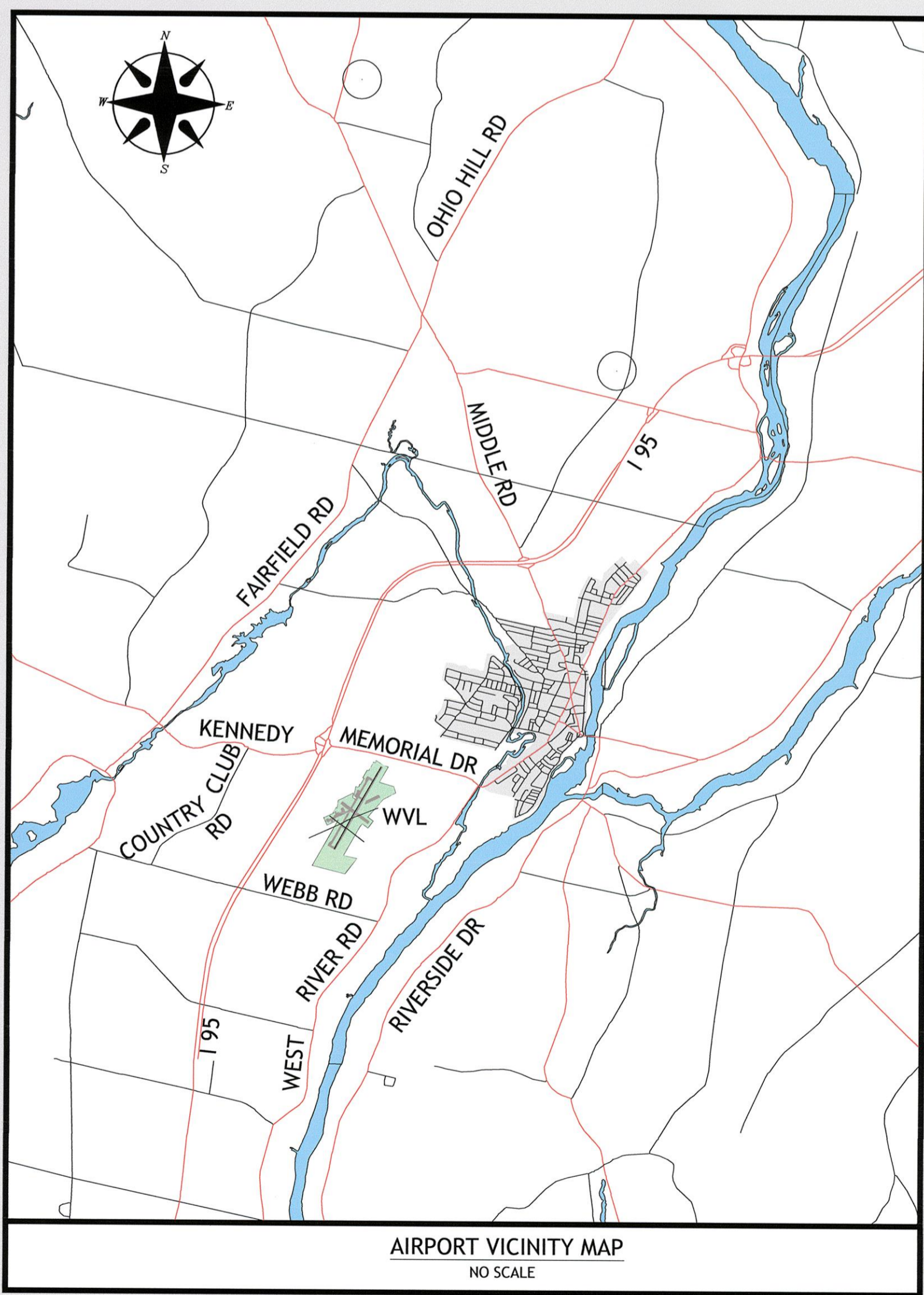
AIRPORT DATA		
	EXISTING	FUTURE
AIRPORT ELEVATION (MSL)	333 FT	333 FT
AIRPORT REFERENCE POINT LAT. (ARP) COORDINATES	44° 31' 59.70" N 69° 40' 31.90" W	44° 31' 59.70" N 69° 40' 31.90" W
MEAN MAX. TEMP. (HOTTEST MONTH)		
FUNCTIONAL ROLE (NPIAS)	GENERAL AVIATION	GENERAL AVIATION
AIRPORT CLASSIFICATION	OTHER THAN UTILITY	OTHER THAN UTILITY
AIRPORT REFERENCE CODE	C-II	C-II

SUMMARY OF NON-STANDARD CONDITIONS				
DESCRIPTION	STANDARD	EXIST. NON-STD CONDITION	REMARKS	DATE APPROVED

PROPOSED MODIFICATION OF STANDARDS	
NONE	

THE UNDERSIGNED CERTIFIES THAT ALL AIRPORT ELEMENTS SHOWN ON THIS ALP ARE IN ACCORDANCE WITH CRITERIA CONTAINED IN THE CURRENT EDITION OF THE FAA ADVISORY CIRCULAR 150/5300-13, CHANGE 10 (SEPTEMBER 29, 2006) EXCEPT AS NOTED ABOVE.

Michael Roy 4/6/12
 SIGNATURE OF SPONSOR DATE



AIRPORT VICINITY MAP
NO SCALE

CAD FILE: WVL_Exhibit III_Tech Data-1-10.dwg
 A.I.P. PROJECT NO. 3-23-0047-16

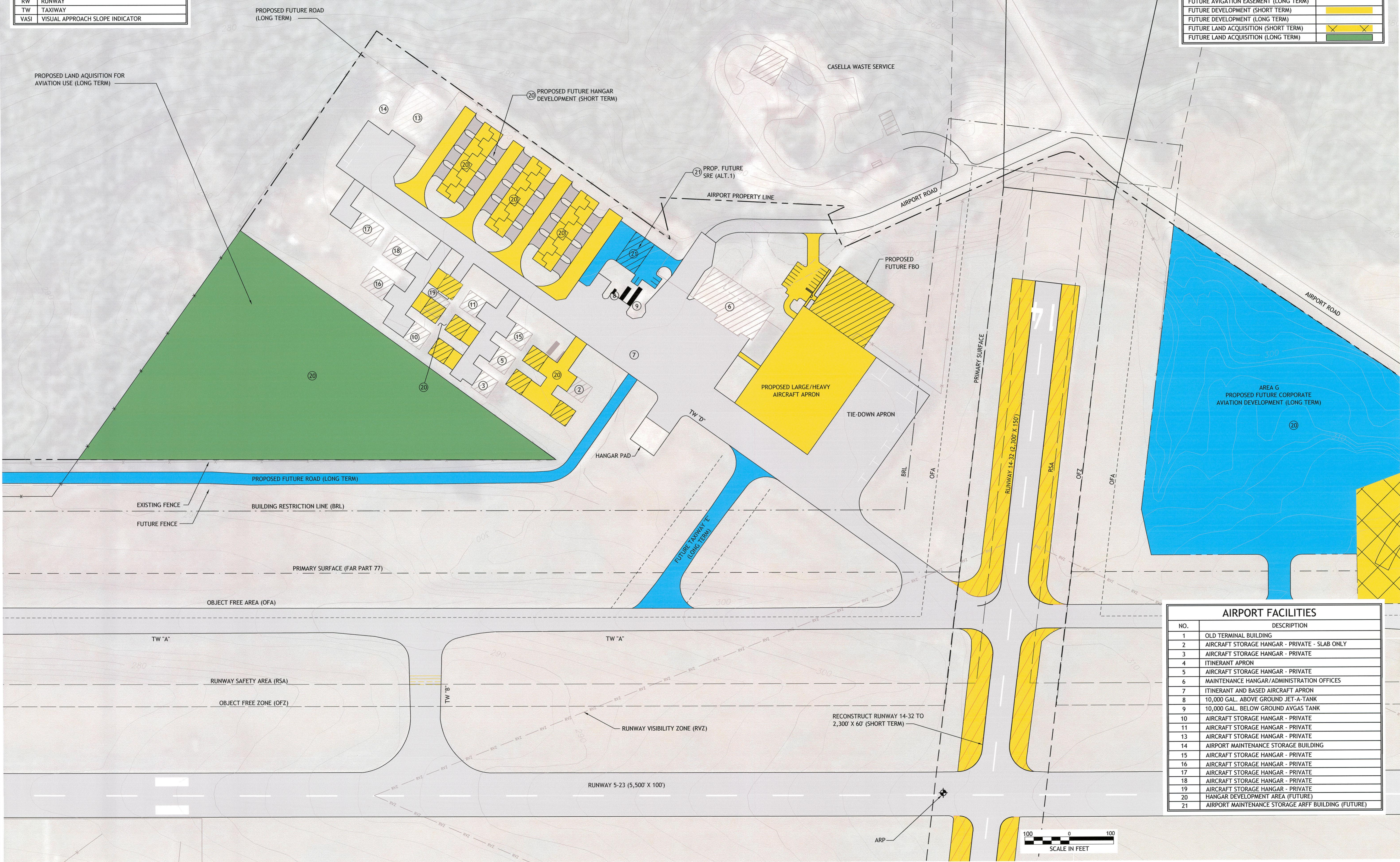
AIRPORT SOLUTIONS GROUP
 INNOVATIVE AIRPORT DEVELOPMENT SPECIALISTS
 PHONE (781) 491-0983 FAX (781) 491-0350
 AIRPORT CONSULTANTS • WOBURN, MASSACHUSETTS

WATERVILLE ROBERT LaFLEUR MUNICIPAL AIRPORT
 1 COMMON STREET • WATERVILLE, ME 04901
 (207) 860-4203

SHEET TITLE: TECHNICAL DATA PLAN
 PROJECT: AIRPORT MASTER PLAN UPDATE - PHASE II
 DESIGNER: T.J. CAD/TECH: T.J.L. APPROVED: EPL

ABBREVIATIONS	
ARP	AIRPORT REFERENCE POINT
AWOS	AUTOMATED WEATHER OBSERVING SYSTEM
BLDG	BUILDING
BRL	BUILDING RESTRICTION LINE
EL	ELEVATION (FEET)
LAT	LATITUDE
LONG	LONGITUDE
OFA	OBJECT FREE AREA
OFZ	OBSTACLE FREE ZONE
REIL	RUNWAY END INDICATOR LIGHTS
RSA	RUNWAY SAFETY AREA
RW	RUNWAY
TW	TAXIWAY
VASI	VISUAL APPROACH SLOPE INDICATOR

DESCRIPTION	OBJECT
AIRPORT PROPERTY LINE	---
AIRPORT REFERENCE POINT (ARP)	+
BUILDING RESTRICTION LINE (BRL)	---
RUNWAY/TAXIWAY OBJECT FREE AREA	---
RUNWAY SAFETY AREA	---
RUNWAY PROTECTION ZONE (RPZ)	---
RUNWAY VISIBILITY ZONE (RVZ)	RVZ RVZ
AIRPORT BUILDINGS	▨
FENCE	▨
SHORT TERM PAVEMENT REMOVAL	▨
FUTURE AVIGATION EASEMENT (SHORT TERM)	▨
FUTURE AVIGATION EASEMENT (LONG TERM)	▨
FUTURE DEVELOPMENT (SHORT TERM)	▨
FUTURE DEVELOPMENT (LONG TERM)	▨
FUTURE LAND ACQUISITION (SHORT TERM)	▨
FUTURE LAND ACQUISITION (LONG TERM)	▨



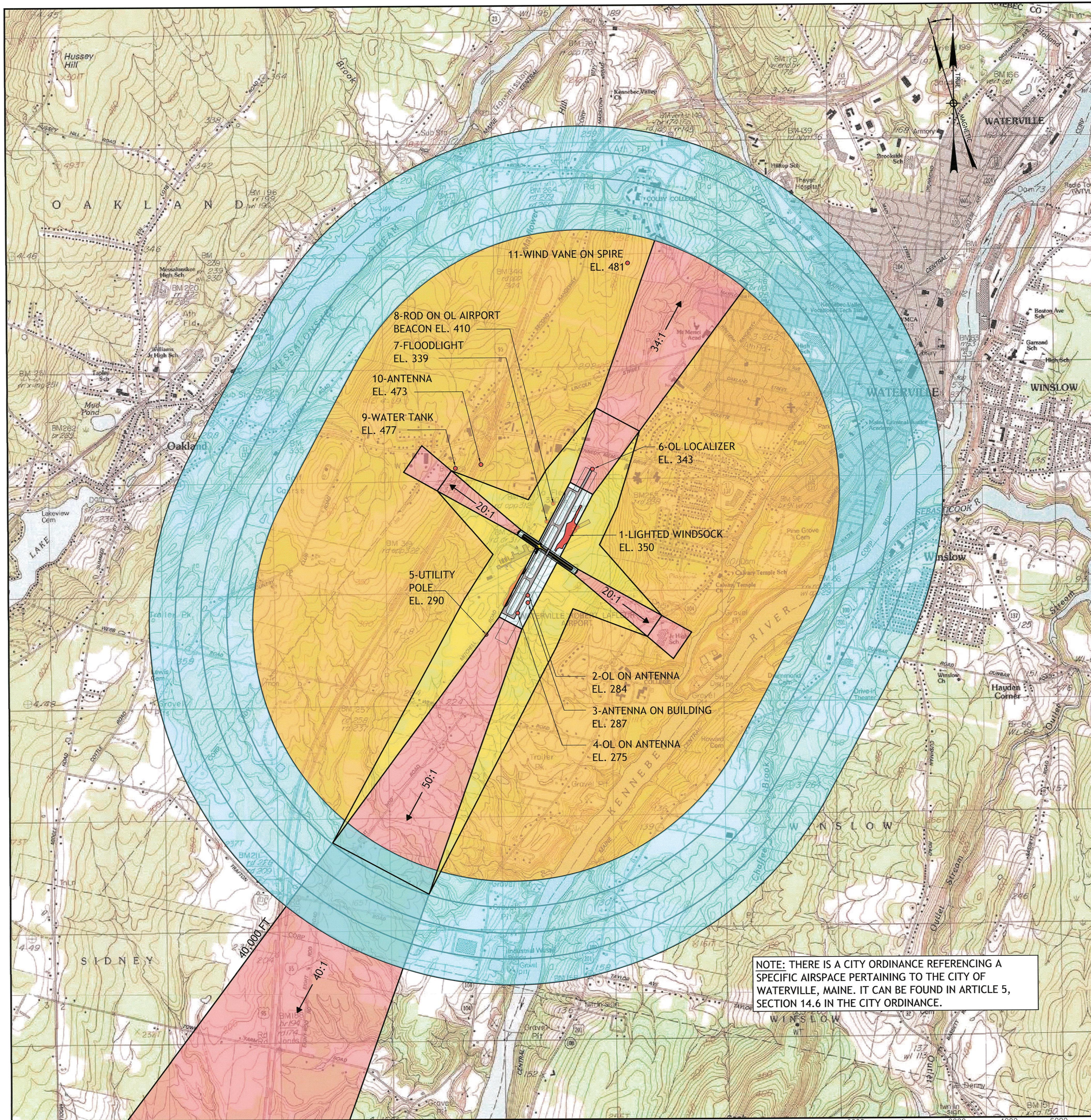
NO.	DESCRIPTION
1	OLD TERMINAL BUILDING
2	AIRCRAFT STORAGE HANGAR - PRIVATE - SLAB ONLY
3	AIRCRAFT STORAGE HANGAR - PRIVATE
4	ITINERANT APRON
5	AIRCRAFT STORAGE HANGAR - PRIVATE
6	MAINTENANCE HANGAR/ADMINISTRATION OFFICES
7	ITINERANT AND BASED AIRCRAFT APRON
8	10,000 GAL. ABOVE GROUND JET-A-TANK
9	10,000 GAL. BELOW GROUND AVGAS TANK
10	AIRCRAFT STORAGE HANGAR - PRIVATE
11	AIRCRAFT STORAGE HANGAR - PRIVATE
13	AIRCRAFT STORAGE HANGAR - PRIVATE
14	AIRPORT MAINTENANCE STORAGE BUILDING
15	AIRCRAFT STORAGE HANGAR - PRIVATE
16	AIRCRAFT STORAGE HANGAR - PRIVATE
17	AIRCRAFT STORAGE HANGAR - PRIVATE
18	AIRCRAFT STORAGE HANGAR - PRIVATE
19	AIRCRAFT STORAGE HANGAR - PRIVATE
20	HANGAR DEVELOPMENT AREA (FUTURE)
21	AIRPORT MAINTENANCE STORAGE ARFF BUILDING (FUTURE)

CAD FILE: WL_Exhibit IV_Terminal Area-1-10.dwg
 A.I.P. PROJECT. NO. 3-23-0047-16

AIRPORT SOLUTIONS GROUP
 INNOVATIVE AIRPORT DEVELOPMENT SPECIALISTS
 PHONE (781) 491-0983 FAX (781) 491-0360
 AIRPORT CONSULTANTS • WOBURN, MASSACHUSETTS

WATERVILLE ROBERT LaFLEUR MUNICIPAL AIRPORT
 1 COMMON STREET • WATERVILLE, ME 04901
 (207) 868-4203

SHEET TITLE: TERMINAL AREA PLAN
 PROJECT: AIRPORT MASTER PLAN UPDATE - PHASE II
 DESIGNER: T.J.L. CADD TECH: T.J.L. APPROVED: E.P.L.



NOTE: THERE IS A CITY ORDINANCE REFERENCING A SPECIFIC AIRSPACE PERTAINING TO THE CITY OF WATERVILLE, MAINE. IT CAN BE FOUND IN ARTICLE 5, SECTION 14.6 IN THE CITY ORDINANCE.

PART 77 DIMENSIONAL CRITERIA

Existing Conditions								
Runway	Runway Classification	Approach Procedure	Visibility Minimums	Primary Surface	Inner Approach Width	Outer Approach Width	Approach Length	Approach Slope
5	Other than Utility	Precision	¼ mi.	1,000'	1,000'	16,000'	50,000'	50:1/40:1*
23	Other than Utility	Non Precision	¼ mi.	1,000'	1,000'	4,000'	10,000'	34:1
14	Utility	Visual	-	250'	250'	1,250'	5,000'	20:1
32	Utility	Visual	-	250'	250'	1,250'	5,000'	20:1

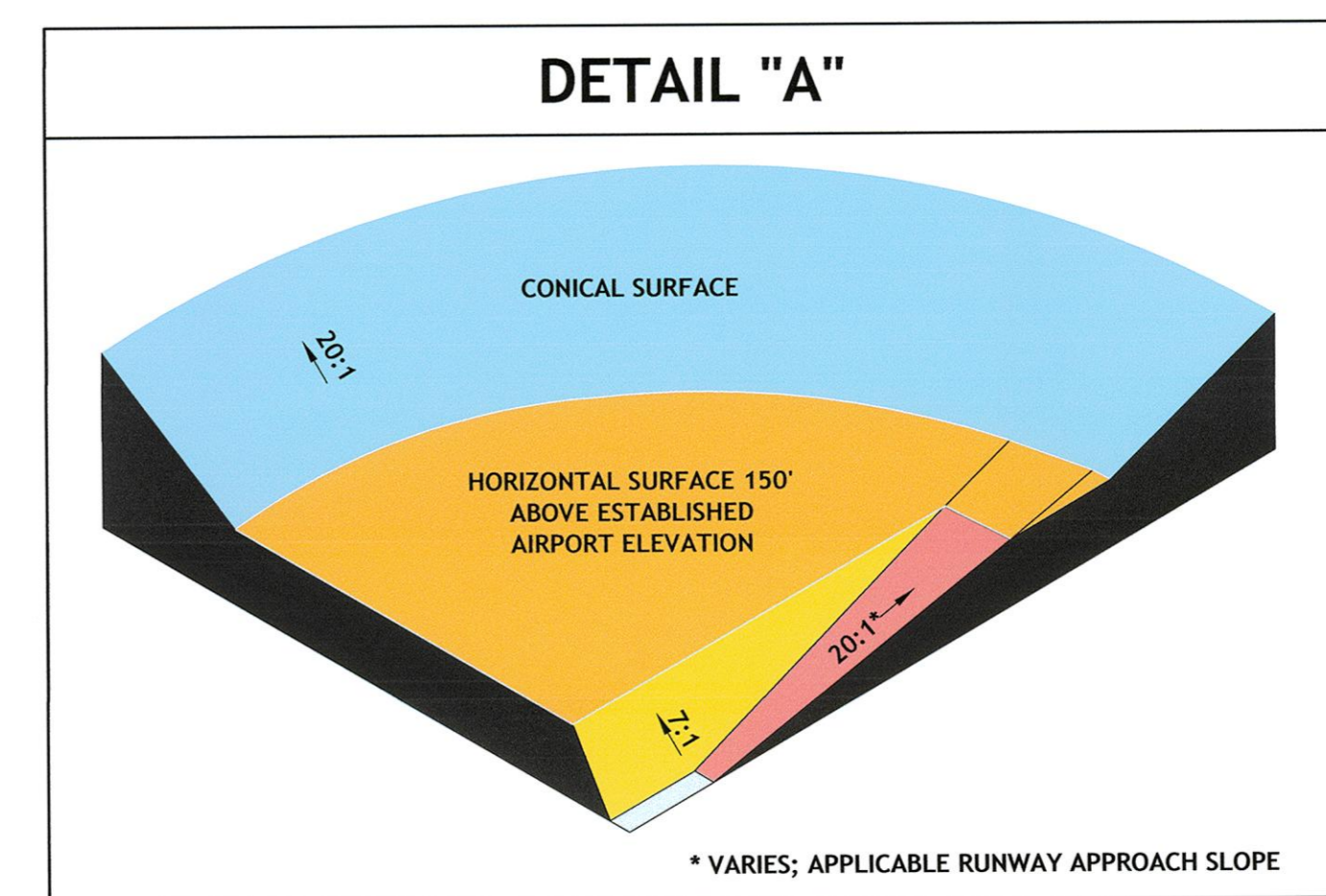
* For a Precision Instrument Runway, the approach surface extends outward and upward at a slope of 50 to 1 (H:V) for the first 10,000 feet, then continuing at a slope of 40 to 1 for the next 40,000 feet.

Ultimate Conditions								
Runway	Runway Classification	Approach Procedure	Visibility Minimums	Primary Surface	Inner Approach Width	Outer Approach Width	Approach Length	Approach Slope
5	Other than Utility	Precision	¼ mi.	1,000'	1,000'	16,000'	50,000'	50:1/40:1*
23	Other than Utility	Non Precision	¼ mi.	1,000'	1,000'	4,000'	10,000'	34:1
14	Utility	Visual	-	250'	250'	1,250'	5,000'	20:1
32	Utility	Visual	-	250'	250'	1,250'	5,000'	20:1

* For a Precision Instrument Runway, the approach surface extends outward and upward at a slope of 50 to 1 (H:V) for the first 10,000 feet, then continuing at a slope of 40 to 1 for the next 40,000 feet.

OFF-AIRPORT OBSTRUCTIONS					
NO.	DESCRIPTION	ELEV.	VERTICAL PENETRATION	FAR PART 77 SURFACE	PROPOSED ACTION
1	LIGHTED WINDSOCK	350	31	PRIMARY	NONE
2	OL ON ANTENNA	284	4	PRIMARY	NONE
3	ANTENNA ON BUILDING	287	10	PRIMARY	NONE
4	OL ON ANTENNA	275	4	PRIMARY	NONE
5	UTILITY POLE	290	6	RW 5 APPROACH	NONE
6	OL LOCALIZER	343	-15	RW 23 APPROACH	NONE
7	FLOODLIGHT	339	16	TRANSITION	NONE
8	ROD ON OL AIR. BEACON	410	71	TRANSITION	NONE
9	WATER TANK	477	-6	HORIZONTAL	NONE
10	ANTENNA	473	-10	HORIZONTAL	NONE
11	WIND VANE ON SPIRE	481	-2	HORIZONTAL	NONE

- INFORMATION FROM 1991 OBSTRUCTION DATA SHEET (UDS 6129) SURVEYED IN JULY 1990, 3RD EDITION



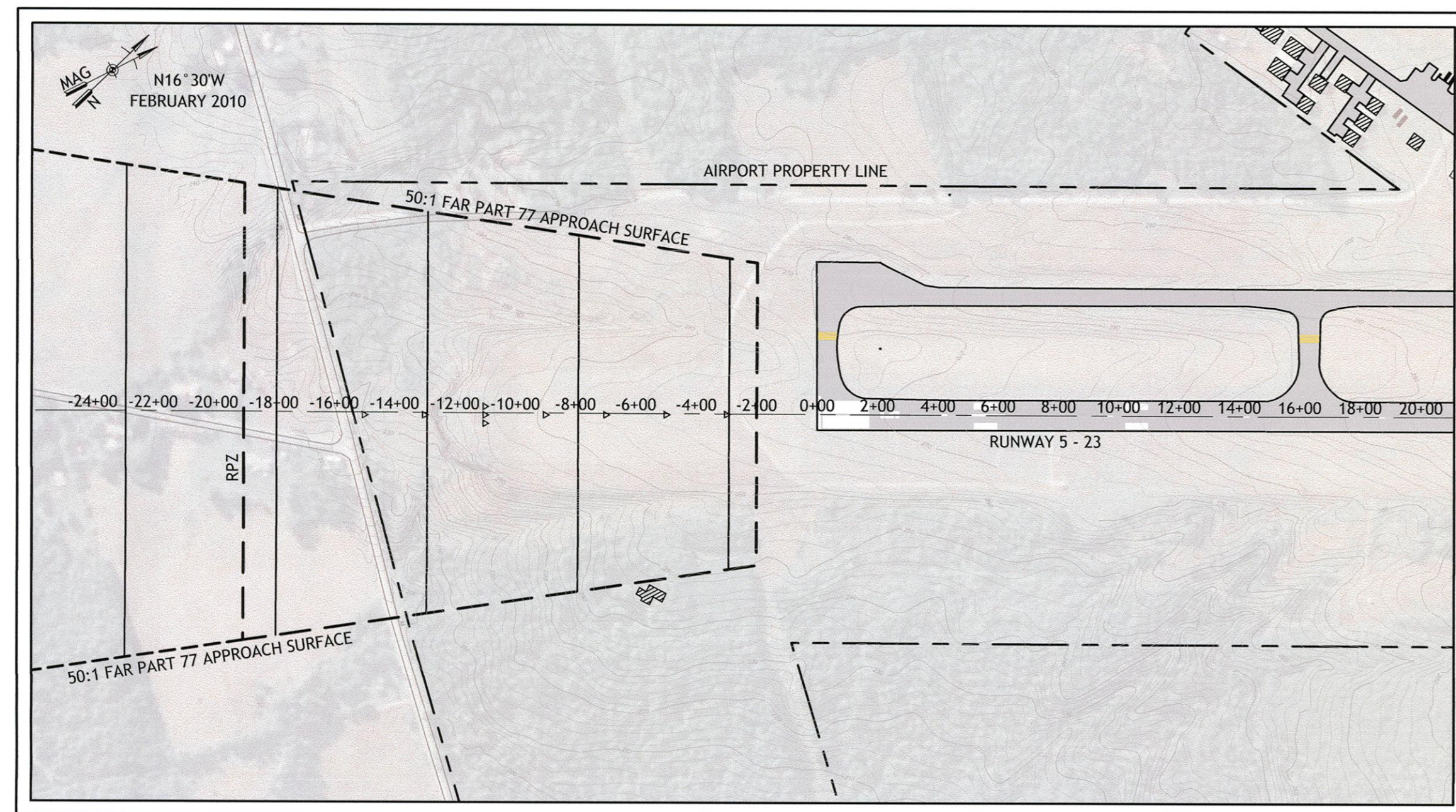
LEGEND	
	= PRIMARY SURFACE
	= APPROACH SURFACE
	= HORIZONTAL SURFACE
	= CONICAL SURFACE
	= TRANSITIONAL SURFACE
	= GROUND PENETRATION TO PART 77
	= AIRSPACE OBSTRUCTION TO FAR PART 77

CAD FILE: WL_Exhibit_V_Part 77-1-10.dwg
A.I.P. PROJECT. NO. 3-23-0047-16

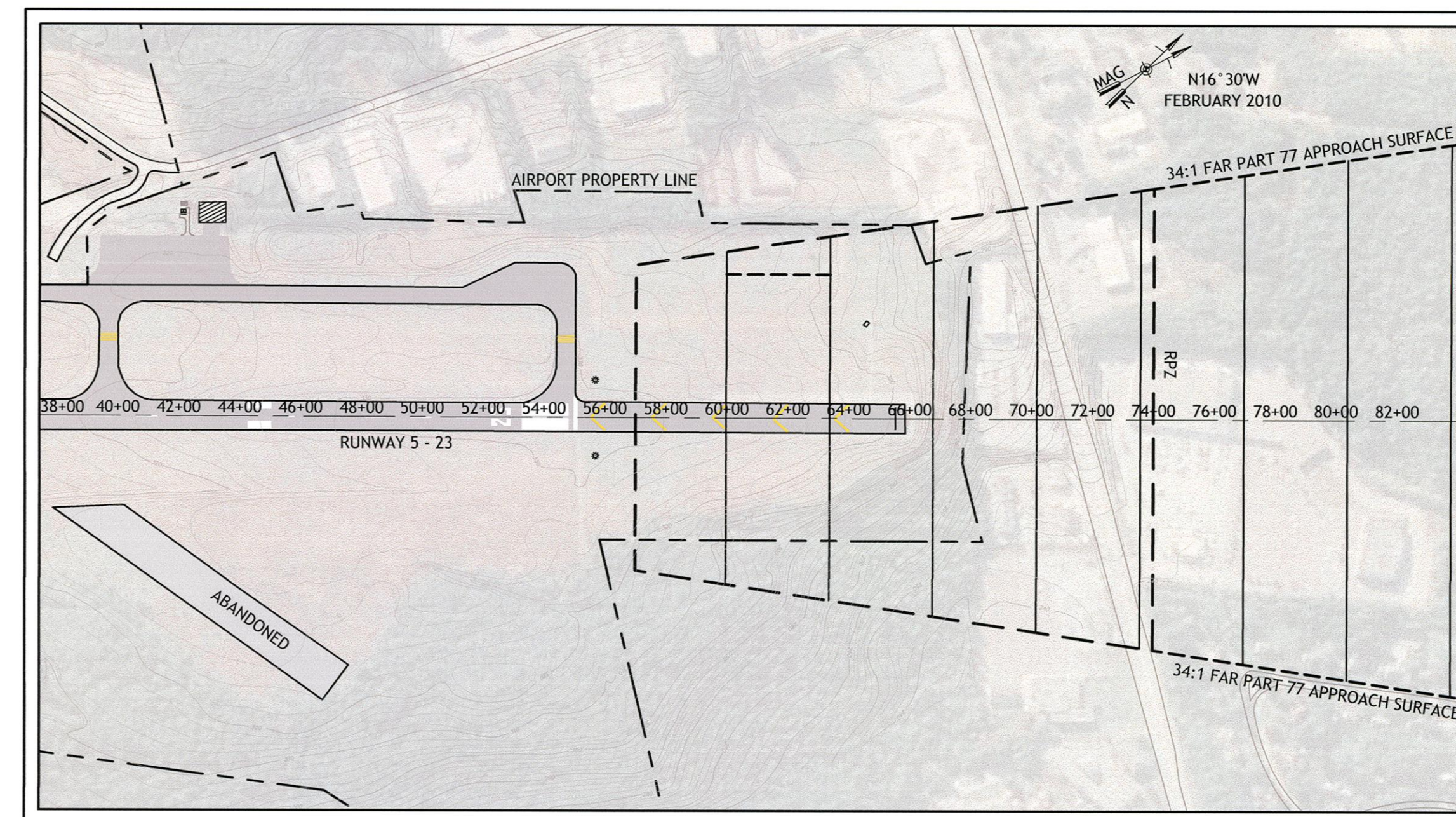
AIRPORT SOLUTIONS GROUP
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PHONE (91) 461-0383 FAX (91) 461-0380
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(207) 680-4203

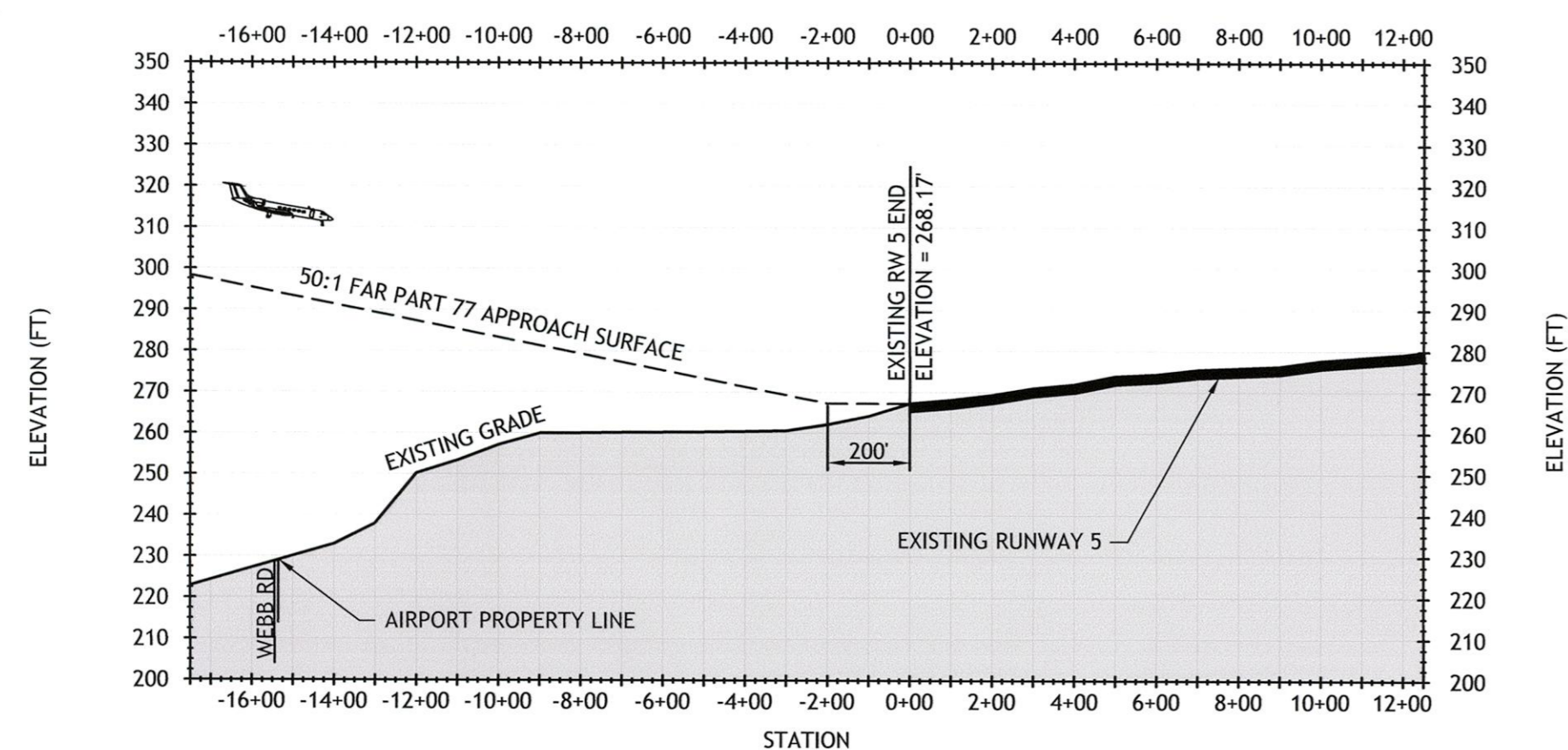
SHEET TITLE: AIRPORT AIRSPACE DRAWING (FAR PART 77)
PROJECT: AIRPORT MASTER PLAN UPDATE - PHASE II
DESIGNER: T.J.L. CAD/TECH: T.J.L. APPROVED: E.P.L.



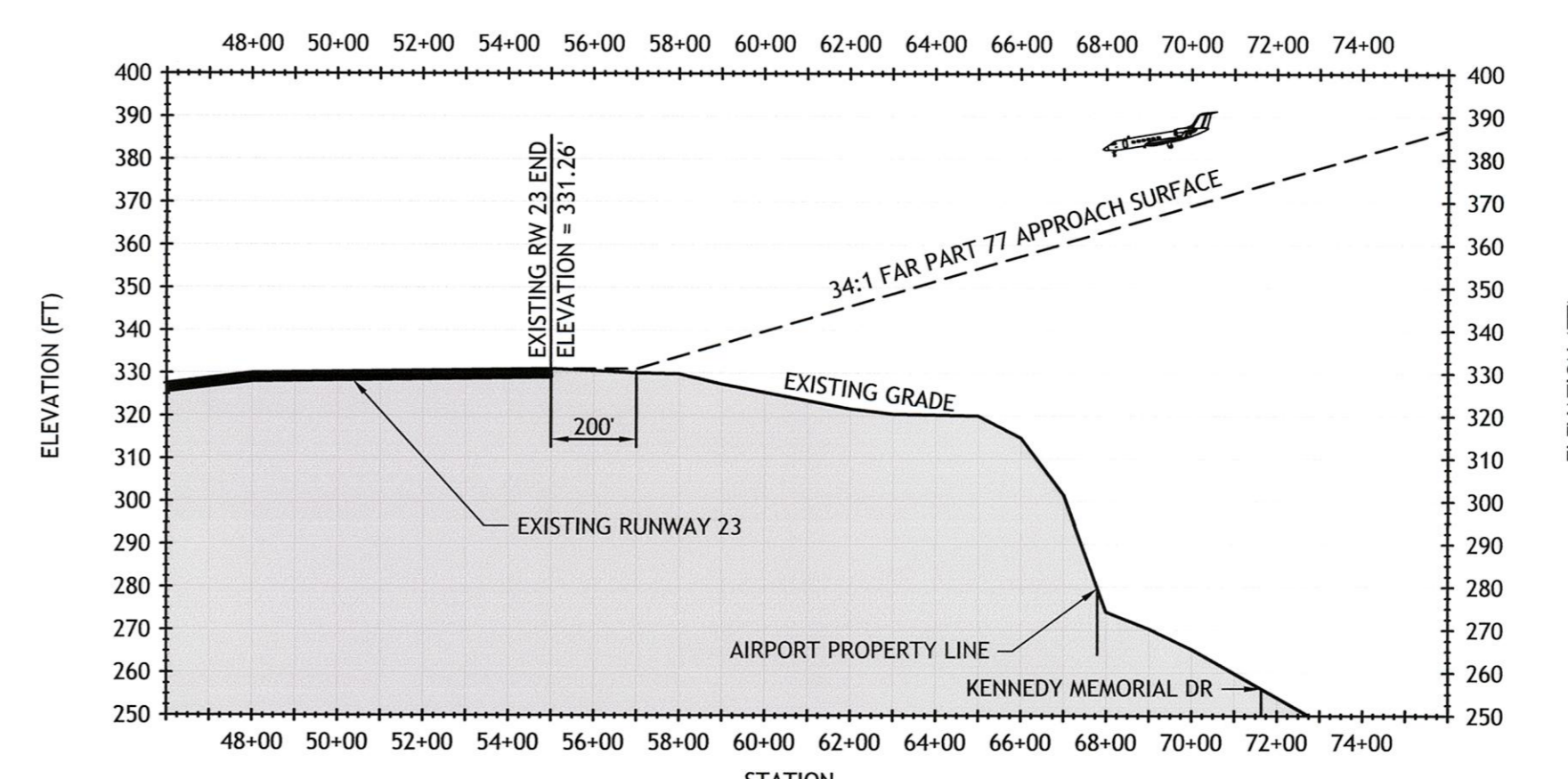
RUNWAY 5 APPROACH PLAN
SCALE 1" = 400'



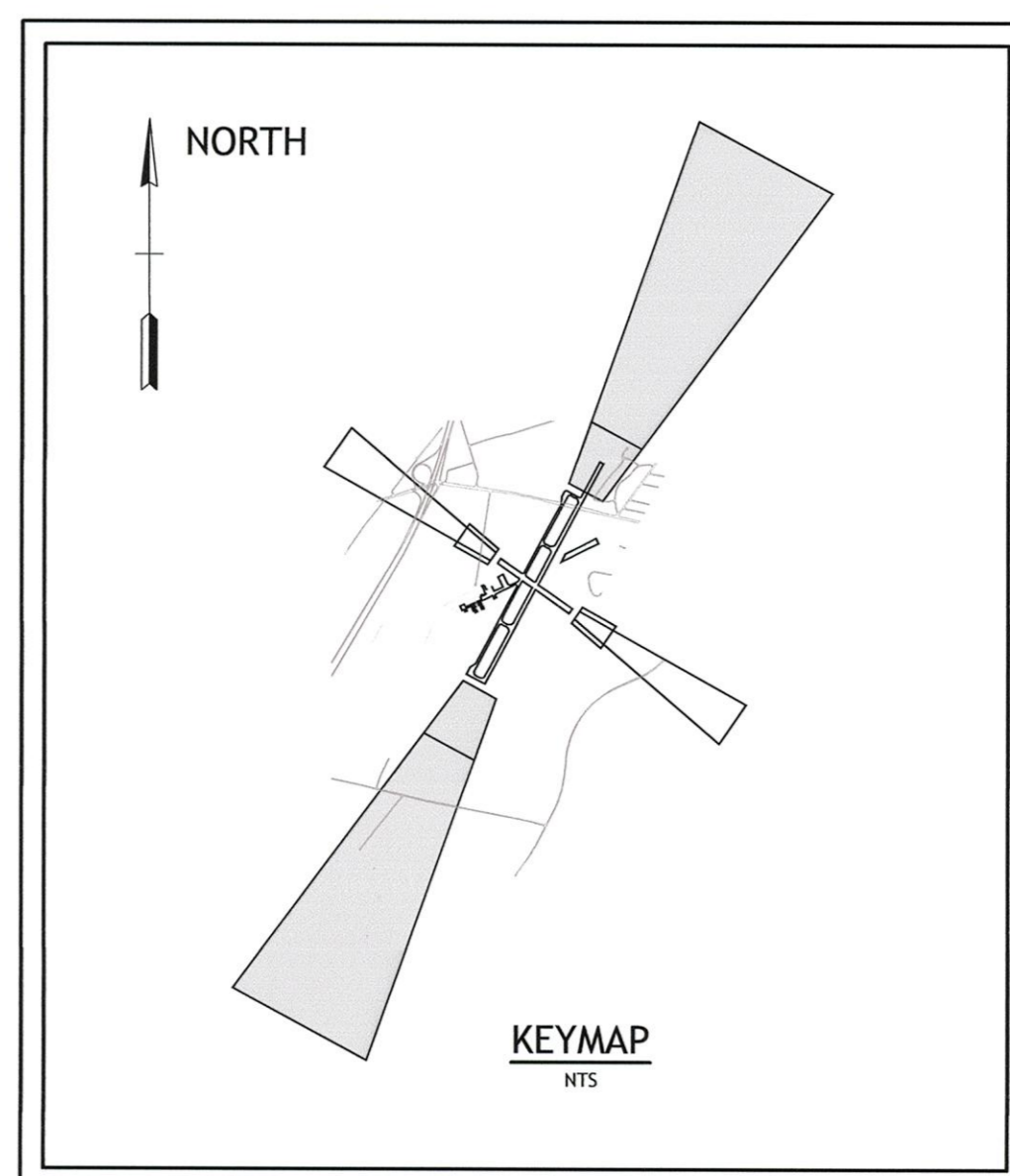
RUNWAY 23 APPROACH PLAN
SCALE 1" = 400'



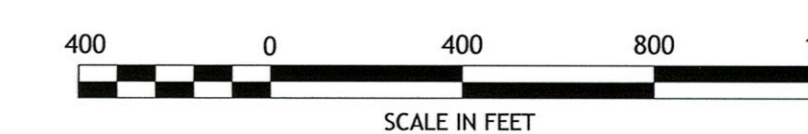
RUNWAY 5 APPROACH PROFILE
HORIZONTAL SCALE 1" = 400'
VERTICAL SCALE 1" = 40'



RUNWAY 23 APPROACH PROFILE
HORIZONTAL SCALE 1" = 400'
VERTICAL SCALE 1" = 40'



OBSTRUCTIONS - RUNWAY 5 - 23					
NUMBER	DESCRIPTION	ELEVATION	PENETRATION	PART 77 SURFACE	PROPOSED ACTION
1					
2					
3					

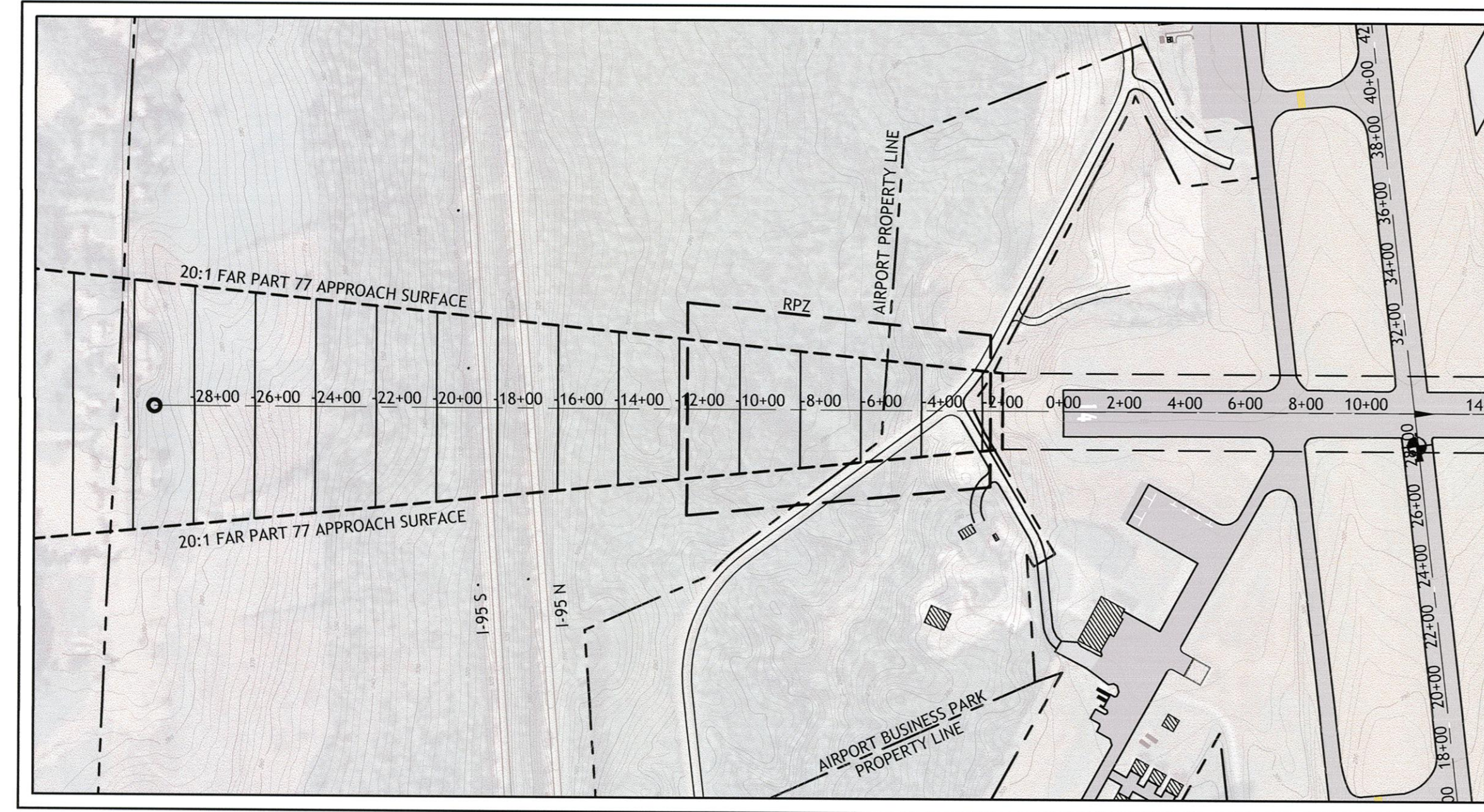


CAD FILE:	WM_Exhibit VI - VI_Profiles-1-10.dwg
REV.	
DATE	
DESCRIPTION	

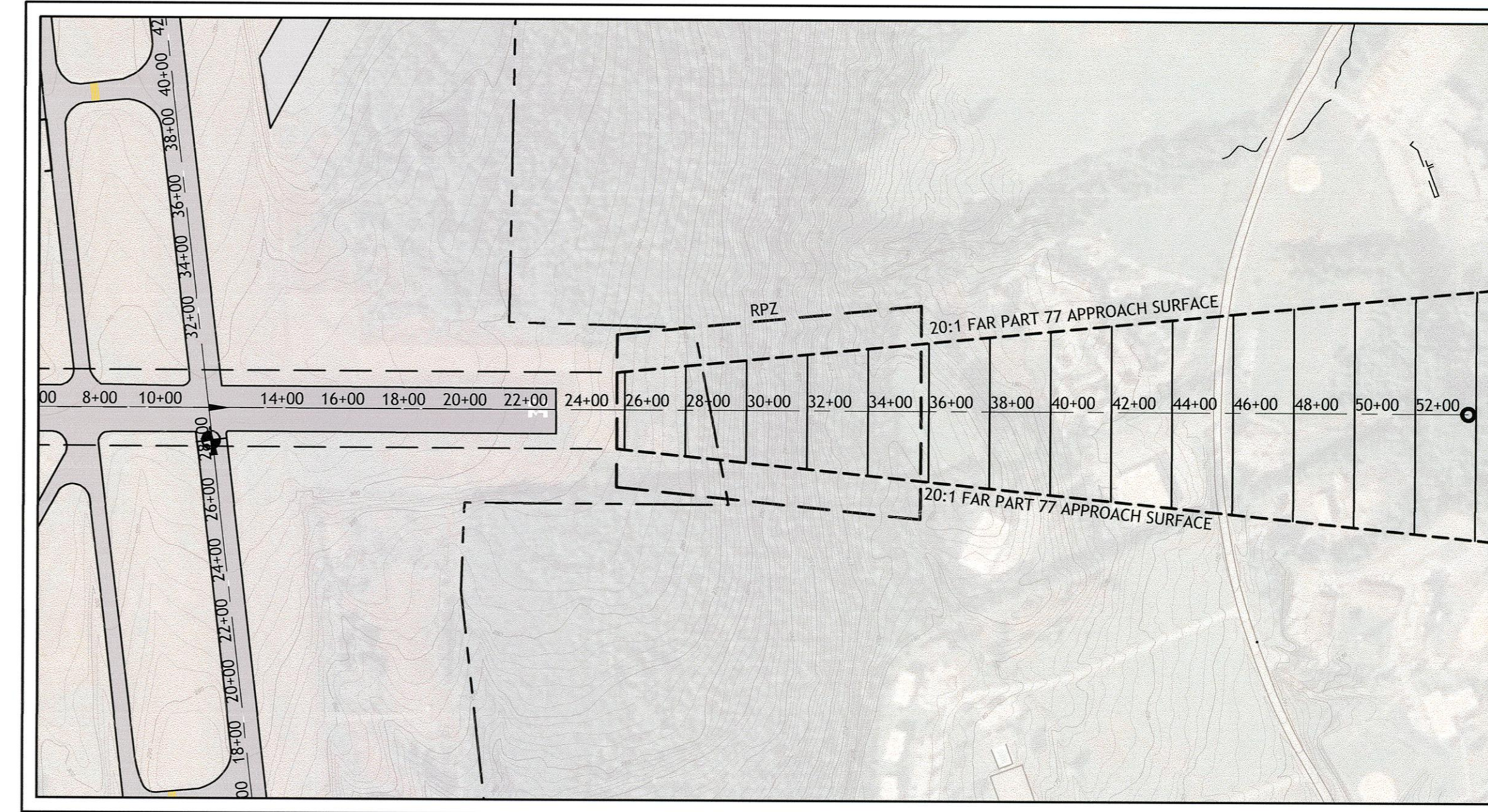
AIRPORT SOLUTIONS GROUP
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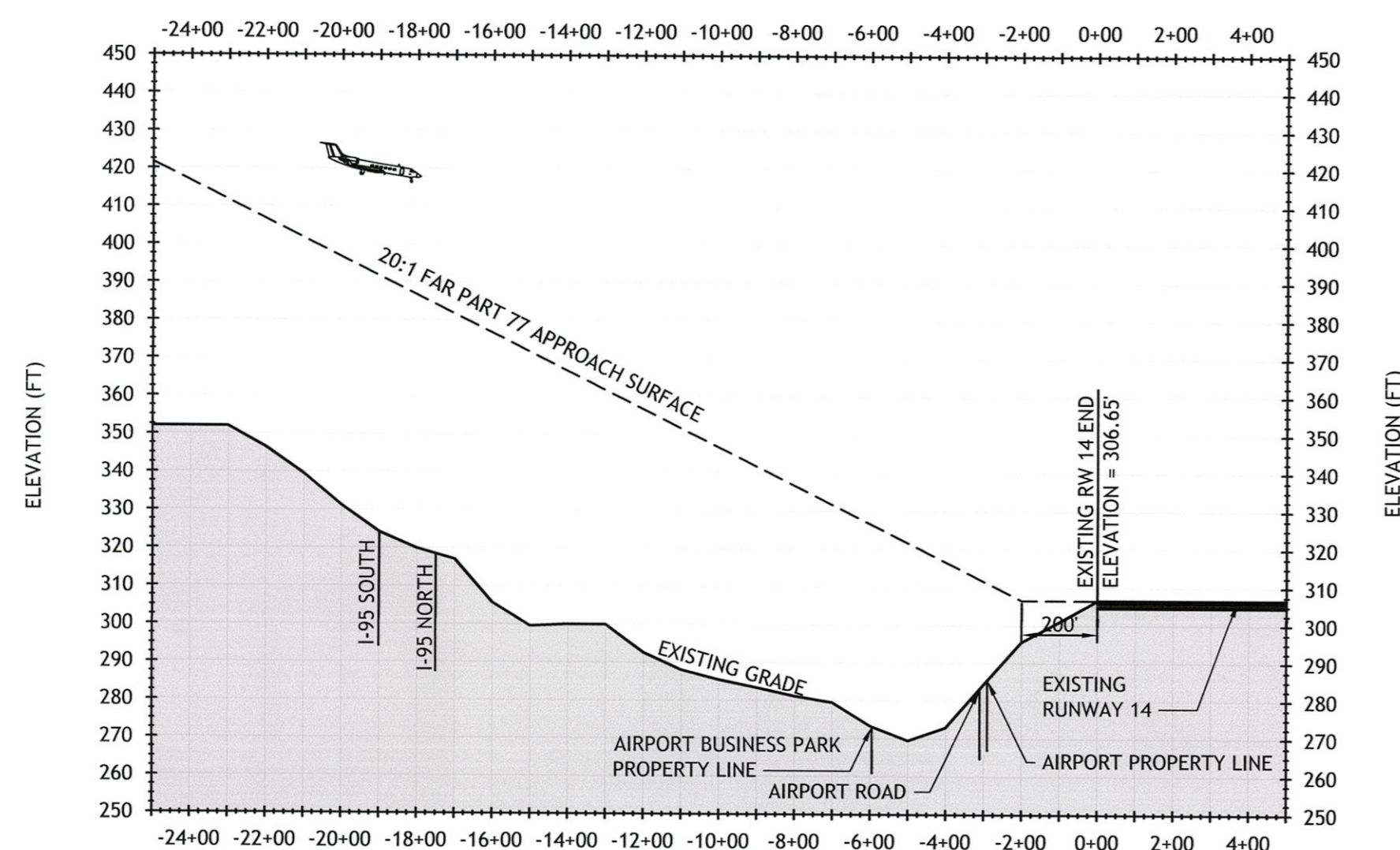
SHEET TITLE	PLAN AND PROFILES - RUNWAY 5-23
PROJECT	AIRPORT MASTER PLAN UPDATE - PHASE II
DESIGNER: TUL	CADD TECH: TUL
APPROVED: EPL	



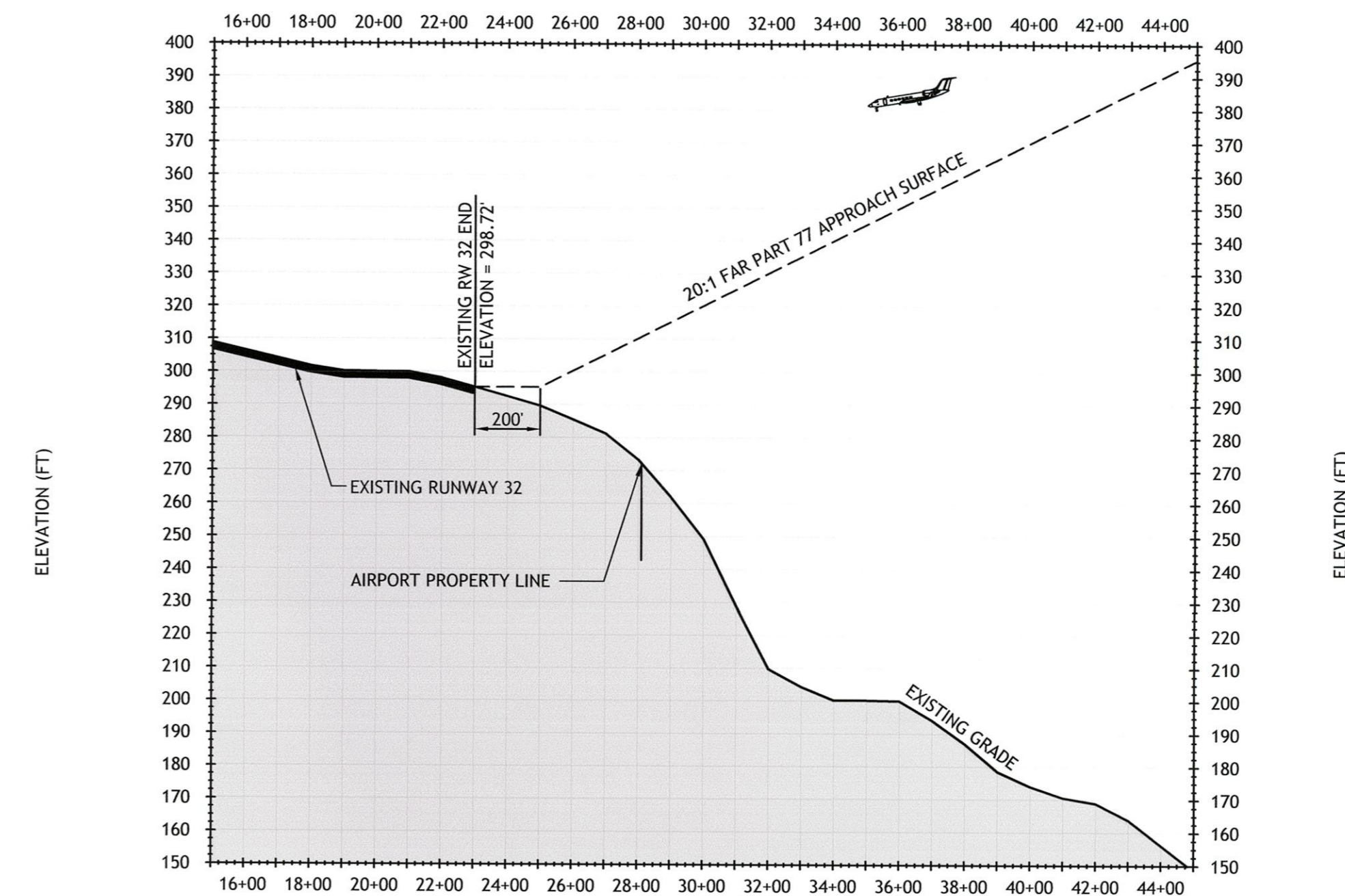
RUNWAY 14 APPROACH PLAN
SCALE 1" = 400'



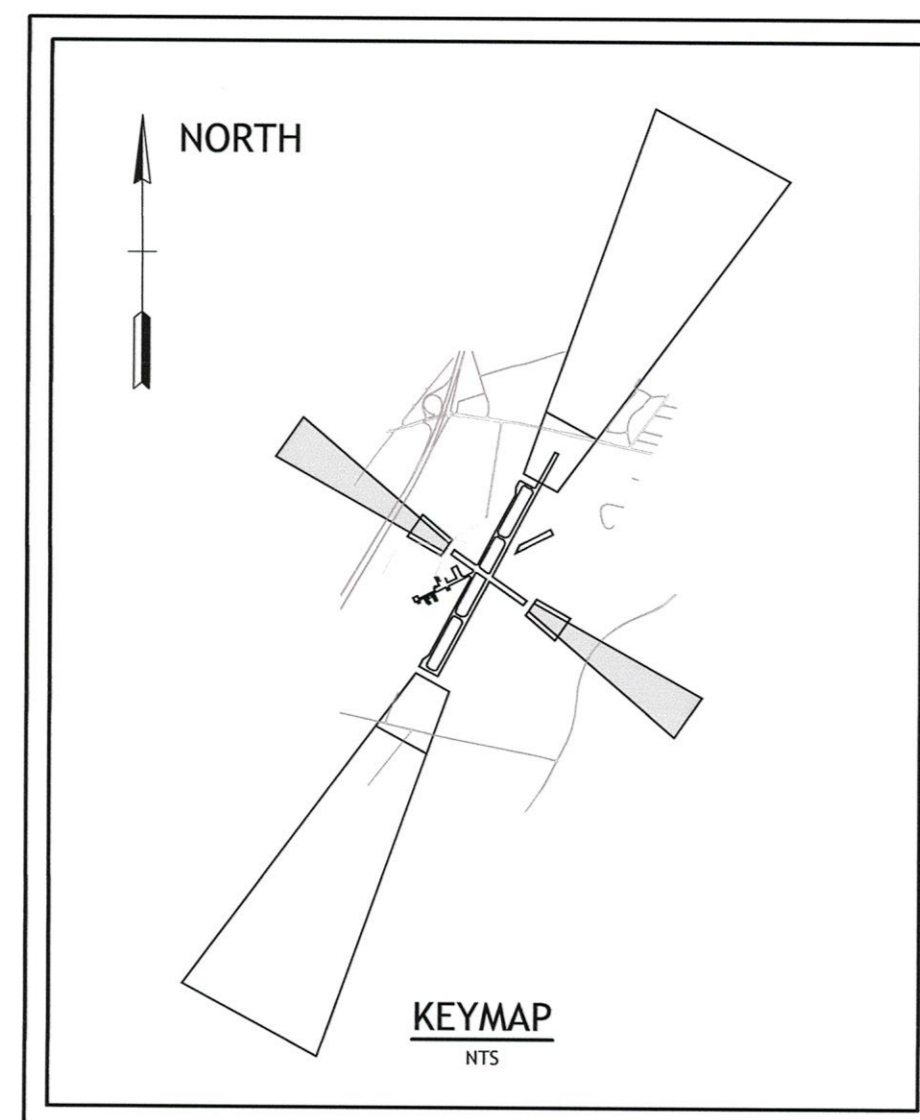
RUNWAY 32 APPROACH PLAN
SCALE 1" = 400'



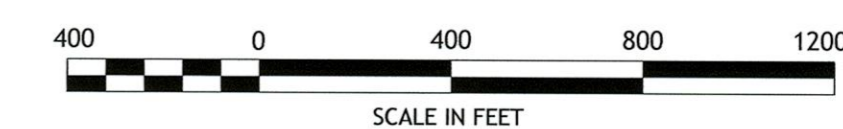
RUNWAY 14 APPROACH PROFILE
HORIZONTAL SCALE 1" = 400'
VERTICAL SCALE 1" = 40'



RUNWAY 32 APPROACH PROFILE
HORIZONTAL SCALE 1" = 400'
VERTICAL SCALE 1" = 40'



OBSTRUCTIONS - RUNWAY 14 - 32					
NUMBER	DESCRIPTION	ELEVATION	PENETRATION	PART 77 SURFACE	PROPOSED ACTION
1					
2					
3					

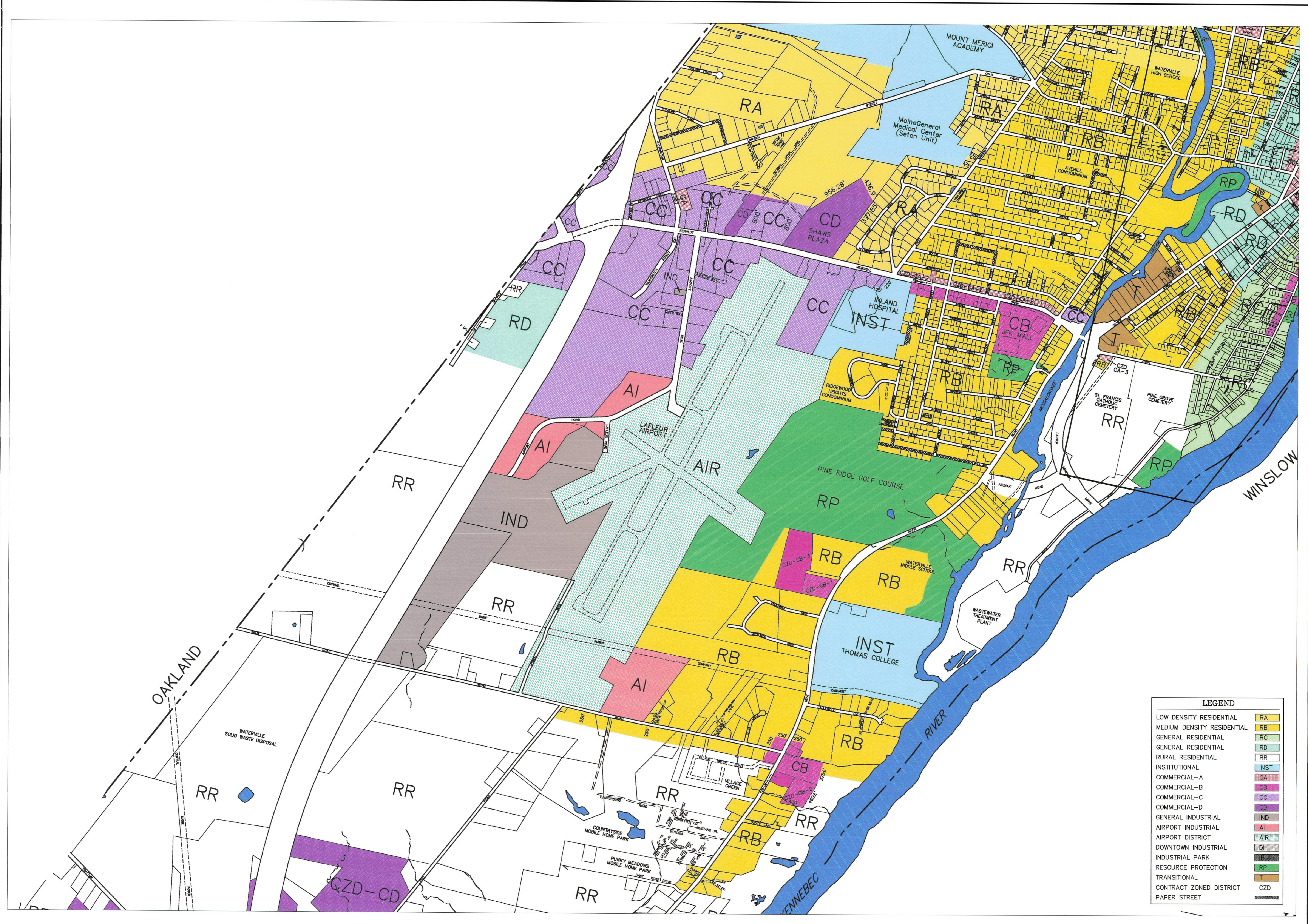


CAD FILE:	WL_Exhibit VI - W_Profile-1-10.dwg	
A.I.P. PROJECT NO.:	3-23-0047-16	
REV.	DATE	DESCRIPTION

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1 COMMON STREET • WATERVILLE, ME 04901
(207) 860-4233

SHEET TITLE: PLAN AND PROFILES - RUNWAY 14-32
PROJECT: AIRPORT MASTER PLAN UPDATE - PHASE II
DESIGNER: T.J.L. CADD TECH: T.J.L. APPROVED: EPL




LEGEND

LOW DENSITY RESIDENTIAL	RA
MEDIUM DENSITY RESIDENTIAL	RB
GENERAL RESIDENTIAL	RC
GENERAL RESIDENTIAL	RD
RURAL RESIDENTIAL	RR
INSTITUTIONAL	INST
COMMERCIAL-A	CA
COMMERCIAL-B	CB
COMMERCIAL-C	CC
COMMERCIAL-D	CD
GENERAL INDUSTRIAL	IND
AIRPORT INDUSTRIAL	AI
AIRPORT DISTRICT	AIR
DOWNTOWN INDUSTRIAL	DI
INDUSTRIAL PARK	IP
RESOURCE PROTECTION	RP
TRANSITIONAL	T
CONTRACT ZONED DISTRICT	CZD
PAPER STREET	

CAD FILE: WL_Exhibit VIII_Landuse-1-10.dwg
A.I.P. PROJECT NO. 3-23-0047-16

REV.	DATE	DESCRIPTION

AIRPORT SOLUTIONS GROUP
AIRPORT DEVELOPMENT SPECIALISTS
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AIRPORT CONSULTANTS • WOBURN, MASSACHUSETTS



WATERVILLE ROBERT LaFLEUR MUNICIPAL AIRPORT
1 COMMON STREET • WATERVILLE, ME 04901
(207) 868-4233

SHEET TITLE: LANDUSE PLAN
PROJECT: AIRPORT MASTER PLAN UPDATE - PHASE II

DESIGNER: T.J.L. APPROVED: EPL
CADD TECH: T.J.L.

DECEMBER, 2011



U.S. Department
of Transportation
**Federal Aviation
Administration**

May 4, 2015

Attn; Greg Brown
City of Waterville
#2 Lafleur Road, 1 Common St
Waterville, Me 04901

Dear Mr. Brown:

The Waterville Robert LaFleur Airport Layout Plan (ALP), prepared by Airport Solutions Group, and bearing your signature, is approved and the master plan is accepted. A signed copy of the approved ALP is enclosed.

An aeronautical study (no. 2015-ANE-420-NRA) was conducted on the proposed development. This determination does not constitute FAA approval or disapproval of the physical development involved in the proposal. It is a determination with respect to the safe and efficient use of navigable airspace by aircraft and with respect to the safety of persons and property on the ground.

In making this determination, the FAA has considered matters such as the effects the proposal would have on existing or planned traffic patterns of neighboring airports, the effects it would have on the existing airspace structure and projected programs of the FAA, the effects it would have on the safety of persons and property on the ground, and the effects that existing or proposed manmade objects (on file with the FAA), and known natural objects within the affected area would have on the airport proposal.

The FAA has only limited means to prevent the construction of structures near an airport. The airport sponsor has the primary responsibility to protect the airport environs through such means as local zoning ordinances, property acquisition, aviation easements, letters of agreement or other means.

This ALP approval is conditioned on acknowledgement that any development on airport property requiring Federal environmental approval must receive such written approval from FAA prior to commencement of the subject development. This ALP approval is also conditioned on acceptance of the plan under local land use laws. We encourage appropriate agencies to adopt land use and height restrictive zoning based on the plan.

Approval of the plan does not indicate that the United States will participate in the cost of any development proposed. AIP funding requires evidence of eligibility and justification at the time a funding request is ripe for consideration. When construction of any proposed structure or development indicated on the plan is undertaken, such construction requires normal 45-day advance notification to FAA for review in accordance with applicable Federal Aviation

Regulations (i.e., Parts 77, 157, 152, etc.). More notice is generally beneficial to ensure that all statutory, regulatory, technical and operational issues can be addressed in a timely manner. Please attach this letter to the Airport Layout Plan and retain it in the airport. We wish you great success in your plans for the development of the airport.

Sincerely,

A handwritten signature in cursive script that reads "Ralph Nicosia-Rusin".

Ralph Nicosia-Rusin
Airport Capacity Program Manager