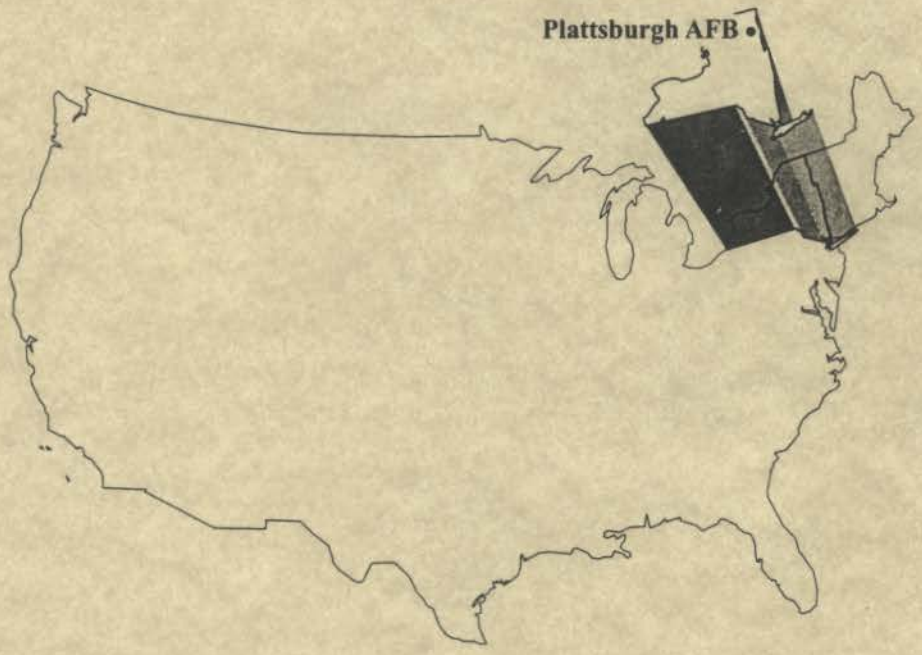
ENVIRONMENTAL ASSESSMENT

(A Supplement to the Final Environmental Impact Statement, Disposal and Reuse of Plattsburgh Air Force Base, New York, November 1995)

MAY 2000



ALTERNATIVE LAND USES
PLATTSBURGH AIR FORCE BASE, NEW YORK

ENVIRONMENTAL ASSESSMENT

ALTERNATIVE LAND USES, PLATTSBURGH AIR FORCE BASE

MAY 2000

DRAFT FINDING OF NO SIGNIFICANT IMPACT

FOR

DISPOSAL AND REUSE OF PLATTSBURGH AIR FORCE BASE, NEW YORK

In accordance with the National Environmental Policy Act (40 CFR Parts 1500-1508) and its implementing regulations, the U.S. Department of the Air Force has conducted an Environmental Assessment (EA) to evaluate the potential environmental consequences of recently proposed (January 2000) reuse alternatives for portions of the former Plattsburgh Air Force Base (AFB), New York. These alternatives represent new additions to the alternatives analyzed previously in the Final Environmental Impact Statement (FEIS) for the Disposal and Reuse of the Plattsburgh AFB, prepared by the Air Force in November 1995, and hereafter referred to as the 1995 FEIS. A Partial Record of Decision (PROD) regarding the disposal of selected parcels of real property at Plattsburgh AFB backed by the 1995 FEIS was issued in August 1996. A Record of Decision (ROD) covering parcels not covered in the 1996 PROD was issued in October 1997. In August 1999, a supplemental ROD (SROD) was issued to create a new disposal parcel (Parcel K, previously part of Parcel A-2) that would be conveyed to the City of Plattsburgh. This FONSI and EA along with the 1996 PROD,1997 ROD, 1999 SROD, and documentation provided in the 1995 FEIS form the basis for making an informed decision on the disposal of all real property at Plattsburgh AFB.

Purpose and Need

Pursuant to the Defense Base Closure and Realignment Act (DBCRA) of 1990 (Public Law 101-510, Title XXIX), Plattsburgh AFB was closed on September 30, 1995. The U.S. Air Force prepared a Final Environmental Impact Statement (FEIS) for the disposal and reuse of Plattsburgh AFB in November 1995. On 11 November 1998 and again in January 2000, the Plattsburgh Airbase Redevelopment Corporation (PARC), the agency responsible for the redevelopment of the base, informed the Air Force of its decision to revise the planned land uses for certain parcels at Plattsburgh AFB. The request was based on PARC's reevaluation of development opportunities for the base. The land uses were revised to accommodate more intensive commercial, industrial, and aviation support land uses which had not been considered previously for certain parcels. The Air Force determined that an Environmental Assessment (EA) should be prepared as a supplement to the 1995 FEIS because the proposal made by PARC represents changes sufficient to warrant additional analysis.

Description of Alternatives including the Proposed Action

To evaluate potential impacts resulting from the additional reuse alternatives, the Air Force has based its Proposed Action on the proposal made by PARC in January 2000. This proposal retains the primary use of the base as an airpark, with the relocation of Clinton County Airport activities to the base airfield. It, however, differs from the Proposed Action analyzed in the 1995 FEIS in two ways: (1) it proposes more intensive commercial, industrial and aviation support land uses to the parcels designated for public/recreational uses and open space in the 1995 FEIS and (2) it proposes analysis of mixed uses, such as commercial and industrial, on the same parcel of land instead of only one use per parcel as analyzed in the 1995 FEIS.

As an alternative, the Air Force has also analyzed the impacts of single land uses on parcels identified for mixed uses in the Proposed Action. The use analyzed in the alternative action

(Alternative 1) is "commercial" land use as it has the potential of generating the maximum adverse environmental impacts.

Summary of Environmental Consequences

Neither the Proposed Action nor Alternative 1 would generate any significant impacts on any environmental resource. The 1995 FEIS identified potential adverse environmental impacts on biological and cultural resources. However, it was indicated that after implementation of suggested mitigation measures, particularly, avoidance of wetlands, the impacts would be reduced to 'not significant' levels. Increase in traffic volumes resulting from more intensive uses of the base property also result in higher impacts on air quality and noise, but these impacts remain within the regulatory thresholds and are not considered significant.

Decision

As a result of the analysis of impacts assessed and analyzed, it is concluded that implementation of the mitigation measures incorporated in the 1995 FEIS and still applicable to this analysis would keep potential impacts on biological and cultural resources at not significant levels. Therefore, a determination has been made that disposal and reuse of the Plattsburgh AFB property does not represent a major federal action significantly affecting the quality of the environment and the preparation of a supplemental EIS is not required.

THOMAS W.L.MCCALL, JR.
Deputy Assistant Secretary of the Air Force

COVER SHEET

DRAFT ENVIRONMENTAL ASSESSMENT ALTERNATIVE LAND USES, PLATTSBURGH AIR FORCE BASE (A Supplement to the Final Environmental Impact Statement, Disposal and Reuse of Plattsburgh Air Force Base, New York, 1995)

a. Lead Agency: U.S. Air Force

b. Proposed Action: Disposal and Reuse of Plattsburgh Air Force Base (AFB),

c. Inquiries on this document should be directed to: Mr. Jonathan D. Farthing, Chief, Environmental Analysis Division, HQ AFCEE/ECA, 3207 North Road, Brooks Air Force Base, Texas, 78235-5363, (210) 536-2787.

d. Designation: Environmental Assessment (EA)

e. Abstract: Pursuant to the Defense Base Closure and Realignment Act (DBCRA) of 1990 (Public Law 101-510, Title XXIX), Plattsburgh AFB was closed on September 30, 1995. The U.S. Air Force prepared a Final Environmental Impact Statement (FEIS) for the disposal and reuse of Plattsburgh AFB in November 1995. In January 2000, the Plattsburgh Airbase Redevelopment Corporation (PARC), the agency responsible for the reuse of the base, requested the Air Force that some new alternatives be added to the existing list of acceptable uses at Plattsburgh AFB. The Air Force agreed to that request and this Environmental Assessment (EA) has been prepared to evaluate potential impacts resulting from the additional reuse alternatives. This document supplements the FEIS prepared in 1995 and includes an analysis of two additional alternatives (Proposed Action and Alternative 1). The EA includes an analysis of community setting, land use and aesthetics, transportation, utilities, soils and geology, water resources, air quality, noise, biological resources, and cultural and paleontological resources. Potential environmental impacts associated with the Proposed Action include increased traffic in the vicinity of the base, traffic related noise, small increases in air pollutant emissions, and potential disturbance of some biological (wetlands) and cultural resources. Overall impacts of Alternative 1 would be greater but would remain within regulatory thresholds. Mitigations suggested in the 1995 FEIS and still applicable to analysis in this document would reduce all impacts to a level that is not significant.

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SUMMARY

SUMMARY

Purpose and Need

This Environmental Assessment (EA) examines the potential impacts to the environment that may result from the recently proposed (January 2000) reuse alternatives of Plattsburgh Air Force Base (AFB), New York. These alternatives represent new additions to the alternatives analyzed previously in the Final Environmental Impact Statement (FEIS) for the Disposal and Reuse of the Plattsburgh AFB, prepared by the U.S. Air Force in November 1995. This EA is, therefore, prepared as a supplement to the 1995 FEIS. Much of the material presented in the 1995 FEIS is still valid for this EA and has not been repeated here. Instead, relevant sections of the 1995 FEIS have been incorporated into this EA by reference.

The U.S. Air Force has prepared this EA because the alternatives analyzed in this document represent changes sufficient to warrant additional analysis from the alternatives analyzed in the 1995 FEIS. The new land use proposal recommended by the Plattsburgh Airbase Redevelopment Corporation (PARC) has added more intensive commercial, industrial, and aviation support land uses to a large number of parcels on the base. These land uses have a greater potential for generating adverse environmental impacts than those analyzed in the 1995 FEIS, thus necessitating a new analysis. To determine whether the proposed changes are significant, the new proposal is measured against the level of activity or magnitude of the alternatives that were evaluated in the 1995 FEIS. The ultimate question for the decision-makers is whether the changes will affect the quality of the human environment in a significant manner or to a significant extent not already considered in the previous study.

After completion and consideration of this EA, the Air Force will prepare decision documents stating what property is excess and surplus, and the terms and conditions under which the dispositions will be made. These decisions may affect the environment by influencing the nature of the property's future use.

Alternatives including the Proposed Action

To evaluate potential impacts resulting from the additional reuse alternatives, the Air Force has based its Proposed Action on the proposal made by PARC to the AFBCA at Plattsburgh in January 2000. This proposal retains the primary use of the base as an airpark, with the relocation of the Clinton County Airport activities to the base airfield. It, however, differs from the Proposed Action analyzed in the 1995 FEIS in two ways: (1) it proposes more intensive commercial, industrial, and aviation support land uses to the parcels designated for public/recreational uses and open space in the 1995 FEIS and (2) it proposes analysis of mixed uses such, as commercial and industrial on the same parcel of land instead of only one use per parcel as analyzed in the 1995 FEIS.

In May 2000, the U.S. Air Force decided to conduct a new noise analysis which would include the cumulative impacts of aircraft operations analyzed in the 1995 FEIS and some additional operations proposed by Pratt & Whitney for their test flights from Plattsburgh AFB. The results of this analysis are presented in Appendix A of this EA.

As an alternative, the Air Force has also analyzed the impacts of single land uses on parcels identified for mixed uses in the Proposed Action. The single use analyzed in the alternative action (Alternative 1) is "Commercial" land use as it has the potential of generating the maximum adverse environmental impacts.

The No Action Alternative remains the same as analyzed in the 1995 FEIS. The analysis has not been repeated in this EA and has been incorporated here in its entirety by reference to the 1995 FEIS. With the No Action Alternative, the base property would be retained by the U.S. Government and no disposal and reuse would occur.

Scope of Study

This EA describes the potential environmental impacts associated with the Proposed Action of January 2000 and one reasonable alternative (Alternative 1). Consistent with the Air Force Instruction (AFI) 32-7061 and Council on Environmental Quality regulations, the scope of this EA was defined by the potential range of environmental impacts that could result from implementation of the Proposed Action and Alternative 1.

To establish the context in which these environmental impacts may occur, potential changes in population and employment, land use and aesthetics, transportation, and community and public utility services are discussed as reuse-related influencing factors. Potential impacts to the physical and natural environment are evaluated for soils and geology, water resources, air quality, noise, biological resources, and cultural and paleontological resources.

As with the 1995 FEIS, the baseline against which the Proposed Action and Alternative 1 have been analyzed consists of the conditions projected in 1996 (the first full calendar year after base closure). Although the baseline assumes a closed base, a reference to preclosure conditions is provided in several sections (e.g., air quality and noise) to allow a comparative analysis over time.

Summary of Environmental Impacts

Environmental impacts of the Proposed Action and Alternative 1 are described in the following sections. Factors that would likely influence the biophysical environment include employment and population, infrastructure demands, and ground disturbance; these factors are summarized in Table S-1. Impacts of the Proposed Action and Alternative 1 are summarized for the year 2016 in Table S-2. To provide easy comparison,

the impacts identified for the Proposed Action in the 1995 FEIS have also been presented in Tables S-1 and S-2.

Mitigations are listed, where appropriate, in terms of their potential effectiveness if implemented for affected resource areas, and are summarized along with environmental impacts in Table S-2. Full responsibility for these suggested mitigations would be borne primarily by future property recipients or local government agencies. No mitigation measures in addition to those identified in the 1995 FEIS have been identified in this EA because the impacts have not been found to be substantially different to require additional mitigations.

Proposed Action

Local Community

The current Proposed Action would result in greater increases in employment and population in Clinton County compared to the Proposed Action in the 1995 FEIS. A total of 12,500 jobs (8,800 direct and 3,700 secondary) would be generated as a result to the Proposed Action by 2016. By comparison, the 1995 FEIS Proposed Action generated 6,370 jobs (4,484 direct and 1,886 secondary). Therefore, the population in Clinton County is expected to increase by 7,230 with the Proposed Action compared to 3,686 with the 1995 FEIS Proposed Action by 2016. Even this increase would represent only 7.5 percent of the 2016 baseline population of 95,900.

Acreage under the Airfield land use would remain the same as identified in the 1995 FEIS. However, aviation support, industrial, and commercial land uses would utilize substantially more land than identified in the 1995 FEIS. Most of this increase would be the result of reduction in the acreage of public/recreational land use.

With the Proposed Action, the average daily traffic (ADT) to and from the base property would increase to 45,600 by 2016. This represents a 26 percent increase over the ADT generated by the Proposed Action but an 11.2 percent decrease from the Aviation with Mixed Use Alternative in the 1995 FEIS. Utility consumption associated with the Proposed Action would represent a relatively small increase (less than 4 percent) over the demand identified for the Proposed Action in the 1995 FEIS. All utility providers currently have excess capacity to meet the increased demand.

Natural Environment

Effects on local soils and geology would result primarily from construction activities. Soil profiles and local topography have been altered by past construction and no significant impacts are anticipated from new construction.

Construction activities would change some surface drainage flows and would increase the amount of impervious surface. Groundwater supplies would not be affected. Because no construction or other change in

conditions is proposed for the 100-year floodplains, no impacts are expected from flooding.

Air pollutant emissions associated with the Proposed Action would increase over baseline and the 1995 FEIS Proposed Action levels. However, the increase would primarily be offset by reductions in preclosure emissions at the base and Federal and State ambient standards would not be exceeded.

As with the 1995 FEIS Proposed Action, aircraft noise associated with reuse of the airfield as a civilian airport would be substantially less than noise levels prior to base closure. The day-night noise level (DNL) of 65 decibels (dB) or greater would be contained within the designated airfield reuse area when the airfield is fully developed in 2016. As a result, no persons would be affected by aircraft-generated noise. Surface traffic noise would increase slightly above preclosure baseline levels along local roadways, but would remain within the local noise thresholds.

Effects on biological resources would not be significant. As with the 1995 FEIS Proposed Action, most of the land disturbance would occur on property supporting habitat of relatively low biological value. Proposed industrial development in the southeastern area and in the western and central parcels would require clearing mature forest. The actual location of development in the western parcels would be segmented because portions of these parcels are classified as forest wetland by the New York State Department of Environmental Conservation (NYSDEC). The loss and alteration of wildlife habitats with the Proposed Action are not expected to significantly affect regional wildlife populations because of the low sensitivity levels of the species present, and the relatively small quantity and generally high levels of previous disturbance to most of the affected habitats. In addition, impacts are not expected to be significant because of the presence and quantity of suitable adjacent habitats.

In the 1995 FEIS, potential impacts to cultural resources were identified as a result of the Proposed Action. However, it was indicated that these impacts could be mitigated to a not significant level. All known cultural resources are proposed to remain undisturbed. Currently, a Programmatic Agreement (PA) between the Air Force, New York SHPO, Advisory Council on Historic Preservation (ACHP), and PARC is being negotiated. The PA will specify the activities and responsible parties to ensure that all the Cultural Resources on Plattsburgh AFB are protected thereby reducing the impacts to not significant levels. Necessary mitigation measures to protect and preserve the potential cultural resources during the construction phase would be undertaken in consultation with the State Historic Preservation Officer (SHPO).

Alternative 1

Local Community

Alternative 1 would result in larger increases in employment and population in Clinton County compared to the Proposed Action. A total of 14,940 jobs

(10,520 direct and 4,420 secondary) would be generated as a result of this alternative by 2016 (Table S-1). The labor force in Clinton County would provide a large share of the new employees. Still, the population in Clinton County is expected to increase by 8,650 or 9.0 percent of the projected baseline population in 2016.

Commercial land use on the base property would increase with Alternative 1, but the overall impact on land disturbance would be similar to the Proposed Action. Land use plans and zoning would be updated to incorporate proposed changes, if necessary, and the reuse proposals would remain compatible with local land use plans and policies.

With this alternative average daily traffic (ADT) on streets adjacent to the base would increase to 55,800 vehicle trips by 2016, resulting in deterioration of level of service (LOS) on some road segments. Air traffic would be similar to that identified for the Proposed Action.

Utility consumption associated with this alternative would represent a larger increase in the total demand than with the Proposed Action. However, all utility providers currently have excess capacity to meet the increased demand.

Natural Environment

Effects on local soils and geology as well as water resources would be similar to those identified for the Proposed Action. Air pollutant emissions resulting from surface traffic would be greater with this alternative than with the Proposed Action. However, there would be minimal impact on regional or local air quality and the attainment classifications for all criteria pollutants in Clinton County will not be affected.

Noise levels would also increase because of the greater volume of surface traffic resulting from this alternative. However, surface traffic noise levels along local roadways would not increase much above baseline levels.

Impacts on biological and cultural resources would be the same as for the Proposed Action, because the acreage disturbed may remain identical to the Proposed Action. Mitigations identified for the Proposed Action would also be applicable to this alternative.

Table S-1
Summary of Reuse-Related Influencing Factors, 2016

Factor	1995 FEIS	Proposed Action	Alternative 1
Direct Employment	4,484	8,800	10,523
Secondary Employment	1,886	3,696	4,420
Total Employment	6,370	12,496	14,943
Population Increase	3,686	7,230	8,646
Traffic (average daily one-way trips)	36,200	45,600	55,800
Water Demand (MGD)	0.19	0.37	0.45
Wastewater Production (MGD)	0.31	0.61	0.73
Solid Waste (tons/day)	6.21	12.18	14.69
Electricity (MWh/day)	111	218	263

Table S-2
Summary of Environmental Impacts and Mitigation Measures for the Proposed Action and Alternative 1

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Land Use and Aesthetics	**Impacts** • Inconsistency with outdated master plans and zoning ordinances. • Rail spur traffic could be incompatible with new onbase educational training facilities and a few offbase residences. Rail spur extension to airfield would require demolition of two structures. Rail spur expansion would centralize the divided spur network. • Potential incompatibility between new recreational facilities and new runway protection zone and noise contours. • Potential incompatibility between planned commercial and existing residential. • Conversion of 26 acres of prime farmland to nonagricultural use. • Upgrade of approximately 44 acres of statewide important farmland to prime farmland. • Relocation of city rail yard would open up city property to redevelopment of higher and better use.	**Impacts** • Same as 1995 FEIS Proposed Action. • Specific changes in land uses not currently known. Local planning and zoning agencies would resolve conflicts.	**Impacts** • Same as Proposed Action • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Land Use and Aesthetics (cont.)	**Impacts** • Orderly, planned expansion of the City of Plattsburgh and town of Plattsburgh. • No change to visual resources. • Elimination of offbase AICUZ land use guidelines, permitting future opportunity to plan for highest and best use of private property. **Additional Potential Mitigations:** • Provide for Federal/State funding to update master plans and zoning ordinances. • Establish conservation easements per New York State Environmental Conservation Law Article 49 within the planned open space network of the public/ recreational category. • Revise all applicable public utility, drainage, road, highway, and railroad easements or outgrants to permanent status. • Restrict train traffic on the railroad spur system to normal business hours, avoiding rush hour periods and quiet nighttime hours. • Public conveyance of open space corridors, historic properties, and public access routes.	**Impacts** • Same as 1995 FEIS Proposed Action • Same as 1995 FEIS Proposed Action. **Additional Potential Mitigations:** • Same as 1995 FEIS Proposed Action.	**Impacts** • Same as Proposed Action. • Same as Proposed Action. **Additional Potential Mitigations:** • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Transportation	**Impacts:** • Increase of 36,200 daily vehicular trips. Several new base access points would be provided. Reuse-generated traffic on U.S. 9 would worsen operations to unacceptable LOS F by 2000. • Substantial increase of 23,464 annual aircraft operations. • No airspace conflicts on air transportation impacts. **Required Mitigations:** • Implement construction practices: traffic control, staging, scheduling, etc. • Implement Transportation system Management measures. **Additional Potential Mitigations:** • Create an efficient onsite circulation Plan. • Realign and Improve U.S. 9/New York Road Intersection. • Widen U.S. 9 to five lanes. • Implement a Transportation Demand Management Program.	**Impacts:** • Increase of 45,600 daily vehicular trips. LOS would deteriorate from C to D on one road segment. • Air traffic impacts same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. **Required Mitigations:** • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. **Additional Potential Mitigations:** • Same as 1995 FEIS Proposed Action. • Improve road segments to keep LOS at acceptable levels.	• Increase of 55,800 daily vehicular trips. Traffic would result in LOS F on two additional road segments. • Same as Proposed Action. **Required Mitigations:** • Same as Proposed Action. • Same as Proposed Action. **Additional Potential Mitigations:** • Same as Proposed Action. • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Utilities	**Impacts:** • Slight increase in ROI utility demands (approximately 4%). ROI capability is sufficient to accommodate projected demands. • Interconnection required to provide service to onbase users. Pretreatment of Industrial wastewater may be required. **Required Mitigations:** • Provide wastewater treatment in accordance with applicable permit requirements. **Additional Potential Mitigations:** • Seek Federal Funding for additional water and wastewater treatment and distribution systems. • Develop water conservation strategies to reduce water use and the need for additional infrastructure. • Institute waste source separation to reduce solid waste and extend the life of the landfill. • Develop energy conservation strategies to reduce energy consumption and the need for additional infrastructure.	**Impacts:** • Approximately 7% increase in ROI utility use. Current systems would be able to accommodate projected demands. • Same as 1995 FEIS Proposed Action. **Required Mitigations:** • Same as 1995 FEIS Proposed Action. **Additional Potential Mitigations:** • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action.	**Impacts:** • Approximately 9% increase in ROI utility use. Current systems would be able to accommodate projected demands. • Same as Proposed Action. **Required Mitigations:** • Same as Proposed Action. **Additional Potential Mitigations:** • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Utilities (Cont.)	**Additional Potential Mitigations (Cont.)** • Provide temporary operations and maintenance procedures and modification of utility systems to increase efficiency during low demand in initial phases of reuse.	**Additional Potential Mitigations (Cont.)** • Same as 1995 FEIS Proposed Action.	**Additional Potential Mitigations (Cont.)** • Same as Proposed Action.
Natural Environment			
Soils and Geology	**Impacts:** • Minor erosion effects from 447 acres of ground disturbance. **Required Mitigations:** • Use of techniques such as protective cover, dust control, and diversion dikes to minimize erosion during and after construction.	**Impacts:** • Minor erosion effects from ground disturbance (acreage unknown). **Required Mitigations:** • Same as 1995 FEIS Proposed Action	**Impacts:** • Minor erosion effects from ground disturbance (acreage unknown). **Required Mitigations:** • Same as Proposed Action.
Water Resources	**Impacts:** • Disturbance of 447 acres could affect surface water flow and water quality. • 33 percent increase in ROI water demand would not affect water supply. • Use proper construction practices, control site runoff, and minimize surface disturbance and length of exposure time. • Compliance with SPDES and local permit requirements for stormwater and wastewater discharge.	**Impacts:** • Ground disturbance could affect surface water flow and water quality. • Increased water demand would not affect water supply. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action.	**Impacts:** • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Natural Environment			
Air Quality	**Impacts:** • Increase in pollutant emissions would not violate Federal and State ambient standards. • Apply water twice daily during ground-disturbing activities to control fugitive dust. • Decrease time during which newly graded sites are exposed. • Schedule equipment use to be most efficient to control combustive emissions. • Implement a phased construction schedule. • Perform regular vehicle engine maintenance.	**Impacts:** • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action.	**Impacts:** • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action.
Noise	**Impacts:** • All aircraft noise contours are within the airfield reuse designation through 2016. No residences in the noise impact area. • Slightly increased traffic noise along some roads. • Restrict reuse development to areas outside the DNL 65 dB contour for aircraft. • Use traffic mitigations to reduce vehicle trips and associated noise on affected roads.	**Impacts:** • Same as 1995 FEIS Proposed Action. • Greater increase in traffic noise than identified for 1995 FEIS Proposed Action, but decrease from the Aviation with Mixed Use Alternative. • Same as 1995 FEIS Proposed Action.	**Impacts:** • Same as Proposed Action. • Greater increase in traffic noise than identified for the Proposed Action. • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Natural Environment			
Biological Resources	**Impacts:**	**Impacts:**	**Impacts:**
	• Potential disturbance of zero to 25 acres of wetlands onsite.	• Potential disturbance of some wetlands onsite, if no mitigation measures, other than avoidance, are taken.	• Same as Proposed Action.
	• No impact to federal-listed threatened or endangered species.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Potential impact to state-listed threatened or endangered species.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Up to 447 acres of ground disturbance. Probable loss of 328 acres of upland forest.	• Probable loss of some of upland forest.	• Same as Proposed Action.
	Required Mitigations:	**Required Mitigations:**	**Required Mitigations:**
	• Avoid sensitive habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Standard construction practices and soil stabilization.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Comply with New York State Law and Federal regulations (Sec. 404 and E.O 11990).	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Minimize disturbance by planning and design.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	Additional Potential Mitigations:	**Additional Potential Mitigations:**	**Additional Potential Mitigations:**
	• Establish conservation easement or require deed restrictions to protect sensitive habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Develop replacement or additional habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Monitor mitigated habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Natural Environment			
Cultural and Paleontological Resources	**Impacts:**	**Impacts:**	**Impacts:**
	• Potential adverse effects to the U.S. Oval National Register District and other historic properties listed on or potentially eligible for listing o the NRHP.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Properties may be conveyed to non-Federal owners with preservation covenants. SHPO and Advisory Council on Historic Preservation would be consulted during development and implementation of procedures and mitigation strategies. Prepare agreement document to establish acceptable mitigation measures.	• Mitigations suggested in 1995 FEIS are being implemented. Currently, a Programmatic Agreement between Air Force, New York SHPO, ACHP, and PARC is being negotiated to reduce impacts to acceptable levels.	• Same as Proposed Action.
	• Consult with archaeologist if cultural resources are discovered during redevelopment activities.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.

Notes: Impacts are based on the changes from closure baseline conditions, which are projected to occur as a results of implementing that alternative.

AICUZ = Air Installation Compatible Use Zone
EPA = Environmental Protection Agency
LOS = Level of Service
NRHP = National Register of Historic Places
ROI = Region of Influence
SHPO = State Historic Preservation Officer
SPDES = State Pollutant Discharge Elimination System

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CHAPTER 1.0
PURPOSE OF AND NEED FOR ACTION

1.0 PURPOSE OF AND NEED FOR ACTION

This Environmental Assessment (EA) examines the potential impacts to the environment that may result from the recently proposed (January 2000) reuse alternatives of Plattsburgh Air Force Base (AFB), New York. These alternatives represent new additions to the alternatives analyzed previously in the Final Environmental Impact Statement (FEIS) for the Disposal and Reuse of the Plattsburgh AFB, prepared by the U.S. Air Force in November 1995, hereafter referred to as the 1995 FEIS. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508).

This EA is prepared as a supplement to the 1995 FEIS because the actions presented in this document are closely tied to the base closure decision made in 1995 and because much of the information provided in the 1995 FEIS is still valid for this EA. The alternatives analyzed in this EA include additional land uses which could have been analyzed in the 1995 FEIS if information developed now was available in 1995.

NEPA allows the preparation of a supplemental document that addresses the salient environmental issues focused on the changes related to the alternatives previously analyzed and allows incorporation of that previous document, in this case, the 1995 FEIS, by reference on issues/resources that do not result in substantial changes. As a result, some of the environmental issues/resources have been discussed in this EA only in a summary form with reference made to the 1995 FEIS for details, while those directly affected by the newly-developed reuse alternatives are discussed in detail.

1.1 PURPOSE AND NEED

The U.S. Air Force has prepared this EA because the alternatives analyzed in this document represent changes sufficient to warrant additional analysis from the alternatives analyzed in the 1995 FEIS. To determine whether the proposed changes are significant, the new proposals are measured against the level of activity or magnitude of the alternatives that were evaluated in the 1995 FEIS. The ultimate question for the decision makers is whether the changes will affect the quality of the human environment in a significant manner or to a significant extent not already considered in the previous study. A brief background to the actions previously taken and the rationale for undertaking this effort are provided in the following sections.

1.2 BACKGROUND OF THE CLOSURE OF PLATTSBURGH AIR FORCE BASE

Pursuant to the Defense Base Closure and Realignment Act (DBCRA) of 1990 (Public Law 101-510, Title XXIX), Plattsburgh AFB was closed on September 30, 1995. Prior to the closure of the base, an Air Force Base Conversion Agency (AFBCA) Operating Location (OL) was established at Plattsburgh AFB. The responsibilities of the OL and caretaker force included maintaining Air Force-controlled properties after closure and serving as the

Air Force local liaison to community reuse groups until disposal of the base property was completed. In response to the base closure announcement, an agreement among the City of Plattsburgh, Town of Plattsburgh, and Clinton County was signed in 1993, to ensure the direct input of community leaders and interested citizens. A 14-member Plattsburgh Inter-municipal Development Council (PIDC) was established to represent various local and state interests. The PIDC was specifically charged with acting as the spokesperson for the local community in dealing with the State and Federal government on matters affecting Plattsburgh AFB.

In September 1994, the Plattsburgh Airbase Redevelopment Corporation (PARC) was incorporated as the PIDC-affiliated economic development entity. In July 1995, PARC officially became the local reuse agency (LRA), and assumed all developmental responsibilities of the former PIDC. In the spring of 1998, the Clinton County Industrial Development Agency (CCIDA) was identified as the state recognized agency to act as applicant/sponsor for PARC to obtain transfer of land from the federal government.

1.3 DESCRIPTION OF PREVIOUS ENVIRONMENTAL DOCUMENTATION

The U.S. Air Force prepared an Environmental Impact Statement (EIS) for the disposal and reuse of Plattsburgh AFB. The Final EIS (FEIS), published in November 1995, is incorporated into this document by reference. The FEIS examined a Proposed Action, two additional reuse alternatives, and the No Action Alternative. The Proposed Action was based on a conceptual reuse Master Plan submitted to the Air Force by PIDC in April 1995. It included the relocation of all aviation activity at Clinton County Airport to Plattsburgh AFB. The Aviation with Mixed Use Alternative was based on an application submitted by the St. Regis Mohawk Tribe to the Department of the Interior. This alternative also centered on the relocation of Clinton County Airport to Plattsburgh AFB. The Nonaviation Alternative was developed by the Air Force to analyze potentially marketable reuse options without reuse of the airfield.

1.4 BACKGROUND OF THE CURRENT PROPOSAL

In November 1998, PARC made a proposal to the AFBCA at Plattsburgh AFB stating that some new alternatives be added to the existing list of acceptable uses at Plattsburgh AFB (Plattsburgh Airbase Redevelopment Corporation 1998). This proposal was based on PARC's reevaluation of development opportunities for the base. With the previous Master Plan, over one-third of the base was designated as public/recreational use, which included open space and tourism land uses. The new land use proposal added more intensive commercial, industrial, and aviation support land uses to a large number of parcels on the base. This proposal was considered to be too broad for analysis by the Air Force. In response, PARC submitted a revised proposal on January 25, 2000. Figure 1.4-1 shows the areas of the base where the newly proposed land uses are different from those analyzed in the 1995 FEIS. Table 1.4-1 provides a comparison of the land uses examined in the Proposed Action of the 1995 FEIS and the current proposals.

In January 2000, Pratt & Whitney (P&W) Corporation of Canada leased a facility (the large maintenance hanger at the flightline of the former Plattsburgh AFB) from PARC. P&W has opened a test center at this site from which new aircraft engines would be tested. The majority of the planned five-hour test flights would occur over Northern Quebec after taking off from and prior to returning to Plattsburgh AFB.

P&W will test new engines (PW6000) in a 1960 Boeing 720 in airspace over Canada. However, it needed an exemption from the requirement for quieter stage 3 engine in order to fly the B720 itself in U.S. airspace. The noise abatement standard requires that all civil subsonic turbojets operate to and from an airport in the United States by 31 December 1999 only if they comply with stage 3 noise levels. On 29 November 1999, the U.S. Congress granted an exemption to allow the operation of a stage 1 or stage 2 aircraft in nonrevenue service to or from an airport in the U.S. in order to test aircraft engines that meet stage 3 noise levels if the aircraft only takes off and lands at an airport that is located at a former military installation closed or realigned. The 1960 Boeing 720 appears to meet the qualification for this exemption. There has been some concern from local residents that the test flights might be too noisy. P&W has indicated that the noise levels will be lower than those produced by the KC-135 stratotankers and FB-111 jets that were stationed at the Plattsburgh AFB from the early 1970s until the early 1990s.

The number of aircraft operations analyzed in the 1995 FEIS were considerably larger than the number of operations planned by P&W. The Proposed Action of the 1995 FEIS analyzed 23,464 operations per year by 2016. The Aviation with Mixed Used Alternative analyzed 139,600 operations; 900 of these operations were related to aircraft maintenance on B474s. By contrast P&W plans to do 40 operations in the first year and eventually move up to 200 operations per year. However, the B720 does not have the same noise profile as the B747s.

In response to public concern about possible noise impacts of the B720, the Air Force has decided to conduct a new noise analysis which would include the cumulative noise impacts of aircraft operations analyzed in the 1995 FEIS and the operations newly proposed by P&W. The results of this analysis have been included in Appendix A to this EA.

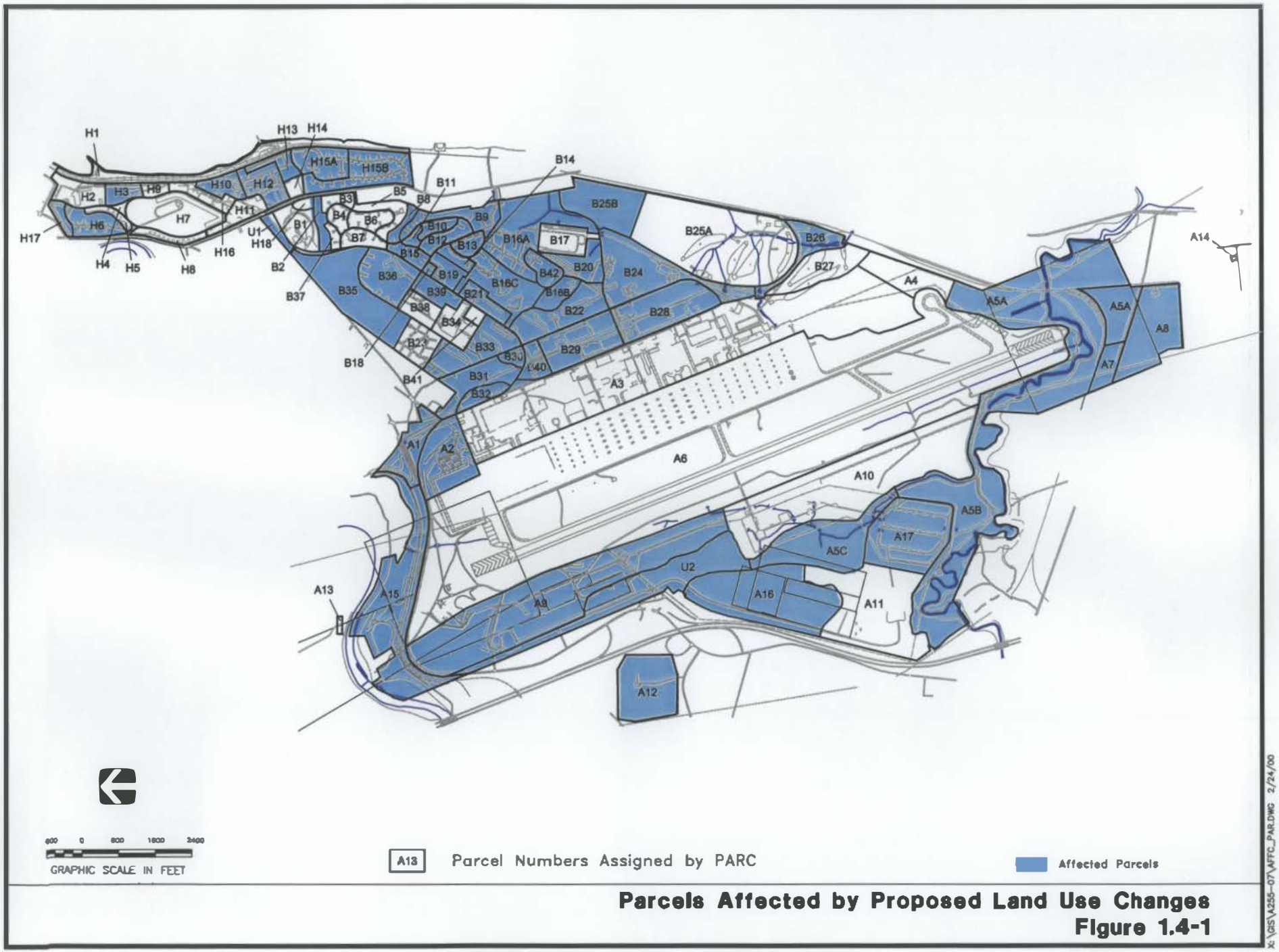
1.5 ORGANIZATION OF THIS DOCUMENT

This EA is organized into a number of chapters. Chapter 2.0 includes a description of the Proposed Action, one alternative to the Proposed Action identified for reuse of the Plattsburgh AFB property, and the No-Action Alternative. Chapter 2.0 also provides a comparison of the Proposed Action and alternatives with respect to effects on the local community and the natural environment. The effects of the Proposed Action as analyzed in the 1995 FEIS are also summarized here to provide a better understanding of the effects of the new alternatives.

Chapter 3.0 includes a description of the affected environment to the extent it enhances the understanding of the impacts presented in this EA. The 1995 FEIS has been incorporated into this document by reference and the readers are referred to this document for details not provided in this EA. The results of the environmental analysis are presented in Chapter 4.0 which also includes the effects of the Proposed Action as analyzed in the 1995 FEIS for comparison purposes. Chapter 5.0 includes a list of individuals and organizations consulted during the preparation of the EA; Chapter 6.0 provides a list of the document's preparers; Chapter 7.0 contains references; Chapter 8.0 includes a glossary of terms, acronyms, units of measurements, and chemical abbreviations; and Chapter 9.0 contains an index.

1.6 FEDERAL PERMITS, LICENSES, AND CERTIFICATES

Information provided in the 1995 FEIS is still valid for this EA and is incorporated here by reference.



Parcels Affected by Proposed Land Use Changes
Figure 1.4-1

Table 1.4-1
Comparison of Land Uses by Parcel

	1995 FEIS	2000 EA	
Parcel Number	**Proposed Action**	**Proposed Action[1]**	**Alternative 1[2]**
A1	Industrial	Commercial	Commercial
A2	Public/Recreational	Commercial/Indust.	Commercial
A3	Aviation Support	N.C.	N.C.
A4	Industrial	N.C.	N.C.
A5	Public/Recreational	Com/Industrial/Av. Supp.	Commercial
A6	Airfield	N.C.	N.C.
A7	Public/Recreational	Com/Industrial/Av. Supp.	Commercial
A8	Public/Recreational	Com/Industrial/Av. Supp.	Commercial
A9	Industrial	Aviation Support	Aviation Support
A10	Aviation Support	N.C.	N.C.
A11	Industrial	N.C.	N.C.
A12	Government-Retained	Commercial/Indust.	Commercial
A13	Airfield	N.C.	N.C.
A14	Airfield	N.C.	N.C.
A15	Public/Recreational	Industrial	Industrial
A16	Commercial	Industrial	Industrial
A17	Institutional (Prison)	Industrial/Aviat Supp	Industrial
B1	Commercial	N.C.	N.C.
B2	Public/Recreational	Commercial	Commercial
B3	Residential	N.C.	N.C.
B4	Residential	N.C.	N.C.
B5	Residential	N.C.	N.C.
B6	Residential	N.C.	N.C.
B7	Residential	N.C.	N.C.
B8	Public/Recreational	N.C.	N.C.
B9	Residential	Industrial	Industrial
B10	Residential	Industrial	Industrial
B11	Residential	Industrial	Industrial
B12	Residential	Industrial	Industrial
B13	Residential	Industrial	Industrial
B14	Residential	Commercial/Indust.	Commercial
B15	Residential	Commercial/Indust.	Commercial
B16	Public/Recreational	Industrial	Industrial
B16A&B	Public/Recreational	Industrial	Commercial
B16C	Public/Recreational	Commercial/Indust.	Commercial
B17	Industrial	N.C.	N.C.
B18	Commercial	Industrial	Industrial
B19	Residential	Commercial/Indust.	Commercial
B20	Public/Recreational	Industrial	Industrial
B21	Public/Recreational	Commercial/Indust.	Commercial
B22	Institutional (Education)	Commercial/Indust.	Commercial
B23	Industrial	N.C.	N.C.
B24	Industrial	Commercial/Indust.	Commercial
B25A	Public/Recreational	N.C.	N.C.
B25B	Public/Recreational	Industrial	Industrial
B26	Public/Recreational	Industrial	Industrial

	1995 FEIS	2000 EA	
Parcel Number	Proposed Action	Proposed Action[1]	Alternative 1[2]
B27	Industrial	N.C.	N.C.
B28	Industrial	Commercial	Commercial
B29	Institutional (Education)	Commercial/Indust.	Commercial
B30	Industrial	Commercial	Commercial
B31	Public/Recreational	Commercial/Av Supp	Commercial
B32	Institutional (Education)	Commercial/Av Supp	Commercial
B33	Institutional (Education)	Commercial/Indust.	Commercial
B34	Industrial	N.C.	N.C.
B35	Industrial	Commercial	Commercial
B36	Residential	Commercial/Indust.	Commercial
B37	Residential	N.C.	N.C.
B38	Industrial	N.C.	N.C.
B39	Commercial	Industrial	Industrial
B40	Industrial	Commercial/Av Supp	Commercial
B41	Residential	N.C.	N.C.
B42	Residential	Industrial	Industrial
H1	Public/Recreational	N.C.	N.C.
H2	Public/Recreational	N.C.	N.C.
H3	Public/Recreational	Commercial	Commercial
H4	Public/Recreational	N.C.	N.C.
H5	Residential	N.C.	N.C.
H6	Public/Recreational	Commercial/Res.	Commercial
H7	Public/Recreational	N.C.	N.C.
H8	Residential	N.C.	N.C.
H9	Public/Recreational	N.C.	N.C.
H10	Commercial	Industrial	Industrial
H11	Commercial	N.C.	N.C.
H12	Commercial	Commercial/Res.	Commercial
H13	Public/Recreational	Residential	Residential
H14	Public/Recreational	N.C.	N.C.
H15A	Residential	N.C.	N.C.
H15B	Residential	Public/Recreational	Public/Recreational
H16	Commercial	N.C.	N.C.
H17	Public/Recreational	Commercial/Res.	Commercial
H18	Commercial	N.C.	N.C.
U-1 (undesignated)	Public/Recreational	Commercial	Commercial
U-2 (undesignated)	Public/Recreational	Com/Industrial/Av. Supp.	Commercial

Notes: [1]PARC Proposal, January 25, 2000

[2]Alternative 1 converts all mixed-use parcels in the Proposed Action (2000 EA) to single-use parcels with the most intensive use (generally, commercial use).

N.C. = No change from the 1995 FEIS Proposed Action.

CHAPTER 2.0
ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 INTRODUCTION

This chapter includes a description of the Proposed Action, one alternative to the Proposed Action, and the No Action Alternative. The Proposed Action is based on the proposal made by PARC to the AFBCA at Plattsburgh AFB in January 2000. This proposal adds more intensive commercial, industrial, and aviation support land uses to the parcels designated for public/recreational use and open space in the 1995 FEIS. In addition, mixed uses, such as, commercial and industrial, were recommended for many parcels to provide flexibility in future land development. This EA, therefore, analyzes the impacts of more intensive uses as well as the mixed uses in the Proposed Action. As an alternative, it also analyzes the impacts of single land uses on parcels identified for mixed uses in the Proposed Action. The single use analyzed in the Alternative Action is the "commercial" land use as it has the potential of generating the maximum environmental impacts. The No Action Alternative remains the same as analyzed in the 1995 FEIS. With the No Action Alternative, the base property would be retained by the U.S. Government and no disposal and reuse would occur.

2.2 DESCRIPTION OF PROPOSED ACTION

The Proposed Action for this EA is based on the primary reuse proposal submitted by PARC to the AFBCA on January 25, 2000. This proposal identifies large parcels of land for mixed uses, such as, industrial/aviation support, commercial/industrial, commercial/aviation support, commercial/industrial/aviation support, and commercial/residential (Figure 2.2-1). As with the Proposed Action in the 1995 FEIS, the primary reuse of the base is as an airpark, with the relocation of Clinton County Airport activities to the base airfield. However, instead of recreation and tourism, open space, vocational education, and lakefront housing uses, proposed in the 1995 FEIS, the non-airfield land uses in the current proposal are predominantly commercial, industrial, and aviation support uses. Figure 2.2-1 (Proposed Action) of the 1995 FEIS is provided here as Figure 2.2-2 to allow comparison of changes proposed. The new parcel boundaries and identification numbers supplied by PARC have been superimposed over the 1995 map to facilitate understanding of the changes between the 1995 FEIS Proposed Action and the current Proposed Action.

The total acreage for each land use designated for the Proposed Action at full buildout in 2016 is summarized in Table 2.2-1. For purposes of analysis, the total acreage of each parcel designated for mixed uses has been distributed equally among the uses identified for the parcel. For example, if a parcel is identified for use as commercial/industrial, 50 percent of the total acreage of that parcel is allocated to each use. Reuses identified for the Proposed Action are discussed in the following sections.

2.2.1 Airfield

The airfield land use and proposed operations analyzed in this EA are the same as for the Proposed Action in the 1995 FEIS. The airfield land use category includes 858 acres on the base and consists of runways, taxiways, runway protection zones, the control tower, and a fire station. The airfield would be used primarily by commercial passenger aircraft (air carrier and commuter), general aviation aircraft, and air cargo.

In May 2000, the U.S. Air Force decided to conduct a new noise analysis which would include the cumulative noise impacts of aircraft operations analyzed in the 1995 FEIS and some additional operations proposed by P&W for their test flights from Plattsburgh AFB. The results of this analysis have been presented in Appendix A of the EA. See Section 1.4 of this EA for project description.

Table 2.2-1
Land Use Acreage - Proposed Action

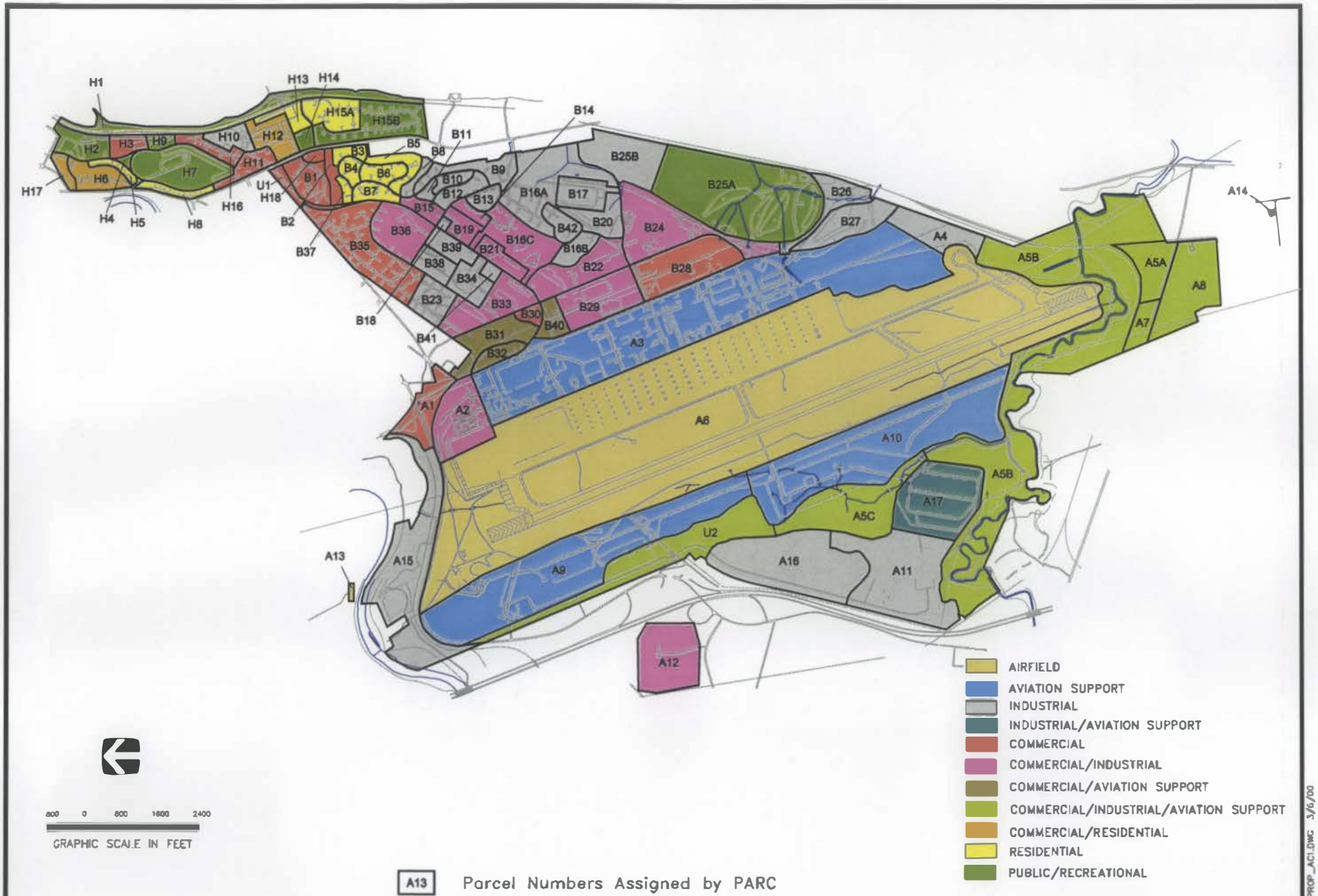
Land Use	1995 FEIS Proposed Action	Current Proposed Action
Airfield	858	858
Aviation Support	440	850
Industrial	493	891
Institutional (Education)	176	0
Commercial	154	528
Residential	113	81
Public/Recreational	1,173	239
Government-Retained	40	0
Total:	**3,447**	**3,447**

2.2.2 Aviation Support

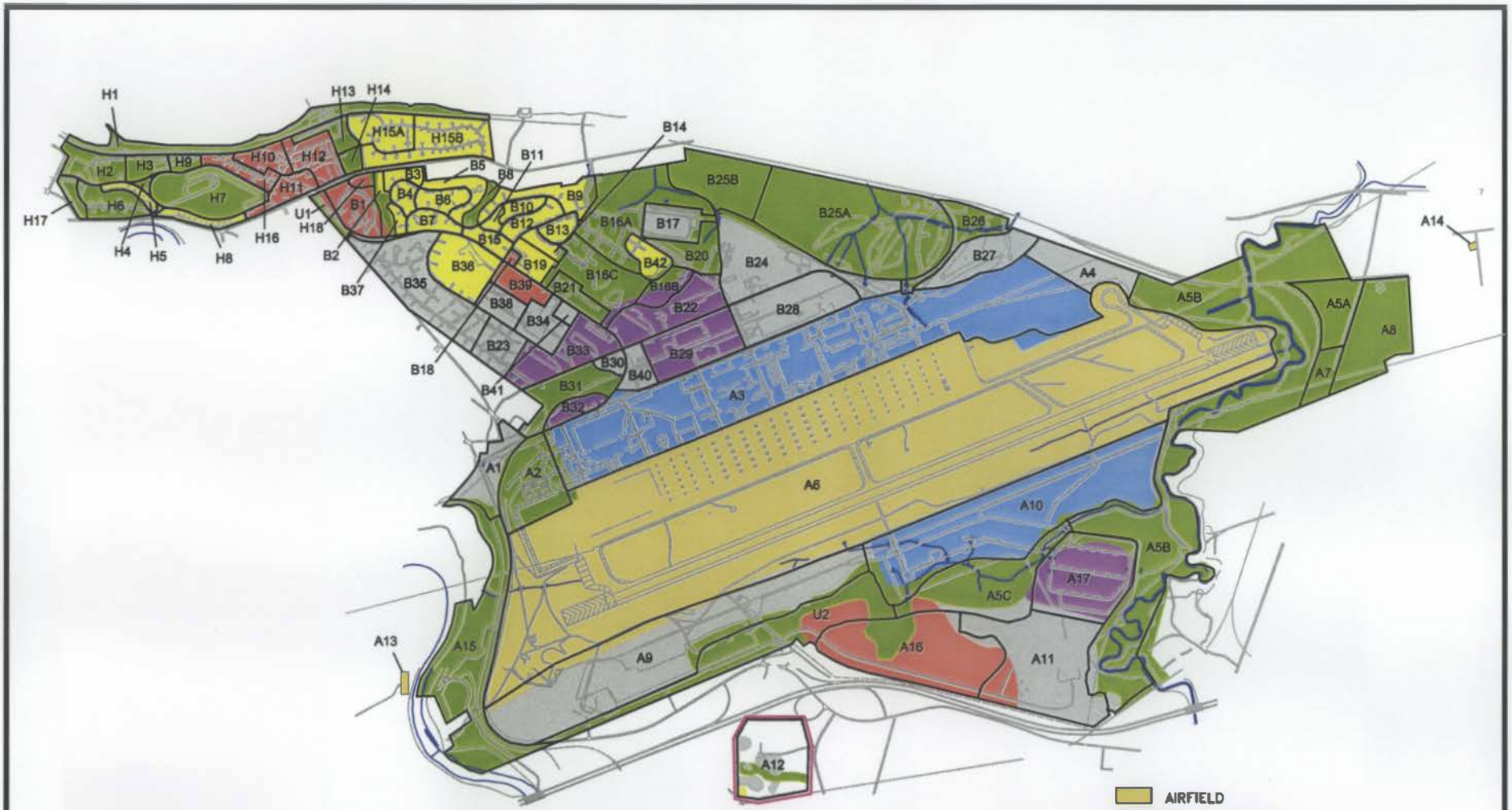
The proposed aviation support area would utilize 850 acres of land located on either side of the runway facilities compared to 440 acres designated for this use in the 1995 FEIS. The majority of the existing aviation support facilities are located on the east side of the runway, and the Proposed Action preserves a majority of these facilities. The property designated as aviation support on the west side of the runway is largely vacant and would accommodate future uses. A site for an 18,000-square-foot airport passenger terminal and associated parking would be located in the aviation support area as identified in the 1995 FEIS.

2.2.3 Industrial

A total of 891 acres of Plattsburgh AFB is proposed for industrial uses including light industrial, research and development, and warehousing compared to 493 acres designated for this use in the 1995 FEIS. The majority of the industrial land is designated light industrial to take advantage of land with direct frontage on the existing and proposed railroad spur and Interstate-87 (I-87), U.S. 9 and SH22.



Proposed Action
Figure 2.2-1



Adapted from Plattsburg AFB Disposal and Reuse FEIS, 1995.

1995 FEIS Proposed Action
Figure 2.2-2

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The housing area between New York Road and the base boundary at Sharron Avenue would be utilized as commercial space. The housing in this area will be demolished and new facilities would be constructed. Two other parcels, parcel A1 along SH22 and parcel B28 along Arizona Avenue, are proposed for commercial use instead of industrial use proposed in the 1995 FEIS (see figure 2.2-2).

2.2.4 Institutional

No institutional uses are part of the Proposed Action.

2.2.5 Commercial

A total of 528 acres are proposed for commercial uses, including office and retail establishments. Historic buildings on Plattsburgh Barracks would be reused for office space, creating an opportunity for office uses in a park-like setting. The present base hospital would be redeveloped as office space.

2.2.6 Residential

Approximately 81 acres of land are proposed to be retained for residential land use mainly on the west side of U.S. 9 and on the north and west side of the U.S. Oval (figure 2.2-1). New housing is also proposed for Parcels H13 and H15A on the east side of U.S. 9.

2.2.7 Public/Recreational

Approximately 239 acres of land are proposed to be retained or newly created for public/recreational use. These include the existing golf course (Parcel 25A), the U.S. Oval and the Lake Champlain shoreline as proposed in the 1995 FEIS. Existing housing on Parcel H15B would be demolished and converted to open space. The vacant parcel (H14) north of the housing and east of U.S. 9 is also proposed for public/recreational use.

2.2.8 Agricultural

No agricultural uses are proposed as part of the Proposed Action.

2.2.9 Vacant Land

No property is assigned to the vacant land use category with the Proposed Action. However, parcels shown in Figure 2.2-1 will not be fully utilized even at full development within each land use designation. Lands consisting of wetlands and riparian areas and archaeological and historical sites would be left untouched as buffers in parcels designated for industrial, commercial and aviation support uses.

2.2.10 Government-Retained Land

There will be no government-retained land with the Proposed Action. A 40-acre parcel of land located west of I-87 was identified as government retained property in the 1995 FEIS. This parcel (Parcel A-12) is proposed for Commercial/Industrial use in this EA.

2.2.11 Employment and Population

Estimated employment and population figures for 2016 are presented in Table 2.2-2. Approximately 8,800 total direct jobs are expected to be generated by 2016 as a result of the Proposed Action. In addition, the Proposed Action employment would include approximately 3,700 secondary jobs to be generated in Clinton County.

Table 2.2-2
Clinton County Reuse-Related Employment and Population
Proposed Action

	No Action	1995 FEIS Proposed Action	Current Proposed Action
Direct Employment	50	4,484	8,800
Secondary Employment	27	1,886	3,696
Total Employment	77	6,370	12,496
Population Change	0	3,686	7,230

Employment related to base reuse is expected to result in the inmigration of approximately 7,230 people into Clinton County by 2016.

2.2.12 Transportation

An important component of the 1995 FEIS Proposed Action was the development of increased and improved access to the base property. A key change in the roadway system was the realignment of New York Road to provide a direct link with State Highway (SH)-22. Existing roads would connect into this new alignment, and new roads would feed from SH-22 to service the industrial, commercial, and aviation support areas west of the runway.

Also proposed were several additional roadway connections along U.S. 9 to tie the base into the surrounding roadway network. Arizona Avenue and Massachusetts Street were proposed to be extended to U.S. 9 to provide access to the aviation support and residential areas.

At the Plattsburgh Barracks gate, New York Road was proposed to be realigned to provide a better entrance to the historic U.S. Oval. A new road was proposed to be constructed connecting U.S. 9 to Club Road. For purposed of this analysis, it is assumed that all improvements proposed in the 1995 FEIS will be carried out as new land uses are developed on the base and need for road improvement is identified.

Based on proposed land uses and employment projections, the average daily traffic (ADT) to and from the base property generated by the Proposed Action would be approximately 45,600 by 2016.

Railroad.

For purposes of this analysis, it is assumed that improvements to the railroad system on the base will be carried out as identified in the 1995 FEIS. No changes are proposed as part of the current proposed action.

2.2.13Utilities

By 2016, the projected reuse of Plattsburgh AFB with the Proposed Action and with associated population and employment increases in the Region of Influence (ROI) would generate the following changes in utility demands compared to 1995 FEIS Proposed Action demand.

- **Water** – 5.51 million gallons per day (MGD) compared to 5.23 MGD for 1995 FEIS Proposed Action.
- **Wastewater** – 8.65 MGD compared to 8.35 MGD for the 1995 FEIS Proposed Action.
- **Solid Waste** – 173.90 tons per day compared to 167.93 tons per day for the 1995 FEIS Proposed Action.
- **Electricity** – 3,122 megawatt-hour (MWh) per day compared to 3,015 MWh per day for the 1995 FEIS Proposed Action.

Construction of any new utility systems is assumed to be part of the overall construction of new facilities. Upgrades to existing utility systems would occur within existing utility corridors by future site developers. Utility services would continue to be provided by local utility providers.

2.3 DESCRIPTION OF ALTERNATIVES

One comprehensive reuse alternative and the No-Action Alternative have been identified for analysis and are described in this section. Alternative 1 also assumes the relocation of Clinton County Airport. However, this alternative proposes commercial land uses only on parcels where commercial uses was shown mixed with other uses in the Proposed Action.

2.3.1 Alternative 1

Proposed land use designations for Alternative 1 are shown in Figure 2.3-1. As with the Proposed Action, Alternative 1 centers on the reuse of the existing airfield. This alternative would also involve the relocation of aviation activities from Clinton County Airport and development of new aviation uses in the Plattsburgh area. The base is designated for airfield, aviation support, industrial and commercial land uses. Acreages for land use categories are listed in Table 2.3-1.

2.3.1.1 Airfield

Reuse of the airfield would be similar to that of the Proposed Action, with Clinton County Airport operations moving to Plattsburgh AFB.

2.3.1.2 Aviation Support

An estimated 616 acres are designated for aviation support uses in this alternative. Uses planned for this area are similar to those in the Proposed Action, but at a lesser intensity. As with the Proposed Action, the construction of a passenger terminal for charter and commuter passengers would occur.

2.3.1.3 Industrial

Approximately 584 acres of Plattsburgh AFB are designated for industrial uses. Reuse in this area would be similar to the light industrial uses in the Proposed Action and could include warehousing and research and development activities. Compared to the Proposed Action, acreage under industrial land use has been reduced in favor of commercial use on parcels which were designated for mixed use on the Proposed Action.

2.3.1.4 Institutional

No institutional uses are proposed as part of this alternative.

2.3.1.5 Commercial

Approximately 1,084 acres are designated commercial. All parcels which were designated for mixed uses with a commercial component have been designated for commercial use only with this alternative.

2.3.1.6 Residential

Approximately 66 acres of residential land uses are proposed with this alternative compared to 81 acres with the Proposed Action.

2.3.1.7 Public/Recreational

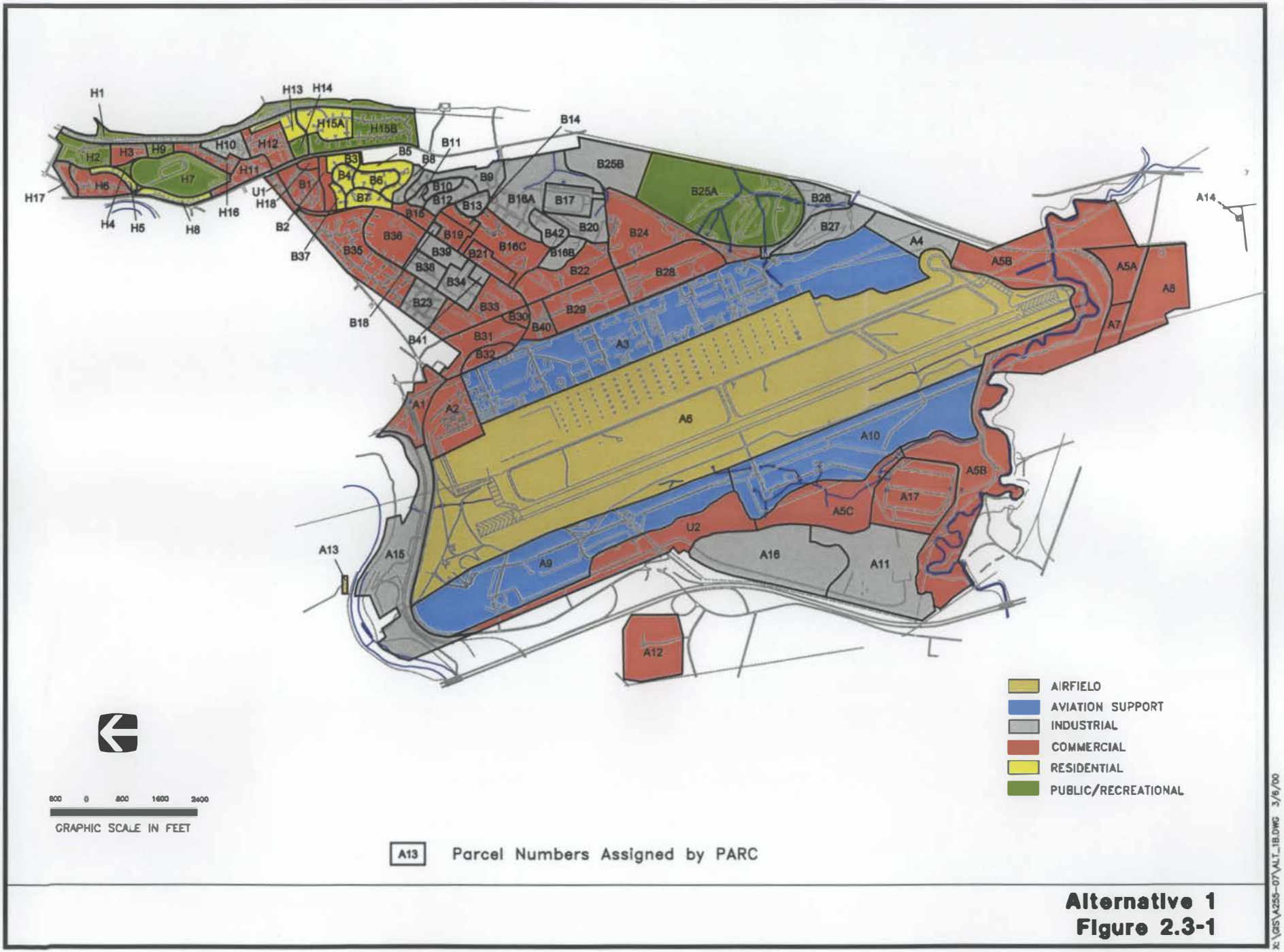
Public/recreational uses are proposed for 239 acres of land with this alternative as with the Proposed Action.

2.3.1.8 Agricultural

No agricultural land uses are proposed for this alternative.

Table 2.3-1
Land Use Acreage – Alternative 1

Land Use	Acreage
Airfield	858
Aviation Support	616
Industrial	584
Institutional (Education and Medical)	0
Commercial	1,084
Residential	66
Public/Recreational	239
Government-Retained	0
Total:	3,447



Alternative 1
Figure 2.3-1

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2.3.1.9 Vacant Land

Similar to the Proposed Action, no base property is assigned to the vacant land use category for this alternative.

2.3.1.10 Government-Retained Land

Similar to the Proposed Action, no government-retained lands are proposed for this alternative.

2.3.1.11 Employment and Population

Approximately 10,500 direct jobs and 4,400 secondary jobs would be generated by 2016 with Alternative 1 (Table 2.3-2). Employment related to base reuse is expected to result in the inmigration of approximately 8,650 persons into Clinton County by 2016.

Table 2.3-2
Clinton County Reuse-Related Employment and Population, 2016
Alternative 1

	No Action	Alternative 1
Direct Employment	50	10,523
Secondary Employment	27	4,420
Total Employment	77	14,943
Population Change	0	8,646

2.3.1.12 Transportation

The same road and rail improvements would occur as described in the Proposed Action. Based on proposed land uses and employment projections, the average daily vehicular traffic to and from the base property generated with this alternative would be approximately 55,800 ADT by 2016.

2.3.1.13 Utilities

By 2016, the projected reuses of Plattsburgh AFB with Alternative 1 and with associated population increases in the region surrounding the base would generate the following changes in utility demands:

- Water – 5.59 MGD;
- Wastewater – 8.77 MGD;
- Solid Waste – 176.41 tons per day; and
- Electricity – 3,167 MWh per day,

No major utility system improvements have been identified for this alternative. The same assumptions made for the Proposed Action have been assumed for this alternative.

2.3.2 No-Action Alternative

The No-Action Alternative remains the same as identified in the 1995 FEIS. It would result in the U.S. Government retaining ownership of the base property.

2.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

The discussion provided in the 1995 FEIS is still valid. The alternatives analyzed in this EA are additions to the alternatives analyzed in the 1995 FEIS.

2.5 INTERIM USES

Interim uses include predisposal short-term uses of base facilities and property. Predisposal interim uses are conducted under lease agreements with the U.S. Government. The terms and conditions of such leases will be arranged to ensure that predisposal interim uses do not prejudice future disposal and reuse plans of the base. The continuation of interim uses beyond disposal and reuse would be arranged through agreements with the new property owner(s). Environmental effects of interim uses of the base are analyzed in the 1995 FEIS.

2.6 OTHER FUTURE ACTIONS IN THE REGION

Other reasonably foreseeable actions that could be considered as contributing to substantial cumulative impacts on the disposal and reuse of Plattsburgh AFB were discussed in the 1995 FEIS. No new developments are known to occur in the foreseeable future that would change the analysis provided in that document.

2.7 COMPARISON OF ENVIRONMENTAL IMPACTS

A summary comparison of the influencing factors and environmental impacts, as well as their potential mitigations, on each biophysical resource affected by the Proposed Action and alternatives is presented in Tables 2.7-1 and 2.7-2. Influencing factors are nonbiophysical elements, such as population, employment, public utility systems, and transportation networks that directly affect the environment. These activities have been analyzed to determine their effects on the environment. Impacts to the environment are described briefly in the Summary and discussed in detail in Chapter 4.0.

Table 2.7-1
Summary of Reuse-Related Influencing Factors, 2016

Factor	1995 FEIS	Proposed Action	Alternative 1
Direct Employment	4,484	8,800	10,523
Secondary Employment	1,886	3,696	4,420
Total Employment	6,370	12,496	14,943
Population Increase	3,686	7,230	8,646
Traffic (average daily one-way trips)	36,200	45,600	55,800
Water Demand (MGD)	0.19	0.37	0.45
Wastewater Production (MGD)	0.31	0.61	0.73
Solid Waste (tons/day)	6.21	12.18	14.69
Electricity (MWh/day)	111	218	263

Table 2.7-2
Summary of Environmental Impacts and Mitigation Measures for the Proposed Action and Alternative 1

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Land Use and Aesthetics	**Impacts** • Inconsistency with outdated master plans and zoning ordinances. • Rail spur traffic could be incompatible with new onbase educational training facilities and a few offbase residences. Rail spur extension to airfield would require demolition of two structures. Rail spur expansion would centralize the divided spur network. • Potential incompatibility between new recreational facilities and new runway protection zone and noise contours. • Potential incompatibility between planned commercial and existing residential. • Conversion of 26 acres of prime farmland to nonagricultural use. • Upgrade of approximately 44 acres of statewide important farmland to prime farmland. • Relocation of city rail yard would open up city property to redevelopment of higher and better use.	**Impacts** • Same as 1995 FEIS Proposed Action. • Specific changes in land uses not currently known. Local planning and zoning agencies would resolve conflicts.	**Impacts** • Same as Proposed Action • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Land Use and Aesthetics (cont.)	**Impacts** • Orderly, planned expansion of the City of Plattsburgh and town of Plattsburgh. • No change to visual resources. • Elimination of offbase AICUZ land use guidelines, permitting future opportunity to plan for highest and best use of private property. **Additional Potential Mitigations:** • Provide for Federal/State funding to update master plans and zoning ordinances. • Establish conservation easements per New York State Environmental Conservation Law Article 49 within the planned open space network of the public/ recreational category. • Revise all applicable public utility, drainage, road, highway, and railroad easements or outgrants to permanent status. • Restrict train traffic on the railroad spur system to normal business hours, avoiding rush hour periods and quiet nighttime hours. • Public conveyance of open space corridors, historic properties, and public access routes.	**Impacts** • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. **Additional Potential Mitigations:** • Same as 1995 FEIS Proposed Action.	**Impacts** • Same as Proposed Action. • Same as Proposed Action. **Additional Potential Mitigations:** • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Transportation	**Impacts:** • Increase of 36,200 daily vehicular trips. Several new base access points would be provided. Reuse-generated traffic on U.S. 9 would worsen operations to unacceptable LOS F by 2000. • Substantial increase of 23,464 annual aircraft operations. • No airspace conflicts on air transportation impacts. **Required Mitigations:** • Implement construction practices: traffic control, staging, scheduling, etc. • Implement Transportation system Management measures. **Additional Potential Mitigations:** • Create an efficient onsite circulation Plan. • Realign and Improve U.S. 9/New York Road Intersection. • Widen U.S. 9 to five lanes. • Implement a Transportation Demand Management Program.	**Impacts:** • Increase of 45,600 daily vehicular trips. LOS would deteriorate from C to D on one road segment. • Air traffic impacts same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. **Required Mitigations:** • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. **Additional Potential Mitigations:** • Same as 1995 FEIS Proposed Action. • Improve road segments to keep LOS at acceptable levels.	• Increase of 55,800 daily vehicular trips. Traffic would result in LOS F on two additional road segments. • Same as Proposed Action. **Required Mitigations:** • Same as Proposed Action. • Same as Proposed Action. **Additional Potential Mitigations:** • Same as Proposed Action. • Same as Proposed Action.

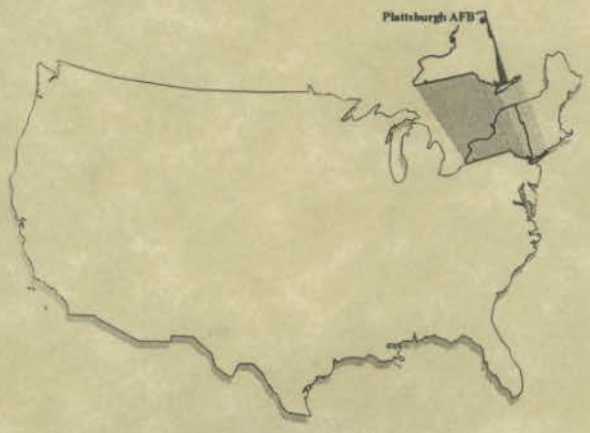
Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Utilities	**Impacts:** • Slight increase in ROI utility demands (approximately 4%). ROI capability is sufficient to accommodate projected demands. • Interconnection required to provide service to onbase users. Pretreatment of Industrial wastewater may be required. **Required Mitigations:** • Provide wastewater treatment in accordance with applicable permit requirements. **Additional Potential Mitigations:** • Seek Federal Funding for additional water and wastewater treatment and distribution systems. • Develop water conservation strategies to reduce water use and the need for additional infrastructure. • Institute waste source separation to reduce solid waste and extend the life of the landfill. • Develop energy conservation strategies to reduce energy consumption and the need for additional infrastructure.	**Impacts:** • Approximately 7% increase in ROI utility use. Current systems would be able to accommodate projected demands. • Same as 1995 FEIS Proposed Action. **Required Mitigations:** • Same as 1995 FEIS Proposed Action. **Additional Potential Mitigations:** • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action.	**Impacts:** • Approximately 9% increase in ROI utility use. Current systems would be able to accommodate projected demands. • Same as Proposed Action. **Required Mitigations:** • Same as Proposed Action. **Additional Potential Mitigations:** • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Local Community			
Utilities (Cont.)	**Additional Potential Mitigations (Cont.)** • Provide temporary operations and maintenance procedures and modification of utility systems to increase efficiency during low demand in initial phases of reuse.	**Additional Potential Mitigations (Cont.)** • Same as 1995 FEIS Proposed Action.	**Additional Potential Mitigations (Cont.)** • Same as Proposed Action.
Natural Environment			
Soils and Geology	**Impacts:** • Minor erosion effects from 447 acres of ground disturbance. **Required Mitigations:** • Use of techniques such as protective cover, dust control, and diversion dikes to minimize erosion during and after construction.	**Impacts:** • Minor erosion effects from ground disturbance (acreage unknown). **Required Mitigations:** • Same as 1995 FEIS Proposed Action	**Impacts:** • Minor erosion effects from ground disturbance (acreage unknown). **Required Mitigations:** • Same as Proposed Action.
Water Resources	**Impacts:** • Disturbance of 447 acres could affect surface water flow and water quality. • 33 percent increase in ROI water demand would not affect water supply. • Use proper construction practices, control site runoff, and minimize surface disturbance and length of exposure time. • Compliance with SPDES and local permit requirements for stormwater and wastewater discharge.	**Impacts:** • Ground disturbance could affect surface water flow and water quality. • Increased water demand would not affect water supply. • Same as 1995 FEIS Proposed Action. • Same as 1995 FEIS Proposed Action.	**Impacts:** • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action. • Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Natural Environment			
Air Quality	**Impacts:** • Increase in pollutant emissions would not violate Federal and State ambient standards.	**Impacts:** • Same as 1995 FEIS Proposed Action.	**Impacts:** • Same as Proposed Action.
	• Apply water twice daily during ground-disturbing activities to control fugitive dust.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Decrease time during which newly graded sites are exposed.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Schedule equipment use to be most efficient to control combustive emissions.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Implement a phased construction schedule.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Perform regular vehicle engine maintenance.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
Noise	**Impacts:** • All aircraft noise contours are within the airfield reuse designation through 2016. No residences in the noise impact area.	**Impacts:** • Same as 1995 FEIS Proposed Action.	**Impacts:** • Same as Proposed Action.
	• Slightly increased traffic noise along some roads.	• Greater increase in traffic noise than identified for 1995 FEIS Proposed Action, but decrease from the Aviation with Mixed Use Alternative.	• Greater increase in traffic noise than identified for the Proposed Action.
	• Restrict reuse development to areas outside the DNL 65 dB contour for aircraft. • Use traffic mitigations to reduce vehicle trips and associated noise on affected roads.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Natural Environment			
Biological Resources	**Impacts:**	**Impacts:**	**Impacts:**
	• Potential disturbance of zero to 25 acres of wetlands onsite.	• Potential disturbance of some wetlands onsite, if no mitigation measures, other than avoidance, are taken.	• Same as Proposed Action.
	• No impact to federal-listed threatened or endangered species.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Potential impact to state-listed threatened or endangered species.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Up to 447 acres of ground disturbance. Probable loss of 328 acres of upland forest.	• Probable loss of some of upland forest.	• Same as Proposed Action.
	Required Mitigations:	**Required Mitigations:**	**Required Mitigations:**
	• Avoid sensitive habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Standard construction practices and soil stabilization.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Comply with New York State Law and Federal regulations (Sec. 404 and E.O 11990).	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Minimize disturbance by planning and design.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	Additional Potential Mitigations:	**Additional Potential Mitigations:**	**Additional Potential Mitigations:**
	• Establish conservation easement or require deed restrictions to protect sensitive habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Develop replacement or additional habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Monitor mitigated habitats.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.

Resource Category	1995 FEIS Proposed Action	Current Proposed Action	Alternative 1
Natural Environment			
Cultural and Paleontological Resources	**Impacts:**	**Impacts:**	**Impacts:**
	• Potential adverse effects to the U.S. Oval National Register District and other historic properties listed on or potentially eligible for listing o the NRHP.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.
	• Properties may be conveyed to non-Federal owners with preservation covenants. SHPO and Advisory Council on Historic Preservation would be consulted during development and implementation of procedures and mitigation strategies. Prepare agreement document to establish acceptable mitigation measures.	• Mitigations suggested in 1995 FEIS are being implemented. Currently, a Programmatic Agreement between Air Force, New York SHPO, ACHP, and PARC is being negotiated to reduce impacts to acceptable levels.	• Same as Proposed Action.
	• Consult with archaeologist if cultural resources are discovered during redevelopment activities.	• Same as 1995 FEIS Proposed Action.	• Same as Proposed Action.



CHAPTER 3.0
AFFECTED ENVIRONMENT

3.0 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This chapter includes a description of environmental conditions at Plattsburgh Air Force Base (AFB), New York, and its Region of Influence (ROI). It provides the baseline information that was used to identify and evaluate environmental changes resulting from implementation of new alternative land uses proposed by the Plattsburgh Airbase Redevelopment Corporation (PARC). Where appropriate, relevant information has been summarized from the *Final Environmental Impact Statement, Disposal and Reuse of Plattsburgh AFB, New York* (U.S. Air Force 1995a). The 1995 FEIS is hereby incorporated by reference.

The focus of this chapter is on a description of the biophysical environment including pertinent natural resources of soils and geology, water resources, air quality, noise, biological resources, and cultural and paleontological resources. However, some nonbiophysical elements are also addressed to the extent that they directly affect the biophysical environment. The nonbiophysical elements (influencing factors) of population and employment, land use and aesthetics, public utility systems, and transportation networks in the region and local communities are addressed.

The description of the storage, use, and management of hazardous materials and waste at the base, including storage tanks, asbestos, pesticides, polychlorinated biphenyls, radon, medical/biohazardous waste, ordnance, and lead has been incorporated here by reference to the 1995 FEIS. The current status of the Installation Restoration Program is not included in this EA because this is an ongoing activity and the Air Force is committed to completing IRP activities in compliance with all appropriate regulations prior to undertaking any specific project at any site affected by the IRP activities.

In the 1995 FEIS, a Region of Influence (ROI) was defined for each resource potentially affected by the Proposed Action and alternatives, constituting the geographic area addressed as the affected environment. Although the base boundary constituted the ROI limit for many resources, potential impacts associated with certain resources (e.g., air quality, utility systems, and water resources) were analyzed outside the base boundary also. For this EA, the ROIs defined in the 1995 FEIS have been retained for analysis.

For all resources, the baseline conditions assumed for the purposes of analysis are the conditions that were projected for the No-Action Alternative in the 1995 FEIS. The most descriptive year for this baseline was 1996, the first year after base closure. These conditions have been retained, as appropriate, for comparison purposes. As discussed previously, relevant information from the 1995 FEIS has been summarized.

The No-Action Alternative from the 1995 FEIS consists of the U.S. Government retaining ownership of the base property after closure. Since no alternative from the 1995 FEIS has been implemented, this reflects the current status of the base. As such, the Government has a small caretaker

force at the base to conduct caretaker activities to ensure that resource protection, grounds maintenance, necessary utility operations, and building care are accomplished.

3.2 LOCAL COMMUNITY

Plattsburgh AFB is located in the northeastern part of New York approximately 65 miles south of Montreal, Canada, and on the western shore of Lake Champlain (Figure 3.2-1).

The base, consisting of 3,447 acres, is located in Clinton County within the southern portions of the City of Plattsburgh and the Town of Plattsburgh (Figure 3.2-2).

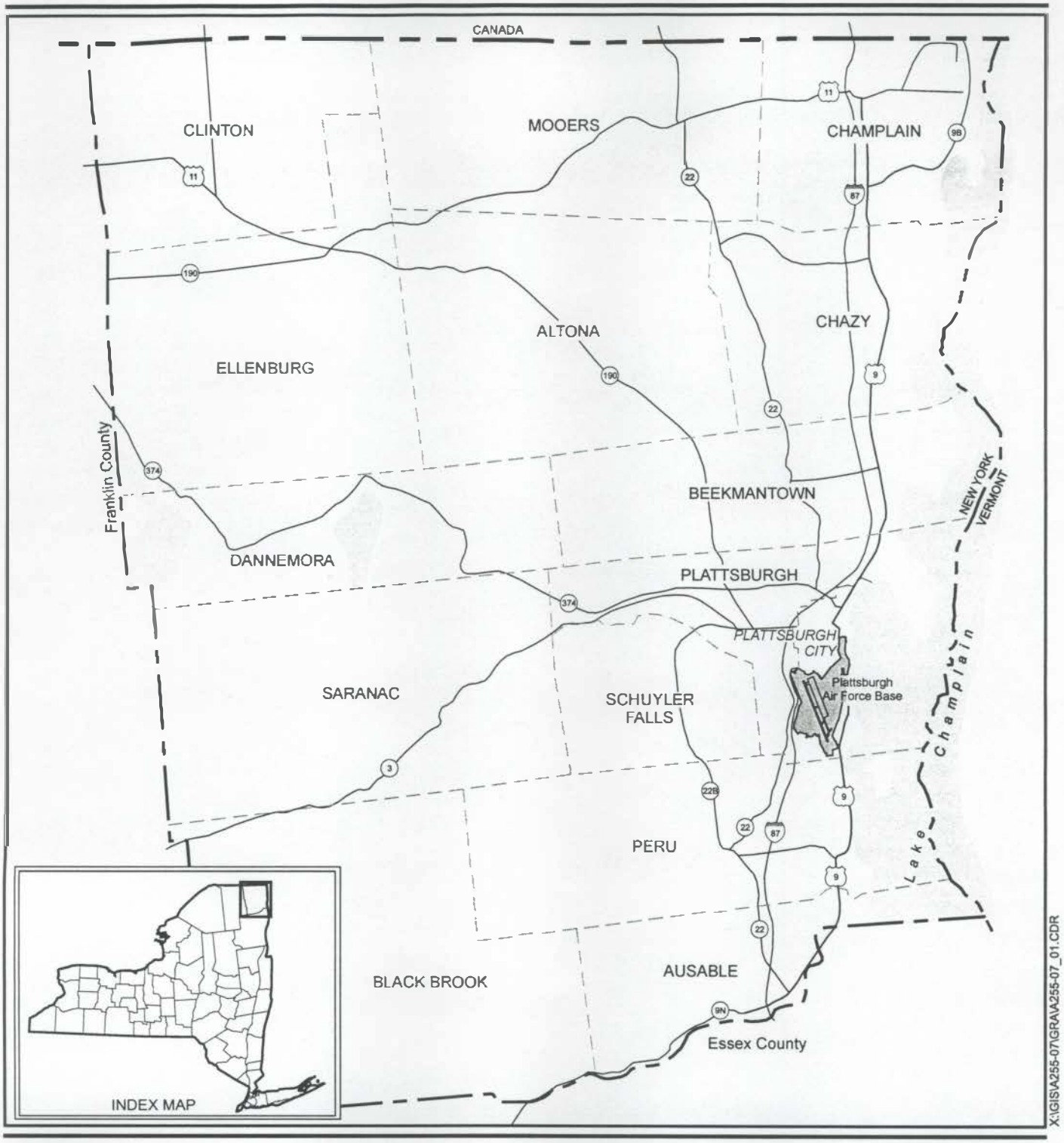
For further details on local community, the reader is referred to the 1995 FEIS.

3.2.1 Community Setting

Clinton County experienced a steady decrease in military employment between 1970 and 1980, from 4,447, or 16.3 percent of total employment in 1970, to 3,886, or 11.5 percent of total employment in 1980, an average annual decrease of 1.3 percent. In 1990, military employment in Clinton County totaled 3,983 and accounted for 9.2 percent of total employment. Between 1970 and 1980, total employment in Clinton County increased from 27,213 to 33,688, or an average of 2.4 percent annually. By 1990, it had increased to 43,061, representing an average increase of 2.8 percent annually from the 1980 figure.

The 1990 population of Clinton County was 85,969, an increase of 5,219, or an average annual increase of 6.5 percent from the 1980 level of 80,750. This overall increase is equivalent to an annual average growth for the county of about 0.6 percent over the 1960 to 1990 period. The 1990 population in the City of Plattsburgh was 21,255, and since 1960 has increased at a lower rate than that of Clinton County. The population of the Town of Plattsburgh totaled 17,231 in 1990, an increase of 5.2 percent from the 1980 level of 16,384. Military population at Plattsburgh AFB has been decreasing since fiscal year (FY) 1989. The number of military retirees in the area increased annually between FY 1980 and FY 1993, from 2,078 to 2,419.

Plattsburgh AFB operational employment levels began to decline in October 1990. This drawdown of military and civilian personnel at the base continued until its closure on September 30, 1995. Total employment in Clinton County was reduced in 1996 by an estimated 5,063 jobs, including 2,930 direct and 2,133 secondary positions. The reduction in employment is estimated to have increased the unemployment rate in Clinton County by 7.6 percent in 1996 (U.S. Air Force 1995a).



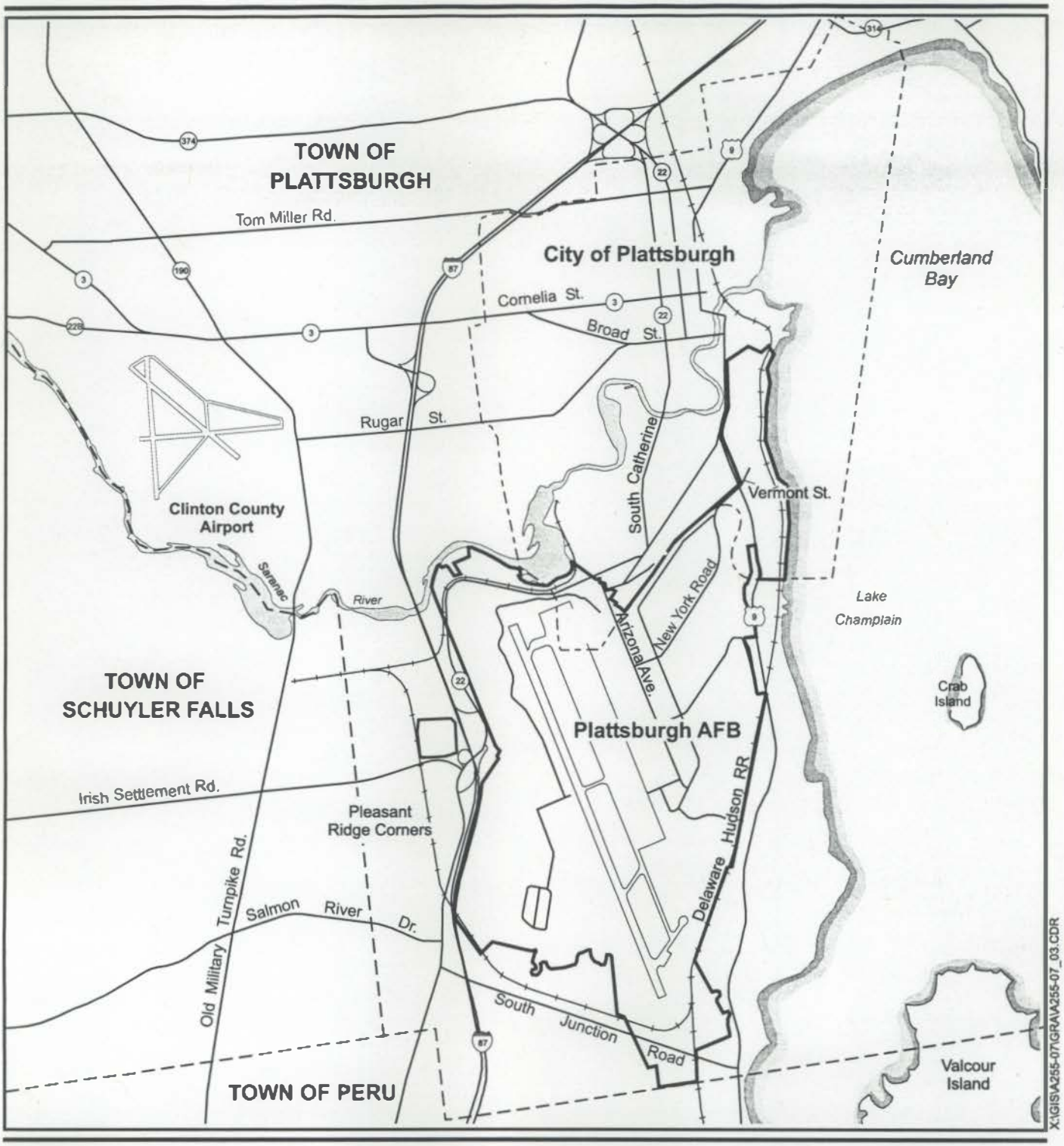
LEGEND

- Interstate Highway
- U.S. Highway
- State Highway
- Township

0 1 4 Miles

Regional Map of Clinton County

Figure 3.2-1



LEGEND

- Interstate Highway
- U.S. Highway
- State Highway
- Town Boundary
- Railroad
- Plattsburgh AFB Gate
- Base Boundary
- City Limits

0 .25 1 Mile

Plattsburgh AFB and Vicinity

Figure 3.2-2

Some 6,300 civilian personnel, military personnel, retirees, and dependents relocated as a result of base closure (U.S. Air Force 1995a,b). Because economic and natural growth in the county was expected to absorb most of this reduction, the population of Clinton County decreased only slightly from an estimated 82,805 in 1995 to 80,270 by the end of 1996 (U.S. Bureau of the Census 1999).

The current caretaker status of the base requires a workforce of approximately 50 people. These 50 direct jobs have 27 secondary jobs associated with them (U.S. Air Force 1995a,b).

3.2.2 Land Use and Aesthetics

Land uses on Plattsburgh AFB were assumed to be similar to existing land uses described in the 1995 FEIS because no specific development plans are proposed in this portion of Clinton County.

3.2.2.1 Land Use

Land Use Plans and Regulations. The affected land use management jurisdictions within the Plattsburgh AFB vicinity are the City of Plattsburgh, Town of Plattsburgh, Town of Peru, and the New York State Adirondack Park Agency. Land use plans for these jurisdictions are described in the 1995 FEIS.

Zoning. Local zoning ordinances do not have enforcement powers on Federal property. However, the ordinances zone Federal property in advance of future land disposals conveyed to non-Federal parties. The land use management jurisdictions identified above each have zoning ordinances. These have been described in the 1995 FEIS.

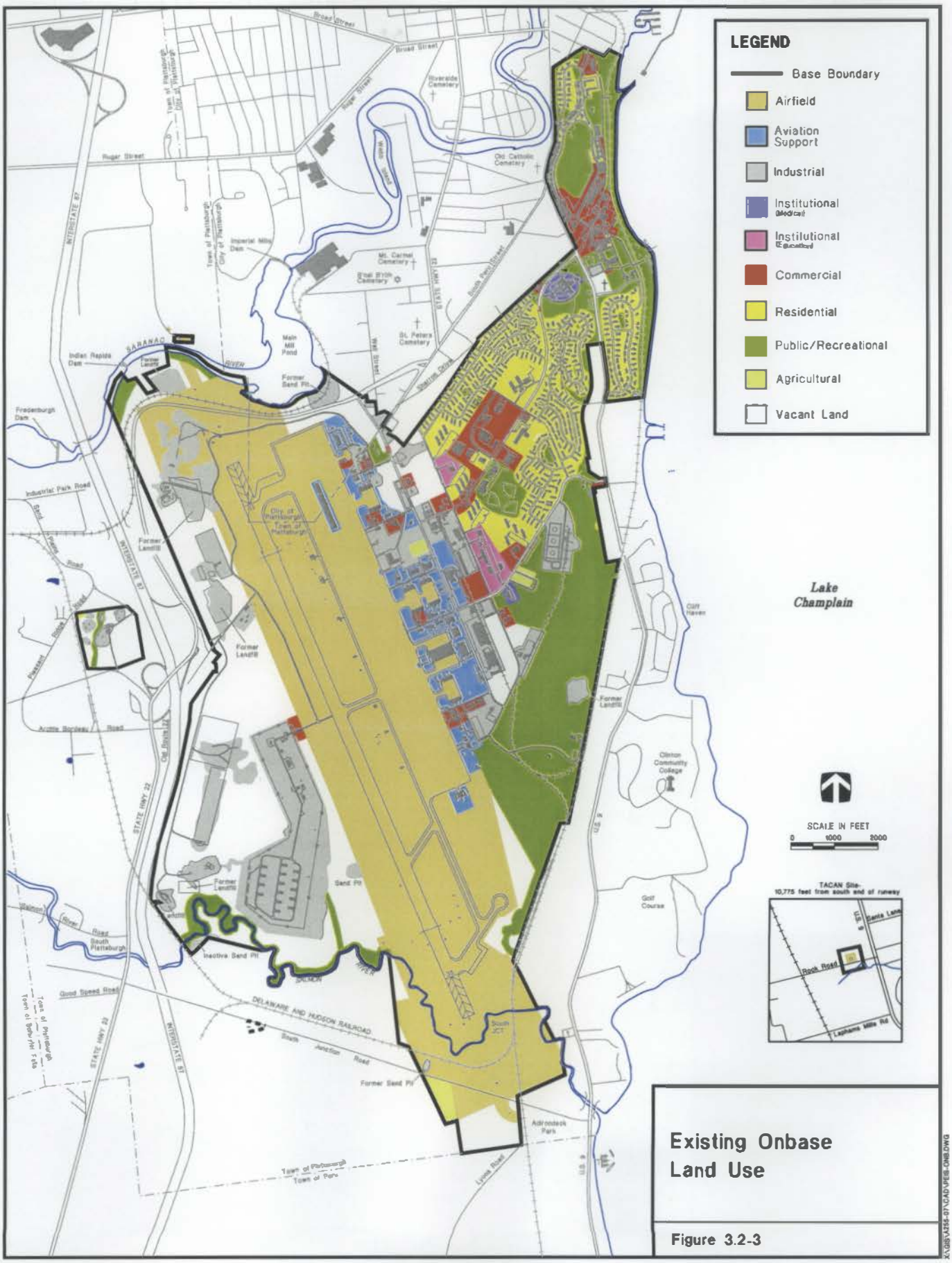
Onbase Land Use. Plattsburgh AFB consists of 3,447 acres held in fee simple. The main base consists of 3,399 acres, with four remote parcels totaling 48 acres (Figure 3.2-3).

The four remote parcels are located northwest, west, and south of the base. Plattsburgh Barracks (223 acres) is located east of U.S. 9 and is referred to as the "old base" because it is the original military land withdrawal. The "new base" is located west of U.S. 9 and consists of the 3,176-acre air base that was built beginning in 1954.

3.2.2.2 Aesthetics

Visual resources include natural and man-made features that give a particular environment its aesthetic qualities. Criteria used in the analysis of these resources include visual sensitivity, which is the degree of public interest in a visual resource, and concern over adverse changes in visual quality. Visual sensitivity is categorized in terms of high, medium, or low levels.

The 1995 FEIS provides definitions for these categories and a detailed discussion of visually sensitive areas in the vicinity of Plattsburgh AFB.


LEGEND
Base Boundary
Airfield
Aviation Support
Industrial
Institutional
Institutional
Commercial
Residential
Public/Recreational
Agricultural
Vacant Land
Lake Champlain
SCALE IN FEET
0
1000
2000
TACAN Site-
10,775 feet from south end of runway
Rock Road
Existing Onbase Land Use
Figure 3.2-3

SH-22 (South Catherine Street) is a major north-south highway providing direct regional access to Plattsburgh AFB. In the vicinity of the base, SH-22 is a two-lane, undivided roadway, which is congested during peak periods along its entire route through the downtown area of the City of Plattsburgh. The main causes of congestion are the lack of capacity and the absence of adequate alternate routes bypassing the downtown area.

U.S. 9 (United States Avenue) is a principal north-south route providing direct regional and local access to Plattsburgh AFB. Through the City of Plattsburgh, this roadway is a two-lane, undivided roadway with speed restricted by law to below 40 miles per hour (mph). Within the City of Plattsburgh and through downtown, U.S. 9 is congested during peak periods. The main causes of congestion are the high traffic demand and the lack of capacity.

SH-3 (Cornelia Street) is a main east-west roadway located north of Plattsburgh AFB. It connects Plattsburgh to Buffalo, New York, and it links I-87 to SH-22 and U.S. 9 to the east and SH-190 and SH-22B to the west. SH-3 is a four-lane, undivided arterial between Old Military Turnpike Road and Broad Street, and a two-lane, undivided roadway from Broad to Miller streets.

Major onbase roadways include Connecticut Road, New York Road, and Idaho and Arizona avenues. Most onbase roadways are two-lane, two-way, and undivided.

Traffic estimates for 1993, 1996, and 1998 are presented in Table 3.2-1. The 1993 estimates reflect traffic volumes when the base was in full operation; the 1996 estimates are presented to show reduction in traffic volumes resulting from the base closure in 1995; and the 1998 actual counts provide the latest traffic volumes available from the New York Department of Transportation. The 1998 data shows a fairly good correspondence with the 1996 estimates.

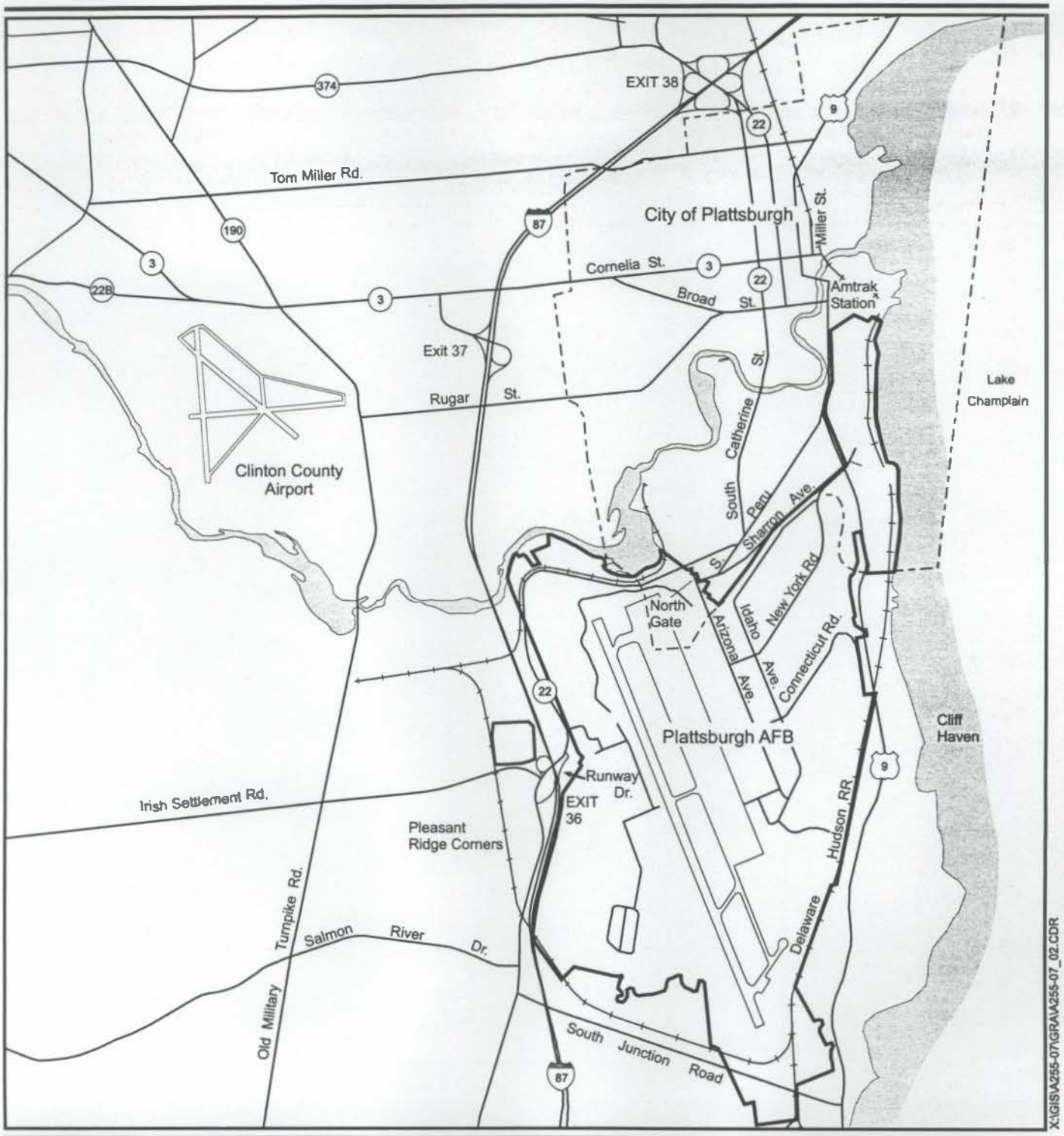
After base closure in 1995, U.S. 9 at South Peru Street experienced the greatest reduction in vehicle trips during the afternoon peak hours. This reduction was approximately 620 vehicles during the afternoon peak hour, representing a 50 percent reduction from the projected 1996 traffic levels without base closure and resulting in a significant improvement of LOS from E to C. U.S. 9 at Broad Street experienced a 30 percent reduction (a 500-vehicle reduction during afternoon peak hours), resulting in performance improvements without a change in LOS E.

With base closure, SH-3 at Broad Street experienced a reduction of 320 vehicles during the afternoon peak hours, a 10 percent reduction from the traffic volume projected for 1996 without base closure, but continued to operate at LOS F. All other key roads, including I-87 and all ramps at Exit 36, experienced a reduction of less than 270 vehicles per hour, representing a 2 to 48 percent reduction from the projected 1996 traffic volumes without base closure.

Table 3.2-1
Average Afternoon Peak-Hour Traffic Volumes on Key Roads

Roadway Segment	Two-Way Capacity VPH[2,3]	Preclosure (1993) Traffic[2]	LOS	Closure (1996) Traffic[2]	LOS	Traffic Counts (1998) Traffic[4]	LOS
Interstate 87 South State Highway 22 Crossing (Exit 36)	7,600	1,330	A	1,360	A	1,500	A
Interstate 87 North State Highway 22 Crossing (Exit 36)	7,600	1,860	A	1,900	A	1,500	A
Interstate 87 northbound off-ramp to State Highway 22 (Exit 36)	1,500	120	A	120	A		
Interstate 87 northbound on-ramp from State Highway 22 (Exit 36)	1,500	340	A	320	A		
Interstate 87 southbound off-ramp to State Highway 22 (Exit 36)	1,500	290	A	300	A		
Interstate 87 southbound on-ramp (Loop) from State Highway 22 (Exit 36)	1,350	110	A	90	A		
U.S. 9 South Vermont Street at Plattsburgh South City Line	2,520	580	B	330	A	760	B
U.S. 9 at South Peru Street	1,740	1,240	E	680	C	920	C
U.S. 9 at Broad Street	1,680	1,680	E	1,260	E	1,170	D
State Highway 3 West South Catherine Street (Route 22)	1,800	1,550	E	1,450	E	1,170	D
State Highway 3 at Broad Street	2,900	3,120	F	2,930	F	2,950	F
State Highway 22 at Railroad Crossing, South Junction Interstate 87	2,160	480	B	390	B		
State Highway 22 West Arizona Avenue at North Gate	2,540	990	C	850	C		
State Highway 22 East Arizona Avenue at North Gate	2,340	600	C	610	C		
State Highway 22 Overlap with South Peru Street	2,340	930	D	850	C	900	C
State Highway 22 (South Catherine Street) at Broad Street	1,860	830	D	680	C	1,656	E
Sharron Avenue at South Peru Street	1,760	370	B	260	B		
Arizona Avenue at North Gate	1,500	260	B	<50	A		
New York Road at Main Gate	1,500	850	D	<50	A		
Vermont Street at Old Base Gate	1,500	590	D	<50	A		

Notes: [1]Traffic volumes for 1996 and for each roadway segment are obtained from 1993 corresponding figures increased by 1.5 percent per year through 1996 and then reduced by the traffic volume attributed to the base.
[2]VPH = Volume per hour.
[3]All traffic figures are rounded to the nearest ten.
[4]New York Department of Transportation, 1998 Traffic Volume Report (Peak hour volume was calculated at 12% of the AADT).



LEGEND

- Interstate Highway
- U.S. Route
- State Highway
- Railroad
- Base Boundary
- City Limits

0 .25 1 Mile

X:\GIS\A255-07\GRAV\A255-07_02.CDR

Key Local and Onbase Roads

Figure 3.2-4

With base closure, all onbase roads experienced minimal traffic volumes generated by the 50-person OL and caretaker team resulting in LOS A on all roads.

3.2.3.2 Airspace/Air Traffic

With the two new alternatives, the airfield land use would be the same as in the Proposed Action for the 1995 FEIS. The 1995 FEIS analyzed the airspace and air traffic affected environment in detail. Because no new uses are proposed that would require reanalysis of the airspace and air traffic, Section 3.2.3.2 of the 1995 FEIS is incorporated here in its entirety by reference.

3.2.3.3 Railroads

Because no new uses are proposed that would require reanalysis of the railroads, section 3.2.3.3 of the 1995 FEIS is incorporated here in its entirety by reference.

3.2.3.4 Other Transportation Modes

Greyhound Bus Lines offers extensive and frequent bus service in Clinton County. The Clinton Area Rural Transportation provides public transportation service to all areas of the county and to areas within the City of Plattsburgh. The Lake Champlain Transportation Company operates daily, year-round and seasonal ferries. The ferries carry passenger cars as well as trucks moving bulk cargo and petroleum products across Lake Champlain.

3.2.4 Utilities

Utility systems addressed in this analysis include the facilities and infrastructure used for:

- Potable water pumping, treatment, storage, and distribution;
- Wastewater collection and treatment;
- Solid waste collection and disposal; and
- Energy generation and distribution, including the provision of electricity and natural gas.

The Region of Influence (ROI) for the utilities analysis consists of the service area of each utility provider servicing Plattsburgh AFB and surrounding areas, including the City of Plattsburgh, the Town of Plattsburgh, and Clinton County. The major attributes of utility systems in the ROI are processing and distribution capacities, storage capacities, average daily consumption, peak demand, and related factors required to determine whether such systems are adequate to provide services in the future.

For all utilities, both onbase and offbase, background information is provided in the 1995 FEIS. Utility demands in the ROI for 1991 to 1996 are shown in

Table 3.2-2. Utility demands have been consistent with population changes in Clinton County, the City of Plattsburgh, and the Town of Plattsburgh.

Table 3.2-2
Utility Demands in the Region of Influence

Utility	1991	1992	1993	1994	1995	1996
Water (MGD)	4.50	4.00	4.00	3.97	3.94	4.11
Wastewater (MGD)	7.60	7.30	7.40	7.34	7.29	7.60
Solid Waste (tons/day)	184.80	155.50	151.70	150.56	149.45	155.78
Electricity (MWh/day)	2,480	2,580	2,680	2,660	2,640	2,750

Sources: N. Langlois, E. Mazuchowski, and R. Perkins, personal communication, 1994.

Water Supply. Plattsburgh City Water Department supplies water to the City of Plattsburgh, parts of the Town of Plattsburgh, and all of Plattsburgh AFB. A water filtration plant is located 2 miles west of the city limits in the Town of Plattsburgh. Its design capacity is 10.0 MGD, with a daily average of 4.0 MGD. Total water supplied in 1991 was 4.5 MGD; in 1992, 6.0 MGD; and in 1993, 4.0 MGD.

In addition, the Town of Plattsburgh Water Department supplies water to 10 water districts in the Town of Plattsburgh. The water is supplied from seven wells with a capacity of 2.7 MGD. Total water supplied was 0.68 MGD in 1991, 0.69 MGD in 1992, and 0.74 MGD in 1993.

Sanitary Sewer. The City of Plattsburgh Department of Water and Sewage provides wastewater treatment services to the City of Plattsburgh, Plattsburgh AFB, and portions of the Town of Plattsburgh. The wastewater is treated at the waste treatment plant located on the south bank of the Saranac River near Lake Champlain, 1 mile north of Plattsburgh AFB. The plant is operated with the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) permit.

The design capacity of the waste treatment plant is 16.0 MGD and currently maintains an average flow of 7.4 MGD. The treated water is discharged at the mouth of the Saranac River, which flows into Cumberland Bay in Lake Champlain. Total wastewater treated was 7.6 MGD in 1991, 7.3 MGD in 1992, and 7.4 MGD in 1993. During this period, Georgia Pacific Corporation drew its water from Lake Champlain and Imperial Paper Company drew its water from the Saranac River. However, both these paper mills used the City of Plattsburgh wastewater treatment plant. This explains the disparity between water supply and wastewater production for the City of Plattsburgh. However, the Imperial Paper Company closed after base closure, resulting in additional capacity.

In addition, the Town of Plattsburgh Water and Sewer Department provides wastewater treatment services to the Town of Plattsburgh. The capacity of the wastewater treatment plant is 0.162 MGD. Approximately 0.1 MGD of wastewater is treated at the plant.

Solid Waste. Solid waste generated in Clinton County is disposed of at the Clinton County Solid Waste Department Landfill located in the Town of Schuyler Falls. This landfill services 14 towns, the City of Plattsburgh, 5 villages, and Plattsburgh AFB. Each municipality is responsible for collecting and disposing solid waste at the landfill. The current landfill opened in September 1995, at which time it had a 20-year capacity. In 1991, 1992, and 1993, 67,439 tons, 56,758 tons, and 55,356 tons, respectively, of solid waste were disposed at the landfill.

Electricity and Natural Gas. The City of Plattsburgh owns its municipal electric system, which serves all customers within the city's corporate limits, except for that portion of Plattsburgh AFB which is within the corporate limits and is served by New York State Electric and Gas (NYSEG). The city purchases its electricity from the New York Power Authority and has a 408,000 megawatt-hour (MWh) daily capacity. The City of Plattsburgh supplied 1,420 MWh per day in 1991, 1,510 MWh per day in 1992, and 1,500 MWh per day in 1993 to the City of Plattsburgh service area. NYSEG provides electricity and natural gas to Plattsburgh AFB, the Town of Plattsburgh, and all of Clinton County, except for the Village of Rouses Point.

3.3 HAZARDOUS SUBSTANCES MANAGEMENT

Hazardous materials and hazardous waste management activities at Plattsburgh AFB were governed by specific environmental regulations. A discussion of regulations as they pertained to hazardous substance management at Plattsburgh AFB is found in the 1995 FEIS.

Hazardous Substances management activities, for which the U.S. Air Force is still responsible, are continuing independently of the environmental process, according to the applicable laws and regulations. The U.S. Air Force is committed to the remediation, as necessary, of all contamination at Plattsburgh AFB resulting from Air Force activities prior to disposal and reuse of the base property. Hazardous Substances management activities have been fully described in the 1995 FEIS. Section 3.3 of the 1995 FEIS is incorporated here in its entirety by reference.

3.4 NATURAL ENVIRONMENT

This section describes the affected environment for the following natural resources: soils and geology, water resources, air quality, noise, biological resources, and cultural and paleontological resources.

3.4.1 Soils and Geology

The ROI for soils includes Plattsburgh AFB and an area several hundred feet beyond the base boundary. The ROI for geologic resources includes the base and the area extending approximately 5 miles beyond the base boundary.

3.4.1.1 Soils

Nearly all the soils on Plattsburgh AFB and vicinity are sandy loams, sands, or loamy sands which have been previously described in the 1995 FEIS.

Many soils in the ROI have limitations for construction and maintenance of dwelling structures because of the seasonally high groundwater table; a few soils have limitations because of steep slopes. The depth to bedrock is greater than 60 inches nearly everywhere in the ROI, but excavations in many of the soils are subject to caving if unsupported and to sloughing because of the high groundwater table. In some areas, limitations for road development and maintenance are mostly due to frost action and the high groundwater table. Because nearly all of the base is level or gently sloping, slope is not a limitation to new construction (Smith *et al.* n.d.).

Most soils in the area have constraints for maintaining septic tank fields because of poor filtering ability and the high groundwater table. Nearly all soils on the base have rapid permeability. Because of these conditions, soils may be susceptible to contamination.

Approximately 79 acres of soils on the base are classified prime farmland. Most of the prime farmland on the base is located on the drained portions of the base golf course (Figure 3.4-1).

3.4.1.2 Physiography and Geology

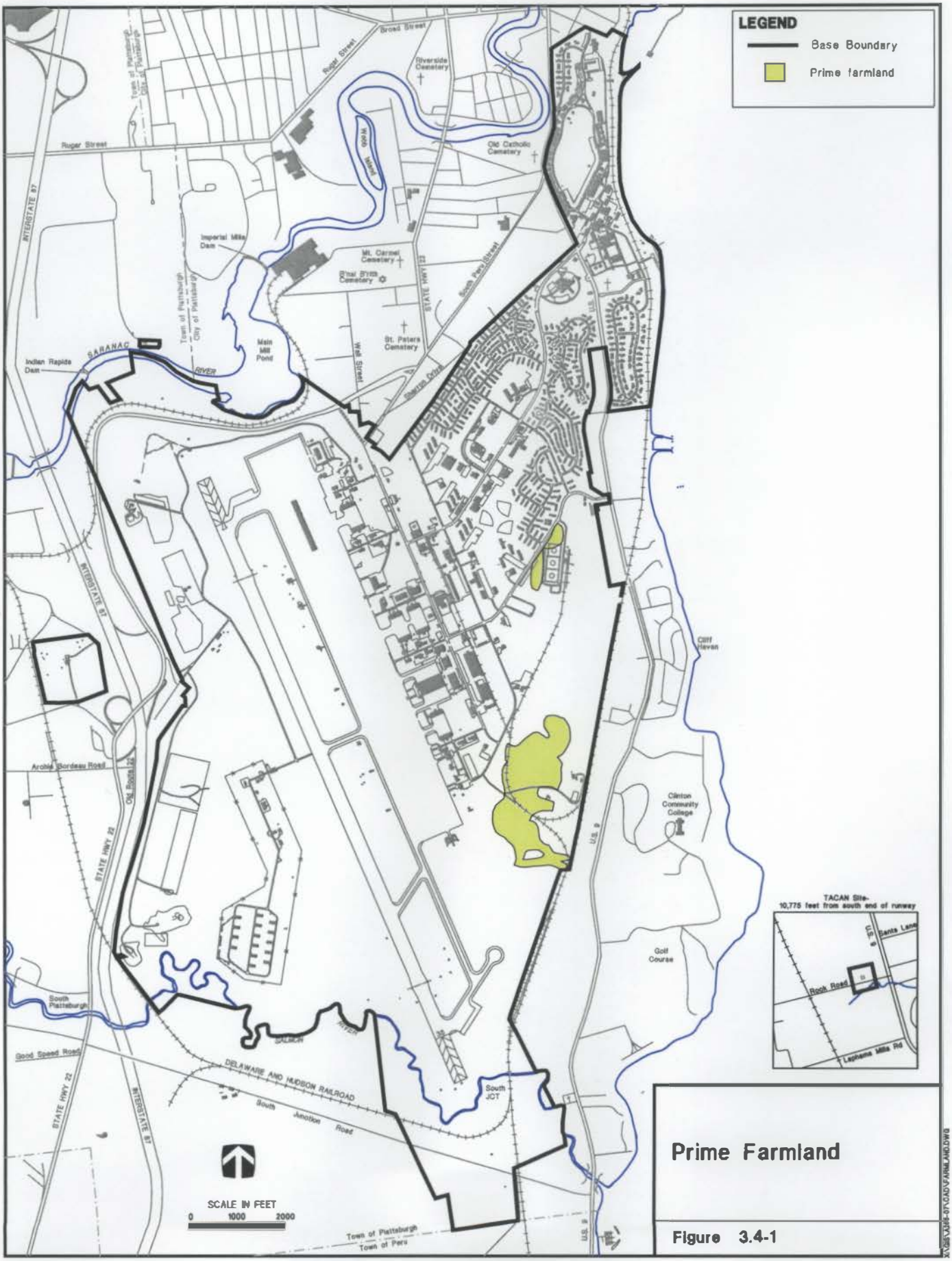
Plattsburgh AFB lies along the western shore of Lake Champlain in the St. Lawrence-Lake Champlain Lowland physiographic province. The land surface of the base slopes generally east toward the lake. The slope along the southern edge of the base is toward the Salmon River, and along parts of the northern edge, toward the Saranac River. Elevations range from 95 feet at the lakeshore to slightly over 270 feet at the northwestern boundary. Just east of the base, the hill above Bluff Point rises to 278 feet. This hill is the most notable topographic feature on the otherwise gently sloping area of the base and immediate surroundings. A topographic depression is present in the vicinity of the Munitions Storage Area in the southwestern portion of the base. The lowest elevation in this area is approximately 140 feet.

Slopes over the area are mostly less than 3 percent; a few scattered areas have slopes of 3 to 8 percent. Areas of steeper slopes are limited to a few places along the Saranac River and near Lake Champlain. The largest area of steep slopes is the hill above Bluff Point.

A detailed discussion of the geology for the base and surrounding ROI is provided in the 1995 FEIS.

3.4.2 Water Resources

The ROI for water resources includes Plattsburgh AFB and the surrounding area extending east to Lake Champlain, north to the Saranac River, west to 1 mile beyond the base boundary, and south to the Salmon River and, where base property extends south of the river, about 0.5 mile beyond it.


LEGEND
Base Boundary
Prime farmland
Broad Street
Riverside Cemetery
Ruger Street
Old Catholic Cemetery
Imperial Mills Dam
Mt. Carmel Cemetery
Pinal Sytts Cemetery
STATE HWY 22
South Plattsburgh
Main Mill Pond
St. Peters Cemetery
Indian Rapids Dam
SARANAC
RIVER
INTERSTATE 87
Archie Bordeau Road
Old Route 22
Cliff Revan
Clinton Community College
U.S. 9
TACAN Site-
10,775 feet from south end of runway
Santa Lane
Rock Road
Lapham Mills Rd
Golf Course
Good Speed Road
DELAWARE AND HUDSON RAILROAD
South Junction Road
South JCT
SCALE IN FEET
0 1000 2000
Town of Plattsburgh
Town of Peru
Prime Farmland
Figure 3.4-1

The average annual precipitation at Plattsburgh is 29.4 inches, and the average snowfall is 63 inches per season (Science and Engineering Associates, Inc. 1992). Precipitation in the Lake Champlain Valley is generally less than in the area to the west because of the rainshadow effect of the Adirondack Mountains. The mountains, however, serve as a recharge area for groundwater and are the source area for the streams that flow toward the Plattsburgh area. Lake Champlain is the discharge point for the combined groundwater-surface water system.

3.4.2.1 Surface Water

Surface waters in the ROI include Lake Champlain, the Saranac and Salmon rivers, numerous wetlands and ponds, and small streams that drain the southwestern part of the base and the golf course area. Surface water on Plattsburgh AFB drains into Lake Champlain, either directly or by way of the Saranac and Salmon rivers (Figure 3.4-2). Lake Champlain forms the most significant body of water in the region. All permanent surface water features are classified and regulated as Waters of the United States. The closest Federally designated wild and scenic river occurs 3 miles south at Au Sable River. A detailed discussion of surface water on the base and surrounding ROI is provided in the 1995 FEIS.

3.4.2.2 Groundwater

Bedrock and overlying unconsolidated deposits comprise the two aquifers in the region. The bedrock aquifer consists of thin- to thick-bedded limestone and dolomite with interbedded layers of sandstone and shale (Fisher 1968). The unconsolidated deposits form the main aquifer of the region and consist of glacially derived sands, silts, and gravel. These sediments form an unconfined, near-surface aquifer that varies in thickness and is separated from the bedrock by confining layers of till and fine-grained lacustrine sediments (Cadwell and Pair 1991). Groundwater flow within the bedrock aquifer is generally eastward to Lake Champlain.

3.4.2.3 Water Supply

Plattsburgh AFB, all homes in the City of Plattsburgh north of the base, and homes in the Cliff Haven residential community receive their water from the City of Plattsburgh municipal water supply system. All homes south of Clinton Community College rely on private wells or Lake Champlain as their source of potable water. All homes west and south of the base rely on private wells. These include a cluster of homes along the western boundary of the base at the SH-22 and I-87 interchange and a small number of homes adjacent to the north gate of the base (Science and Engineering Associates, Inc. 1992). Other users in the Town of Plattsburgh obtain their water from private wells or small community systems. No groundwater is withdrawn for domestic or industrial uses on the base, except for the 40-acre parcel west of the base that draws water from a well located near Building 9100. Streams in the immediate vicinity of Plattsburgh AFB are not used as water supply sources.

Contamination from base sources has not extended offbase. No private wells have been affected by contamination from the base.

3.4.3 Air Quality

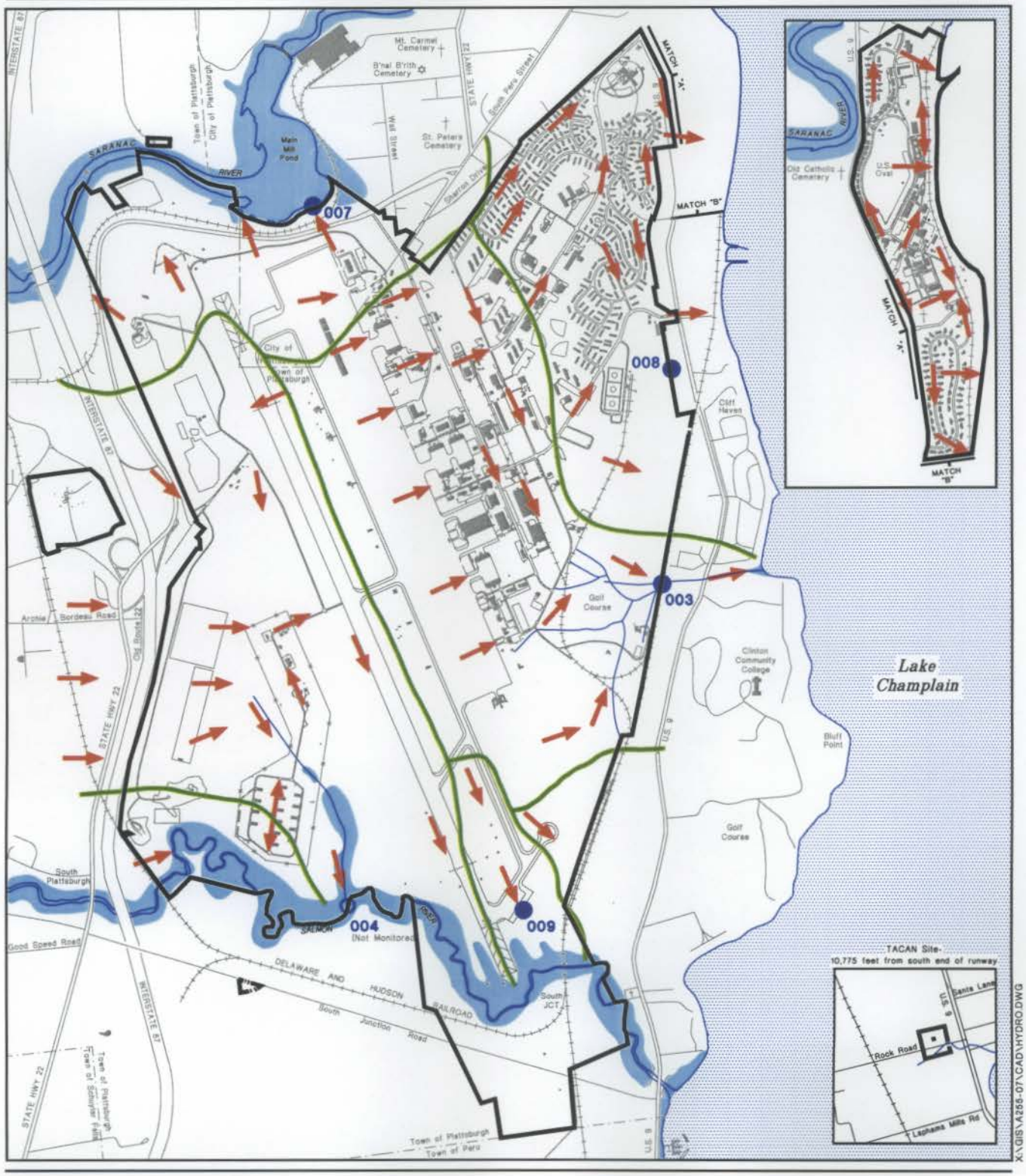
Air quality in a given location is described as the concentration of various pollutants in the atmosphere, generally expressed in units of parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$). Air quality is determined by the type and amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. The significance of a pollutant concentration is determined by comparing it to Federal and/or State ambient air quality standards.

Both the federal government and the State of New York have established ambient air quality standards to protect public health and welfare. Standards have been adopted for six criteria pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable and fine particulate matter (PM_{10} and $PM_{2.5}$), and airborne lead. The most recent updates to the national standards were finalized in 1997. The standards are presented in Table 3.4-1.

Areas that violate air quality standards are designated nonattainment areas for the relevant pollutants. For three of the criteria pollutants (O_3, CO, and PM_{10}), nonattainment areas are further classified according to severity. Areas that comply with air quality standards are designated attainment areas for the relevant pollutants. Areas that lack monitoring data to demonstrate attainment or nonattainment status are designated as unclassified areas and are treated as attainment areas for regulatory purposes. Each classification has an attainment date which must be met by the nonattainment area. The attainment dates associated with each classification are detailed in the 1995 FEIS, Section 3.4.3, Tables 3.4-5 and 3.4-6. Plattsburgh AFB is designated as attainment or unclassifiable for all criteria pollutants (NYSDEC, Jim Ralston, 2000).

The EPA has granted the authority to implement air quality regulations in areas that are classified as attainment or unclassifiable to the NYSDEC. The Prevention of Significant Deterioration (PSD) program is implemented in large part through the use of "increments" and area classifications that effectively define "significant deterioration" for individual pollutants. The Clean Air Act's area classification scheme for PSD establishes three classes of geographic areas and applies increments of different stringency to each class. Air quality impacts, in combination with other PSD sources in the area, must not exceed certain allowable incremental increases. More details about the PSD program, including the maximum allowable pollutant concentration increases, are in Section 3.4.3 of the 1995 FEIS.

Clinton County is designated by the EPA as a Class II area. Class II areas are all PSD areas that are designated as attainment or unclassifiable for all NAAQS that are not class I areas. Major new or modified stationary sources in the region are subject to PSD review to ensure that these sources are constructed without significant adverse deterioration of the clean air in the area. Emissions from any major new or modified source must be controlled



LEGEND

- Base Boundary
- Stormwater Flow Direction
- Drainage Divide
- Monitored Stormwater Outfall, with New York State Discharge Outfall Number
- Flood Hazard Areas (100-year)

Source: BCP Tab G-3, SH 1 & 2, FEMA Flood Insurance Maps

SCALE IN FEET
0 500 1000

Surface Hydrology

Figure 3.4-2

Table 3.4-1
New York State and National Ambient Air Quality Standards

Pollutant	Averaging Time	Level	New York State Standards[1] Concentrations[2]	National Standards[1] Concentrations[2]	
				Primary	Secondary
Ozone	1 hour[9]	All	0.08 ppm[3]	0.12 ppm (235 $\mu g/m^3$)	Same as primary standard
	8 hours[9]	All		0.08 ppm (160 $\mu g/m^3$)	Same as primary standard
Carbon Monoxide	8 hours	All	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	NS[4]
	1 hour	All	35 ppm (40 mg/m^3)	35 ppm (40 mg/m^3)	NS
Nitrogen Dioxide	Annual	All	0.05 ppm (100 $\mu g/m^3$)	0.053 ppm (100 $\mu g/m^3$)	Same as primary standard
Sulfur Dioxide	Annual	All	0.03 ppm (80 $\mu g/m^3$)	80 $\mu g/m^3$ (0.03 ppm)	
	24 hours	All	0.14 ppm[5] (365 $\mu g/m^3$)	365 $\mu g/m^3$ (0.14 ppm)	
	3 hours	All	0.50 ppm[6] (1,300 $\mu g/m^3$)	NS	1300 $\mu g/m^3$ (0.5 ppm)
Lead	Calendar Quarter	All[7]	NS	1.5 $\mu g/m^3$	Same as primary standard
Inhalable Particulates (PM_{10})	Annual Arithmetic Mean	All[8]	NS	50 $\mu g/m^3$	Same as primary standard
	24 hours	All[8]	NS	150 $\mu g/m^3$	Same as primary standard
Fine Particulates ($PM_{2.5}$)[9]	Annual Arithmetic Mean	All[8]	NS	15 $\mu g/m^3$	Same as primary standard
	24 hours	All[8]	NS	65 $\mu g/m^3$	Same as primary standard
Total Suspended Particulates (TSP)[10]	Annual Geometric Mean	IV	75 $\mu g/m^3$	NS	NS
		III	65 $\mu g/m^3$	NS	NS
		II	55 $\mu g/m^3$	NS	NS
		I	45 $\mu g/m^3$	NS	NS
	24 hours	All	250 $\mu g/m^3$	NS	NS

Notes:
(1) National and99 New York State standards, other than ozone and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.
(2) Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25C and a reference pressure of 760 millimeters of mercury. All measurements of ambient concentrations are to be corrected to a reference temperature of 25C and a reference pressure of 760 millimeters of mercury; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
(3) Existing New York State standard for ozone of 0.08 ppm not yet officially revised via regulatory process to coincide with the national standard of 0.12 ppm, which is currently being applied to determine compliance status.
(4) NS = No standards, not regulated.
(5) Also during any 12 consecutive months, 99 percent of the values shall not exceed 0.10 ppm.
(6) Also during any 12 consecutive months, 99 percent of the values shall not exceed 0.25 ppm.
(7) Federal standard for lead not yet officially adopted by New York State, but is currently being applied to determine compliance status.
(8) National standard for PM10 not yet officially adopted by New York State, but is currently being applied to determine compliance status.
(9) EPA adopted new ozone and particulate matter standards on July 18, 1997; the new standards became effective on September 16, 1997. EPA rescinded the 1-hour ozone standard in June 1998. EPA will not designate areas as nonattainment for the new 8-hour ozone standard until the year 2000. In doing so, EPA will use the 3 years of data most recently available at that time. Previous national PM10 standards (which had different violation criteria than the September 1997 standards) will remain in effect for existing PM10 nonattainment areas until EPA takes actions required by Section 172(e) of the Clean Air Act or approves emission control programs for the relevant PM10 state implementation plan.
(10) New York State also has 30-, 60-, and 90-day standards in Part 257 of New York Codes, Rules, and Regulations.

Sources: New York State Department of Environmental Conservation 1991a, 1992, 1993.
40 CFR 50.

using Best Available Control Technology. No PSD Class I areas are located within over 100 miles of Plattsburgh AFB.

The Federal Clean Air Act, as amended in August 1977 and November 1990, dictates that project emission sources must comply with the air quality standards and regulations that have been established by Federal, State, and county regulatory agencies and must conform to the appropriate State Implementation Plan (SIP). A formal conformity determination is required for Federal actions occurring in nonattainment areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified annual de minimis threshold values. Because O_3 is a secondary pollutant, the conformity determination for O_3 uses the precursor emissions of VOCs and nitrogen oxide (NO_X) as surrogate pollutants. The de minimis thresholds are presented in the 1995 FEIS Section 3.4.3, Table 3.4-8. Because Plattsburgh AFB is not designated as a nonattainment area for any criteria pollutant, a conformity determination is not required.

The Clean Air Act Amendments of 1990 established an ozone transport region (OTR). The OTR consists of the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, the District of Columbia, and the portion of Virginia that is within the Consolidated Metropolitan Statistical Area that includes the District of Columbia. The OTR was established in recognition of the fact that the transport of O_3 and O_3 precursors throughout the region may render the northeast States' attainment strategies interdependent. The Clean Air Act Amendments also specify that VOC sources located anywhere in the OTR are required to achieve reasonably available control technology (RACT) if they have the potential to emit more than 50 tons per year of VOCs or are covered by an EPA Control Technique Guideline regardless of the attainment status or nonattainment classification. States were required to amend their SIPs to require RACT for major VOC sources no later than May 31, 1995.

3.4.3.1 Regional Air Quality

Air Pollution Potential. The air quality in a region on a given day depends on both pollutant emission strengths and atmospheric dispersion rates. Although the air pollution potential is moderately high, the air quality in Clinton County is good. This condition occurs because there are only seven major sources (emission greater than 100 tons per year for one pollutant) in Clinton County.

Clinton and Essex counties, New York, and Chittenden and Franklin counties, Vermont, are located within the Champlain Valley Interstate Air Quality Control Region (AQCR No. 159). All four counties are designated by EPA as attainment for SO_2 and PM_{10} and as unclassifiable for CO and NO_2 (40 CFR 81.333 and 81.346). All four counties, except Essex County, New York, are designated as unclassifiable attainment for O_3. A small portion of Essex County (the portion of Whiteface Mountain above 4,500 feet in

elevation) is designated nonattainment and is classified rural transport (marginal).

No designation for lead has been assigned to the four counties. Plattsburgh AFB is in a Class II PSD area. The nearest PSD Class I area is the Lye Brook Wilderness Area, about 115 miles south-southeast of the base in Vermont.

The NYSDEC does not operate an air quality monitoring station in Clinton County. However, there is a monitoring station located in Essex County at the base of Whiteface Mountain. The station is about 32 miles southwest of Plattsburgh AFB. The only other air quality monitoring station in the four-county area is in Chittenden County. It is operated by the Vermont Department of Environmental Conservation and is located in Burlington about 20 miles southeast of Plattsburgh AFB. O_3, SO_2, and PM_{10} are monitored at both stations, while CO is also monitored at Burlington, Vermont. Maximum concentrations of these pollutants recorded at these stations from 1992 through 1994 were summarized in Table 3.4-11 in the 1995 FEIS. No violations of the ambient air quality standards were recorded at these stations.

3.4.4 Noise

The areas most affected by base closure and reuse are the base itself; the towns of Plattsburgh, Schuyler Falls, and Peru; the City of Plattsburgh; and the adjacent unincorporated areas in Clinton County.

The characteristics of sound include parameters such as amplitude, frequency, and duration. The decibel (dB), a logarithmic unit that accounts for the large variations in amplitude, is the accepted standard-unit measurement of sound. Different sounds may have different frequency content.

When measuring sound to determine its effects on the human population, A-weighted sound levels (dBA) are typically used to account for the response of the human ear. A-weighted sound levels represent adjusted sound levels. The adjustments, established by the American National Standards Institute (1983), are made according to the frequency content of the sound. Examples of typical A-weighted sound levels are shown in Section 3.4.4 of the 1995 FEIS.

Noise is usually defined as sound that is undesirable because it interferes with communication and hearing, intense enough to damage hearing, or otherwise annoying. Noise levels often change with time. Therefore, to compare levels over different time periods, several descriptors were developed to account for time variance. These descriptors are used to assess and correlate the various effects of noise on humans, including land use compatibility, sleep and speech interference, annoyance, hearing loss, and startle effects.

The day-night average sound level (DNL) was developed to evaluate the total community noise environment. The DNL is the average A-weighted sound

level during a 24-hour period with 10 dB added to nighttime levels (between 10:00 p.m. and 7:00 a.m.). This adjustment is made to account for the increased sensitivity to nighttime noise. The DNL was endorsed by the EPA and is mandated by the U.S. Department of Housing and Urban Development, the FAA, and the DOD for land use assessments.

The DNL is an accepted unit for quantifying human annoyance to general environmental noise, which includes aircraft noise. The Federal Interagency Committee on Urban Noise developed land use compatibility guidelines for noise in terms of DNL (14 CFR 150). FAA-recommended DNL ranges for various land use categories based on these guidelines are presented in Table 3.4-2. Residential land uses are generally acceptable below 65 DNL, even though some sleep and speech interference exists. The FAA guidelines were used in this study to determine noise impacts.

The DNL is used in this report because it is the noise descriptor recognized by the FAA and Air Force for airfield environments. The DNL is sometimes supplemented with other metrics, primarily the equivalent sound level (L_{eq}). The L_{eq} is the equivalent, steady-state level that would contain the same acoustical energy as the time-varying level during the same time interval.

Appendix H in the 1995 FEIS provides additional information about the measurement and prediction of noise. Appendix H also provides more information on the units used in describing noise, as well as information about the effects of noise such as annoyance, sleep and speech interference, health effects, and effects on animals.

3.4.4.1 Existing Noise Levels

Because airfield land uses with both new alternatives would be the same as those previously analyzed for the Proposed Action in the 1995 FEIS, aircraft noise data has not been detailed in this document. Detailed data for preclosure aircraft noise is presented in the 1995 FEIS. Typical noise sources near airfields include aircraft, surface traffic, and other human activities. Prior to base closure, military aircraft operations and surface traffic on local streets and highways were the existing primary sources of noise in the vicinity of Plattsburgh AFB. Noise from railroads in the vicinity of the base is negligible and is not included in the analysis. In airport analyses, areas with DNLs above 65 dB are often considered in land use compatibility planning and impact assessment. Therefore, the DNL contours equal to or greater than 65 dB are of particular interest and are estimated and presented in 5-dB intervals.

Preclosure Reference. Prior to base closure, aircraft noise at Plattsburgh AFB occurred during aircraft engine warmup, maintenance and testing, taxiings, takeoffs, approaches, and landings. Noise contours for preclosure aircraft operations were modeled for the 1993 AICUZ study (U.S. Air Force 1993a). The preclosure DNL contours form a distorted elliptical pattern with the high noise levels found along the north-south runway (Runway 17/35).

Table 3.4-2
Land Use Compatibility With Yearly Day-Night Average Sound Levels[1] (in dB)

Land Use	Yearly Day-Night Average Sound Level (DNL) Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential – other than mobile homes and transient lodgings	Y[2]	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices – business and professional	Y	Y	25	30	N	N
Wholesale and retail--building materials, hardware, and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing and Production						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(5)	Y(6)	Y(7)	Y(7)	Y(7)
Livestock farming and breeding	Y	Y(5)	Y(6)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(8)	Y(8)	N	N	N
Outdoor music halls and amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusement parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

Notes: [1]The designations contained in this table do not constitute a federal determination that any use of land covered by the program is acceptable or unacceptable under federal, state, or local laws. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise-compatible land uses.

[2]Key:
- Y (Yes) — Land use and related structures compatible without restrictions.
- N (No) — Land use and related structures are not compatible and should be prohibited.
- 25, 30, or 35 — Land use and related structures generally compatible; measures to achieve Noise Level Reduction (NLR) of 25, 30, or 35 dB must be incorporated into design and construction of structure.

(1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor NLR of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide an NLR of 20 dB; thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year-round. However, the use of NLR criteria will not eliminate outdoor noise problems.

(2) Measures to achieve an NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

Table 3.4-2, Page 2 of 2

(3) Measures to achieve an NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public Interstate received, office areas, noise-sensitive areas, or where the normal noise level is low.

(4) Measures to achieve an NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public Interstate received, office areas, noise-sensitive areas, or where the normal noise level is low.

(5) Residential buildings require an NLR of 25.

(6) Residential buildings require an NLR of 30.

(7) Residential buildings not permitted.

(8) Land use compatible, provided special sound reinforcement systems are installed.

Source: 14 CFR 150.

Surface vehicle traffic noise levels for roadways in the vicinity of the base were analyzed using the Federal Highway Administration Highway Noise Model STAMINA 2.0 (1982). This model incorporates vehicle mix, traffic volume projections, and speed to generate DNL values. The results of the modeling for surface traffic are presented in Table 3.4-3. Additional details regarding surface traffic noise modeling are presented in Appendix H of the 1995 FEIS. The noise levels are presented as a function of distance from the centerline of the nearest road. The actual distances to the DNLs may be less than those presented because the model-shielding factors were not used to account for the screening effects of intervening buildings, terrain, and walls.

Closure Baseline. The projected noise levels for the closure baseline were calculated using the traffic projections at the time of base closure (Appendix H of the 1995 FEIS).

These data include AADT, traffic mix, and speed. The results of the modeling for the roadways analyzed are presented in Table 3.4-3. Because of the small decrease in traffic as a result of base closure, the decrease in noise levels along the roadways in the vicinity of Plattsburgh AFB will be 2 dB or less. This reduction in highway noise levels will not be discernible.

Table 3.4-3
Distance to DNL From Roadway Centerline for the Preclosure Reference and Closure Baseline

Roadway	Distance (feet)		
	DNL 65 dB	DNL 70 dB	DNL 75 dB
Preclosure			
Interstate 87, South of State Highway 22	228	106	49
Interstate 87, North of State Highway 22	284	132	61
U.S. 9, South of Vermont Street	54	25	*
U.S. 9, South Peru Street	35	16	*
U.S. 9, South Broad Street	42	20	*
State Highway 3, West of South Catherine Street	42	20	*
State Highway 3, Broad Street	76	35	*
State Highway 22, South of Interstate 87 (Railroad Crossing)	29	14	*
State Highway 22, West of Arizona Avenue	38	18	*
State Highway 22, East of Arizona Avenue	28	13	*
State Highway 22, South Peru Street Section	37	17	*
State Highway 22, South Broad Street	35	16	*
Sharron Avenue, Peru Street	25	*	*

Roadway	Distance (feet) DNL 65 dB	DNL 70 dB	DNL 75 dB
Closure			
Interstate 87, South of State Highway 22	231	124	50
Interstate 87, North of State Highway 22	289	134	62
U.S. 9, South of Vermont Street	37	17	*
U.S. 9, South Peru Street	35	16	*
U.S. 9, South Broad Street	44	20	*
State Highway 3, West of South Catherine Street	51	24	*
State Highway 3, Broad Street	74	34	*
State Highway 22, South of Interstate 87 (Railroad Crossing)	26	12	*
State Highway 22, West of Arizona Avenue	34	16	*
State Highway 22, East of Arizona Avenue	28	13	*
State Highway 22, South Peru Street	36	17	*
State Highway 22, South Broad Street	31	14	*
Sharron Avenue, Peru Street	19	*	*

Note: *Contained within the highway.

3.4.5 Biological Resources

Biological resources include native and introduced plants and animals in the project area. For discussion purposes, these are divided into vegetation, wildlife (including aquatic biota), threatened or endangered species, and sensitive habitats.

The ROI for the biological resources analysis is Plattsburgh AFB and natural areas adjacent to the base. This includes the area in which potential impacts could occur and provides a basis for evaluating impacts on these resources.

Field surveys of Plattsburgh AFB were conducted in fall 1993 as part of a habitat assessment. Field surveys of the base were also conducted during 1994 by the New York State Natural Heritage Program (Corey 1994a,b). Field surveys and ground truthing of data for natural areas on the base and immediately adjacent to the base were conducted in fall 1994 for the 1995 FEIS.

3.4.5.1 Vegetation

A detailed discussion of vegetation on Plattsburgh AFB can be found in Section 3.4.5.1 of the 1995 FEIS. The information in that section is summarized below.

Most of Plattsburgh AFB, including forested and nonforested areas, have been moderately to severely disturbed by past and present land uses. Portions of the base were once used for agriculture and many small conifer plantations have been established around the base. About one-fourth of the base is maintained in short vegetation consisting of grasses, sedges, legumes, and various weedy forbs. Approximately one-third of the base is developed and landscaped. There are sizable stands of forest and shrubland in the western and southern portions of the base, as well as small scattered stands of forest intermixed within the developed areas of the base (Figure 3.4-3). These natural areas also make up a little over one-third of the

base, and consist of young to mature stands of relatively undisturbed upland and wetland forests and upland and wetland shrubland/meadow. The shrubland/meadows are more frequently wetland than upland and are in varying stages of disturbance or recovery from disturbance.

3.4.5.2 Wildlife

A very rich assemblage of wildlife has the potential to exist on or near Plattsburgh AFB because of its location among the northern hardwood and pine ecosystems of the upper Northeast area and the nearby aquatic habitats (rivers and streams on two sides and a large northern lake on another). These habitats harbor fishes, birds, mammals, reptiles, and amphibians (URS Consultants, Inc. 1994a). From among the Federal and State (New York) lists of threatened or endangered native species that have the potential to occur in the Plattsburgh area, no Federal-listed species are known to occur on the base. From the State list, two threatened, one protected, and one special concern bird species, as well as two rare and one especially vulnerable plant species have been known to occur on the base (see Section 3.4.5.3, Threatened, Endangered, and Candidate Species).

Wildlife habitat on Plattsburgh AFB consists of the vegetation types discussed above and summarized in Table 3.4-4. This summary includes the characteristic wildlife most often associated with each habitat. Nearly two-thirds of the base consists of slightly to moderately disturbed natural habitats. About one-third of the acreage is occupied by housing, runway, industrial, and related development. The primary factors that would limit wildlife at Plattsburgh AFB are the proximity of human activity, development and disturbance of natural habitats, and noise. The limited airfield chain-link fence would inhibit some species such as red and gray fox (*Vulpes vulpes* and *Urocyon cinereoargenteus*) and white-tailed deer (*Odocoileus virginianus*). The mixture of forest and shrubland is important because it adds to the diversity of habitats and provides a range of good nesting, feeding, and cover for wildlife.

3.4.5.3 Threatened, Endangered, and Candidate Species

Sensitive species are defined as endangered, threatened, or special concern species. Endangered or threatened species are those listed or proposed by the U.S. Fish and Wildlife Service (USFWS) as endangered or threatened; or those listed by the New York Natural Heritage Program (NYNHP) as endangered or threatened. Special concern species are listed by the USFWS as federal species of concern (FSOC), or by the NYNHP as rare or unprotected. Table 3.4-5 lists species known from occurrences on Plattsburgh AFB, or from the vicinity of the base.

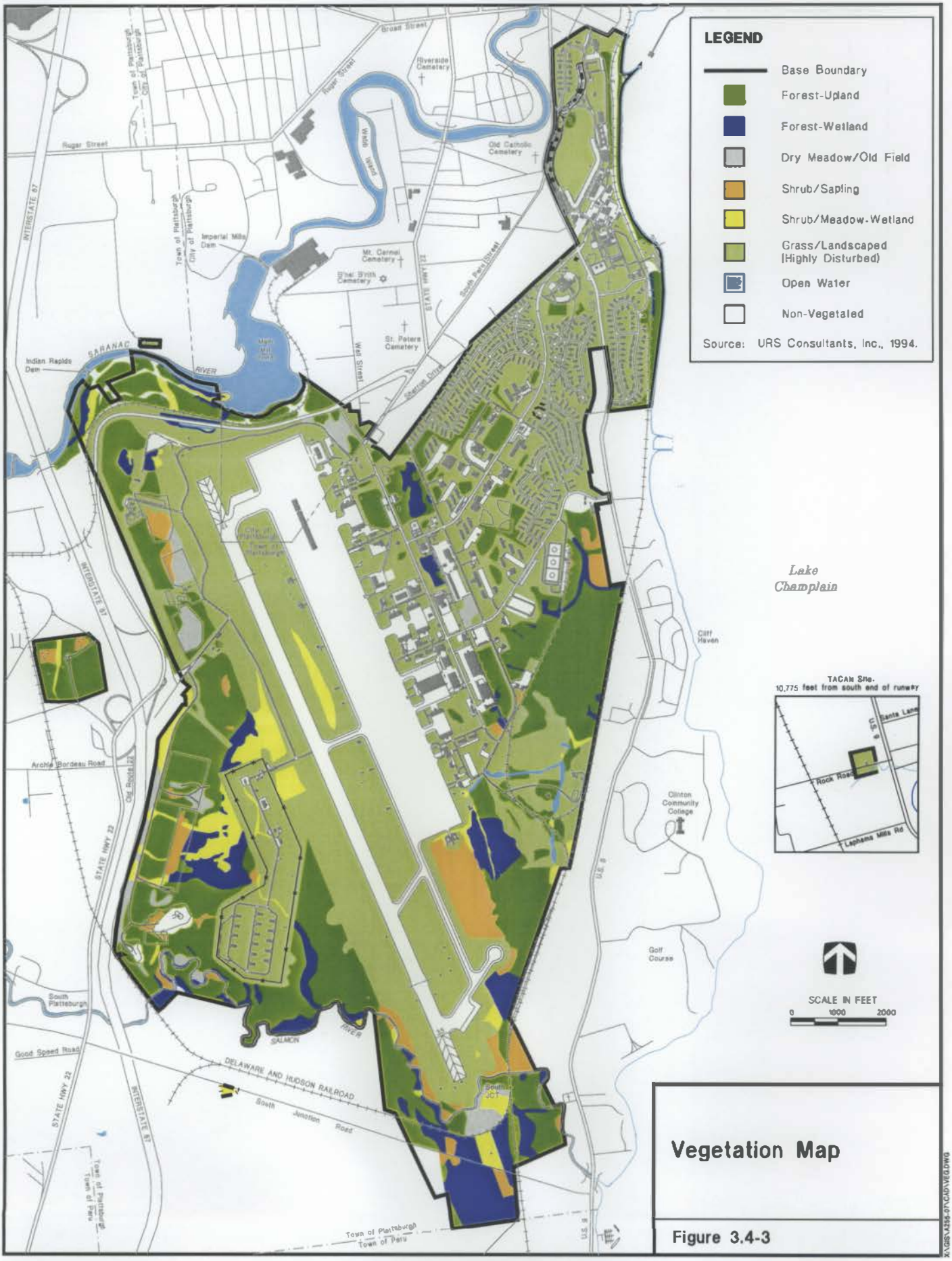

LEGEND
Base Boundary
Forest-Upland
Forest-Wetland
Dry Meadow/Old Field
Shrub/Sapling
Shrub/Meadow-Wetland
Grass/Landscaped (Highly Disturbed)
Open Water
Non-Vegetated
Source: URS Consultants, Inc., 1994.
Lake Champlain
TACAN Site.
10,775 feet from south end of runway
SCALE IN FEET
0 1000 2000
Vegetation Map
Figure 3.4-3

Table 3.4-4
Wildlife Habitat Summation for Plattsburgh AFB

Habitat Type	Percent Cover Type	Associated Species
Forestland	30	Ruffed grouse Eastern wood peewee Downy woodpecker Gray squirrel
Shrubland	6	American woodcock Yellow warbler Cardinal Eastern cottontail
Grassland (open/mowed)	24	American kestrel Horned lark Field sparrow Meadow jumping mouse Meadow vole
Wetland	4	Mallard Red-winged blackbird Muskrat
Developed (housing/landscaped, runway, and industrial)	36	American robin Bluejay House sparrow Purple martin
Total:	**100**	

Source: U.S. Fish and Wildlife Service 1986.

No federally endangered or threatened species have been observed onbase. Two state-threatened birds, the northern harrier and osprey, have been identified onbase. Two state-listed rare plants have been located on the base, the Houghton's sedge and the marsh horsetail. One state sensitive bird, the great blue heron, has also been identified on the base. Each endangered or threatened species from Table 3.4-5 is discussed separately below, followed by those special status species known to inhabit the base.

Seven plant species that are state-listed as endangered or threatened inhabit the region of Plattsburgh AFB, but have not been identified on the base property:

- Rocky mountain sedge (*Carex backii*), Threatened (T);
- Crawe sedge (*Carex crawei*), T;
- Golden corydalis (*Corydalis aurea*), T;
- Northern wild comfrey (*Cynoglossum virginianum* var. *boreale*), T;
- Ram's-head ladyslipper (*Cypripedium arietinum*), T;

- Veiny meadow-rue (*Thalictrum venulosum*), Endangered (E); and
- Melic-oats (*Trisetum melicoides*), E.

The Chittenango ovate amber snail, a federally and state listed endangered species, inhabits freshwater habitats near the base. Four fish species that are state listed as endangered or threatened also inhabit these waters:

- Lake sturgeon (Acipenser fulvescens), T;
- Eastern sand darter (Ammocrypta pellucida), E;
- Mooneye (Hiodon tergisus), T; and
- Round whitefish (Prosopium cyoindraceu), E.

One state-threatened reptile, the timber rattlesnake (*Crotalus horridus*), is found in the region of Plattsburgh AFB, and may inhabit forested areas of the base.

Six birds are state-listed in the region, with one, the bald eagle (*Haliaeetus leucocephalus*) also listed as federally-threatened:

- Red-shouldered hawk (*Buteo lineatus*), T;
- Northern harrier (*Circus cyaneus*), T;
- Peregrine falcon (*Falco peregrinus*), endangered due to a similarity of appearance with the federally-threatened American peregrine falcon;
- Osprey (*Pandion haliaetus*), T; and
- Common tern (*Sterna hirundo*), T.

Table 3.4-5
Sensitive Species, Plattsburgh AFB and Vicinity

Scientific Name	Common Name	Federal Status	State Status	NYNHP Status	Potential for Occurrence
Plants					
Calamagrostis stricta var. stricta	northern reedgrass	None	U	S1	P
Carex backii	rocky mountain sedge	None	T	S2	P
Carex crawei	Crawe sedge	None	T	S2	P
Carex cumulata	clustered sedge	None	R	S2S3	P
Carex formosa	handsome sedge	None	R	S2S3	P
Carex garberi	elk sedge	None	R	SH	P
Carex houghtoniana	Houghton's sedge	None	R	S2	O
Carex lupuliformis	false hop sedge	None	R	S3	P
Carex merritt-fernaldii	Fernald's sedge	None	R	S2S3	P
Carex schweinitzii	Schweinitz sedge	None	R	S2	P
Corydalis aurea	golden corydalis	None	T	S2	P
Cynoglossum virginianum var. *boreale*	northern wild comfrey	None	T	S1	P
Cypripedium arietinum	ram's-head ladyslipper	None	T	S2	P

Scientific Name	Common Name	Federal Status	State Status	NYNHP Status	Potential for Occurrence
Draba arabisans	rock-cress	None	R	S2	P
Eleocharis obtusa var. *ovata*	blunt spikerush	None	R	S1S2	P
Equisetum palustre	marsh horsetail	None	R	S1	O
Equisetum pratense	meadow horsetail	None	R	S2	P
Halenia deflexa	spurred gentian	None	T	S1	P
Hedoma hispidium	mock-pennyroyal	None	R	S2S3	P
Myriophyllum alterniflorum	water milfoil	None	R	S2	P
Phyllitis scolopendrium var.americana	American hart's-tongue fern	T	None	None	P
Potamogeton alpinus	northern pondweed	None	R	S2	P
Prunus pumila var. *depressa*	dwarf sand-cherry	None	R	S2	P
Thalictrum venulosum	veiny meadow-rue	None	E	S1	P
Trisetum melicoides	melic-oats	None	E	S1	P
Vaccinium boreale	high-mountain blueberry	None	R	S2	P
Mollusks					
Succinea chittenangoensis	Chittenango ovate amber snail	E	E	S1	P
Fish					
Acipenser fulvescens	lake sturgeon	FSOC	T	S1	P
Ammocrypta pellucida	eastern sand darter	FSOC	E	S1	P
Hiodon tergisus	mooneye	None	T	S1	P
Notropis heterodon	blackchin shiner	None	U,SC	S1	P
Prosopium cylindraceu	round whitefish	None	E	S1	P
Reptiles					
Crotalus horridus	timber rattlesnake	None	T	S3	P
Birds					
Ardea herodias	great blue heron	None	P	S5	O
Bulbucus ibis	cattle egret	None	P	S2	P
Buteo lineatus	red-shouldered hawk	None	T	S4	P
Childonias niger	black tern	FSOC	P,SC	S2B	P
Circus cyaneus	northern harrier	None	T	S3	O
Falco peregrinus	peregrine falcon	None	E/SA	S2	P
Gavia immer	common loon	None	P,SC	S3S4	P
Haliaeetus leucocephalus	northern bald eagle	T	E	S1B,S1N	P
Pandion haliaetus	osprey	None	T	S4	O
Sterna hirundo	common tern	FSOC	T	S3B	P
Mammals					
Myotis sodalis	Indiana bat	E	E	S1	P

Notes: **Federal Status:** E = Endangered, T = Threatened, FSOC = Federal species of concern
State Status: E = Endangered, T = Threatened, R = Rare, U = Unprotected
NYNHP Status: S1 = Critically imperiled in New York State (NYS), S2 = Imperiled NYS because of rarity, S3 = Rare in NYS, S4 = Apparently secure in NY, S5 = Demonstrable secure in NYS, SH = Historic occurrence in NYS (A double rank denotes the need for additional surveys).
Potential for Occurrence: P = Possible occurrence onbase, O = observed onbase
Sources: NYNHP 1999a,b, USFWS 1999a,b

All of these except the common tern are migratory species that nest in large trees and may use forested areas of the base. These species have been observed on the base, there is no record of these species nesting on the base. The common tern is a migratory shorebird that nests in open fields near large bodies of water.

The Indiana bat (*Myotis sodalis*) is a federally and state listed species endangered across its range which extends from Oklahoma to Vermont. This species forages in forested riparian areas and hibernates in limestone caves. Although no such caves are found on the base, this species may use forested riparian areas on base to forage.

3.4.5.4 Sensitive Habitats

Sensitive habitats include wetlands, plant communities that are unusual or of limited distribution, and important seasonal use areas for wildlife (e.g., migration routes, breeding areas, or critical habitat). Efforts to quantify the wetlands on Plattsburgh AFB have produced various results. Table 3.4-6 summarizes these efforts. According to the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), most areas that meet hydric soils and hydrophytic vegetation criteria for wetlands determination and are inundated for 12.5 percent of the growing season or longer are considered wetlands. Areas that are inundated between 5 and 12.5 percent of the growing season may also be considered wetlands depending on soils and vegetation characteristics. According to these latest Federal criteria, there currently are approximately 267.5 acres of U.S. Army Corps of Engineers jurisdictional wetlands on Plattsburgh AFB.

Table 3.4-6
Summary of Plattsburgh AFB Wetland Quantification Data

Date	Agency	Quantity[1]	Wetland Habitat Type(s) (Notes)
1986	USFWS	4% of base (138 acres)	Mallard/muskrat/red-winged blackbird habitat
1991 (updated 1994)	NYSDEC	163 acres	(150 acres) Class II, ranging from open water with emergents through shrub swamp and red maple swamp to mixed northern hardwood bottomland and northern white cedar. (13 acres) Class IV, wet meadow/shrubland regularly disturbed by mowing and cutting.
1992	USACOE[2]	213.8 acres	Western and southern portion of base only. Mapped 23 units, ranging from 0.2 to 52.0 acres in size - as emergents, shrubland, and forested wetlands.
1993	URS[2] Consultants	53.74 acres	Eastern portion of base only. Mapped 36 units, ranging from 0.05 to 19.89 acres in size - as pond edge/wet meadow/shrub swamp, shrub-meadow-forest mixtures, forested wetlands.

Notes: [1]Because the mapped units overlap (about 46 acres), the actual areal extent of all wetlands onbase equals about 384 acres.
[2]The Corps jurisdictional wetlands onbase equal about 267.5 acres.
Sources: New York State Department of Environmental Conservation 1994; URS Consultants, Inc. 1994b; U.S. Fish and Wildlife Service 1986; and U.S. Army Corps of Engineers 1992.

In 1994, the NYSDEC updated their 1991 Plattsburgh area wetland data. The State mapped three areas on Plattsburgh AFB, mostly north and west of the flightline, but also east-southeast (Figure 3.4-4). Wetland PB-13 is a 13-acre, class IV wetland just south of the main apron and operations area. This is a wet meadow/shrubland that is regularly disturbed by mowing and/or cutting. Wetland PB-14 is a 70-acre, class II wetland, west of the

center point in the flightline. This is a large and very diverse wetland, largely red maple-mixed hardwood and shrub swamp. Wetland area PB-15 is a 25-acre, class II wetland that is cut into three sections by the highway and the railroad roadbeds. A fourth area, wetland KV-1, a class II wetland, is a large area with only about 55 acres on the base. This area is in the extreme southern clear zone area of the base. Portions of this area have been disturbed by mowing. This is a young to moderately old red maple-northern hardwood regrowth forest. Even with regular cutting, woody shrubs and trees underlayed with sphagnum mosses still persist in the cleared zone. The total area mapped by the NYSDEC is approximately 163 acres within the base. Other small scattered areas were noted but not mapped because of the State's minimum size (12.5 acres) criteria.

In 1992, the U.S. Army Corps of Engineers delineated wetlands on the base, but only from just east of the flightline (Arizona Avenue) toward the west. One unit just east of Arizona Avenue was also included in the study. A total of 23 units of wetland were mapped, both on the interior of the base and along the Salmon River and Saranac River boundary areas. These ranged in size from 0.2 to 52.0 acres, with four units smaller than 1 acre, nine units between 1.0 acre and 5.0 acres, six units between 5.1 acres and 12.5 acres, and four units over 12.5 acres. The total wetland area mapped was 213.8 acres within the western and southern portion of the base. Most of the small areas mapped are floodplain wetlands along the meanders of the Salmon River.

The 1993 wetlands investigations for Plattsburgh AFB (URS Consultants, Inc. 1994b) were U.S. Army Corps of Engineers jurisdictional delineations for that portion of the base east of the flightline. This effort mapped 36 units of wetland communities. These areas will be subject to final determinations before permits can be granted for actions that might cause filling of these wetlands. Even though they range from 0.05 acre to 19.89 acres, 25 units are smaller than 1 acre, 9 are between 1 acre and 3.71 acres, 1 is 8.51 acres, and 1 is 19.89 acres. A total of 53.74 acres of wetlands were mapped in that portion of the base. Additional wetland were identified by PARC after the release of the 1995 FEIS. Figure 3.4-4 shows all wetlands identified so far.

Three plant communities ranked as State-rare ecological communities by the New York Natural Heritage Program were identified on the base. A sloping fen community was found as part of the long, narrow wetlands site adjacent (on the south side) to SH-22 and directly north of the runway. The pitch pine-heath barren community was found as a major component of the pine barren woodlands occurring at the Building 9100 remote/annex site just west of I-87 and in the pine forest zones in the southern part of the base between the flightline and the Munitions Storage Area and in the northwestern part of the base (west of the runway) between the landfill and the firing range. The northern white cedar rocky summit (limestone outcrop) community was found in the eastern area of the base golf course, just north of the clubhouse site (Corey 1994a).

3.4.6 Cultural and Paleontological Resources

Cultural resources include prehistoric and historic sites, structures, districts, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or any other reason. Paleontological resources are the fossil evidence of past plant and animal life. Cultural resources have been divided for the purpose of discussion into three main categories: prehistoric resources, historic resources, and Native American resources. These types of resources are defined in Appendix E of the 1995 FEIS and are incorporated here by reference.

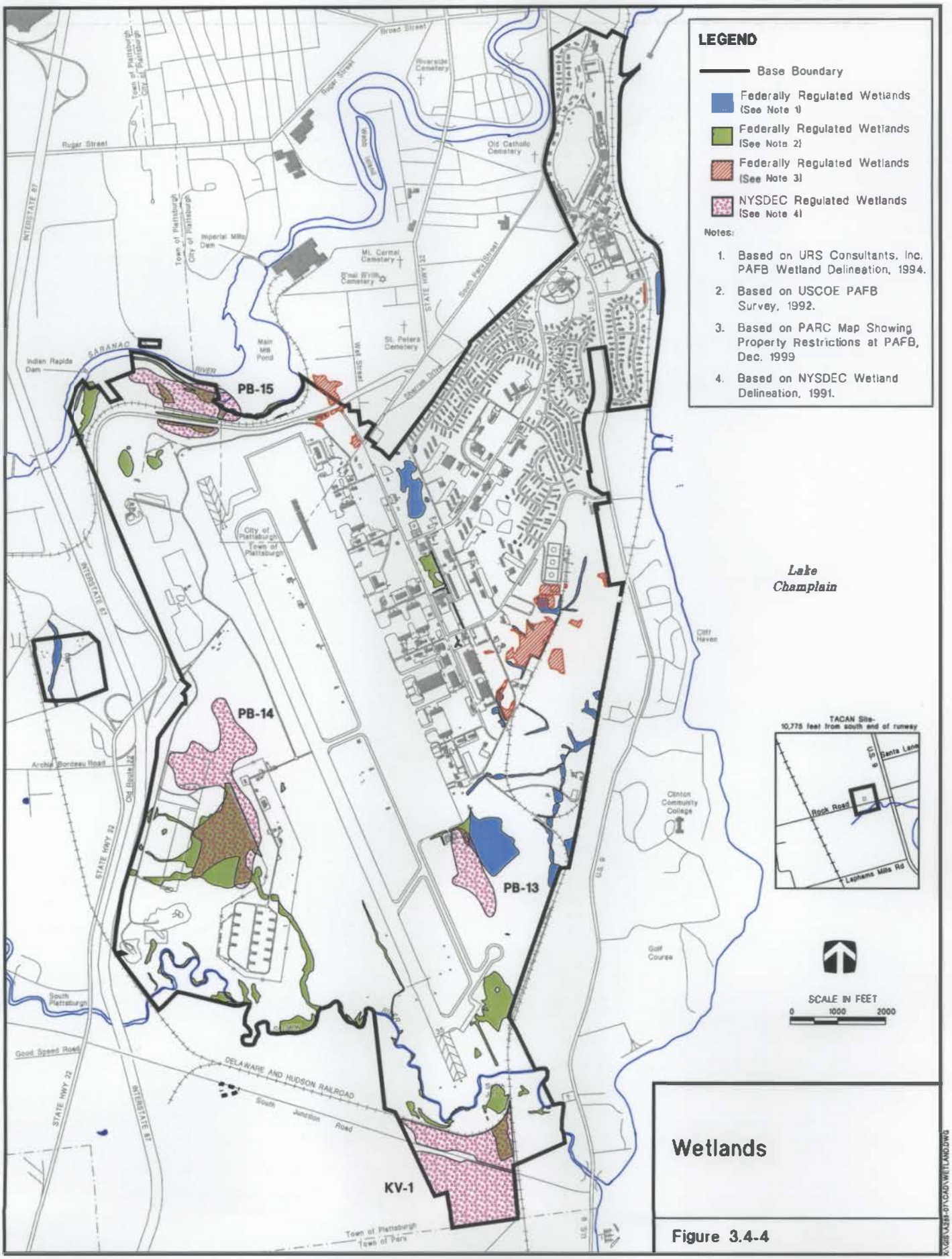
The ROI for the cultural and paleontological resource analysis includes, at a minimum, all areas within the base boundaries, whether or not certain parcels would be subject to ground disturbance. For this analysis, the ROI is synonymous with the Area of Potential Effect (APE) as defined by the National Historic Preservation Act (NHPA). The potential conveyance of Federal property to a private party or non-Federal agency constitutes an undertaking or a project. This undertaking falls under the requirements of cultural resource legislative mandates because any historic properties located on that property would cease to be protected by Federal law. However, impacts resulting from conveyance could be reduced to a nonadverse level by placing preservation covenants on the lease or disposal document. Reuse activities within designated parcels that may affect historic properties would require the reuser to comply with the requirements contained in the preservation covenants.

Numerous laws and regulations require Federal agencies to consider the effects of a proposed project on cultural resources. These laws and regulations are summarized in the 1995 FEIS and incorporated here by reference.

3.4.6.1 Prehistoric Resources

The earliest human occupation of the northeastern United States, including New York, may have been around 10,500 B.C. Prehistoric periods including the Paleoindian (10,500 to 8,000 B.C), the Archaic (8,000 to 1,300 B.C), and the Woodland (1,300 B.C. to AD 1300) preceded the emergence of the Iroquoian culture, which was in place when European contact took place in the early 17th century. The prehistory of the region encompassing Plattsburgh AFB is provided in the 1995 FEIS.

In 1995, a cultural resources investigation was conducted on approximately 140 acres, representing all undisturbed areas of the base. The investigation included both visual pedestrian surveys and subsurface testing. No prehistoric sites were identified and the probability of intact buried prehistoric sites was considered low (Air Mobility Command 1995). The New York State Historic Preservation Office (SHPO) has concurred with the results and recommendations of this investigation (Anderson, personal communication, 1999).


LEGEND
Base Boundary
Federally Regulated Wetlands (See Note 1)
Federally Regulated Wetlands (See Note 2)
Federally Regulated Wetlands (See Note 3)
NYSDEC Regulated Wetlands (See Note 4)
Notes:
1. Based on URS Consultants, Inc. PAFB Wetland Delineation, 1994.
2. Based on USCOE PAFB Survey, 1992.
3. Based on PARC Map Showing Property Restrictions at PAFB, Dec. 1999
4. Based on NYSDEC Wetland Delineation, 1991.
PB-15
PB-14
PB-13
KV-1
Lake Champlain
TACAN Site- 10,775 feet from south end of runway
Santa Lane
Rock Road
Lephams Mills Rd
SCALE IN FEET
0
1000
2000
Wetlands
Figure 3.4-4

3.4.6.2 Historic Resources

The history of Plattsburgh AFB is closely tied to the regional history of eastern New York State and Lake Champlain. The first European exploration of the region took place in 1609. The first European settlement was established in 1769. Military use of the Plattsburgh area began with the War of 1812, when American barracks were constructed around an oval-shaped parade ground. Plattsburgh AFB was established in December 1953. The complete history of the Plattsburgh AFB area is provided in the 1995 FEIS.

Plattsburgh AFB includes the U.S. Oval National Register Historic District and the Old Stone Barracks, which is a National Register of Historic Places (NRHP) -listed property. Fort Brown, originally within the confines of the base, is also listed on the National Register. The U.S. Oval Historic District is eligible under NRHP criteria a) (broad patterns of history) and c) (distinctive architectural style). The District consists of 27 buildings or structures representing both 19th century brick construction and 20th century concrete block construction. The Old Stone Barracks was constructed in 1838.

An expansion of the U.S. Oval National Register Historic District was proposed in 1993. The expansion area is adjacent to the existing District and includes numerous additional buildings, a cemetery, and two park areas which may contain buried archaeological deposits associated with the early forts. The New York SHPO has identified 57 buildings that are considered NRHP-eligible; however, the SHPO has recommended that they not be nominated for the National Register.

In 1997, a study was conducted to evaluate the potential for "exceptional importance" of the Cold War-era buildings and structures, as required by Criterion Consideration G for structures less than 50 years old. The term "Cold War" was first popularized in 1947 and came to describe the state of hostile relations that developed primarily between the Union of Soviet Socialist Republics (Soviet Union) and the United States at the end of World War II. Often viewed as an ideological confrontation between communist and noncommunist governments, this hostility was manifested not in overt military action, but in economic pressure, propaganda, the arms race, and other covert activities. As an "undeclared" war, the beginning and ending dates of the conflict are ambiguous, but Churchill's 1946 Iron Curtain speech is considered a major opening event, and dismantling Berlin Wall in 1989 and the dissolution of the Soviet Union in 1991 are major closing events. In consultation with the New York SHPO, the Air Force has determined that the entire Cold War base comprises a historic district. The New York SHPO has also agreed that recordation of selected properties will serve as adequate mitigation for the Cold War district.

Plattsburgh AFB has been extensively surveyed to identify historic buildings or structures. As a result of a phase II archaeological survey conducted in 1998, 3 sites were found to be eligible for the NRHP. Two of the eligible sites, the Pike's Cantonment Site (Site A01940.001086), and the Oval Site (Site A019-40-0352) are important sites associated with the War of 1812 in Plattsburgh. The Pike Cantonment site is recommended as eligible for the NRHP under Criterion D, based on its association with the remains of

Zebulon Pike's winter encampment of 1812-13. The Oval Area is the location of fortifications and barracks built in 1813/1814 and occupied until 1843. It is also the site of the 1814 Battle of Plattsburgh, a major land and lake battle that routed an attempted British invasion of New York. The Oval Area, including the location of Fort Moreau, and the northern and western lines of barracks are recommended to be eligible for the NRHP based on the potential of resources within this region of the oval to address questions related to the War of 1812, the daily life in the early days of the U.S. Army, and the fortification efforts of the Army Corps of Engineers. The third eligible site is the "Area R" Trash Dump (Site A01940.001090). It is a dump site associated with the Catholic Summer School of America from ca. 1893 to the 1930s or 40s. The New York SHPO has concurred with the findings.

Currently, a Programmatic Agreement (PA) between the Air Force, SHPO, Advisory Council and PARC is being negotiated. The PA will specify the activities and responsible parties to ensure that all the Cultural Resources on Plattsburgh AFB are protected thereby reducing the impact of conveyance of Historic Properties to a non-adverse level.

3.4.6.3 Native American Resources

The St. Lawrence and Mohawk Iroquois are the Native American groups traditionally associated with the region around Plattsburgh (Trigger and Pendergast 1978; Fenton and Tooker 1978). The major villages of the Mohawk have been historically located southwest of Plattsburgh. The St. Lawrence Iroquoians' settlements were in Canada. By the mid-17th century, these settlements had ceased to exist due to wars with neighboring groups. Many families were incorporated into other tribes. The Mohawk fought with the British in the American Revolution and many went north into Canada to resettle after the war. Today, the Mohawk occupy the Gibson, Tyendenaga, Oka, and Caughnawagain land reserves in southeastern Canada, and the St. Regis Reserve, which lies along the southern border of the St. Lawrence River in Canada and the United States approximately 70 miles northwest of the base (Fenton and Tooker 1978).

Native American consultation with the St. Lawrence and Mohawk Iroquois, and the Seven Nation Confederacy Coalition of Mohawk Tribes, was completed for the 1995 FEIS. As of June 1999, no sensitive Native American resources are known to be located on Plattsburgh AFB (Anderson, personal communication, 1999). However, if evidence of Native American resources is encountered during reuse activities, additional consultation with these groups will be conducted.

3.4.6.4 Paleontological Resources

The geology of the Plattsburgh AFB region is primarily Mid-Ordovician limestones and dolomites overlain by surface deposits of glacial till. The limestones and dolomites are Champlainian Series formations and are fossiliferous. Surface exposures of these formations occur in the northern portion of the base and in the southeastern portion of the golf course drainage. The fossils associated with these formations are trilobites, stromatoporoids, lichenaria, brachiopods and graptolites (Fisher 1955). As of

June 1999, no paleontological localities have yet been identified on Plattsburgh AFB (Anderson, personal communication, 1999).

The paleontological materials most likely to be exposed on Plattsburgh AFB would be invertebrate assemblages which are widespread. Invertebrate assemblages have low research potential (National Research Council 1987).

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CHAPTER 4.0
ENVIRONMENTAL CONSEQUENCES

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter presents a discussion of the potential environmental consequences associated with the additional reuse alternatives (Proposed Action and alternative 1) at Plattsburgh AFB, New York. A comparison of environmental impact changes resulting from the Proposed Action and Alternative I analyzed in this document with the Proposed Action analyzed in the 1995 FEIS is also provided in this chapter. Impacts of the No Action Alternative remain the same as described in the 1995 FEIS and are not repeated here.

To provide the context in which potential environmental impacts may occur, discussions of potential changes to the local communities (i.e., population and employment, transportation, and community and public utility services) are included in this Environmental Assessment (EA) to the extent necessary. Issues related to current and future management of hazardous materials and hazardous waste are discussed very briefly as the U.S. Air Force policy for hazardous substance management remains the same as described in the 1995 FEIS. The newly proposed reuses would not affect this policy or the on-going remediation activities at the base. Impacts to the physical and natural environment are evaluated for soils and geology, water resources, air quality, noise, biological resources, and cultural and paleontological resources. These impacts may occur as a direct result of disposal and reuse activities or as an indirect result caused by changes within the local communities.

For the alternatives analyzed in this EA, Construction of new facilities is assumed to occur over a 15-year period as was the case in the 1995 FEIS. Contribution of Construction and demolition activities in the 1995 FEIS was found to be minor (Table 2.2-5 of 1995 FEIS). Even though the construction and demolition activity under the new alternatives would be slightly larger, it would not show a substantial increase on an annual basis. The impacts of these activities are, therefore, assumed to be similar to those identified in the 1995 FEIS and have not been analyzed again in this EA. Similarly, aviation activities (flight operations) remain the same as described in the 1995 FEIS and the impacts of these activities are not reported here.

Possible mitigation measures to minimize or eliminate adverse environmental impacts are presented only if new mitigation measures beyond those included in the 1995 FEIS are identified. The analysis in the 1995 FEIS has indicated that the need for mitigation at Plattsburgh AFB is minimized because the potential for impacts from redevelopment of the installation can be significantly reduced through the avoidance of environmentally sensitive areas. Figure 4.1-1 shows the property restrictions which would be followed by PARC during the developmental phase. The use of the avoidance technique for mitigation is possible because of the conceptual nature of the redevelopment options being considered for individual parcels. Sensitive areas in a given parcel can be avoided at the design/construction stage of a

specific project. PARC has indicated to the Air Force that all mitigations identified in the 1995 FEIS will be applied to developments associated with the new reuse alternatives as well.

Cumulative impacts result from "the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency undertakes such other actions. Cumulative impacts remain the same as identified in the 1995 FEIS. No developmental activities are known to have occurred or been planned to change those impacts.

4.2 LOCAL COMMUNITY

This section discusses potential effects on local communities as a result of newly developed reuse alternatives of Plattsburgh AFB.

4.2.1 Community Setting

Employment and population effects generated by the Proposed Action and each alternative are discussed in this section. The closure baseline projects employment levels of 50 direct and 27 secondary jobs for 1996 to remain constant through 2016 for the No-Action Alternative.

4.2.1.1 Proposed Action

By 2016, the Proposed Action would create a total of 12,500 jobs, including 8,800 direct and 3,700 secondary positions. This represents an increase of 96 percent over the total jobs created by the Proposed Action in the 1995 FEIS (Table 2.2-1 in Chapter 2.0).

With the Proposed Action, the population in Clinton County would increase by 7,230 in 2016, an increase of 3,544 or 96 percent over the population change of 3,686 resulting from the Proposed Action in the 1995 FEIS.

4.2.1.2 Alternative 1

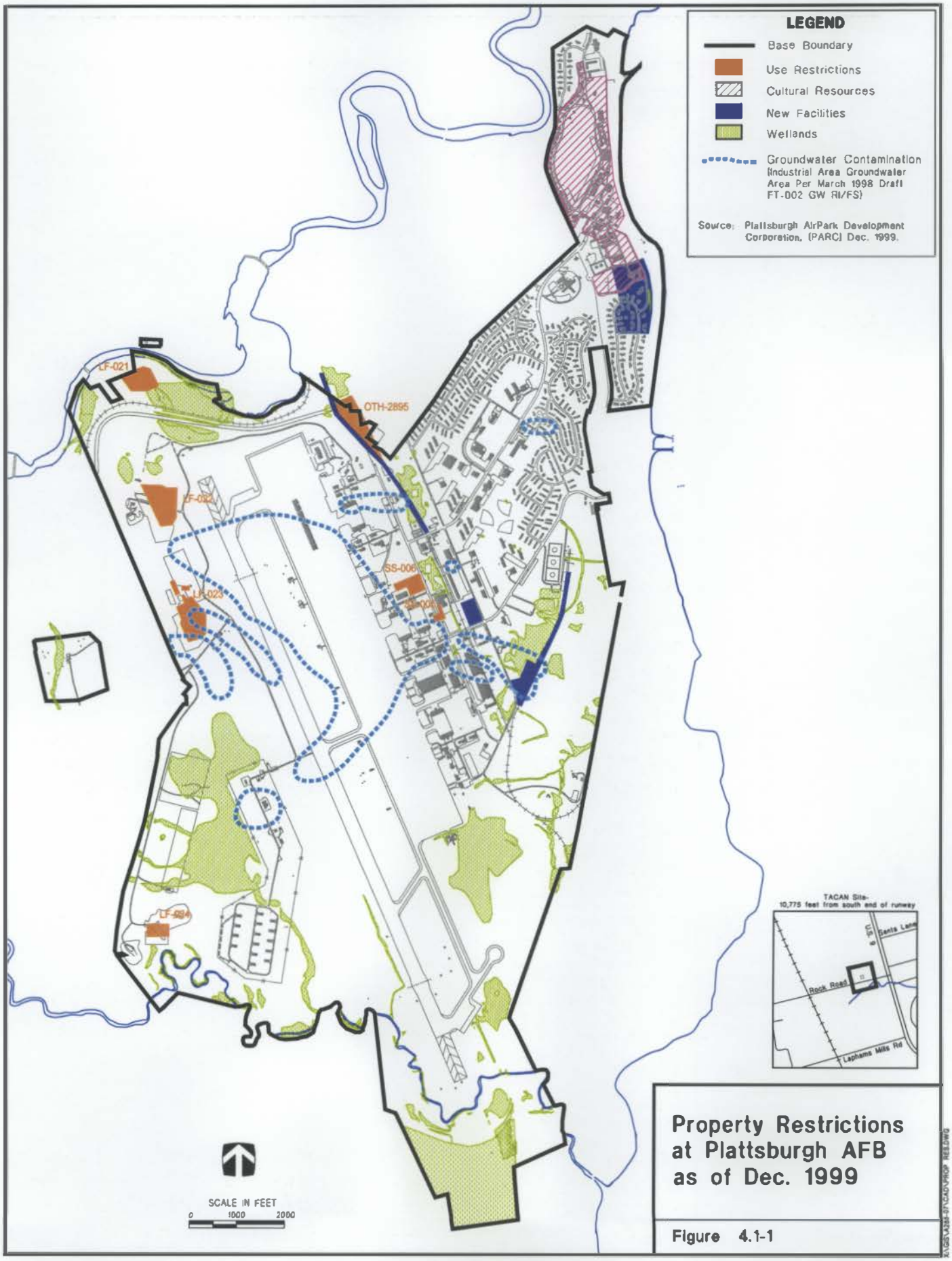
By 2016, Alternative 1 would create a total of 14,940 jobs, including 10,520 direct and 4,420 secondary jobs. This represents an increase of 134 percent over the total jobs created by the Proposed Action in the 1995 FEIS (See Table 2.3-2 in Chapter 2.0).

With Alternative 1, the population in Clinton County would increase by 8,846 in 2016; an increase of 5,160 or 140 percent over the population increase of 3,686 from the Proposed Action in the 1995 FEIS (Table 2.3-2).

4.2.2 Land Use and Aesthetics

4.2.2.1 Proposed Action

Land Use and aesthetics impacts of the Proposed Action would be similar to those identified for the Proposed Action in the 1995 FEIS. The proposed uses are compatible with the uses located off base in the City of Plattsburgh as well as in the Town of Plattsburgh. The City and the Town of Plattsburgh


LEGEND
Base Boundary
Use Restrictions
Cultural Resources
New Facilities
Wetlands
Groundwater Contamination (Industrial Area Groundwater Area Per March 1998 Draft FT-002 GW RI/FS)
Source: Plattsburgh AirPark Development Corporation, (PARC) Dec. 1999.
LF-021
OTH-2895
LF-022
SS-006
LF-023
LF-024
TACAN Site- 10,775 feet from south end of runway
Route 22
Dents Lane
Rock Road
Laphams Mills Rd
SCALE IN FEET
0
1000
2000
Property Restrictions at Plattsburgh AFB as of Dec. 1999
Figure 4.1-1

will apply their zoning ordinances to parcels developed on the base. So far, no zoning is applied to land under the control of the Federal government.

4.2.2.2 Alternative 1.

Land Use and aesthetics impacts of Alternative 1 would be similar to those identified for the Proposed Action in the 1995 FEIS. The proposed uses are compatible with the uses located off base in the City of Plattsburgh as well as in the Town of Plattsburgh. The City and the Town of Plattsburgh will apply their zoning ordinances to parcels developed on the base. So far, no zoning is applied to land under the control of the Federal government.

4.2.3 Transportation

The effects of the Proposed Action and alternatives on roadways in the vicinity of the base are presented in this section. Effects on airspace and air traffic, and other modes of transportation, are not expected to be different from those described in the 1995 FEIS and are not repeated here.

Roadways. Reuse-related effects on roadway traffic were assessed for the Proposed Action and Alternative 1 by estimating the number of trips generated by each land use category, considering employees, visitors, residents, and service vehicles associated with onsite activities. Principal trip-generating land uses included industrial, aviation, commercial/office and retail, institutional, recreational, and residential. Trips generated by commercial land use are particularly affected by the mix of retail shopping and commercial office space. The number of trips generated by retail shopping are significantly higher than those generated by employees commuting to commercial office buildings. Because the ratio of land designated for retail shopping centers to the commercial office space is much lower in the current proposals than in the proposals analyzed in the 1995 FEIS, the average daily trips (ADTs) are not in direct proportion to the increase in employment.

These trips were assigned to the roadway system based on proposed land uses and existing travel patterns. This analysis is based on the peak-hour trips and data on roadway capacities, traffic volumes, and standards established by State and local transportation agencies.

The transportation analysis used the standard analysis techniques of trip generation, trip distribution, and traffic assignment. Trip generation was based on applying the trip rates from the *ITE Trip Generation Manual, 5th Edition* (Institute of Transportation Engineers 1991) to the existing and proposed land uses to derive total daily and peak-hour trips.

Vehicle trip generation for each reuse alternative and for a variety of land uses was analyzed and quantified. Based on the reuse development schedule for each land use, the variation in vehicle trips generated by onsite activities was determined for the average weekday and for the morning and afternoon peak hours of the adjacent streets.

appreciable amount of traffic throughout the day, with heavy left turning movements exiting the site during the afternoon peak hour.

The projected peak-hour traffic on key roads and the associated LOS that would result with the Proposed Action in 2016 are shown in Table 4.2-2. For comparison, peak-hour traffic generated by the Proposed Action in the 1995 FEIS is also presented. With the Proposed Action, U.S. 9 within the base boundaries would experience the greatest increase in traffic with the LOS reaching F. I-87 would experience additional traffic in the afternoon peak at Exit 36. All other key roadway segments would experience moderate increases. Even with this increase in traffic the LOS on most streets and highways would remain the same as identified for the Proposed Action in the 1995 FEIS.

Table 4.2-2
Peak-Hour Traffic Volumes[1] and LOS[2] on Key Roads
1995 FEIS Proposed Action, Current Proposed Action, and Current Alternative 1

		1995 FEIS 2016		Current PA 2016		Alternative 1 2016	
Roadway Segments	Capacity (VPH)[3]	Traffic	LOS	Traffic	LOS	Traffic	LOS
I-87 South SH-22 Crossing (Exit 36)	7,600	1,890	A	2,380	A	2,910	B
I-87 North SH-22 Crossing (Exit 36)	7,600	2,680	B	3,380	B	4,130	B
I-87 Northbound off-ramp to SH-22 (Exit 36)	1,500	190	A	240	A	290	A
I-87 Northbound on-ramp from SH-22 (Exit 36)	1,500	580	A	730	B	890	C
I-87 Southbound off-ramp to SH-22 (Exit 36)	1,500	430	A	540	B	660	B
I-87 Southbound on-ramp from SH-22 (Loop)	1,350	210	A	270	A	320	A
U.S. 9 South Vermont St. at Plattsburgh (S. City Line)	2,520	1,240	D	1,560	D	1910	E
U.S. 9 South Peru St.	1,740	2,400	F	3,020	F	3,700	F
U.S. 9 South Broad St.	1,680	3,010	F	3,790	F	4,640	F
SH-3 West South Catherine St. (Route 22)	1,800	2,280	F	2,870	F	3,510	F
SH-3 at Broad St.	2,900	4,600	F	5,800	F	7,080	F
SH-22 at Railroad Crossing, South Jct. I-87	2,160	1,010	D	1,270	D	1,560	E
SH-22 West Arizona Ave. at North Gate	2,540	1,810	E	2,280	E	2,790	F
SH-22 East Arizona Ave. at North Gate	2,340	890	C	1,120	D	1,370	D
SH-22 Overlap with South Peru St.	2,340	1,480	E	1,860	E	2,280	E
SH-22 South Broad St. at South Catherine	1,860	1,230	E	1,550	E	1,890	F
Sharron Ave. at Peru St.	1,760	460	C	580	C	710	D

Note: [1]All traffic volume figures are rounded to the nearest 10.
[2]LOS = Level of Service.
[3]VPH = Vehicles per hour.

4.2.4 Utilities

The projected changes in utility demand for the Proposed Action and Alternative 1 are shown in Table 4.2-3. The figures shown for the No-Action Alternative are the baseline total demand forecasted for the Region of Influence (ROI). This baseline generally reflects the change expected in utility usage in the ROI without redevelopment of the base and is estimated based on projected changes in population and per capita use. The utility projections for the Proposed Action and other alternatives reflect the growth anticipated due to base reuse. Effects of reuse on utility systems were assessed by comparing projected demand for each reuse alternative to projected demand for the No-Action Alternative. For further details on methodology, the reader is referred to the 1995 FEIS.

Table 4.2-3
Total Projected Utility Demand in the Region of Influence[1], 2016

	Demand	Percent Change Over No Action Baseline
Water Demand (MGD)		
Proposed Action (1995 FEIS)	5.33	3.70
Proposed Action	5.51	7.20
Alternative 1	5.59	8.75
No Action[2]	5.14	NA
Wastewater (MGD)		
Proposed Action (1995 FEIS)	8.35	3.86
Proposed Action	8.65	7.59
Alternative 1	8.77	9.08
No Action[2]	8.04	NA
Solid Waste (Tons/Day)		
Proposed Action (1995 FEIS)	167.93	3.84
Proposed Action	173.90	7.53
Alternative 1	176.41	9.08
No Action[2]	161.72	NA
Electricity (MWh/Day)		
Proposed Action (1995 FEIS)	3,015	3.82
Proposed Action	3,122	7.51
Alternative 1	3,167	9.06
No Action[2]	2,904	NA

Notes: [1]Values for Proposed Action and reuse alternatives represent total projected demand in the ROI.
[2]The No-Action Alternative represents the baseline for comparison of the Proposed Action and alternatives. The baseline represents total demand forecasted for the ROI based on projected changes in population and data from local utility purveyors.
NA = Not applicable.

Currently, natural gas at Plattsburgh AFB is supplied by NYSEG. Natural gas supply to the site was started in 1998 by connecting the gas to selected buildings. The system was extended to additional building in 1999 and is proposed to be extended to select group housing areas on the "old base" in the year 2000.

4.2.4.2 Alternative 1

Water Demand. In 2016, water consumption in the ROI would increase by an average of 0.45 MGD or 8.75 percent over the baseline demand with Alternative 1, increasing total demand in the ROI to 5.59 MGD. The increase in ROI water demand would not require major infrastructure improvements or new supply sources in the ROI.

Wastewater. With Alternative 1, wastewater production in the ROI would increase by 0.73 MGD or 9.08 percent over the baseline production in the year 2016, to a total of 8.77 MGD. This increase is below the total wastewater treatment capacity approximately 16.0 MGD in the ROI.

Continued connection of the base sewage system to the City of Plattsburgh Wastewater Treatment Plant will remain feasible. Industrial users may be required to pretreat industrial wastewater.

Solid Waste. With Alternative 1, the amount of solid waste generated in the ROI would increase by 14.69 tons per day or 9.08 percent over the baseline generation, to 176.41 tons per day in 2016. The Clinton County Solid Waste Landfill has enough capacity to accommodate municipal waste resulting from this alternative.

Electricity. Electrical consumption in the ROI with Alternative 1 would increase by 263 MWh/day in 2016 or 9.06 percent over the baseline demand, to a total of 3,167 MWh/day.

With this alternative, the increase in electricity demand in the ROI would not require major infrastructure improvements by 2016. New York Power Authority has adequate capacity to supply the projected demands. However, infrastructure changes would be needed on the site to accommodate new development associated Alternative 1 (i.e., supply lines, substations, and distribution network).

Mitigation Measures. All mitigations for utility resources with Alternative 1 are the same as those described for the Proposed Action.

4.3 HAZARDOUS SUBSTANCES MANAGEMENT

The U.S. Air Force is committed to the remediation, as necessary, of all contamination at Plattsburgh AFB resulting from Air Force activities. Because the Proposed Action and Alternative 1 discussed in this EA will not be developed in conflict with the remediation activities, no reanalysis is necessary. Section 4.3 of the 1995 FEIS is incorporated here in its entirety by reference.

4.4 NATURAL ENVIRONMENT

This section describes the potential effects of the Proposed Action and alternatives on soils and geology, water resources, air quality, noise, biological resources, and cultural and paleontological resources in the base area and the surrounding region.

4.4.2.1 Proposed Action

Surface Water. No significant impacts on surface water are anticipated as a result of the Proposed Action. The flow patterns and discharges of the golf course drainage would not be changed from its present condition as a result of the Proposed Action. The amount of sediment entering the local streams would be minor if adjacent areas were vegetated and stormwater flows were controlled. Similarly, hydrologic conditions in wetlands, including those associated with the streams, are not expected to be affected by the Proposed Action.

With the Proposed Action, water would continue to be supplied from the City of Plattsburgh system. No water would be withdrawn from the Saranac or Salmon rivers or other surface waters, either on the base or in the immediate vicinity.

There are no flood hazards in any of the areas affected by the Proposed Action except for a narrow strip along the Saranac and Salmon rivers. Because no construction or other change in conditions is proposed for the 100-year floodplains, no impacts are expected as a result of flooding.

Groundwater. No groundwater would be withdrawn for use on the base or in the ROI as a result of the Proposed Action. No impacts to the groundwater flow system or to groundwater quality are anticipated. Cleanup of groundwater contaminated by past activities would continue with the IRP.

Mitigation Measures. No additional mitigation measures would be needed beyond those identified in the 1995 FEIS.

4.4.2.2 Alternative 1

Effects of Alternative 1 on water resources would be similar to those outlined for the Proposed Action.

Mitigation Measures. All mitigation measures for water resources will be the same as for the Proposed Action.

4.4.3 Air Quality

Air quality impacts could occur from: (1) mobile sources such as aircraft, aircraft operation support equipment, commercial transport vehicles, and personal vehicles; (2) point sources such as heating/power plants, generators, incinerators, and storage tanks; and (3) secondary emission sources associated with a general population increase, such as residential heating.

In the 1995 FEIS, the ambient effects of aircraft and related vehicular emissions were analyzed by modeling. The Emissions and Dispersion Modeling System (EDMS) was used to simulate the dispersion of emissions from airport operations. Motor Vehicle emissions were estimated using emission factors obtained from the EPA Mobile Source Emission Factor Model (Mobile 5a) (U.S. Environmental Protection Agency 1993).

the highest 8-hour average concentration was 4.4 ppm. It was assumed that these CO concentrations are representative of those in Clinton County and that county ambient concentration increases are proportional to emission increases. Therefore, a 14-percent increase in CO emissions over the 1988 baseline would result in an ambient concentration of 7.8 ppm for a 1-hour average period. Even a 17.8-percent increase over the 1996 baseline would increase the highest concentration of 6.3 ppm to 8.01 ppm compared to the CO ambient standard of 35 ppm. There are no national or state ambient standards for VOCs. Therefore, these increases in the pollutant burden of CO and VOCs in Clinton County would not cause violations of the ambient standards.

This increase in ambient pollutant concentrations in the Clinton and other downwind counties would not cause violations of the ambient air quality standards.

Local Scale. The local-scale analysis was performed in the 1995 FEIS with the EDMS model. Peak-hour scenarios for emissions from aircraft operations, the heating plant, and vehicle traffic near the proposed terminal were modeled. The addition of the Proposed Action pollutant concentration to the background concentration produces total concentrations below the NAAQS and New York State Ambient Air Quality Standards (NYSAAQS). No local ambient pollutant concentrations produced by emissions from the Proposed Action would cause the NAAQS/NYSAAQS to be exceeded. Therefore, the attainment status of the local area would be maintained.

Mitigation Measures. The air quality analyses in the 1995 FEIS indicated that the NAAQS/NYSAAQS would not be exceeded. Therefore, operational mitigation measures would not be required for air quality impacts. Increases resulting from the current Proposed Action would also not require any mitigation measures.

4.4.3.2 Alternative 1

The results of the emission calculations associated with Alternative 1 for the year 2006 are summarized in Table 4.4-1. Emissions from Alternative 1 would be greater than the Proposed Action. This is the result of higher utilization of the base for commercial land use and a much larger number of vehicle trips generated by this use. In 2006, the percentage increases in the Clinton County for NO_X, VOC, and CO pollutant burden would be about 16, 6, and 17 percent, respectively over the 1988 levels. These net increases in pollutant emissions would not produce ambient concentrations that would exceed the NAAQS/NYSAAQS on the regional scale. Therefore, Clinton County would continue to maintain an attainment designation for all criteria pollutants. The remaining counties in the ROI would also continue to maintain an attainment designation for the reasons discussed for the Proposed Action.

Mitigation Measures. All mitigation measures for air quality impacts for Alternative 1 are the same as described for the Proposed Action.

23 percent of those occurring with the 1995 FEIS Proposed Action. Residences and commercial businesses along these road segments would experience noise levels in excess of 65 dB by 2016.

Mitigation Measures. No impacts have been identified for surface traffic noise resulting from the Proposed Action. Therefore, no mitigation measures would be needed. Mitigations to reduce traffic volume/congestion impacts may indirectly contribute to reductions in surface noise levels.

4.4.4.1 Alternative 1

Surface traffic noise levels are presented in Table 4.4-3 in terms of DNL as a function of distance from the centerline of the roadways. Surface traffic noise levels with this alternative would be slightly greater than with the Proposed Action. Residences and commercial businesses along these road segments would experience noise levels in excess of 65dB by 2016.

Table 4.4-3
Distance to DNL From Roadway Centerline
Alternative 1 - 2016

Roadway	DNL 65 dB	DNL 70 dB	DNL 75 dB
I-87 South SH-22 Crossing (Exit 36)	520	250	115
I-87 North SH-22 Crossing (Exit 36)	650	310	145
U.S. 9 South Vermont Street at Plattsburgh South City Line	69	32	16
U.S. 9 South Peru Street	98	45	21
U.S. 9 South Broad Street	115	53	25
SH-3 at Broad Street	120	60	35
SH-22 West Arizona Avenue at North Gate	89	41	20

Note: *Contained within the highway.

Mitigation Measures. All mitigations for Alternative 1 will be the same as described for the Proposed Action.

4.4.5 Biological Resources

The Proposed Action as well as Alternative 1 could potentially affect biological resources through alteration or loss of vegetation and wildlife habitat. These impacts are summarized below for each alternative. For details, the reader is referred to the 1995 FEIS.

4.4.5.1 Proposed Action

Vegetation. Most of the activity (demolition and construction) is expected to occur in the regularly disturbed grassland/landscaped areas surrounding or adjacent to the currently developed areas of the base. Proposed industrial development in the southeastern areas and in the western and central parcels would require clearing mature forest. These are fully forested tracts of land. Development in the western parcels will be segmented because the central open space area is classified as forest wetland by NYSDEC. Most of

great blue heron (protected species - in golf course ponds), northern harrier (threatened species -in flightline grassland), grasshopper sparrow (special concern species - in flightline grassland), and osprey (threatened species - Salmon River floodplain), are not expected to change; therefore, no impacts are anticipated. The habitats of two of the plant species observed on the base, meadow horsetail (rare species - bottom of bluff along Lake Champlain shoreline) and Houghton umbrella-sedge (rare species - pine barren woodland), are not expected to change; therefore, no impacts are anticipated.

For properties conveyed to non-Federal and private parties, those parties would be subject to the prohibitions listed in Section 9 of the Endangered Species Act (16 U.S.C. § 1538) and 50 CFR Part 17, Subparts C, D, F, and G. For certain activities involving the export, possession, taking, sale, or transport of threatened or endangered animal species, non-Federal and private parties would be required to obtain a permit under Section 10 of the Endangered Species Act (16 U.S.C. § 1539) and 50 CFR Part 17, Subparts C and D.

Sensitive Habitats. The U.S. Army Corps of Engineers made a determination on wetlands in the western half of the base and has also determined that there are several Waters of the United States either on or immediately adjacent to the base subject to protection under the permitting requirements of Section 404 of the Clean Water Act. The NYSDEC has also determined and mapped several wetland areas on the base that are subject to protection under the State's permitting authority. This mapping and protection applies to wetlands that are a minimum of 12.4 acres. Article 24 of the Environmental Conservation Law regulates certain activities in freshwater wetlands and within 100 feet of the wetland boundary. The criteria for mapping and classifying regulated wetlands are contained in the implementing regulations 6 NYCRR Part 664. However, it is the small wetland units, as mapped by the Corps of Engineers criteria, scattered in the developed portion of Plattsburgh AFB that are most likely to be affected by redevelopment.

The development activities associated with the Proposed Action would take place outside the boundary of large wetland units. The largest wetland units surround the airfield area (north, south, southeast, and west). Future development could be planned to avoid wetlands and other sensitive habitats.

Mitigation Measures. The most sensitive habitat requiring mitigation at Plattsburgh AFB is wetland. Potential disturbance to wetlands in New York are controlled and permitted by State and Federal regulations, including Executive Order 11990, Section 404 of the Clean Water Act and Article 24 of the New York Environmental Conservation Law. The standards for permit issuance are contained in the implementing regulations 6 NYCRR Part 663. Mitigations could include (1) avoidance of direct and indirect disturbance of wetlands through facility design or appropriate restrictions in the transfer documents; (2) onsite (if possible) replacement of any wetlands lost at a

Mitigation Measures. Currently, the Air Force is negotiating a Programmatic Agreement (PA) with the New York SHPO, the Advisory Council on Historic Preservation (ACHP), the PARC, and other interested parties, describing and implementing mitigation and monitoring. The appropriate level of data recovery for mitigation would be determined through consultation with the New York SHPO and the ACHP, in accordance with Section 106 of the NHPA.

4.4.6.2 Alternative 1

Impacts to cultural resources as a result of this alternative would be similar to those identified for the Proposed Action.

Mitigation Measures. All mitigation measures for cultural resources with Alternative 1 are the same as those described for the Proposed Action.

CHAPTER 5.0
CONSULTATION AND COORDINATION

5.0 CONSULTATION AND COORDINATION

The Federal, State, and local agencies and organizations that were contacted during the course of preparing this Environmental Assessment are listed below:

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U.S. Bureau of the Census
www.census.gov/population/estimates/metro-city/scful/sc98F/NYDR.txt.

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6.0 LIST OF PREPARERS AND CONTRIBUTORS

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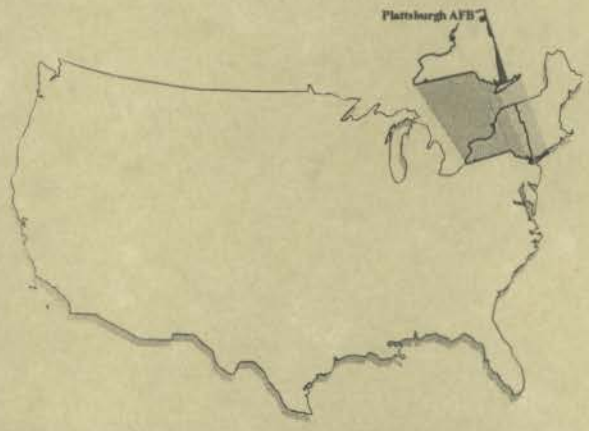

CHAPTER 7.0
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7.0 REFERENCES

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CHAPTER 8.0
GLOSSARY OF TERMS, ACRONYMS, UNITS OF MEASURES, AND CHEMICAL ABBREVIATIONS

8.0 GLOSSARY OF TERMS, ACRONYMS, UNITS OF MEASUREMENT, AND CHEMICAL ABBREVIATIONS

TERMS

A-Weighted Sound Level (dBA). A number representing the sound level which is frequency-weighted according to a prescribed frequency response established by the American National Standards Institute (ANSI S1.4-1971) and accounts for the response of the human ear.

Acoustics. The science of sound that includes the generation, transmission, and effects of sound waves, both audible and inaudible.

Active Fault. A fault on which movement has occurred during the past 10,000 years and which may be subject to recurring movement, usually indicated by small, periodic displacement or seismic activity.

Advisory Council on Historic Preservation. A 19-member body appointed, in part, by the President of the United States to advise the President and Congress and to coordinate the actions of federal agencies on matters relating to historic preservation, to comment on the effects of such actions on cultural resources, and to perform other duties as required by law (Public Law 89-655; 16 USC 470).

Aesthetics. Referring to the perception of beauty.

Aggregate. Materials such as sand, gravel, or crushed stone used for mixing with a cementing material to form concrete, or alone, as railroad ballast or graded fill.

Air Installation Compatible Use Zone. A concept developed by the Air Force to promote land use development near its airfields in a manner that protects adjacent communities from noise and safety hazards associated with aircraft operations, and to preserve the operational integrity of the airfields.

Aircraft Operation. A takeoff or landing at an airport.

Airport Layout Plan. The plan of an airport showing the layout of existing and proposed airport facilities.

Alluvial Plain. Plain produced by deposition of alluvium.

Alluvium. Clay, silt, sand, gravel, or similar material deposited by running water.

Ambient Air. That portion of the atmosphere, outside of buildings, to which the general public has access.

Ambient Air Quality Standards. Standards established on a state or federal level that define the limits for airborne concentrations of designated "criteria" pollutants (nitrogen dioxide, sulfur dioxide, carbon monoxide, total suspended particulates, ozone, and lead), to protect public health with an adequate margin of safety (primary standards) and to protect public welfare, including plant and animal life, visibility, and materials (secondary standards).

Aquifer. The water-bearing portion of subsurface earth material that yields or is capable of yielding useful quantities of water to wells.

Archaeology. A scientific approach to the study of human ecology, cultural history, and cultural process, emphasizing systematic interpretation of material remains.

Arterial. Signalized street that serves primarily through-traffic and provides access to abutting properties as a secondary function.

Artifact. Anything that owes its shape, form, or placement to human activity. In archaeological studies, the term is applied to portable objects (e.g., tools and the by-products of their manufacture).

Attainment Area. A region that meets the National Ambient Air Quality Standards for a criteria pollutant under the Clean Air Act.

Average Annual Daily Traffic (AADT). For a 1-year period, the total volume passing a point or segment of a highway facility in both directions, divided by the number of days in the year.

Average Travel Speed. The average speed of a traffic stream computed as the length of a highway segment divided by the average travel times of vehicles traversing the segment, in miles per hour.

Bedrock. Geologic formation or unit which underlies soil or other unconsolidated surficial deposits.

Biophysical. Pertaining to the physical and biological environment, including the environmental conditions crafted by man.

Biota. The plant and animal life of a region.

Capacity (Transportation). The maximum rate of flow at which vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions.

Capacity (Utilities). The maximum load a system is capable of carrying under existing service conditions.

Carbon Monoxide (CO). A colorless, odorless, poisonous gas produced by incomplete fossil-fuel combustion. One of the six pollutants for which there is a national ambient standard. See Criteria Pollutants.

Chemical Oxygen Demand (COD). The amount of oxygen required to oxidize completely the inorganic oxidizable compounds present.

Class I, II, and III Areas. Under the Clean Air Act, clean air areas are divided into three classes. Very little pollution increase is allowed in Class I areas, some increase in Class II areas, and more in Class III areas. National parks and wilderness areas receive mandatory Class I protection. All other areas start out as Class II. States can reclassify Class II areas up or down, subject to federal requirements.

Comprehensive Plan. A public document, usually consisting of maps, text, and supporting materials, adopted and approved by a local government legislative body, which describes future land uses, goals, and policies.

Council on Environmental Quality (CEQ). Established by the National Environmental Policy Act (NEPA), the CEQ consists of three members appointed by the President. CEQ regulations (40 CFR Parts 1500-1508, as of July 1, 1986) describe the process for implementing NEPA, including preparation of environmental assessments and environmental impact statements, and the timing and extent of public participation.

Criteria Pollutants. The Clean Air Act required the Environmental Protection Agency to set air quality standards for common and widespread pollutants after preparing "criteria documents" summarizing scientific knowledge on their health effects. Today there are standards in effect for six "criteria pollutants": sulfur dioxide (SO_2), carbon monoxide (CO), particulate matter less than 10 micrometers in diameter (PM_{10}), nitrogen dioxide (NO_2), ozone (O_3), and lead (Pb).

Cultigen. A plant species or variety known only in cultivation, especially one without a known ancestor.

Cultural Resources. Prehistoric and historic districts, sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or a community for scientific, traditional, religious, or any other reason.

Day-Night Average Sound Level (DNL). The 24-hour-average energy sound level expressed in decibels, with a 10-decibel penalty added to sound levels between 10:00 P.M. and 7:00 A.M. to account for increased annoyance due to noise during night hours.

Decibel (dB). A unit of measurement on a logarithmic scale which describes the magnitude of a particular quantity of sound pressure or power with respect to a standard reference value.

Developed. Land, a lot, a parcel, or an area that has been built upon, or where public services have been installed prior to residential or commercial construction.

Direct Impact. Effects resulting solely from the proposed program.

Discharge. Release of groundwater in springs or wells, through evapotranspiration, or as outflow.

Disturbed Area. Land that has had its surface altered by grading, digging, or other construction-related activities.

Easement. A right or privilege (agreement) that a person may have on another's property.

Effect. A change in an attribute. Effects can be caused by a variety of events, including those that result from program attributes acting on the resource attribute (direct effect); those that do not result directly from the action or from the attributes of other resources acting on the attribute being studied (indirect effect); those that result from attributes of other programs or other attributes that change because of other programs (cumulative effects); and those that result from natural causes (e.g., seasonal change).

Effluent. Waste material discharged into the environment.

Employment. The total number of persons working (includes all wage and salary workers), both civilian and military, and proprietors.

Endangered Species. Any [plant or animal] species that is in danger of extinction throughout all or a significant portion of its range (ESA 1973 as amended).

Environmental Impact Analysis Process (EIAP). The process of conducting environmental studies as outlined in Air Force Instruction 32-7061 (formerly Air Force Regulation (AFR) 19-2).

Environmental Protection Agency (EPA). The independent federal agency, established in 1970, that regulates environmental matters and oversees the implementation of environmental laws.

Erosion. Wearing away of soil and rock by weathering and the action of streams, wind, and underground water.

Fault. A fracture in the earth's crust accompanied by a displacement of one side of the fracture with respect to the other and in a direction parallel to the fracture.

Federal Candidate Category 1 Species. Taxa for which the U.S. Fish and Wildlife Service has sufficient biological information to support a proposal to list as endangered or threatened.

Federal Candidate Category 2 Species. Taxa for which existing information may warrant listing, but for which substantial biological information to support a proposed rule is lacking.

Federal Candidate Category 3(c) Species. Taxa more common than previously thought; no longer being considered for a listing proposal at this time.

Floodplain. The relatively flat land lying adjacent to a river channel that is covered by water when the river overflows its banks.

Formation. A mappable body of rock having a general homogeneity of composition, structure, texture, and other characteristics.

Fossiliferous. Containing fossils.

Friable. Easily crumbled or reduced to powder.

Fugitive Dust. Particulate matter composed of soil that is uncontaminated by pollutants from industrial activity. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces, and other activities in which soil is either removed or redistributed.

Fugitive Emissions. Emissions released directly into the atmosphere that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Geomorphic. Pertaining to the form of the earth or its surface features.

Groundwater. Water within the earth that supplies wells and springs.

Groundwater Basin. Subsurface structure having the character of a basin with respect to collection, retention, and outflow of water.

Groundwater Recharge. Absorption and addition of water to the zone of saturation.

Groundwater Table. The surface between the zone of saturation and the zone of aeration; that surface of a body of unconfined groundwater at which the pressure is equal to that of the atmosphere.

Hazardous Material. Generally, a substance or mixture of substances that has the capability of either causing or significantly contributing to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or posing a substantial present or potential risk to human health or the environment. Use of these materials is regulated by Department of Transportation (DOT), Occupational Safety and Health Administration (OSHA), and Superfund Amendments and Reauthorization Act (SARA).

Hazardous Waste. A waste, or combination of wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly

contribute to, an increase in mortality or an increase in serious irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA).

Herbicides. A pesticide, either organic or inorganic, used to destroy unwanted vegetation, especially various types of weeds, grasses, and woody plants.

Herpetofauna. Reptiles and amphibians.

Historic. A period of time after the advent of written history dating to the time of first Euro-American contact in an area.

Hydraulic Gradient. The change in head with a change in distance in a given direction (head is the pressure on a fluid at a given point).

Hydrocarbons (HC). Any of a vast family of compounds containing hydrogen and carbon. Used loosely to include many organic compounds in various combinations; most fossil fuels are composed predominantly of hydrocarbons. When hydrocarbons mix with nitrogen oxides in the presence of sunlight, ozone is formed; hydrocarbons in the atmosphere contribute to the formation of ozone.

Impact. An assessment of the meaning of changes in all attributes being studied for a given resource; an aggregation of all the adverse effects, usually measured using a qualitative and nominally subjective technique. In this EIS, as well as in the CEQ regulations, the word impact is used synonymously with the word effect.

Indirect Impact. Program-related impact (usually population changes and resulting impacts) not directly attributable to the program itself. Indirect effects... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable... [and] may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (Council on Environmental Quality [CEQ] regulations, NEPA, 40 CFR 1508.8[b]).

Infrastructure. The basic installations and facilities on which the continuance and growth of a community, state, etc., depend, e.g., roads, schools, power plants, transportation systems, and communication systems, etc.

Intermittent Stream. A stream that flows part of the time, such as during the wet season.

Interstate. The designated National System of Interstate and Defense Highways located in both rural and urban areas; they connect the East and West coasts and extend from points on the Canadian border to various points on the Mexican border.

Kilowatt. A unit of power equivalent to 1,000 watts.

Land Use Plans and Policies. Guidelines adopted by governments to direct future land use within their jurisdictions.

L_{eq} Noise Level. The equivalent steady state sound level which, in a stated period of time, would contain the same acoustical energy as a time-varying sound level during the same period.

Level of Service (LOS). In transportation analyses, a qualitative measure describing operational conditions within a traffic stream and how they are perceived by motorists and/or passengers. In public services, a measure describing the amount of public services (e.g., fire protection and law enforcement services) available to community residents, generally expressed as the number of personnel providing the services per 1,000 population.

Master Plan. A Master Plan provides guidelines for future development within a jurisdiction (e.g., city, town, county, airport, park, etc.). The plan establishes a schedule of priorities and phasing of various improvements for conceptual development.

Megawatt. One thousand kilowatts or 1,000,000 watts.

Microgram. One-millionth of a gram.

Mineral Resources. Mineral deposits that may eventually become available; known deposits that are not recoverable at present or yet undiscovered.

Mitigation. A method or action to reduce or eliminate program impacts.

National Ambient Air Quality Standards (NAAQS). Section 109 of the Clean Air Act requires EPA to set nationwide standards, the National Ambient Air Quality Standards, for widespread air pollutants. Currently, six pollutants are regulated by primary and secondary NAAQS: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter less than 10 micrometers in diameter (PM_{10}), and sulfur dioxide. See Criteria Pollutants.

National Environmental Policy Act (NEPA). Public Law 91-190, passed by Congress in 1969. The Act established a national policy designed to encourage consideration of the influences of human activities (e.g., population growth, high-density urbanization, and industrial development) on the natural environment. NEPA also established the Council on Environmental Quality. NEPA procedures require that environmental information be made available to the public before decisions are made. Information contained in NEPA documents must focus on the relevant issues in order to facilitate the decision-making process.

National Register of Historic Places. A register of districts, sites, buildings, structures, and objects important in American history, architecture, archaeology, and culture, maintained by the Secretary of the Interior under authority of Section 2(b) of the Historic Sites Act of 1935 and Section 101(a)(1) of the National Historic Preservation Act of 1966, as amended.

Native Americans. Used in a collective sense to refer to individuals, bands, or tribes who trace their ancestry to indigenous populations of North America prior to Euro-American contact.

Native Vegetation. Plant life that occurs naturally in an area without agricultural or cultivational efforts. It does not include species that have been introduced from other geographical areas and become naturalized.

Nitrogen Dioxide (NO_2). Gas formed primarily from atmospheric nitrogen and oxygen when combustion takes place at high temperature. NO_2 emissions contribute to acid deposition and formation of atmosphere ozone. NO_2 is one of the six pollutants for which there is a national ambient standard. See Criteria Pollutants.

Nitrogen Oxides (NO_x). Gases formed primarily by fuel combustion, which contribute to the formation of acid rain. Hydrocarbons and nitrogen oxides combine in the presence of sunlight to form ozone, a major constituent of smog.

Noise. Any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying (unwanted sound).

Noise Attenuation. The reduction of a noise level from a source by such means as distance, ground effects, or shielding.

Noise Contour. A curve connecting points of equal noise exposure on a map. Noise exposure is often expressed using the average day-night sound level, DNL.

Nonattainment Area. An area that has been designated by the Environmental Protection Agency or the appropriate state air quality agency as exceeding one or more National or State Ambient Air Quality Standards.

Normal Fault. A type of fault in which beds on one side of the fault have slipped down and away from beds on the other side.

Ozone (ground-level). A major ingredient of smog. Ozone is produced from reactions of hydrocarbons and nitrogen oxides in the presence of sunlight and heat. Some 68 areas, mostly metropolitan areas, did not meet a 31 December 1987 deadline in the Clean Air Act for attaining the ambient air quality standard for ozone.

Paleo-Indian. Prehistoric hunter-gatherer populations characterized by efficient adaptations to terminal Pleistocene environments in which small bands exploited megafauna such as mammoth (app. 10,000-6,000 B.C.).

Paleontological Resources. Fossilized organic remains from past geological periods.

Palustrine. The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 percent. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 hectares (20 acres); (2) active wave formation or bedrock shoreline features lacking; (3) water depth in the deepest part of the basin less than 2 meters at low water; and (4) salinity due to ocean-derived salts less than 0.5 percent.

Peak Demand. The highest instantaneous amount of electrical power (in kilowatts) that an electrical system is required to supply over a given time frame, usually 1 year.

Peak Hour. The hour of highest traffic volume on a given section of roadway between 7:00 A.M. and 9:00 A.M. or between 4:00 P.M. and 6:00 P.M.

Peak Year. The year when a particular program-related effect is greatest.

Perennial Stream. A stream that flows all the time.

Pleistocene. An earlier epoch of the Quaternary period during the "ice age" beginning approximately 3 million years ago and ending 10,000 years ago. Also refers to the rocks and sediments deposited during that time.

Potable Water. Water suitable for drinking.

Prehistoric. The period of time before the written record.

Prevention of Significant Deterioration (PSD). In the 1977 Amendments to the Clean Air Act, Congress mandated that areas with air cleaner than required by National Ambient Air Quality Standards must be protected from significant deterioration. The Clean Air Act's PSD program consists of two elements: requirements for best available control technology on major new or modified sources and compliance with an air quality increment system.

Prevention of Significant Deterioration Area. A requirement of the Clean Air Act (160 et seq.) that limits the increases in ambient air pollutant concentrations in clean air areas to certain increments even though ambient air quality standards are met.

Primary Roads. A consolidated system of connected main roads important to regional, statewide, and interstate travel; they consist of rural arterial routes and their extensions into and through urban areas of 5,000 or more population.

Prime Farmland. Land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion, as determined by the Secretary of Agriculture (Farmland Protection Policy Act, 7 CFR 658).

Protohistoric. The period when Native American cultures were affected by Euro-Americans without direct contact. For instance, inland Indian tribes received trade goods and reports of European cultures from coastal tribes before the arrival of European explorers in the interior.

Raptors. Birds of prey.

Recharge. The process by which water is absorbed and added to the zone of saturation, either directly into a formation or indirectly by way of another formation.

Region of Influence. The area where project-induced effects may be expected to occur.

Riparian. Of or relating to land lying immediately adjacent to a river or stream, and having specific characteristics of that transitional area (e.g., riparian vegetation).

Riverine. The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens; and (2) habitats with water containing ocean-derived salts in excess of 0.5 percent.

Ruderal. Weedy or introduced vegetation growing in disturbed areas.

Runoff. The noninfiltrating water entering a stream or other conveyance channel shortly after a rainfall event.

Secondary Employment. In economics, the additional employment and income generated by the economic activity required to produce the inputs to meet the initial material requirements. The term is often used to include induced effects.

Sediment. Material deposited by wind or water.

Sedimentary. Rock formed by mechanical, chemical, or organic sediments such as rock formed of fragments transported from their source and deposited elsewhere by water (e.g., sandstone or shale).

Seismic. Pertains to the characteristics of an earthquake or earth vibrations including those that are artificially induced.

Seismicity. Relative frequency and distribution of earthquakes.

Shrink/Swell Potential. Volume change possible upon wetting or drying.

Significance. The importance of a given impact on a specific resource as defined under the Council on Environmental Quality regulations.

Site. As it relates to cultural resources, any location where humans have altered the terrain or discarded artifacts.

Sound. The auditory sensation evoked by the compression and rarefaction of the air or other transmitting medium.

State Historic Preservation Officer. The official within each state, authorized by the State at the request of the Secretary of the Interior, to act as liaison for purposes of implementing the National Historic Preservation Act.

State-Sensitive/State-Recognized Species. Plant and animal species in each state that are monitored and listed for purposes of protection.

Sulfur Dioxide (SO_2). A toxic gas that is produced when fossil fuels, such as coal and oil, are burned. SO_2 is the main pollutant involved in the formation of acid rain. SO_2 can irritate the upper respiratory tract and cause lung damage. During 1980, some 27 million tons of sulfur dioxide were emitted in the United States, according to the Office of Technology Assessment. The major source of SO_2 in the United States is coal-burning electric utilities.

Threatened Species. Any [plant or animal] species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (ESA 1973 as amended).

Trip Distribution. A determination of the interchange of trips among zones in the region.

Trip Generation. A determination of the quantity of trip ends associated with a parcel of land.

Unconfined Aquifer. An aquifer where the water table is exposed to the atmosphere through openings (pores) in the overlying materials.

Understory. An underlying layer of low vegetation.

Unemployment Rate. The number of civilians, as a percentage of the total civilian labor force, without jobs but actively seeking employment.

Unique and Sensitive Habitats. Areas that are especially important to regional wildlife populations or protected species that have other important biological characteristics (e.g., severe wintering habitats, nesting areas, and wetlands).

Volume (Transportation). The total number of vehicles that pass over a given point or section of a roadway during a given time interval. Volumes may be expressed in terms of annual, daily, hourly, or subhourly periods.

Watershed. An area consisting of a surface water drainage basin and the divides that separate it from adjacent basins.

Water Table. The sustainable volume of water discharged from a well per units of time, often expressed in gallons per minute.

Watt. A unit of electrical power equal to 1/756th horsepower.

Wetlands. Areas that are inundated or saturated with surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil. This classification includes swamps, marches, bogs, and similar areas. Jurisdictional wetlands are those wetlands that meet the hydrophytic vegetation, hydric soils, and wetland hydrology criteria under normal circumstances (or meet the special circumstances as described in the U.S. Army Corps of Engineers, 1987, wetland delineation manual where one or more of these criteria may be absent and are a subset of "waters of the United States)."

Zoning. The division of a municipality (or county) into districts for the purpose of regulating land use, types of buildings, required yards, necessary off-street parking, and other prerequisites to development. Zones are generally shown on a map and the text of the zoning ordinance specifies requirements for each zoning category.

ACRONYMS

AADT	Average Annual Daily Traffic
ACHP	Advisory Council for Historic Preservation
ADT	Average Daily Traffic
AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
AFI	Air Force Instruction
AFR	Air Force Regulation
AICUZ	Air Installation Compatible Use Zone
ALP	Airport Layout Plan
AMC	Air Mobility Command
ANSI	American National Standards Institute
APE	Areas of Potential Effect
AQCR	Air Quality Control Region
CCA	Clinton County Airport
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
COE	U.S. Army Corps of Engineers
DBCRA	Defense Base Closure and Realignment Act
DOD	Department of Defense
DOI	Department of the Interior
EBS	Environmental Baseline Survey
EDMS	Emissions and Dispersion Modeling System
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FEIS	Final Environmental Impact Statement

FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FY	Fiscal Year
GSA	General Services Administration
HABS	Historic American Building Survey
INM	Integrated Noise Model
IRP	Installation Restoration Program
LOS	Level of Service
LRA	Local Redevelopment Authority
MACT	Maximum Achievable Control Technology
MCL	Maximum Contaminant Level
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NOISEMAP	Noise Exposure Model
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NYCRR	New York Codes, Rules, and Regulations
NYSAAQS	New York State Ambient Air Quality Standards
NYSDEC	New York Department of Environmental Conservation
NYSEG	New York Stated Electric and Gas
OL	Operating Location
OSHA	Occupational Safety and Health Administration
OTR	Ozone Transport Region
PARC	Plattsburgh Airbase Redevelopment Corporation
PA/SI	Preliminary Assessment/Site Inspection
PEL	Permissible Exposure Limit
PIDC	Plattsburgh Intermunicipal Development Council
P.L.	Public Law
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
ROG	Reactive Organic Gases
ROI	Region of Influence
SCS	Soil Conservation Service
SEL	Sound Exposure Level
SHPO	State Historic Preservation Officer
SI	Site Inspection
SIP	State Implementation Plan
TACAN	Tactical Air Navigation
TDM	Transportation Demand Management
TRACON	Terminal Radar Approach Control
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	Volatile Organic Compound

UNITS OF MEASUREMENT

BTU	British thermal units
°C	degrees Celsius

cm/sec	centimeters per second
dB	decibel
dBA	decibel measured on the A-weighted scale
DNL	day-night average noise level
°F	degrees Fahrenheit
gmp	gallons per minute
kVa	kilovolt-ampere
kWh	kilowatt-hour
L_{eq}	energy-equivalent continuous noise level
MG	million gallons
MGD	million gallons per day
MMcf	million cubic feet
mph	miles per hour
MVA	megavolt-ampere
MW	megawatt
MWh	Megawatt Hour
nm	nautical mile
PM_{10}	particulate matter less than or equal to 10 micrometers in diameter
ppm	parts per million
µg/dl	micrograms/decaliter
µg/l	micrograms/liter
$\mu g/m^3$	micrograms per cubic meter

CHEMICAL ABBREVIATIONS

CO	carbon monoxide
CO_2	carbon dioxide
HC	hydrocarbons
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
O_3	ozone
SO_x	sulfur oxides
SO_2	sulfur dioxide

CHAPTER 9.0
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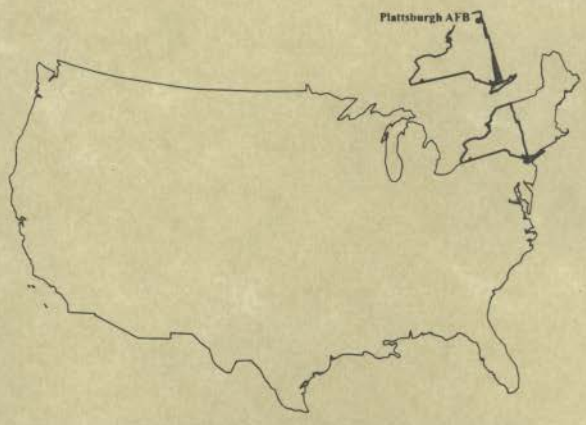
9.0 INDEX



APPENDIX A
NOISE ANALYSIS

APPENDIX A – NOISE ANALYSIS

Introduction.

Pratt & Whitney (P&W) plans to conduct up to 100 test flight (200 flight operations with 1 operation = 1 takeoff or 1 landing) per year (PARC, April 20, 2000). The test flights will take off from Plattsburgh International Airport (formerly, Plattsburgh AFB), fly north over Canada and return to Plattsburgh. Most of the test flights will be about five hours long and would occur over northern Quebec. The company intends to conduct about 100 hours of test flying (20 test flights or 40 flight operations) from Plattsburgh the first year and eventually increase to about 500 hours (100 test flights or 200 flight operations) per year.

To assess the cumulative noise impacts, noise modeling was performed for four (4) scenarios: (1) noise contours for the 1995 FEIS Proposed Action, (2) noise contours for the 1995 FEIS Proposed Action combined with the P&W proposal (100 test flights or 200 flight operations per year), (3) noise contours for the 1995 FEIS Aviation with Mixed Use Alternative, and (4) noise contours for the 1995 FEIS Aviation with Mixed Use Alternative combined with the P&W proposal. Noise contours were produced only for the one model year, 2016, to show the maximum noise impacts.

Noise Modeling

To define noise impacts from aircraft operations at Plattsburgh International Airport, the FAA-approved Integrated Noise Model (INM) version 6.0 was used to predict DNL 65 and 70 dB noise contours. The 1995 FEIS used an earlier version (version 4.11) of INM. Appendix H of the 1995 FEIS defines these noise descriptors. The contours were generated for the Proposed Action and the Aviation with Mixed Use Alternative utilizing the same operational input data as used in the 1995 FEIS. These input data are summarized in Tables A-1 and A-2.

In order to evaluate the additional impact of the P&W flight test operations, a KC-135 aircraft was added to the original mix of aircraft and then modeled with INM 6.0. The KC-135 aircraft was selected as a conservative representation of the noise that would be produced by the test engines on the P&W B720-B test bed aircraft. This selection was based on the P&W aircraft data provided by PARC (PARC, April 18, 2000).

The contours generated by the INM model were overlaid on a U.S. Geological Survey (USGS) map of the Plattsburgh AFB and vicinity. Input data to INM 6.0 include information on aircraft types, runway use, takeoff and landing flight tracks, aircraft altitude, speed, engine

settings, and number of daytime (7:00a.m. to 10:00p.m.) and nighttime (10:00p.m. to 7:00a.m.) operations (see Table A-2).

Half of all aircraft operations were assumed to be takeoffs and half landings. Aircraft operations and mix are included in Tables A-1 and A-2. Vicinity flight tracks were assumed to be straight tracks for takeoffs and landings. All operations were assumed to follow standard glide slopes and takeoff profiles provided by the FAA's model (INM 6.0).

Noise Impacts

The results of the aircraft noise modeling for the Proposed Action and the Aviation with Mixed Use Alternative are presented as noise contours in Figures A-1 and A-3, respectively. The contours shown in these figures are quite similar to those shown in Figures 4.4-4 and 4.4-7 of the 1995 FEIS. The DNL 65 and 70 dB noise contours are oriented along the runway. As a result of more aircraft operations with the Aviation with Mixed Use Alternative, 65 dB contour extends about 1,000 feet north of the base boundary. This area is undeveloped, resulting in negligible noise impacts.

The contours resulting from the addition of the operation of a KC-135 aircraft to the two alternatives are shown in Figures A-2 and A-4. A comparison of these contours with those shown in Figures A-1 and A-3 indicates very little change in the contour lengths and widths.

In order to quantify the small changes resulting from the addition of KC-135 operations, the INM model was used to calculate the areas within the 65 dB and 70 dB contours. These areas in acres are summarized in Table A-3. As shown in the table, the addition of the KC-135 to the alternative operations increased the area within the 65 dB contour by 3 acres and within the 70 dB contour by only 1 acre. Therefore, the addition of the P&W flight test operations to the 1995 FEIS Proposed Action and Aviation with Mixed Use Alternative will have negligible cumulative noise impacts in the Plattsburgh area.

Table A-1
Scenarios Analyzed for Noise Analysis
Modeled Year: 2016

Type of aircraft	Number of Annual Operations			
	1995 FEIS Proposed Action	Proposed Action and KC-135	1995 FEIS Aviation With Mixed Use Alternative	Aviation with Mixed Use Alt. and KC-135
Air Passenger (Air Cavier)				
B757	624	624	-	-
Air Passenger (Charter)				
A320	1,872	1,872	350	350
Air Passenger (Commuter)				
B-1900	3,494	3,494	9,800	9,800
SMW	749	749	2,100	2,100
DH8	749	749	2,100	2,100
Air Cargo				
B757	1,872	1,872	3,300	3,300
B747	624	624	1,100	1,100
General Aviation				
GASEPV (Single-engine piston)	9,436	9,436	84,000	84,000
Beech Baron 58 (Twin-engine piston)	4,044	4,044	36,000	36,000
Aircraft Maintenance				
B747-400	-	-	900	900
P&W Engine Testing				
KC-135*	-	200	-	200
Total	23,464	23,664	139,650	139,850

*KC-135 is used as a surrogate for B720-B test bed aircraft.

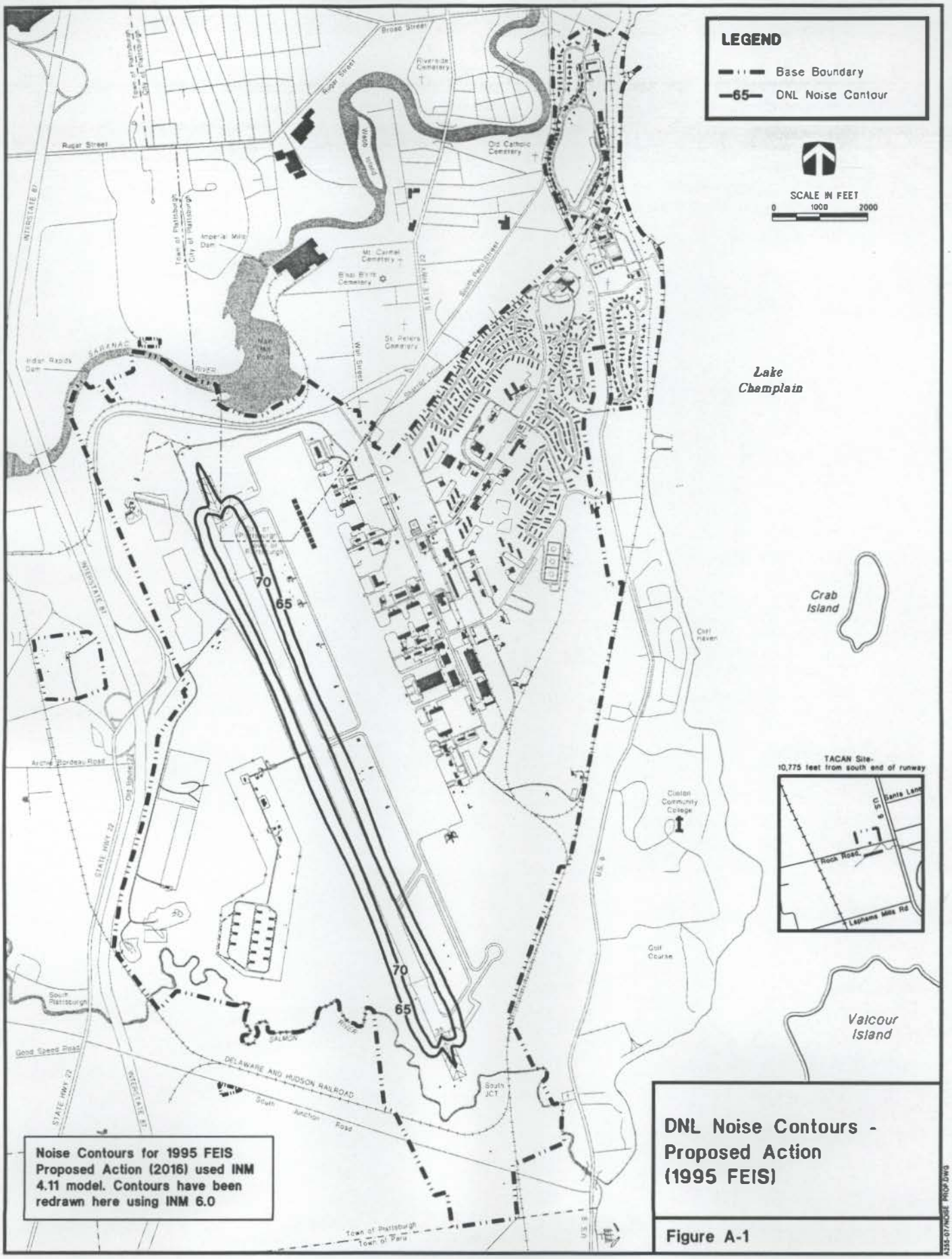
Table A-2
Assignment of Operations for the Proposed Action, Aviation with Mixed Use Alternative (2016) and the KC-135

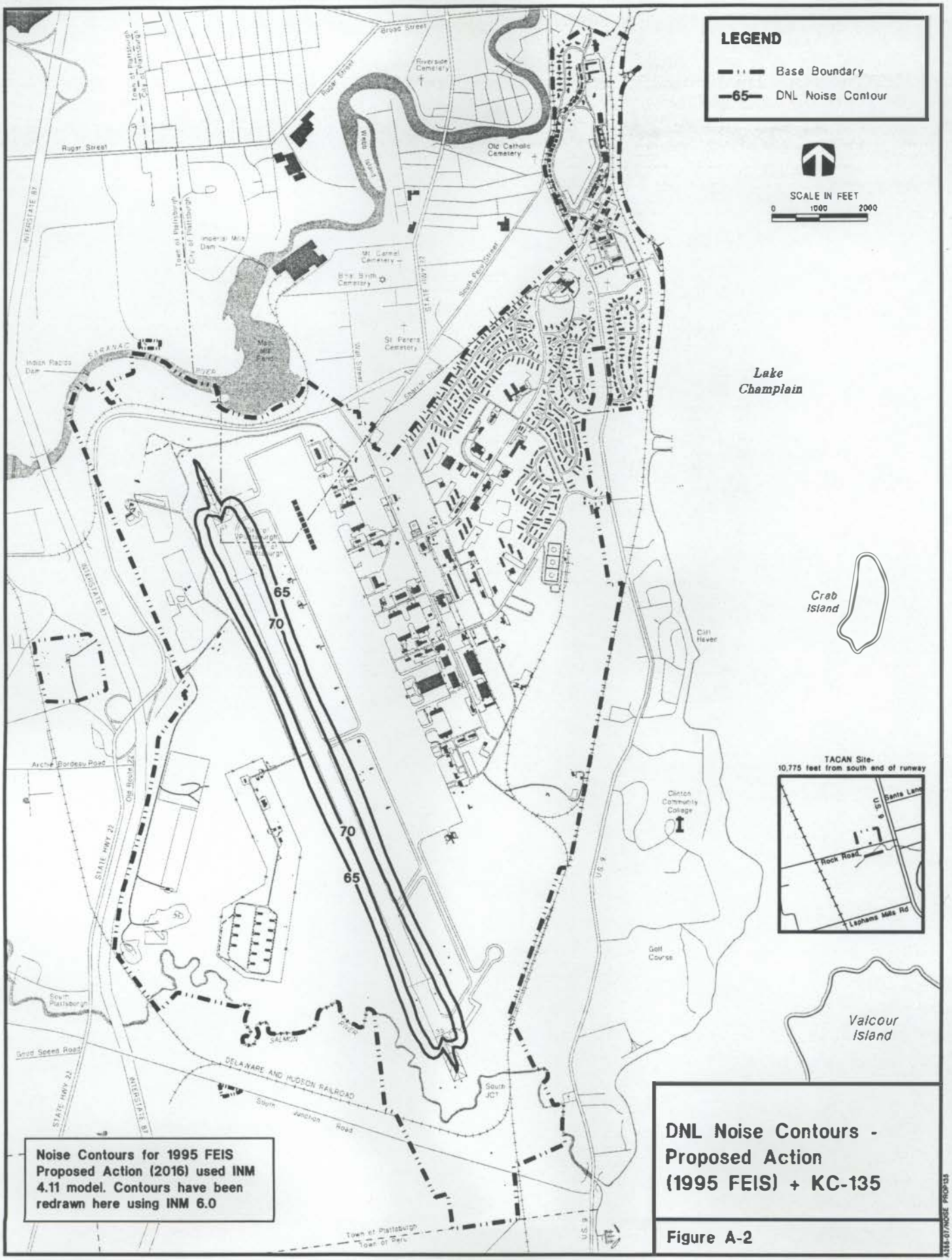
Aircraft	Proposed Action				Aviation with Mixed Use Alternative			
	Departure Track 35		Departure Track 17		Departure Track 35		Departure Track 17	
	Day	Night	Day	Night	Day	Night	Day	Night
757RR	1.3	0.1	1.9	0.1	1.5	0.1	2.8	0.2
A320	0.9	0.1	1.5	0.1	0.2	0.0	0.3	0.0
747200	0.4	0.0	0.5	0.0	0.5	0.0	0.9	0.1
747400	-	-	-	-	0.4	0.0	0.8	0.0
FAL20	2.6	0.1	3.9	0.2	6.4	0.3	11.8	0.6
GASEPV	4.9	0.3	7.3	0.4	38.3	2.0	71.1	3.7
BEC58P	2.0	0.2	3.1	0.2	16.4	0.9	30.5	1.6
KC-135	0.1	0.0	0.2	0.0	0.1	0.0	0.1	0.0

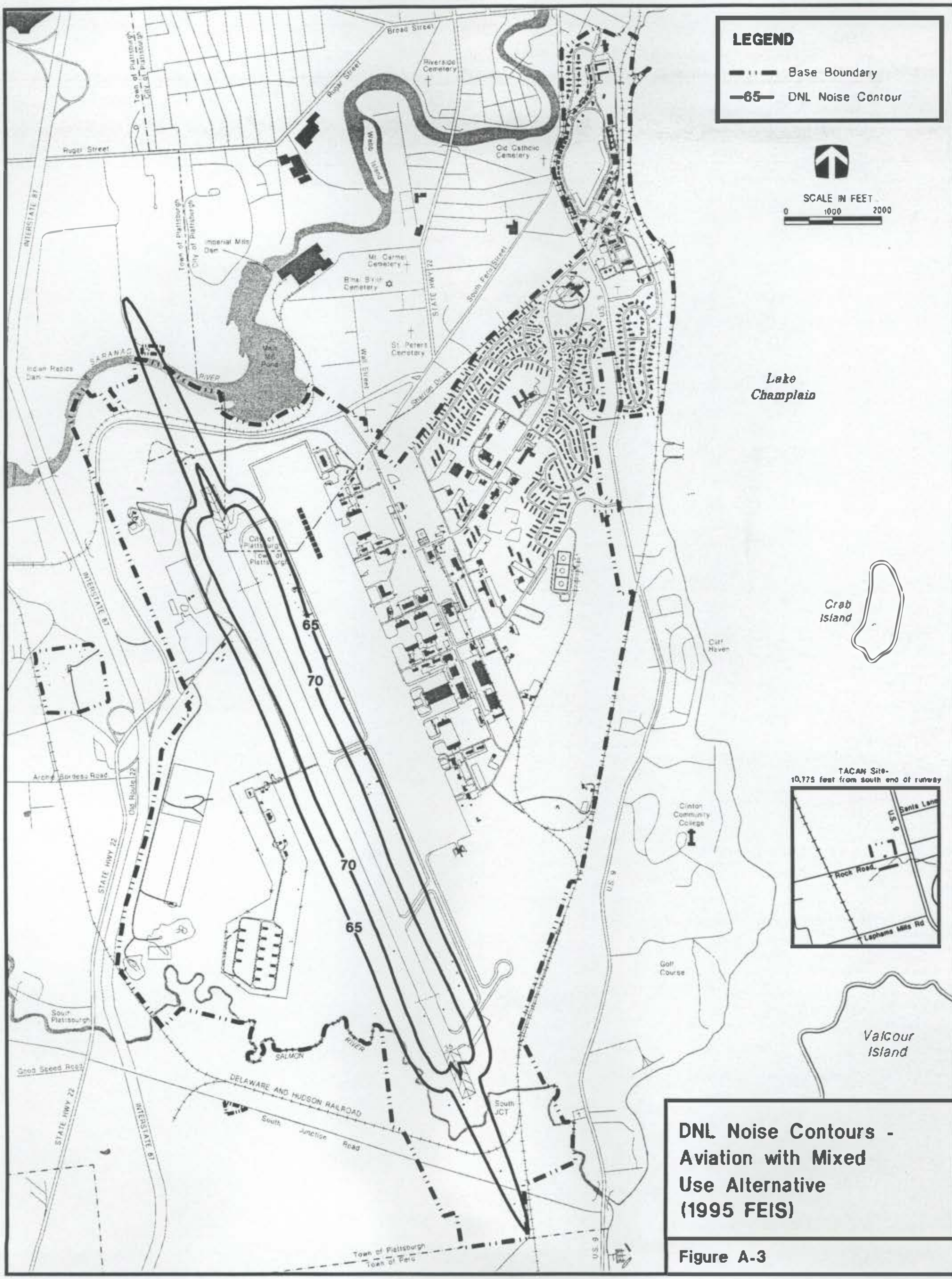
Notes: Day – 7:00 a.m. to 10:00 p.m.
Night – 10:00 p.m. to 7:00 a.m.
Daily arrival frequencies were assumed to be the same as departure frequencies

Table A-3
Acreage Within 65dB and 70dB DNL Contours

Scenario	Acres	
	65dB	70dB
Proposed Action	280	142
Aviation with Mixed Use	600	284
Proposed Action and KC-135	283	143
Aviation with Mixed Use and KC-135	603	285

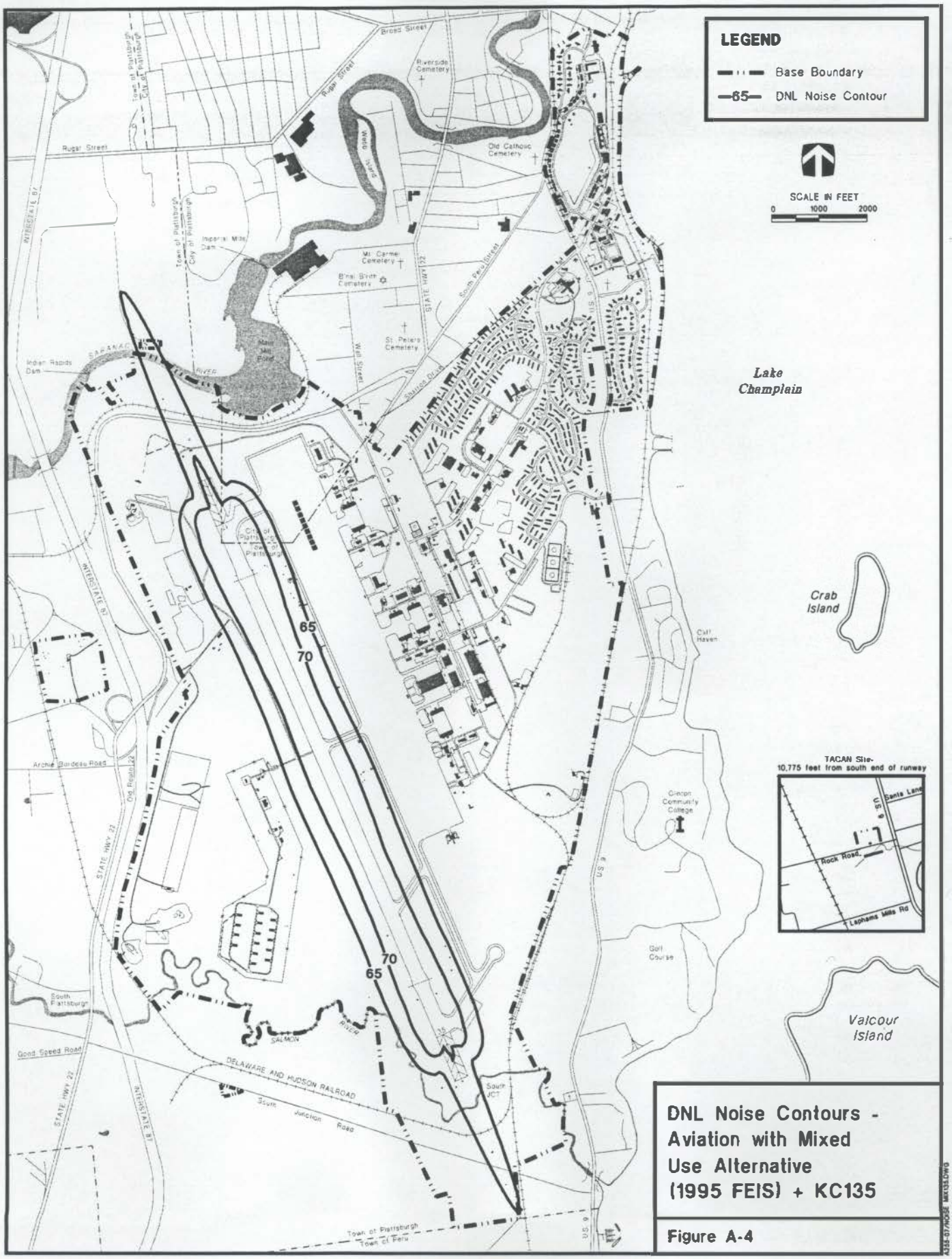

LEGEND
Base Boundary
65 DNL Noise Contour
SCALE IN FEET
0 1000 2000
Lake Champlain
Crab Island
Valcour Island
TACAN Site-
10,775 feet from south end of runway
Rock Road
Lapham Mills Rd
Santa Lane
70
65
Noise Contours for 1995 FEIS Proposed Action (2016) used INM 4.11 model. Contours have been redrawn here using INM 6.0
DNL Noise Contours - Proposed Action (1995 FEIS)
Figure A-1


LEGEND
Base Boundary
65 DNL Noise Contour
SCALE IN FEET
0 1000 2000
Lake Champlain
Crab Island
Valcour Island
65
70
70
65
TACAN Site-
10,775 feet from south end of runway
Rock Road
Lephams Mills Rd
Noise Contours for 1995 FEIS Proposed Action (2016) used INM 4.11 model. Contours have been redrawn here using INM 6.0
DNL Noise Contours - Proposed Action (1995 FEIS) + KC-135
Figure A-2


LEGEND
Base Boundary
65 DNL Noise Contour
SCALE IN FEET
0
1000
2000
Lake Champlain
Crab Island
Valcour Island
TACAN Site-
10,775 feet from south end of runway
Rock Road
Saranac River
Salmon River
Delaware and Hudson Railroad
South Junction Road
Interstate 87
State Hwy 22
U.S. 9
Ruger Street
Broad Street
Riverside Cemetery
Old Catholic Cemetery
Mt. Carmel Cemetery
B'nai B'rith Cemetery
St. Peters Cemetery
Imperial Mills Dam
Indian Rapids Dam
Clinton Community College
Cliff Haven
Golf Course
South Plattsburgh
South JCT
Town of Plattsburgh
Town of Peru
65
70
70
65

DNL Noise Contours - Aviation with Mixed Use Alternative (1995 FEIS)

Figure A-3


LEGEND
Base Boundary
65 DNL Noise Contour
SCALE IN FEET
0 1000 2000
Lake Champlain
Crab Island
Valcour Island
TACAN Site-
10,775 feet from south end of runway
Rock Road
Lashams Mills Rd
Santa Lane
65
70
70
65
Broad Street
Rugar Street
Riverside Cemetery
Old Catholic Cemetery
Mt. Carmel Cemetery
Bnai Brith Cemetery
St. Peters Cemetery
Imperial Mills Dam
Indian Rapids Dam
SARANAC RIVER
Main Mill Pond
Saranac River
South Peru Street
Mill Street
STATE HWY 22
INTERSTATE 87
INTERSTATE 87
Archie Bordeau Road
Old Route 22
South Plattsburgh
Good Speed Road
DELAWARE AND HUDSON RAILROAD
South Junction Road
SALMON RIVER
South JCT
Clinton Community College
Golf Course
Cliff Haven
Town of Plattsburgh
City of Plattsburgh
Town of Plattsburgh
Town of Peru
DNL Noise Contours - Aviation with Mixed Use Alternative (1995 FEIS) + KC135
Figure A-4

REFERENCES

Federal Aviation Administration, Office of Environment and Energy
Integrated Noise Model (INM) Version 6.0, September 1999.

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2000 Memorandum from Randall S. Beach, Esq. to Michael D. Sorel, AFBCA Site Manager, April 18, 2000.

2000 Letter from Randall S. Beach, Esq. to Michael D. Sorel, AFBCA Site Manager, April 20, 2000.

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