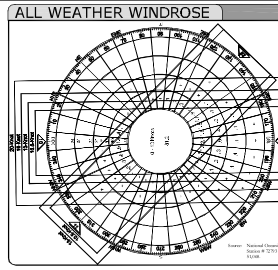
RUNWAY DATA

	RUNWAY 16R/34L EXISTING	RUNWAY 16R/34L *FUTURE*	RUNWAY 16L/34R EXISTING	RUNWAY 16L/34R *FUTURE*	RUNWAY 11/29 EXISTING	RUNWAY 11/29 *FUTURE*
APPROACH VISIBILITY MINIMUMS	1/2MILE/ 3/4MILE	*CAT II / 1/2MILE*	VISUAL/VISUAL	*VISUAL/VISUAL*	VISUAL/VISUAL	*VISUAL/VISUAL*
FAR PART 77 APPROACH SLOPE	50:1/34:1	*50:1/50:1*	20:1/20:1	*20:1/20:1*	20:1/20:1	*20:1/20:1*
RUNWAY WIDTH X LENGTH	150' X 9010'	*150' X 9010'*	75' X 3000'	*75' X 3000'*	75' X 4504'	*75' X 4504'*
PAVEMENT TYPE	ASPHALT/CONCRETE	*ASPHALT/CONCRETE*	ASPHALT	*ASPHALT*	ASPHALT	*ASPHALT*
PAVEMENT STRENGTH (IN 1000 LBS.)	830 DDT	*830 DDT*	12.5 S	*12.5 S*	30 S	*30 S*
RUNWAY LIGHTING	HIRL (℄ 16R)	*HIRL (℄ 16R), (TZL 16R)*	MIRL	*MIRL*	MIRL	*MIRL*
EFFECTIVE RUNWAY GRADIENT %	0.28	*0.28*	0.33	*0.33*	0.93	*0.93*
RUNWAY LINE-OF-SITE	CRITERIA MET	*CRITERIA MET*	CRITERIA MET	*CRITERIA MET*	CRITERIA MET	*CRITERIA MET*
WIND COVERAGE % (20 KNOTS)	99.5	*99.5*	99.5	*96.5*	96.5	*99.5*
VISUAL APPROACH AIDS	MALSR,℄ L,PAPI/MALSF	*ALSF2,RVR,PAPI/MALSR,PAPI*	REILS,PAPI	*REILS, PAPI*	VASI	*VASI,REILS*
INSTRUMENT APPROACH AIDS	NDB,DME,VOR,ILS,GPS/GPS	*NDB,DME,VOR,ILS,GPS/GPS*	NONE	*NONE*	NONE	*NONE*
AIRPORT REFERENCE CODE	D-V	*D-V*	B-I	*B-I*	B-I	*B-I*
CRITICAL AIRCRAFT	B-747-400	*B-747-400*	KING AIR B100	*KING AIR B100*	KING AIR B100	*KING AIR B100*
RUNWAY SAFETY AREA DIMENSIONS	500' X 1000'	*500' X 1000'*	120' X 240'	*120' X 240'*	120' X 240'	*120' X 240'*
RUNWAY OBJECT FREE AREA DIMENSIONS	800' X 1000'	*800' X 1000'*	250' X 240'	*250' X 240'*	250' X 240'	*250' X 240'*
OBSTACLE FREE ZONE CRITERIA	CRITERIA MET	*CRITERIA MET*	CRITERIA MET	*CRITERIA MET*	CRITERIA MET	*CRITERIA MET*
RUNWAY END COORDINATES (NAD 83)	LAT. 47°55'16.8044"N LON. 122°17'09.0677"W LAT. 47°53'47.8981"N LON. 122°17'07.0938"W	*LAT. 47°55'16.8044"N LON. 122°17'09.0677"W LAT. 47°53'47.8981"N LON. 122°17'07.0938"W*	LAT. 47°54'23.11955"N LON. 122°16'18.09758"W LAT. 47°53'53.51453"N LON. 122°16'17.76990"W	*LAT. 47°54'23.11955"N LON. 122°16'18.09758"W LAT. 47°53'53.51453"N LON. 122°16'17.76990"W*	LAT. 47°54'37.47897"N LON. 122°17'12.35049"W LAT. 47°54'06.53753"N LON. 122°16'24.93300"W	*LAT. 47°54'37.47897"N LON. 122°17'12.35049"W LAT. 47°54'06.53753"N LON. 122°16'24.93300"W*
RUNWAY ELEVATIONS END	562.86'/577.50'	*562.86'/577.50'*	601.03/599.88	*601.03/599.88*	564.98'/603.81'	*564.98'/603.81'*
HIGH POINT	582.57'	*582.57'*	609.6'	*609.6'*	607.63'	*607.63'*
LOW POINT	562.86'	*562.86'*	599.88'	*599.88'*	564.94'	*564.94'*
TOUCHDOWN ZONE ELEVATION	570.54'/582.57'	*570.54'/582.57'*	604.1'/600.9'	*604.1'/600.9'*	588.9'/607.5'	*588.9'/607.5'*
DECLARED DISTANCES TORA	9010'/9010'	*9010'/9010'*	3000'/3000'	*3000'/3000'*	4504'/4504'	*4504'/4504'*
TODA	9010'/9010'	*9010'/9010'*	3000'/3000'	*3000'/3000'*	4504'/4504'	*4504'/4504'*
ASDA	9010'/9010'	*9010'/9010'*	3000'/3000'	*3000'/3000'*	4504'/4264'	*4504'/4264'*
LDA	9010'/9010'	*9010'/9010'*	3000'/3000'	*3000'/3000'*	3705'/4264'	*3705'/4264'*
DISPLACED THRESHOLD COORDINATES					LAT. 47°54'31.98808"N LON. 122°17'03.94160"W	*LAT. 47°54'31.98808"N LON. 122°17'03.94160"W*
DISPLACED THRESHOLD ELEVATION					576.99'	*576.99'*
THRESHOLD SITING SURFACE	(SEE INNER APPROACH DRAWINGS/PROFILES – NO PENETRATIONS)					

NOTES: 1. This drawing reflects current planning standards applicable to Paine Field Airport to the greatest extent possible. This drawing should not be used as a standard for planning or design.
2. Runway End and Airport Reference Point Lat./Long. coordinate data is NAD83/91. Runway elevation vertical datum NAVD 88.

ALL WEATHER WINDROSE



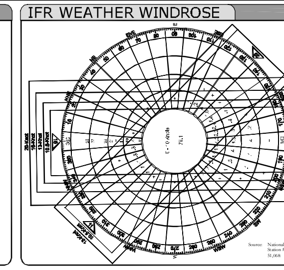
ALL WEATHER WIND COVERAGE SUMMARY
Paine Field Master Plan Update

Runway Designation	20-Knot Crosswind Component	10.5-Knot Crosswind Component
Runway 16/34	99.99%	98.62%
Runway 16	74.80%	73.53%
Runway 34	65.63%	65.20%
Runway 11/29	99.83%	93.35%
Runway 11	77.09%	71.53%
Runway 29	65.98%	63.96%
Combined	100.0%	99.95%

Source: Wind analysis tabulation provided by Barnard Dunkelberg & Company utilizing the FAA Airport Design Software supplied with AC 150/5300-13.

Source: National Oceanic and Atmospheric Administration, National Climatic Data Center Station # 72793 – Paine Field, Snohomish County, Everett, W.A. Period of Record – 1991-2000. Total Observations: 51,068.

IFR WEATHER WINDROSE



IFR WIND COVERAGE SUMMARY
Paine Field Master Plan Update

Runway Designation	Wind Coverage Provided Under IFR Conditions (1) 20-Knot Maximum Crosswind	Wind Coverage Provided Under IFR Conditions (1) 10.5-Knot Maximum Crosswind
Runway 16/34	100.00%	98.95%
Runway 16	85.35%	84.37%
Runway 34	50.48%	50.20%
Runway 11/29	99.75%	92.22%
Runway 11	87.50%	80.17%
Runway 29	55.46%	54.11%
Combined	100.0%	99.92%

Source: Wind analysis tabulation provided by Barnard Dunkelberg & Company utilizing the FAA Airport Design Software supplied with AC 150/5300-13.
(1) Ceiling of less than 1,000 feet, but equal to or greater than 200 feet and/or visibility less than 3 statute miles, but equal to or greater than ½ statute mile.

Source: National Oceanic and Atmospheric Administration, National Climatic Data Center Station # 72793 – Paine Field, Snohomish County, Everett, W.A. Period of Record – 1991-2000. Total Observations: 51,068.

APPROVAL

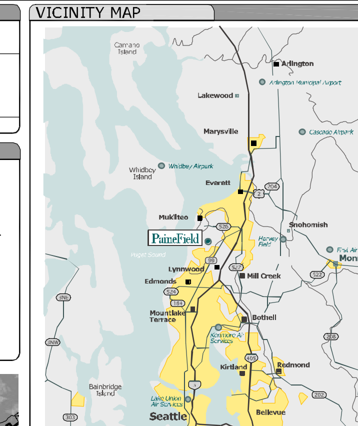
AIRPORT SPONSOR DATE

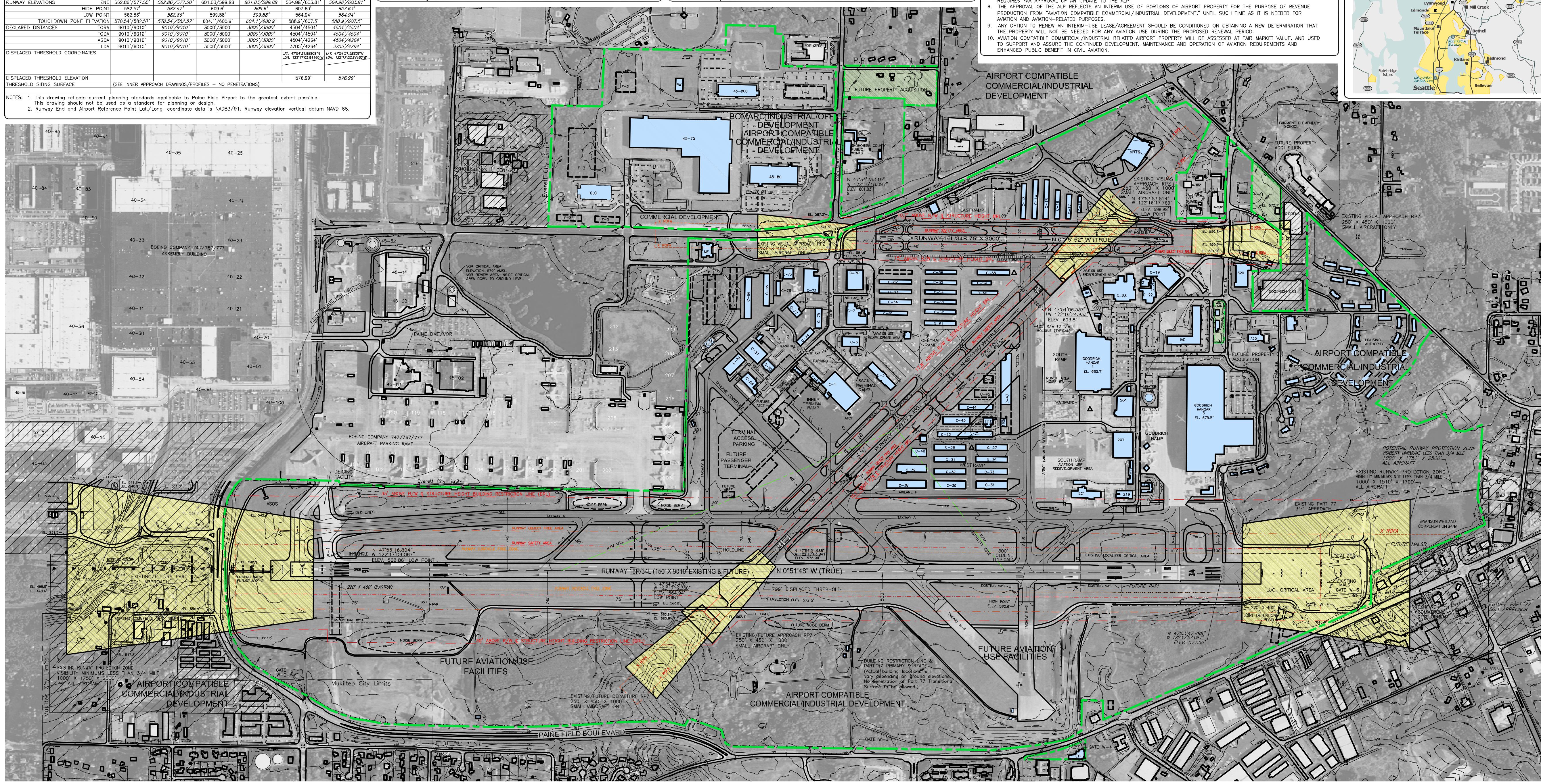
FEDERAL AVIATION ADMINISTRATION DATE

NOTES

1. THIS DRAWING IS FOR PLANNING AND DESIGN ONLY AND IS NOT INTENDED FOR ENGINEERING PURPOSES.
2. ALL LAT./LON. COORDINATE DATA IS NAD83.
3. PHOTOGRAMMETRIC MAPPING BY WALKER AND ASSOCIATES, SEATTLE, WA. PREPARED FOR SNOHOMISH COUNTY AIRPORT, JUNE 1998, (1" = 100' MAP ACCURACY). AERIAL PHOTOS DATED MAY 15, 2001.
4. ROADWAY AND RAILROAD SPOT ELEVATIONS WITHIN RUNWAY PROTECTION ZONE ARE BASED ON WALKER AND ASSOCIATES SURVEY.
5. DIGITAL FILE HORIZONTAL COORDINATE SYSTEM IS WASHINGTON STATE PLANE, NORTH ZONE 1983/1991 ADJUSTED, VERTICAL NAVD 88.
6. RUNWAY END ELEVATIONS BASED ON SURVEY DATA BY CH2MHILL 06/14/00.
7. ALL CONCEPT ORIENTED DEVELOPMENT STATEMENTS DEPICTED ON THE ALP DRAWING ARE SUBJECT TO FURTHER PLANNING AND REQUIRES FAA APPROVAL OF AN UPDATE TO THE ALP.
8. THE APPROVAL OF THE ALP REFLECTS AN INTERIM USE OF PORTIONS OF AIRPORT PROPERTY FOR THE PURPOSE OF REVENUE PRODUCTION FROM "AVIATION COMPATIBLE COMMERCIAL/INDUSTRIAL DEVELOPMENT," UNTIL SUCH TIME AS IT IS NEEDED FOR AVIATION AND AVIATION-RELATED PURPOSES.
9. ANY OPTION TO RENEW AN INTERIM-USE LEASE/AGREEMENT SHOULD BE CONDITIONED ON OBTAINING A NEW DETERMINATION THAT THE PROPERTY WILL NOT BE NEEDED FOR ANY AVIATION USE DURING THE PROPOSED RENEWAL PERIOD.
10. AVIATION COMPATIBLE COMMERCIAL/INDUSTRIAL RELATED AIRPORT PROPERTY WILL BE ASSESSED AT FAIR MARKET VALUE, AND USED TO SUPPORT AND ASSURE THE CONTINUED DEVELOPMENT, MAINTENANCE AND OPERATION OF AVIATION REQUIREMENTS AND ENHANCED PUBLIC BENEFIT IN CIVIL AVIATION.

VICINITY MAP





NON-STANDARD CONDITIONS

DESCRIPTION	ARC EXISTING	ARC *FUTURE*	STANDARD EXISTING	STANDARD *FUTURE*	NON-STANDARD EXISTING	NON-STANDARD *FUTURE*	REMARKS
RUNWAY OBJECT FREE AREA BEYOND R/W 11 THRESHOLD	B-I (SMALL A/C)	*SAME*	250' X 240'	*SAME*	250' X 0'	*250' X 0'*	CROSSED BY PERIMETER ROAD
RUNWAY SAFETY AREA BEYOND R/W 11 THRESHOLD	B-I (SMALL A/C)	*SAME*	120' X 240'	*SAME*	120' X 50'	*120' X 50'*	CROSSED BY PERIMETER ROAD
RUNWAY VISIBLITY ZONE					HANGAR ENCROACHMENT	*HANGAR ENCROACHMENT*	HANGARS TO BE REMOVED AT THE END OF THEIR USEFUL LIFE

BUILDING LEGEND

NO.	DESCRIPTION	ELEVATION	NO.	DESCRIPTION	ELEVATION	NO.	DESCRIPTION	ELEVATION	NO.	DESCRIPTION	ELEVATION
C-1	GOODRICH/PRECISION ENGINES/AIRPORT OFFICES	658.3'	C-51-56	T-HANGARS	620.2'-626.4'	C-85	T-HANGAR	618'	ETF	EVALUATION & TREATMENT FACILITY	567'
C-2	G. A. TERMINAL/FLITELINE SERVICES	615.7'	C-57	JET DECK RESTAURANT (TO BE REMOVED)	623.6'	C-86	T-HANGAR	618'	ATCT	AIR TRAFFIC CONTROL TOWER	688.1'
C-3	NORTHWAY AVIATION/CANNON INTERIORS	628.2'	C-58-64	T-HANGARS	620.2'-623.8'	126	TO BE REMOVED	618.9'	LS	LIFT STATION	584'
C-4	FLITELINE SERVICES (TO BE REMOVED)	613.7'	C-70	UMBRA CUSCINETTI	616.2'	201	GOODRICH	642.7'	733	YMCA	608.1'
C-11	CROWN AVIATION	624.1'	C-71	TYEE	629.1'	207	VACANT	627.0'	ME	MEDICAL EXAMINER	601'
C-13-18	T-HANGARS (EAST CONDO)	613.9'-616.7'	C-72	MUSEUM OF FLIGHT	623.7'	211	DEPT OF EMERGENCY MANAGEMENT	614.2'	GLG	GOODRICH LANDING GEAR	628'
C-19-23	NEUVANT	625.9'-640.1'	C-73	MUSEUM OF FLIGHT	626.3'	219	ARFF/MAINTENANCE	634.9'	RW	ROADWAY	
C-30-31	WEST CONDO HANGARS	614.4'-612.3'	C-74	HANGAR	622.3'	221	ME 262 PROJECT	623.5'	NLV	NIGHT LIGHTING VAULT	565'
C-38-41	WEST CONDO HANGARS	612.5'-633.7'	C-75	HANGAR	622.3'	620	GOODRICH (TO BE REMOVED)	614.8'	IAC	INDUSTRIAL ADVANCEMENT CENTER	623.9'
C-32-37	T-HANGARS	614.7'-612.9'	C-76	STORAGE	613.1'	1103	GOODRICH	630.0'			589'
C-42	*FUTURE T-HANGARS*		C-77	RANGER CORP.	629'	1105	VACANT (TO BE REMOVED)	625.7'			
C-43	*FUTURE T-HANGARS*		C-78	HONEYWELL	630.7'	1116	FIRE VEHICLE MAINTENANCE (TO BE REMOVED)	631.0'	F-1	*FUTURE GA HANGAR*	
C-44	*FUTURE T-HANGARS*		C-80	EVERETT COMMUNITY COLLEGE	614.2'	40-01	BOEING COMPANY (40-01 THRU 45-04)		F-2	*FUTURE GA HANGAR & RESTAURANT*	
C-45	*FUTURE T-HANGARS*		C-81	EVERETT COMMUNITY COLLEGE	630.2'	45-70	BOEING COMPANY	620'	F-3	*FUTURE BOMARC BUILDING*	
C-46	*FUTURE T-HANGARS*		C-82	EVERETT COMMUNITY COLLEGE	618.2'	45-80	BOEING COMPANY		F-5	*FUTURE INDUSTRIAL HANGAR*	
C-47	*FUTURE T-HANGARS*		C-84	ATTWS	632.3'	45-800	BOEING COMPANY		F-7	*FUTURE GA TERMINAL*	

REVISIONS

	DATE

AIRPORT DATA

	EXISTING	*FUTURE*
AIRPORT ELEVATION (AMSL)	609.65'	*609.65'*
AIRPORT REFERENCE POINT (ARP)	LAT. 47° 54' 25.388" N LON. 122° 16' 53.816" W	*LAT. 47° 54' 25.388" N LON. 122° 16' 53.816" W*
AIRPORT REFERENCE CODE	D-V	*D-V*
NPIAS CATEGORY	RELIEVER	*RELIEVER*
MEAN MAX. TEMPERATURE (HOTTEST MONTH)	73°	*73°*
TAXIWAY LIGHTING	MITL	*MITL*
TAXIWAY MARKING (*)	CENTERLINE	*CENTERLINE*
AIRPORT & TERMINAL NAVAIDS	NDB,VOR,ILS,GPS	*NDB,VOR,ILS,GPS*

(*) TAXIWAY EDGE MARKING ON T/W ALPHA

LAYOUT PLAN LEGEND

	EXISTING	*FUTURE*
AIRPORT PROPERTY LINE		
AIRPORT SECURITY FENCE	X	X
AIRPORT BUILDINGS		
AIRFIELD PAVEMENT		
PAVED ROADS		
RUNWAY PROTECTION ZONE		
AVIGATION EASEMENT		
BUILDING RESTRICTION LINE	BRL	*BRL*
RUNWAY SAFETY AREA		
RUNWAY OBJECT FREE AREA		
FUEL STORAGE AREA	F	F
AIRPORT BEACON		
LIGHTED WIND CONE		
PRECISION APPROACH PATH INDICATOR (PAPI)		
RUNWAY END IDENTIFIER LIGHTS (REIL)		
WASH RACK		

Figure E1 Airport Layout Plan

Prepared by:
Barnard Dunkelberg & Company
1616 East 15th Street
Tulsa, Oklahoma 74120
918.585.8844 staff@bd-c.com

19.17'05" Mag. Dec.
March 17, 2000
0°-14.33395'
Annual Change
True North

0 200' 400' 800' 1200'
GRAPHIC SCALE IN FEET

AIRPORT LAYOUT PLAN

SHEET 1 OF 12
DECEMBER, 2002

Paine Field
Snohomish County, Washington

E.3