

WASHINGTON DULLES INTERNATIONAL AIRPORT (IAD)
FBO EXPANSION
(EXPANSION OF SIGNATURE FBO SITE)
ENVIRONMENTAL ASSESSMENT

Prepared for:

Landow & Company
4710 Bethesda Avenue
Bethesda, Maryland 20814

and

Metropolitan Washington Airports Authority
One Aviation Circle
Washington, DC 20001

Prepared by:

Michael Baker Jr. , Inc.
3601 Eisenhower Avenue
Alexandria, Virginia 22304

February 7, 2005



**ENVIRONMENTAL
EVALUATION
FORM "C"**
(Short Environmental Assessment)
for
**AIRPORT DEVELOPMENT
PROJECTS**



~ Aviation in Harmony with the Environment ~



**FEDERAL AVIATION ADMINISTRATION
EASTERN REGION
AIRPORTS DIVISION**

Airport Name: Washington Dulles International Airport

Proposed Project: FBO Expansion

This Environmental Assessment becomes a Federal document when evaluated and signed by the responsible FAA official.

Responsible FAA Official:

Date: 2/16/05

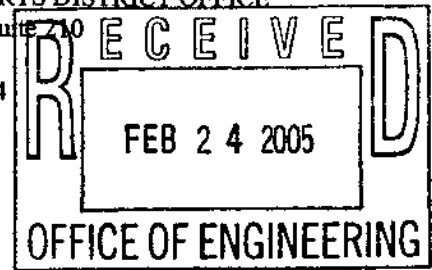


U. S. Department
of Transportation

**Federal Aviation
Administration**

WASHINGTON AIRPORTS DISTRICT OFFICE

23723 Airfreight Lane, Suite 210
Dulles, Virginia 20166
Telephone: 703/661-1354
Fax: 703/661-1370



February 16, 2005

Bill Lebegern
Manager, Planning Department
Metropolitan Washington Airports Authority
1 Aviation Circle
Washington, D.C. 20001-6000

Dear Mr. Lebegern:

The Federal Aviation Administration (FAA) has recently approved the Environmental Evaluation Form "C" for the "Expansion of Signature FBO Site" at Washington Dulles International Airport. (The specific projects are listed in the Form "C".) Copies of the approved Form "C" signed by the Approving Official and the Responsible FAA Official are enclosed for your records.

This Federal environmental approval is a determination by the Approving Official that this Form "C" has satisfied the requirements imposed by applicable environmental statutes/regulations. However, it is not an approval of the Federal action approving the funding of eligible items for any specific projects, nor approval of airspace review, nor approval of the revisions to the Airport Layout Plan (ALP) to show these projects. Such decisions must be made separately and remain the purview of the Washington Airports District Office.

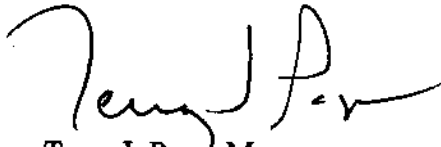
In compliance with council on Environmental Quality (CEQ) regulations 1501.4(e)(1) and 1506.6 and the Environmental Protection Agency regulations 40 CFR part 93.156, we require that your office make the Form "C" available to the affected public, and announce such availability through appropriate media in the area. The announcement shall indicate the availability of the documents for examination and note the appropriate location of the general public access where the documents may be found (i.e., your office, local libraries, public buildings, etc.). We request a copy of such announcement be sent to this office when it is issued.

Finally, your attention is directed to the mitigating measures noted on page 31 that were made a condition of approval of this Form "C". Please be reminded that these measures must be taken by the airport sponsor in order to meet the terms of the Form "C".

The process of making these environmental determinations is that of a partnership between you as airport sponsor, and other contributing parties, both public and private. We thank you for your effort and cooperation.

Please contact our office if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry J. Page". The signature is fluid and cursive, with a large initial "T" and a long, sweeping underline.

Terry J. Page, Manager
Washington Airports District Office

Enclosure: Signed copy of the Form "C"

FAA EASTERN REGION AIRPORTS DIVISION
ENVIRONMENTAL EVALUATION FORM "C"
FOR SHORT ENVIRONMENTAL ASSESSMENTS

Environmental Evaluation Form "C," Short Environmental Assessment (EA), is based upon the guidance in Federal Aviation Administration (FAA) Order 5050.4A, "Airport Environmental Handbook" or subsequent revisions, which incorporates the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (NEPA), as well as the US Department of Transportation environmental regulations (including FAA Order 1050.1D or subsequent revisions), and many other federal statutes and regulations designed to protect the Nation's natural, historic, cultural, and archeological resources. It was prepared by FAA Eastern Region Airports Division, and is intended to be used for proposed Airports projects in this region only. If you wish to use it for projects in other regions or divisions, you must first coordinate with that region or division to determine whether they approve of its use.

Form C is intended to be used when a project cannot be categorically excluded (CATEX) from formal environmental assessment, but when the environmental impacts of the proposed project are expected to be insignificant and a detailed EA would not be appropriate. Accordingly, Form C is intended to meet the intent of a short EA while satisfying the regulatory requirements of an EA.

Proper completion of Form C would allow the FAA to determine whether the proposed airport development project can be processed with a short EA, or whether a more detailed EA must be prepared. FAA normally intends to use a properly completed Form C to support a Finding of No Significant Impact (FONSI).

Applicability

Form C should be used if the sponsor's proposed project meets the following two (2) criteria:

1) The proposed project involves conditions ("extraordinary circumstances") identified in paragraph 21 (projects normally requiring an EIS); paragraph 22 (projects normally requiring an EA); paragraph 24 (extraordinary circumstances); or paragraph 26 (cumulative impacts), and the sponsor shall demonstrate that involvement with, or impacts to, the extraordinary circumstances are not notable in number or degree of impact, and that any significant impacts can be mitigated below threshold levels.

2) The proposed project must fall under one of the following categories of Federal Airports Program actions noted with an asterisk (*):

- (a) Approval of an airport location (new airport).
- *(b) Approval of a project on an airport layout plan (ALP).
- *(c) Approval of federal funding for airport development.
- *(d) Requests for conveyance of government land.
- *(e) Approval of release of airport land.
- *(f) Approval of the use of passenger facility charges (PFC).
- *(g) Approval of development or construction on a federally obligated airport.

Do any of these listed Federal Airports program action(s), 2(b) - (g), apply to your project? Yes
 X No** If "yes," list them here (there can be more than one).

2(g) Approval of development or construction on a federally obligated airport.

If "no," see (**) below.

**** If the proposed project does not meet 1) or 2) above, i.e., one or more answers to the questions resulted in a (**), do not complete this Form. Rather, contact the appropriate official (listed at the end of this form) for additional instructions.**

Directions

Prior to completing Form C, FAA recommends that you contact the environmental specialist in the appropriate office listed at the end of this Form to insure that the proper Form (A, B, or C) is used for your proposed action. Once you have completed the Form in accordance with the following instructions, submit it to that office for review.

To complete Form C, the preparer should describe the proposed project and provide information on any potential impacts of the proposed project. Accordingly, it will be necessary for the preparer to have knowledge of the environmental features of the airport. Although some of this information may be obtained from the preparer's own observations, previous environmental studies and associated documents, or research, the best sources are the jurisdictional federal, state and local resource agencies responsible for protecting specially-protected resources, such as wetlands, coastal zones, floodplains, endangered or threatened species, properties in or eligible for National Register status, DOT Section 303/4(f) lands, etc.. As appropriate, these agencies should be consulted prior to submitting information to the FAA. It is important to note that in addition to fulfilling the requirements of NEPA through this evaluation process, the FAA is responsible for ensuring that airport development projects comply with the many laws and orders administered by the agencies protecting specially-protected resources. Moreover, the Form is not meant to be a stand-alone document. Rather, it is intended to be used in conjunction with applicable Orders, laws, and guidance documents, and in consultation with the appropriate resource agencies.

An electronic version of this Evaluation Form is available on-line at <http://www.faa.gov/arp/aea>. In addition, some of the guidance and regulatory documents referenced in this Evaluation Form are available on-line at <http://www.faa.gov/arp/arp/home.htm>. A document entitled "Tips for Airport Sponsors and their Consultants" is also available at <http://www.faa.gov/asw/asw600/envreq.html>. We encourage the preparer to complete the Form electronically, rather than by hand. It may then be submitted via e-mail, with a copy of the completed signature page sent by fax or mail; or, a hard copy of the completed Form may be submitted by fax or mail. The contact list should be removed from the completed Form prior to its submittal. Those responses requiring further explanation, or separate project plans or maps, should be attached at the end of the Form. In the attachment, identify the issue by its associated number/title (e.g., response to Item 13, Coastal Zone Impacts).

Complete the following information:

1. Project Location:

Airport Name: Washington Dulles International Airport

Airport Address: P.O. Box 17045

City: Washington, D.C. 20041-0045 County: Loudoun State: Virginia

2. Airport Sponsor Information:

Point of Contact: William C. Lebegern, P.E.

Address: Room 155, West Building, Ronald Reagan Washington National Airport

Washington, D.C. 20001

Telephone: 703-417-8161 Fax: 703-417-8199

E-mail: william.lebegern@mwaa.com

3. Evaluation Form Preparer Information:

Point of Contact: Tony Collier, P.E.

Address: Michael Baker Jr., Inc.

3601 Eisenhower Avenue, Alexandria, Virginia 22304

Telephone: (703) 317-6238 Fax: (703) 960-9125

E-mail: tcollier@mbakercorp.com

4. Proposed Development Action (describe ALL associated projects that are involved):

The project consists of the development of additional Fixed Based Operator (FBO) facilities on approximately 20 acres immediately north of and adjacent to the Signature FBO facilities (Figures 1, 2 and 3). Included are the following facilities:

- *Approximately 43,870 square yards of aircraft apron.*
- *Four aircraft hangars, each 158' by 252.5', for a total of approximately 159,580 square feet of hangar space.*
- *Office pods adjacent to the hangars for FBO operations and aircraft owner's use. Total of approximately 46,000 square feet of space.*
- *A future office building of up to 5 floors, approximately 11,300 square feet per floor, or up to 56,500 square feet total.*
- *Access roadway from Wind Sock Drive and landside parking for approximately 370 vehicles.*
- *Complete stormwater collection and conveyance system for on-site as well as offsite stormwater currently passing through the site (see Section 9(6)). The onsite collection system will pass through a Best Management Practice (BMP) system and into the stormwater detention pond described below. The system is designed so that post development runoff from the site will not exceed the pre-development runoff for the 10-year storm. The system will discharge into the existing unnamed tributary on the west edge of the site. This unnamed tributary is to be realigned as part of the North Area Roadways project to be undertaken by the Authority. The stormwater runoff from the south and east of the project site that currently passes through the site will be collected in a separate system and discharged directly into the above mentioned unnamed tributary.*
- *On-site stormwater detention pond (dry pond). The detention pond will have a surface area of approximately 9,425 square feet with a capacity of approximately 80,000 cubic feet (approximately 600,000 gallons).*

- *Underground utilities (sanitary sewer, gas, water, electric, and telecommunications) for complete service for the site.*
- *Temporary relocation of the North-South Construction Service Road to allow for site grading. The road will be rebuilt in the original location following grading and the temporary road section will then be demolished.*
- *Construction of Taxiway J Connector.*

The hangars are designed to accommodate up to G500 (Group III) aircraft and each hangar will accommodate up to six (6) aircraft. The apron areas in front of the four hangars will accommodate parking of up to G500 aircraft as well, while the southeast corner of the apron (south of Hangar C and east of Hangar B) will accommodate up to an Airbus 320 (Group III). Approximately 40 aircraft will be able to be accommodated at maximum capacity.

Approximately 25-50 employees of the Fixed Base Operation and tenants will be located on-site. When the office building is completed approximately 200 people will be based in the office building.

5. Describe the Purpose of and Need for the Project:

Today, general aviation activities at the airport have reached levels that are severely straining the capacity of the airport to accommodate them. General aviation activity at the airport is expected to continue to grow and is forecasted to increase at 2 to 3 percent per year over the next several years. Activity prior to September 11th, 2001 was strong and growing. Post-9/11 there was an immediate influx of activity with continued strong growth through today.

September 11th resulted in the indefinite closure of DCA with a large percentage of those based aircraft relocating to IAD. Additionally, there has been growing use of corporate aircraft by the business community within the last several years, including fractional ownership. Washington, DC and the metropolitan area including Loudoun and Fairfax Counties are or will become home to many government agencies and large corporations all of which attract general aviation users. The number of Fortune 500 companies with headquarters in Northern Virginia and defense contractors located in the same areas have increased dramatically over the last several years. These businesses conduct much business travel with corporate aircraft. Even if DCA is reopened to some or all GA aircraft, demand for GA facilities is expected to remain very strong.

The increased level of GA activity has strained the capacity of existing GA facilities at Dulles. Demand clearly exceeds capacity. A GA Facility Requirements Study identified deficiencies in terminal areas, hangar requirements, aircraft parking apron requirements for based and itinerant aircraft, and hangar apron.

The existing hangar areas are filled to capacity with parked aircraft as are the aircraft parking ramp areas. Additionally, FBO support facilities such as terminal areas, shop space, office area, and other support areas are at or over capacity. The existing FBO facilities at Dulles are unable to accommodate the existing private aircraft, much less any anticipated growth. Some portions of the airfield that are traditionally used as aircraft movement areas have been re-

designated as non-movement areas and converted to aircraft parking areas to accommodate GA activity.

The proposed development presented by Signature (the Dulles Jet Center) will help provide new facilities to supplement those that are currently over-capacity and in demand. This development will help remedy the deficiencies discussed above. A higher level of service will be available to general aviation customers, the capacity of needed facilities will be increased to meet demand, and operational efficiencies will be gained.

6. Alternatives to the Project: Describe any other reasonable actions that may feasibly substitute for the proposed project, and include a description of the "No Action" alternative. If there are no feasible or reasonable alternatives to the proposed project, explain why:

Proposed Action Alternative. Development of an additional FBO facility is described in Item 4 above.

A Master Plan Update for Washington Dulles International Airport was completed in 1985. The Master Plan Update proposed a revised ALP and presented recommendations for future airport development. The ALP, approved in 1987, and Land Use Plan were adopted by the FAA-Metropolitan Washington Airports and with the transfer of IAD to MWAA were confirmed by the Board of Directors. Areas reserved for General Aviation development are depicted in the Master Plan and Land Use Plan. From time to time the Airports Authority has updated the Land Use Plan (see Attachment A) to address current and future airport development requirements. Any changes to the Land Use Plan require Board of Directors action.

The Land Use Plan identifies two areas for general aviation development, one on the east side of the airport and one on the west side. Each area is approximately 30 acres. One Fixed Based Operator leases the area on the east side (Signature Flight Support) and one Fixed Based Operator leases the area on the west side (Piedmont-Hawthorne). Each FBO is equally close to a runway, landside access, utilities, and other infrastructure. To the extent practicable, parity is maintained between FBO's to facilitate competition. Alternative sites for FBO development were evaluated in the 1985 Master Plan. This evaluation resulted in a recommendation for general aviation development in the areas depicted on the Land Use Plan. The proposed location for this project is consistent with the 1985 Master Plan and Land Use plans.

The Airports Authority has lease agreements with two FBO's for each of the 30 acre sites set aside for general aviation. The lease agreements allow each FBO to fully develop each area. Several years ago Piedmont-Hawthorne completed full development of their 30 acre site. Signature, which currently has developed approximately 10 acres of its existing 30 acre leasehold, is now proposing to develop the remainder of its site.

Signature's existing leasehold is the only property it currently has an interest in at IAD. This 20 acre parcel is the only remaining undeveloped land reserved for GA activity. In addition, there are no other areas on the existing Land Use Plan identified for general aviation expansion. For these reasons there are no areas on the airport that present feasible or reasonable alternatives for Signature's proposed expansion.

This development is consistent with the Land Use Plan and enables the FBO's to maintain parity and be competitive. Therefore, there are no reasonable alternatives for FBO expansion in other areas.

No Action Alternative. *The No Action Alternative would consist of the existing FBO facility without expansion. The No Action Alternative would result in reduced level of service to general aviation users, reduced capacity to support general aviations' ground operations, continued airfield/landside congestion and operational delays.*

In addition, Signature would not be able to develop a facility that is comparable to the competing FBO, which could lead to competitive disadvantage.

The Airports Authority has a contractual obligation through an FBO lease agreement to allow Signature Flight Support to develop the remainder of its premises.

There would be a negative economic impact to the community from the direct and indirect lost revenue that would occur if the facilities are not developed.

7. Describe the affected environment of the project area (terrain features, level of urbanization, sensitive populations, etc). Attach a map or drawing of the area with the location(s) of the proposed action(s) identified. Attachment? Yes X No

The project is located completely within the landside area of the airport. There are no sensitive populations within the project area. The nearest schools, daycare centers or places of public assembly are located outside Washington Dulles International Airport, approximately 1/2- mile or more from the project area. The project site lies within the proposed Dulles Historic District boundaries, which has been determined eligible for the National Register of Historic Places (see Figure 1). However, the proposed project will not have an adverse effect on historic structures. The project site has been utilized as a construction staging area and contractor office area for a number of years as part of the Dulles Capital Development Program.

8. Are there attachments to this Form? Yes X No If "yes," identify them below.

References

Figures:

Figure 1 *Project Location Map*

Figure 2 *FBO Expansion Site Plan*

Figure 3 *MWAA FBO Expansion Site Plan*

Figure 4 *Jurisdictional Wetlands in the Vicinity of FBO Expansion*

Figure 5 *Jurisdictional Wetlands in the Vicinity of the Limits of Disturbance*

Figure 6 *100 and 500-Year Floodplain*

Figure 7 *Proposed Development Concurrent and in the Vicinity of the FBO Expansion Project*

Attachment A *Land Use Plan*

Attachment B *Virginia State Historic Preservation Officer Department of Historic Resources Statement of Concurrence*

9. Environmental Consequences – Special Impact Categories (refer to corresponding sections in 5050.4A , or subsequent revisions, for more information and direction to complete each category, including discussions of Thresholds of Significance).

(1) NOISE

1) Does the proposal require a noise analysis per Order 5050.4A? Explain. (Note: Noise sensitive land uses are defined in Table 1 of FAR Part 150). Yes ____ No X

Per Order 5050.4A, the proposed project will not individually or cumulatively involve airport location, runway location, major runway extension, or runway strengthening and will not introduce noise to a previously unaffected area or significantly increase noise over a noise sensitive area.

2) If “yes,” determine whether the proposed project is likely to have a significant impact on noise levels over noise sensitive areas within the DNL 65 dBA noise contour.

(2) COMPATIBLE LAND USE

(a) Would the proposed project result in other (besides noise) impacts exceeding thresholds of significance that have land use ramifications, such as disruption of communities, relocation of residences or businesses, or impact natural resource areas? Explain.

The area surrounding the airport is zoned for a variety of uses including agriculture/low density residential, light and heavy industrial, industrial and office parks, and retail/commercial uses. Airport sponsors are encouraged to work with local authorities to ensure that proper zoning and other necessary land use controls are put into place near the airport. This includes the adoption of zoning laws, to the reasonable extent possible, to restrict the use of land adjacent to or in the immediate area of the airport to activities compatible with normal airport operations, including the landing and taking off of aircraft.

The project will be constructed entirely on airport property and is not expected to disrupt communities, relocate residences or businesses, or impact natural resource areas in the vicinity of Washington Dulles International Airport.

(b) Would the proposed project be located near or create a wildlife hazard as defined in FAA Advisory Circular 150/5200-33, "Wildlife Hazards on and Near Airports"? Explain.

The proposed project would not be located near or create a wildlife hazard as defined in FAA's Advisory Circular 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports". Examples of incompatible land uses include putrescible-waste disposal operations, wastewater treatment facilities, artificial marshes, wastewater discharge and sludge disposal, wetland mitigation that provides habitat for hazardous wildlife (particularly waterfowl). None of these incompatible land uses will be located or created on the project site.

(3) SOCIAL IMPACTS

(a) Would the proposed project cause relocation of any homes or businesses? Yes ___ No X
Explain.

The proposed project will not cause the dislocation of any homes or businesses located outside the boundaries of Washington Dulles International Airport. Additionally, there are no homes or businesses located on the site of the project.

(b) If "yes," describe the availability of adequate relocation facilities

(c) Would the proposed project cause an alteration in surface traffic patterns, or cause a noticeable increase in surface traffic congestion? Explain.

The proposed project is not expected to cause an alteration in surface traffic patterns or cause a noticeable increase in surface traffic congestion outside of Washington Dulles International Airport boundaries.

(4) INDUCED SOCIOECONOMIC IMPACTS

Would the proposed project cause induced, or secondary, socioeconomic impacts to surrounding communities, such as change business and economic activity in a community; impact public service demands; induce shifts in population movement and growth, etc.? Yes ___ No X Explain

No induced adverse socioeconomic impacts are expected since the project has limited construction and will occur within the Washington Dulles International Airport property boundary. The project will not result in the relocation of residences or disrupt established communities or planned development. The project will not adversely affect business or economic activity in the surrounding community, nor will it induce shifts in population movement or growth.

(5) AIR QUALITY

(a) Does the proposed project have the potential to increase airside or landside capacity, including an increase in capacity to handle surface vehicles? Explain

The proposed project will provide sufficient landside parking for users of the facility. Airside capacity will not be increased but the project will provide storage space for the private aircraft now parked on taxiways and hold aprons, thereby permitting a greater level of service and more efficient operations for the airfield.

(b) Identify whether the project area is in a non-attainment or maintenance area for any of the six (6) criteria air pollutants having National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act Amendments (CAAA), and identify which pollutant(s)

apply. If the proposed project is in an attainment area, no further air quality analysis is needed; skip to item (6). See EPA Green Book at www.epa.gov/oar/oaqps/greenbk for current attainment areas.

Loudoun County, Virginia was re-designated from serious to severe non-attainment for the 1-hour ozone standard, effective March 2003. The county was designated as moderate non-attainment for the new 8-hour ozone standard in June 2004 and may be designated as non-attainment for the new PM 2.5 standard in late 2004. The area is in attainment for all other NAAQS pollutants.

(c) Is an air quality analysis needed with regard to indirect source review requirements or levels of aircraft activity (See Order 5050.4A and the 1997 FAA Handbook "Air Quality Procedures for Civilian Airports and Air Force Bases"). Explain. If "yes," comply with state requirements.

No. Indirect source review requirements are state specific, and Virginia is not one of the states that require such reviews.

(d)(1) Would the proposed action be an "exempted action," as defined in 40 C.F.R. Part 51.853(c)(2) of the General Conformity Rule? If exempt, skip to item (6). List exemption claimed.

The proposed action is not specifically exempted as defined in 40CFR Part 51.853(c)(2).

(d)(2) Would the increase in the emission level of the regulated air pollutants for which the project area is in non-attainment or maintenance exceed the de minimis standards?

Yes _____ No X

(d)(3) If "no," would the proposed project cause a violation of any NAAQS, delay the attainment of any NAAQS, or worsen any existing NAAQS violation? Explain.

The proposed project will generate a minimal amount of additional pollutants. The indoor occupied space will have heating and air conditioning. However, the total additional space represents significantly less than 1% of the heated and air-conditioned space currently existing on the airport. The minimal amount of additional pollutants generated by this project would not cause a violation of any NAAQS, delay the attainment of any NAAQS, or worsen any existing NAAQS violation.

(d)(4) Would the proposed project conform to the State Implementation Plan (SIP) approved by the state air quality resource agency? Explain, and provide supporting documentation.

Conformity is triggered in the northern Virginia area if NOx or VOC emissions from the proposed project exceed 25 tons per year. The airport's current air permit has fuel consumption limits that have an associated 46.25 and 17.98 tons per year of NOx and VOC emissions, respectively. If the additional space heating for the proposed project represents less than 1% of the airport's existing heating capacity, then NOx and VOC emissions from the proposed project would be significantly less than 0.46 and 0.18 tons per year respectively. Therefore, the project would conform to the SIP.

(6) WATER QUALITY

Describe the potential of the proposed project to impact water quality, including ground water, surface water bodies, any public water supply systems, etc. Provide documentation of consultation with agencies having jurisdiction over such water bodies, as applicable.

The resulting project will create additional impervious surface area. Potential impacts to water quality associated with construction will be avoided by employing Best Management Practices (BMPs). Specifically, erosion control measures such as silt fences as required in the Authority Design Manual will be implemented. Erosion and sedimentation controls will be designed in accordance with the latest version of the Virginia Erosion and Sediment Control Handbook. These controls will be in place prior to clearing and grading, and maintained in good working order to minimize impacts to state waters. The controls will remain in place until the area is stabilized. Additionally, a Stormwater Pollution Prevention Plan (SPPP) for the project will be prepared.

Potential impacts to water quality resulting from converting pervious surface to impervious surface will be minimized by complying with applicable regulations. One new stormwater management pond will be constructed to minimize potential impacts to water quality. The stormwater pond will be designed in accordance with the Virginia Stormwater Management Handbook and will be designed to attenuate the 2- and 10-year storm flows to pre-development levels. This stormwater pond will drain to the existing unnamed tributary on the west edge of the site. The unnamed tributary is to be realigned as part of the North Area Roadways project (see Section 4).

The new stormwater management system for the project will drain to the north into Dulles Lake. The spillway from Dulles Lake flows north into Horsepen Run, which then flows into Horsepen Lake. This system then flows entirely to the north through Loudoun County until it reaches the Potomac River, which is located nine miles to the north of the project area. Therefore the Occoquan Watershed located to the south will not be affected.

See Section 4 and Section 10 for more details.

(7) DEPARTMENT OF TRANSPORTATION SECTION 303/4(f)

Does the proposed project require the use of any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance? Provide justification for your response. Include concurrence of appropriate officials having jurisdiction over such land regarding the use determination.

There are no public parks, recreation areas, or wildlife or waterfowl refuges subject to Section 4(f) of the Department of Transportation Act or Section 6(f) of the Land and Water Conservation Act directly or indirectly affected by this project. The project will occur within the airport boundaries and will conform to the provisions of the Airport Master Plan and Airport Layout Plan (revised). In addition, distance will minimize noise or construction-related impacts to off-airport parks and recreation areas.

The Authority has implemented planning and alternatives analysis to comply with the DOT Act of 1966 Section 4(f), now 49 U.S.C. Section 303(c). The project will be consistent with the Airport Master Plan that includes planning guidelines taken from the original Saarinen Master Plan for the airport. The project includes planning to minimize harm resulting from use as well as ensuring the project will be compatible with the normal activity or aesthetic value of the historic district.

Additionally, in order to assess the potential effects of this project on the National Register eligible Washington Dulles International Airport Historic District, the Authority has entered into consultation with the VASHPO and the ACHP. This consultation on potential effects addresses the environmental assessment requirements related to Historic Architectural, Archaeological and Cultural Resources, under the National Environmental Policy Act and Section 4(f) of the Department of Transportation Act.

A complete submittal relating to this project has been presented to VASHPO for review and resulted in a determination of No Adverse Effect (Attachment B).

(8) HISTORIC, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

(a) Describe any impact the proposed project might have on any properties in or eligible for inclusion in the National Register of Historic Places. Provide justification for your response, and include a record of your consultation with the State Historic Preservation Officer (SHPO), if applicable (attach correspondence with SHPO).

The project is within the proposed National Register eligible Washington Dulles International Airport Historic District (see Figure 1 for the proposed District boundary related to this project site). No impact is expected to any structures eligible for the National Register. The project will adhere to the Airport Master Plan and follow the original architectural and cultural designs of the master architect, Eero Saarinen. No facilities on the project site will have an adverse impact on significant views of the Main Terminal and the Dulles Air Traffic Control Tower (ATCT).

In order to assess the potential effects of this project on the National Register eligible Washington Dulles International Airport Historic District, the Authority has entered into consultation with the VASHPO and the ACHP. In addition, this analysis of potential effects also addresses the environmental assessment requirements related to Historic Architectural, Archaeological and Cultural Resources, under the National Environmental Policy Act (including the applicable provisions of the National Historic Preservation Act of 1966 (as amended) and Section 4(f) of the Department of Transportation Act). This consultation resulted in a determination of No Adverse Effect (Attachment B).

(b) Describe whether there is reason to believe that significant scientific, prehistoric, historic, archeological, or paleontological resources would be lost or destroyed as a result of the proposed project. Include a record of consultation with persons or organizations with relevant expertise, including the SHPO, if applicable.

The area where the proposed project is planned has been used for a number of years as a construction field office area for contractors working on the airport's midfield area. The area has contained contractor's field office trailers and parking areas for their employees. Given the location of the project, it is extremely unlikely that any intact prehistoric or historic archaeological resources remain in the construction area.

In order to assess the potential effects of this project on any significant scientific, prehistoric, historic, archeological, or paleontological resources, the Authority has entered into consultation with the VASHPO and the ACHP. This consultation resulted in a Determination of No Adverse Effect (Attachment B).

(9) BIOTIC COMMUNITIES

Describe the potential of the proposed project to directly or indirectly impact plant communities and/or the displacement of wildlife. This answer should also reference Section 6, Water Quality, if jurisdictional water bodies are present.

The proposed project is located adjacent to the existing Signature FBO Site. The project site has been used for a number of years as a contractor's field office area (see Section 9(8) above). As a result, construction activities for the project will not have a significant impact on plant or wildlife communities.

Through the project site it is a wet weather surface water conveyance that collects the runoff from portions of the project site, as well as, the area to the east and south of the project site (see Sections 4 and 9(6) for details on the proposed stormwater systems for this project).

A detailed Benthic and Fish Community Bioassessment was conducted in the fall of 2003 for the entire airport. The final report, entitled "Fall 2003 Report, Benthic and Fish Community Bioassessment for Washington Dulles International Airport" indicated the results of the test station NAR-A (tributary to Dulles Lake) located directly west (downstream) of the project site as follows:

"No aquatic benthic macroinvertebrate rare, threatened, endangered, or species of special concern were found in the 2003 fall survey at Dulles Airport. No fish species are listed as rare, threatened, endangered, or as species of special concern by the Natural Heritage Resources for Loudoun or Fairfax Counties.

(10) FEDERAL and STATE-LISTED ENDANGERED AND THREATENED SPECIES

Would the proposed project impact any federally- or state-listed or proposed endangered or threatened species of flora and fauna, or impact critical habitat? Explain, and discuss and attach records of consultation efforts with jurisdictional agencies, if applicable.

Rare, threatened, and endangered (RTE) species surveys were conducted throughout Washington Dulles International Airport during the years 2001-2003. The RTE surveys were seasonally dependent and included individual surveys during the winter, spring, summer, and fall. These surveys include: Survey for Rare, Threatened, and Endangered Species at the Proposed Tier 2 and Related Projects (EA 2001); Inventory of Available Habitat, Washington Dulles International Airport (EA 2002c); Spring Survey for Rare, Threatened, and Endangered

Species (EA 2002d); Summer Survey for Rare, Threatened, and Endangered Species (EA 2002e); Fall Survey for Rare, Threatened, and Endangered Species (EA 2002f); and Characterization of Available Habitat and Assessment of Rare, Threatened, and Endangered Species Occurrence (EA 2003a). RTE surveys were conducted to determine if federal, state, or county-listed species utilize the habitats available at Washington Dulles International Airport.

The proposed project would not affect any federally- or state-listed or proposed threatened or endangered species or impact any critical habitat that supports these species. The RTE species found during the RTE survey were not located directly in the project area. In addition, the habitat in the vicinity has previously been disturbed, decreasing the potential for RTE usage.

(11) WETLANDS

Does the proposed project involve the modification of delineated wetlands (wetlands must be delineated using methods in the US Army Corps of Engineers (ACE) 1987 Wetland Delineation Manual; delineations must be performed by a person certified in wetlands delineation). Provide justification for your response.

Jurisdictional wetlands will not be impacted as a result of constructing the proposed project (Figures 4 and 5). The portion of the unnamed tributary that is designated as wetlands is downstream of the project site. Additionally, the portion of the unnamed tributary to be realigned as part of the North Area Roadways project is also located downstream of the proposed project. Permitting for that work has been acquired under the North Area Roadways project.

(12) FLOODPLAINS

(a) Would the proposed project be located in, or would it encroach upon, any 100-year floodplains, as designated by the Federal Emergency Management Agency (FEMA)?
Yes _____ No X

The proposed project would not encroach upon the 100-year floodplain (Source: Flood Insurance Rate Map [FIRM] Loudoun County, Virginia).

(b) Would the proposed project be located in a 500-year floodplain, as designated by FEMA?
Yes _____ No X

The proposed project would not encroach upon the 500-year floodplain (Source: Flood Insurance Rate Map [FIRM] Loudoun County, Virginia).

(c) If "yes," is the proposed project considered a "critical action", as defined in the Water Resources Council Floodplain Management Guidelines? (see FR Vol. 43, No. 29, 2/10/78)
Yes _____ No _____

Not Applicable.

(d) You must attach the corresponding FEMA Flood Insurance Rate Map (FIRM) or other documentation showing the project area. Map attached? Yes X No _____ If "no," why not?

See Figure 6.

(e) If the proposed project would cause an encroachment of a base floodplain (the base floodplain is the 100-year floodplain for non-critical actions and the 500-year floodplain for critical actions), what measures would be taken to provide an opportunity for early public review, in accordance with Order 5050.4A Par. 47 (g)(6)?

Not Applicable.

(13) COASTAL ZONE MANAGEMENT PROGRAM

(a) Would the proposed project occur in, or affect, a coastal zone, as defined by a state's Coastal Zone Management Plan (CZMP)? Explain

No, the proposed project will not occur in a coastal zone as defined by the State's Coastal Zone Management Plan. The project will drain away from Fairfax County into Dulles Lake.

(b) If "yes," is the project consistent with the State's CZMP? Explain. If applicable, attach the sponsor's consistency certification and the state's concurrence of that certification. Early coordination is recommended.

Not Applicable.

(14) COASTAL BARRIERS

Is the location of the proposed project within the Coastal Barrier Resources System, as delineated by the US Fish and Wildlife Service (FWS) or FEMA coastal barrier maps? Explain.

Washington Dulles International Airport is not located within a Coastal Barrier Resource System (CBRS) Unit as delineated by the US Fish and Wildlife Service or FEMA.

(15) WILD AND SCENIC RIVERS

Would the proposed project affect any portion of the free-flowing characteristics of a Wild and Scenic River or a Study River, or any adjacent areas that are part of such rivers, listed on the Wild and Scenic Rivers Inventory? Consult the (regional) National Parks Service (NPS), U.S. Forest Service (FS), or other appropriate federal authority for information. Early consultation is recommended.

The proposed project would not affect any portion of a Wild and Scenic River listed on the Wild and Scenic Rivers Inventory. The nearest State designated scenic river, Goose Creek, is located approximately 5 miles northwest of Washington Dulles International Airport.

(16) FARMLAND

(a) Would the proposed project involve the use of federal financial assistance or conversion of federal government land? Explain

No. The proposed project does not involve conversion of federal government land. Washington Dulles International Airport is located in areas that have been previously developed or in areas that are not being converted from farmland to non-agricultural uses. The Farmland Protection Policy Act (FPPA) is not applicable, and no formal consultation is required for land that was purchased prior to August 6, 1984 (FAA 1985). Therefore, the lands at Dulles do not qualify as prime or unique farmland.

(b) If "yes" would it convert farmland protected by the Farmland Protection Policy Act (FPPA) (prime or unique farmland) to non-agricultural uses? Yes _____ No _____

Not Applicable.

(c) If "yes," determine the extent of project-related farmland impacts by completing (and submitting to the Natural Resources Conservation Service) the "Farmland Conversion Impact Rating Form" (NRCS Form AD 1006). Coordinate with the state or local agricultural authorities. Explain your response, and attach the Form AD 1006, if applicable.

Not Applicable.

(17) ENERGY SUPPLY AND NATURAL RESOURCES

What effect would the proposed project have on energy or other natural resource consumption? Would demand exceed supply? Explain. Letters from local public utilities and suppliers regarding their abilities to provide energy and resources needed for large projects may be necessary.

The proposed project should not have any significant impacts on energy consumption. Although the buildings will require electricity, heating and air conditioning the energy requirements will be insignificant since this is a relatively small project. Energy supply will be provided to the site by the Authority.

(18) LIGHT EMISSIONS

Would the proposed project have the potential for airport-related lighting impacts on nearby residents? Explain, and, if necessary, provide a map depicting the location of residences in the airport vicinity in relation to the proposed lighting system.

The only new lights would be area lights for the apron and parking areas, which are ancillary components of the overall project. All new lighting designs will be based on criteria, parameters, recommendations, and guidelines of the Authority and the FAA. These lights would be on airport property that is sufficiently distant from surrounding communities that no light interference would occur.

(19) SOLID WASTE

Would the proposed project generate solid waste? Yes X No _____

If "yes," are local disposal facilities capable of handling the additional volumes of waste resulting from the project? Explain.

The project will generate some fill material during construction that may be transported to a temporary soil stockpile on airport property and utilized elsewhere on airport property in the future. Some construction debris may be generated on a one-time basis and disposed off site at an approved disposal facility. After completion of construction and the facility is in operation, solid waste will be generated. However, the volume produced will be negligible and easily handled through commercial removal and disposal methods without significantly impacting available disposal facilities.

NOTE: A sanitary landfill is incompatible with airport operations if the landfill is located within 10,000 feet of a runway serving turbo-powered aircraft, or 5,000 feet of a runway serving piston-powered aircraft. Refer to FAA Advisory Circular 150/5200.33 "Hazardous Wildlife Attractants on or Near Airports," and FAA Order 5200.5B, "Guidance Concerning Sanitary Landfills on or Near Airports."

(20) CONSTRUCTION IMPACTS

Would construction of the proposed project: 1) increase ambient noise levels due to equipment operation; 2) degrade local air quality due to dust, equipment exhausts and burning debris; 3) deteriorate water quality when erosion and pollutant runoff occur; 4) or disrupt off-site and local traffic patterns? Explain.

Overall, the construction phase of this project is expected to create minor and temporary impacts in the immediate area. These impacts will be short-term in nature, lasting for the duration of construction activities. Temporary contractor staging areas will be required throughout the construction process to store and assemble construction equipment and materials.

1) Noise is expected, but noise impacts are generally localized at the vicinity of the construction site. Earthmoving equipment, pavers, and other construction equipment and vehicles will create localized increases in noise levels. These temporary noise impacts should not disrupt normal airport operations.

2) Air quality degradation is not expected. Emissions from construction equipment will be temporary and limited to the duration of the construction project. The State Implementation Plan includes an allowance for construction emissions region-wide. Fugitive dust emissions from construction will be controlled by timely applications of water and implementation of Best Management Practices (BMPs). There will be no open burning of debris at the project site. The area's current State Implementation Plan (SIP) accounts for emissions generated by construction equipment in Northern Virginia. Also, during construction, fugitive dust will be kept to a minimum by using applicable control methods outlined in 9 Virginia Administrative Code (VAC) 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution.

Construction emissions for the FBO Expansion project were estimated by scaling the site work and paving operations of similar projects. The estimates considered NO_x and VOC that will be generated during the construction of the concrete aircraft parking areas (both inside and outside the four hangars) and Taxiway J Connector, the paved vehicle parking area, and temporary relocation of the paved haul road. Using data developed for other concrete and paving projects at IAD, an estimated 115 and 35 lbs/day of NO_x and VOC emissions, respectively, would be generated during the 210 days of construction. Total NO_x and VOC

emissions associated with the FBO Expansion project are 12.2 and 3.7 tons, respectively, which are well below the 25 ton/day de minimis that would require a General Conformity analysis.

The table below summarizes construction air emissions estimated for the FBO Expansion and other projects at IAD. The lower part of the range for the other projects for both NO_x and VOC emissions occurs during the early part of the FBO Expansion project construction time period of interest, May-November 2005. This would also coincide with the time period that construction emissions are generated by ground preparation and ramp and hangar flooring construction equipment. As the data indicate, the total airport construction emissions do not exceed the SIP allocation.

Pollutant	IAD Construction Emissions (lbs/day)			
	FBO Expansion Project	Other Projects	Totals	SIP Allocation
NO _x	115	820 – 1,000	935 – 1,115	1,144
VOC	35	90 – 120	125 – 155	192

3) If uncontrolled, construction activities have the potential to cause erosion and sedimentation that can impact water quality. The project will result in some new, impervious surface area. Potential impacts to water quality associated with construction will be avoided by employing Best Management Practices (BMPs). Specifically, erosion control measures as required in the Authority Design Manual will be implemented. Contractors will be required to provide an erosion and sediment control plan that complies with the latest version of the Virginia Erosion and Sediment Control Law and General Criteria, including the Virginia Erosion and Sediment Control Handbook. Additionally, a Stormwater Pollution Prevention Plan (SPPP) for the project will be prepared.

4) During the construction period, construction-related vehicles will be traversing the airport access roads and internal roadways to deliver materials and equipment and to transport construction workers to their job sites. This increase in roadway use will be managed to avoid impact to normal airport operations. The use of public use access roads will be minimized and coordinated with the Authority. The use of internal roadways (including the new North-South Construction Service Road) will be maximized to limit the disruption on the public use roadways. This may create a slight increase in traffic congestion, but significant delays are not expected.

(21) OTHER CONSIDERATIONS

(a) Is the proposed project likely to be highly controversial on environmental grounds? Explain.

The proposed project is not expected to be controversial on environmental grounds. The project is expected to have minimal environmental impacts.

(b) Is the proposed project likely to be inconsistent with any federal, state or local law or administrative determination relating to the environment? Explain.

The proposed project is not expected to be inconsistent with any federal, state, or local law or administrative determination relating to the environment.

(c) Is the proposed project reasonably consistent with plans, goals, policies, or controls that have been adopted for the area in which the airport is located? Explain

Yes, the proposed project is consistent with plans, goals, policies, or controls that have been adopted for the area in which the airport is located. The proposed project is consistent with the following plans:

Federal Aviation Administration (FAA) Metropolitan Washington Airports. 1985. Master Plan Update Washington Dulles International Airport. Final Technical Report. Prepared by: Peat, Marwick, Mitchell & Co. September 1985.

Federal Aviation Administration (FAA) Metropolitan Washington Airports. 1964. Dulles International Airport Master Plan Report.

Loudoun County. 2001. Loudoun County Revised General Plan, Planning Commission Draft. November 14.

Metropolitan Washington Airports Authority (MWAA). 1993. Addendum, Part 150 Noise Compatibility Program, Washington Dulles International Airport.

Metropolitan Washington Airports Authority (MWAA). Metropolitan Washington Airports Authority Design Manual, Appendix 2, Volume 1.

Metropolitan Washington Council of Governments (MWCG). 2004. Plan to Improve Air Quality in the Washington DC-MD-VA Region, State Implementation Plan (SIP) "Severe Area SIP".

(22) HAZARDOUS SITES/MATERIALS

Would the proposed project require the use of land that may contain hazardous substances or may be contaminated? Explain your response and describe how such land was evaluated for hazardous substance contamination. Early consultation with appropriate expertise agencies (e.g., US Environmental Protection Agency (EPA), EPA-certified state and local governments) is recommended.

There is no historical evidence of any hazardous substances potentially contaminating the project site. Even though the airport's ground-water monitoring system has not detected migration of petroleum products in the proposed project area, excavation and dewatering operations will be monitored for evidence of petroleum products.

If contaminated soil is encountered and depending on the type and extend of contamination, MWAA will notify Virginia DEQ to determine if additional site characterization is required at that time. Additionally, if contaminated soils are found, the soil will be hauled offsite for

disposal. If necessary, dewater discharge will be processed by means of oil-water separation and two-stage carbon adsorption.

(23) PERMITS

List all required permits for the proposed project. Indicate whether any difficulties are anticipated in obtaining the required permits.

A Virginia Department of Environmental Quality permit will be required for the sanitary sewer system and a Virginia Department of Health permit will be required for the water supply system. No difficulties are anticipated in obtaining these permits.

NOTE: Even though the airport sponsor has/shall obtain one or more permits from the appropriate federal, state, and/or local agencies for the proposed project, initiation of such project shall NOT be approved until FAA has issued its environmental determination.

(24) ENVIRONMENTAL JUSTICE

Would the proposed project impact minority and/or low-income populations? Consider human health, social, economic, and environmental issues in your evaluation. Explain.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires Federal agencies to consider the environmental and human health effects of their policies, procedures, and projects on minority and low-income populations. Environmental justice is the fair treatment and meaningful involvement of people of all races, cultures, or incomes, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Each Federal agency was mandated to make environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. The DOT issued Order 5610.2 on April 15, 1997 as a statement of the agency's compliance with Executive Order 12898. It stated that it is the "policy of DOT to promote the principles of environmental justice (as embodied in the Executive Order) through the incorporation of those principles in all DOT programs, policies, and activities."

A low income or minority community exists when the percentage of people in a minority group, or living in poverty within the area under consideration is significantly greater than the region. The US Census Bureau defines six minority groups on the basis of race: Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, Other Single Race, and Two or More Races. To illustrate the overall racial distribution in the vicinity of Washington Dulles International Airport for this project, the minority groups have been combined into two categories – 1) nonwhite, which includes Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, and persons reporting some other race; and 2) multi-racial, which includes people of two or more races.

Population demographics to the census tract level are available from the U.S. Census Bureau for both Fairfax and Loudoun counties from the 2000 census. The demographic data of census tracts located within the vicinity of Washington Dulles International Airport were used to describe the characteristics of the surrounding population. The area in the vicinity of

Washington Dulles International Airport includes 12 census tracts in Fairfax County and nine census tracts in Loudoun County.

The area in the vicinity of Washington Dulles International Airport has a total population of 183,196 people and is 73.1 percent white; 7.0 percent black; 11.9 percent Asian; 4.7 percent "other," which includes American Indians, Native Alaskans, Native Hawaiians, and Pacific Islanders; and 3.3 percent multi-racial, which includes persons reporting two or more races (U.S. Census Bureau 2002) (Table 1).

TABLE 1 - POPULATION DEMOGRAPHIC DATA FOR LOUDOUN AND FAIRFAX COUNTIES AND THE COMMONWEALTH OF VIRGINIA

AREA	TOTAL POPULATION	% WHITE	% NON-WHITE	% MULTI-RACIAL
Fairfax County*	969,749	69.9	26.5	3.7
Tract 480500	18,097	80.5	16.2	3.3
Tract 480800	8,123	63.5	32.6	3.9
Tract 480900	13,539	52.8	40.5	6.7
Tract 481000	3,952	51.2	43.7	5.1
Tract 481100	16,498	70.4	27.4	2.2
Tract 481200	7,716	50.3	44.4	5.3
Tract 482500	15,190	78.1	18.5	3.4
Tract 482600	11,239	76.8	20.5	2.6
Tract 490100	10,360	83.0	15.0	2.0
Tract 491500	7,397	77.1	20.5	2.4
Tract 491600	8,484	63.8	31.2	5.0
Tract 491800	10,802	75.2	22.1	2.7
Loudoun County*	169,599	82.8	14.8	2.4
Tract 611003	7,797	82.9	14.0	3.0
Tract 611006	3,636	80.1	19.1	0.8
Tract 611007	9,562	85.0	12.5	2.5
Tract 611008	1,486	91.5	8.5	0.0
Tract 611400	5,033	72.3	23.7	4.0
Tract 611500	5,264	73.7	23.5	2.8
Tract 611600	6,704	71.0	26.2	2.7
Tract 611700	4,918	72.7	21.8	5.5
Tract 611800	7,399	87.0	12.2	0.8
Virginia*	7,078,515	72.3	25.7	2.0

Source: Census 2000 Summary File 3 Data (Virginia)

*Numbers represent the entire population of each county or the Commonwealth of Virginia

The population demographics of the area in the vicinity of Washington Dulles International Airport is comparable to the demographics of both Fairfax County (69.9 percent white, 8.6 percent black, 13.0 percent Asian, 4.9 percent "other," and 3.7 percent multi-racial) and Loudoun County (82.8 percent white, 6.9 percent black, 5.3 percent Asian, 2.6 percent "other," and 2.4 percent multi-racial).

Low income populations were defined as the number of people living in poverty, according to the 2000 census data. The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor (Dalaker and Proctor 2000). The poverty thresholds do not vary geographically, but they are updated annually for inflation using the Consumer Price Index. Table 2 shows the percentage of the population living in poverty in Fairfax and Loudoun counties (U.S. Census Bureau 2002).

TABLE 2 - PERCENTAGE OF THE POPULATION LIVING IN POVERTY IN FAIRFAX AND LOUDOUN COUNTIES

AREA	TOTAL POPULATION	MEDIAN HOUSEHOLD INCOME	% IN POVERTY
Fairfax County			
Tract 480500	18,097	\$98,141	2.2
Tract 480800	8,123	\$81,126	3.8
Tract 480900	13,539	\$66,435	10.6
Tract 481000	3,952	\$69,464	2.4
Tract 481100	16,498	\$95,838	3.2
Tract 481200	7,716	\$66,577	8.4
Tract 482500	15,190	\$105,025	1.6
Tract 482600	11,239	\$110,307	0.7
Tract 490100	10,360	\$84,092	1.9
Tract 491500	7,397	\$117,168	1.5
Tract 491600	8,484	\$79,938	3.5
Tract 491800	10,802	\$76,126	3.8
Loudoun County			
Tract 611003	7,797	\$85,813	1.5
Tract 611006	3,636	\$105,447	3.1
Tract 611007	9,562	\$105,247	2.0
Tract 611008	1,486	\$92,668	2.7
Tract 611400	5,033	\$72,143	3.9
Tract 611500	5,264	\$67,847	3.9
Tract 611600	6,704	\$64,644	2.7
Tract 611700	4,918	\$68,789	1.7
Tract 611800	7,399	\$83,390	1.4

Source: Census 2000 Summary File 3 Data (Virginia)

The U.S. Census Bureau's Small Area Income and Poverty Estimates Program has released model-based income and poverty estimates for both Fairfax and Loudoun counties, based on data from 1999. According to this estimate, 2.8 percent of the people in Loudoun County and 4.5 percent of the people in Fairfax County are living in poverty. Both counties have poverty rates lower than the 9.6 percent of the people in the state of Virginia living in poverty (U.S. Census Bureau 2002).

Median household income data were also included in the U.S. Census Bureau's Small Area Income and Poverty Estimates Program report. The median household income for Fairfax County was approximately \$81,050 and for Loudoun County was approximately \$80,648 (U.S. Census Bureau 2002). Both counties have median household incomes well above the median household income of approximately \$47,000 for the state of Virginia (U.S. Census Bureau 2002).

Since the proposed project will occur within the Washington Dulles International Airport property boundary, it is not expected to result in any adverse human health or environmental effects to minority or low-income populations. The area in the vicinity of Washington Dulles International Airport is 73.1 percent white; 23.6 percent non-white, which includes American Indians, Native Alaskans, Native Hawaiians, Pacific Islanders and persons reporting some other race; and 3.3 percent multi-racial, which includes persons reporting two or more races. This is comparable to average county and state minority populations (Fairfax County – 26.5 percent non-white and 3.7 percent multi-racial; Loudoun County – 14.8 percent non-white and 2.4 percent multi-racial; Commonwealth of Virginia – 25.7 percent non-white and 2.0 percent multi-racial). Only one census tract in the vicinity of Washington Dulles International Airport has a percentage of people living in poverty (10.6 percent) that is slightly greater than the percentage of people living in poverty for the Commonwealth of Virginia (9.6 percent). The percentage of people living in poverty in both counties is lower than the average poverty population in the Commonwealth of Virginia (Fairfax County – 4.5 percent; Loudoun County – 2.8 percent; Commonwealth of Virginia – 9.6 percent). In addition, the median income for households in the vicinity of Washington Dulles International Airport is higher than the average for the Commonwealth of Virginia.

Overall, the proposed project is not expected to cause adverse social or socioeconomic impact on the communities surrounding the airport. Since the proposed projects involve construction located entirely within the airport proper, the projects will not result in the relocation of residences and businesses or disrupt established communities or planned development.

(25) CUMULATIVE IMPACTS

When considered together with other past, present, and reasonably foreseeable future development projects on or off the airport, federal or non-federal, would the proposed project produce a cumulative effect on any of the environmental impact categories above? You should consider projects that are connected, cumulative and similar (common timing and geography). Provide a list of such projects considered. For purposes of this Evaluation Form, generally use 3 years for past projects and 5 years for future foreseeable projects.

Overall, the Proposed Action comprises a small portion of the current and planned development activity in the Dulles region. Although the region could experience cumulative effects to air quality, water quality (stormwater runoff and increased impervious surface area), and habitat loss due to multiple ongoing roadway and development projects, the Proposed Action accounts for a small fraction of these effects.

It is not expected that the Proposed Action discussed in this EA will produce significant environmental impacts. Nor is it expected that the effects of the Proposed Action, when added

to the effects of other proposed projects in the region, will cause otherwise insignificant impacts to exceed thresholds of significance.

Recently Completed Projects

In Loudoun County, there are three recently completed projects near Washington Dulles International Airport: two Route 28 improvement projects and a construction project on Route 50. In Fairfax County, there are two recently completed projects near Washington Dulles International Airport: the Fairfax County Parkway Improvements (Walnut Branch to Spring Street and Sunset Hills Road) and the Route 28/29 Interchange. Within Washington Dulles International Airport, recently completed projects include: Contractor Staging Area; North-South Construction Service Road; Aviation Drive bridge and road widening; upgrade natural gas distribution; Taxiway F; Taxiway/Taxilane D reconstruction; Taxiway J extension; North flank and West Flank parking structures. The National Air and Space Museum at Washington Dulles International Airport has been evaluated in a NEPA Environmental Assessment. The Smithsonian Institution found that there were no significant impacts associated with the development of the Air and Space Museum.

Planned Development at Washington Dulles International Airport

Improvement projects that are currently underway or planned for implementation concurrent with the FBO Expansion project include: Tier 2 Concourse, Airport Traffic Control Tower, Automated People Mover (APM) System, South Utilities, Support Facilities, Concourse B 12-Gate Extension, roadway and parking improvements, a new air cargo building, Rudder Road Extension, and an upgrade of the existing heating and cooling utility plant. Future planned development at Washington Dulles International Airport includes implementation of the Tier 3 and Tier 4 midfield concourses and fourth and fifth runways.

The proposed North Area Roadways (NAR) project will be located in the northeastern area of Washington Dulles International Airport directly north of the FBO Expansion (Figure 7). The proposed roadways have been designed to maximize use of existing roads, to improve traffic flow in the north area of Washington Dulles International Airport, to avoid impacts to natural resources, and to avoid impacts to airport operations. A summary of the environmental impacts of the NAR project follows.

- *Noise* – The proposed NAR project will not introduce noise to a previously unaffected area or significantly increase noise over a noise sensitive area. It does not involve airport location, runway location, major runway extension, or runway strengthening.
- *Compatible Land Use* – The proposed NAR project will be constructed entirely on airport property and is not expected to disrupt communities, relocate residences or businesses, or impact natural resource areas in the vicinity of IAD. No incompatible land uses will be located or created on the project site.
- *Social Impacts* - The proposed NAR project will not cause the dislocation of any homes or businesses located outside the boundaries of IAD. The proposed project is not expected to cause an alteration in surface traffic patterns or cause a noticeable increase in surface traffic congestion outside of IAD boundaries.
- *Induced Socioeconomic Impacts* - No induced adverse socioeconomic impacts are expected since the proposed NAR project has limited construction and will occur within the IAD property boundary. The project will not result in the relocation of residences or disrupt established communities or planned development and will not adversely

affect business or economic activity in the surrounding community, nor will it induce shifts in population movement or growth.

- *Air Quality - The proposed NAR project should result in less surface traffic congestion with attendant decreases in air emissions due to congestion-related idling. The General Conformity Rule de minimis levels for VOC and NO_x emissions are 25 tons/year for the National Capital Interstate Air Quality Control Region. Emissions from vehicles operating on airport area roadways would not increase due to the NAR project; therefore, the de minimis values for both pollutants would not be exceeded.*
- *Water Quality - Potential impacts to water quality associated with construction of the proposed NAR project will be minimized by employing Best Management Practices (BMPs). Erosion and sedimentation controls will be designed in accordance with the latest version of the Virginia Erosion and Sediment Control Handbook. Additionally, a Stormwater Pollution Prevention Plan (SPPP) for the NAR project will be prepared. Five new stormwater management ponds will be constructed to minimize potential impacts to water quality (Figure 7). Three of these will drain directly to Horsepen Run, one will flow to Dulles Lake, and one will flow to the unnamed tributary of Horsepen Run that carries the discharge from Dulles Lake. The stormwater ponds will be designed in accordance with the Virginia Stormwater Management Handbook and will be designed to attenuate the 2- and 10-year storm flows to pre-development levels and will be compliant with VA regulations and with the FAA advisory circular regarding wildlife hazards. Collectively, the new stormwater management system will drain to the north via Horsepen Run and Horsepen Lake, flowing through Loudoun County until it reaches the Potomac River, which is located nine miles to the north of the project area. Therefore, the Occoquan Watershed located to the south will not be affected.*
- *Department of Transportation Section 303/4(f) - There are no public parks, recreation areas, or wildlife or waterfowl refuges subject to Section 4(f) directly or indirectly affected by the proposed NAR project. The project will occur within the airport boundaries and distance will minimize noise or construction-related impacts to off-airport parks and recreation areas. The project is located within the proposed National Register eligible Dulles Historic District. The Authority has implemented planning and alternatives analysis to comply with the DOT Act of 1966 Section 4(f), now 49 U.S.C. Section 303(c). Additionally, to assess the potential effects of this project on the Dulles Historic District, the Authority entered into consultation with the Virginia Department of Historic Resources (VDHR), the Virginia State Historic Preservation Officer (VASHPO), and the Advisory Council for Historic Preservation (ACHP). This consultation on potential effects also addressed the environmental assessment requirements related to Historic Architectural, Archaeological and Cultural Resources, under the National Environmental Policy Act (including the applicable provisions of the National Historic Preservation Act of 1966 (as amended) and Section 4(f) of the Department of Transportation Act). Although some impacts may result from the NAR project, the Authority has concluded that historic preservation planning and agency consultation has assured that these impacts will not result in additional Adverse Effects. A Conditional Determination of No Adverse Effect was issued by the VASHPO on April 14, 2004.*
- *Historic, Architectural, Archeological, and Cultural Resources - The proposed NAR project is within the proposed National Register eligible Dulles Historic District. No impact is expected to any structures eligible for the National Register. The area where*

the proposed NAR project is planned has undergone previous construction disturbance. Roadway systems already exist in the proposed project area and the project area was previously disturbed during construction of the existing road system. Given the location of the project, it is extremely unlikely that any intact prehistoric or historic archaeological resources remain in the construction area. The Authority is committed to ensuring that the project will be compatible with the historic and archeological qualities of the original eligible Dulles Historic District. To assess the potential effects of this project on any significant scientific, prehistoric, historic, archeological, or paleontological resources, and the National Register eligible Dulles Historic District, the Authority has entered into consultation with the VASHPO and the ACHP. Although some impacts may result from the NAR project, the Authority has concluded that historic preservation planning and agency consultation has assured that these impacts will not result in additional Adverse Effects. A Conditional Determination of No Adverse Effect was issued by the VASHPO on April 14, 2004.

- *Biotic Communities – The proposed NAR project is located adjacent to an existing network of roads connecting Washington Dulles International Airport to the Dulles Access Road. Much of the area to be affected is currently impervious or mowed turf due to the existing road network. Habitat types that will be affected include old field and mixed (deciduous and coniferous) forest habitat, wetlands and streams. Wetland and stream impacts are discussed in later sections. To the west of the North Area Roadways is Dulles Lake, which is in open water habitat. The new segments of the NAR project will directly impact plant communities. Within the proposed limit of disturbance, approximately 1.3 acres of mowed turf, 1.7 acres of old field, and 2.9 acres of mixed forest may be affected. Permanent impacts to plant communities will be concentrated within the mowed turf habitat type. Construction of the NAR project will not cause fragmentation of intact wildlife corridors. Construction activities for the project will not have a significant impact on plant or wildlife communities.*
- *Federal and State-Listed Endangered and Threatened Species – Rare, threatened, and endangered (RTE) species surveys were conducted throughout Washington Dulles International Airport during the years 2001-2003. The RTE surveys were conducted to determine if federal, state, or county-listed species utilize the habitats available at Washington Dulles International Airport. A total of 172 survey stations were created for the seasonal RTE surveys, four of which occur in the general vicinity of the NAR project (Figure 7). A detailed benthic and fish community bioassessment was also conducted in the fall of 2003 for the entire airport. No aquatic (benthic macroinvertebrate or fish) rare, threatened, endangered, or species of special concern were found at station NAR-A (tributary to Dulles Lake), which is located within the NAR project site (Figure 7). The golden-crowned kinglet, an avian Species of Concern in the Commonwealth of Virginia, and the American coot, a species found on the Virginia Natural Heritage Program rare animal list, were the only RTE species observed in the vicinity of the NAR project, during the seasonal RTE surveys. Both species were found outside of their breeding season as migrants and/or winter residents. Three separate upland sandpipers (listed as threatened by the State of Virginia) were observed to the west of the project location, north of Dulles Lake in April 2001 as part of the United States Department of Agriculture, Animal and Plant Health Inspections Service (APHIS) Wildlife Services Wildlife Hazard Management monitoring program. The upland sandpipers were observed on April 30, 2001 in*

mowed-maintained habitat surrounding Dulles Lake. Upland sandpipers appear to regularly use open grassland habitat at Dulles during both spring and fall migration based on multiple sightings during the USDA APHIS surveys. Nesting of upland sandpipers has occurred at IAD; however, the species requires large tracts of mixed height vegetation for nesting, feeding and rearing young. The area surrounding Dulles Lake does not provide adequate habitat for breeding upland sandpipers; the observation in April 2001, was most likely a small group of migrants resting and feeding on their northward migration. No other RTE species were observed in the vicinity of or adjacent to the NAR project during the surveys conducted at Washington Dulles International Airport.

- **Wetlands** – Jurisdictional wetlands will be permanently impacted as a result of constructing the proposed NAR project. A Joint Permit Application (JPA) has been submitted to USACE, Virginia Department of Environmental Quality (VDEQ), and Virginia Marine Resource Commission (VMRC). The USACE and VDEQ have issued permits for the project; however, the VMRC permit is pending. MWAA ultimately expects to receive the VMRC permit. Wetland and stream impacts from the NAR project are located in three general areas (Horsepen Run, a drainage channel leading to Dulles Lake, and the wetlands associated with the outlet of Dulles Lake) (Figure 7). The NAR project will permanently impact 0.823 acres of wetlands and construction of the project will temporarily impact approximately 0.546 acres of wetlands. Approximately 1,156 linear feet of stream channel will be permanently impacted. Stream impacts caused by construction of the proposed NAR project pertain to the required relocation of a portion of a drainage channel leading to Dulles Lake, the installation of culverts beneath the roadways, and the placement of outlet protection. A total of 811 linear feet of stream and 0.575 acres of wetlands will be permanently impacted at the unnamed tributary/drainage channel leading to Dulles Lake. Wetlands to be permanently impacted will be mitigated by using credits provided by the Cedar Run Wetlands Bank. The stream mitigation for this project includes a combination of off-site restoration or enhancement of streams at the Carter Farm Stream Restoration site and on-site self-mitigation using a portion of the drainage channel leading to Dulles Lake to be relocated as part of the project.
- **Floodplains** - The proposed NAR project would encroach upon the 100 and 500-year floodplain. However, the proposed project is not considered a "critical action" as defined in the Water Resources Council Floodplain Management Guidelines. The areas that will encroach upon the floodplain are the eastern portion of the NAR project at Horsepen Run and the western portion of the project at the Outlet to Dulles Lake (Figure 7). However, no significant encroachment within the floodplain is expected. The proposed roadways follow areas where roads already exist within the floodplain, therefore minimizing encroachment into the floodplain as much as possible.
- **Coastal Zone Management Program** - A portion of the proposed NAR project (the portion located in Fairfax County) will occur in a coastal zone as defined by the State's Coastal Zone Management Plan. The project is in demonstrated compliance with four programs—Wetlands Management, Non-Point Source Pollution Control, Point Source Pollution Control, and Air Pollution Control—through existing permits or new permits in these programs. Chesapeake Bay Preservation Areas (CBPA) are divided into Resource Protection Areas (RPAs) and Resource Management Areas (RMAs). The NAR Project does not affect the existing RPAs as defined on the Fairfax County map of

CBPA. Drainage from the NAR Project will flow to the north to Horsepen Lake. This system then flows entirely to the north through Loudoun County until it reaches the Potomac River. Therefore, the coastal zone located to the south in Fairfax County will not be affected. The proposed NAR project complies with the enforceable programs of Virginia Coastal Resources Management Program (VCP) and will be conducted in a manner consistent with the VCP. The Proposed NAR project is consistent with The Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and Management regulations, implemented by the "Chesapeake Bay Preservation Ordinance" in the Code of the County of Fairfax. A Federal Consistency Certification has been prepared for the project and can be found in the NAR Environmental Assessment.

- *Coastal Barriers* - Washington Dulles International Airport is not located within a Coastal Barrier Resource System (CBRS) Unit as delineated by the U.S. Fish and Wildlife Service or FEMA.
- *Wild and Scenic Rivers* - The proposed NAR project would not affect any portion of a Wild and Scenic River listed on the Wild and Scenic Rivers Inventory. The nearest State designated scenic river, Goose Creek, is located approximately 5 miles northwest of Washington Dulles International Airport.
- *Farmland* - The proposed NAR project does not involve conversion of federally protected farmland. Washington Dulles International Airport is located in areas that have been previously developed or in areas that are not being converted from farmland to non-agricultural uses. The Farmland Protection Policy Act (FPPA) is not applicable, and no formal consultation is required for land that was purchased prior to August 6, 1984. Therefore, the lands at Dulles do not qualify as prime or unique farmland.
- *Energy Supply and Natural Resources* - The proposed NAR project should not have any impacts on energy consumption since it is intended to reduce vehicle congestion in the area and therefore may have an attendant decrease in energy consumption due to congestion-related idling.
- *Light Emissions* - The only new lights would be roadway lights, which are ancillary components of the overall proposed NAR project. These lights would be on airport property that is sufficiently distant from surrounding communities that no light interference would occur.
- *Solid Waste* - The proposed NAR project will not generate a traditional municipal solid waste stream. It will generate some fill material that may be transported to a temporary soil stockpile on airport property and utilized elsewhere on airport property in the future. Some road construction debris may be generated on a one-time basis and disposed off site at an approved disposal facility or recycled.
- *Construction Impacts* - Overall, the construction phase of the proposed NAR project is expected to create minor and temporary impacts in the immediate area. These impacts will be short-term in nature, lasting for the duration of construction activities. Noise is expected, but noise impacts are generally localized at the vicinity of the construction site. Air quality degradation is not expected. Emissions from construction equipment will be temporary and limited to the duration of the construction project. Potential impacts to water quality associated with construction will be minimized by employing Best Management Practices (BMPs); erosion control measures as required in the Authority Design Manual will be implemented, and a Stormwater Pollution Prevention

Plan (SPPP) for the project will be prepared. During the construction period, construction-related vehicles will be traversing the airport access roads and internal roadways to deliver materials and equipment and to transport construction workers to their job sites. This increase in roadway use will be managed to avoid impact to normal airport operations. The access roads and internal roadways may experience a slight increase in traffic congestion, but significant delays are not expected.

- *Other Considerations - The proposed NAR project is not expected to be controversial on environmental grounds since the project is expected to have minimal environmental impacts. The expected environmental impacts include wetlands, which have been addressed in the Joint Permit Application (JPA). The JPA has been submitted to the Norfolk District of USACE and VDEQ, and these agencies have issued permits for this project. The proposed project is not expected to be inconsistent with any federal, state, or local law or administrative determination relating to the environment and will be consistent with plans, goals, policies, or controls that have been adopted for the area in which the airport is located.*
- *Hazardous Sites/Materials - There is no historical evidence of any hazardous substances potentially contaminating the proposed NAR project site. Even though the airport's ground-water monitoring system has not detected migration of petroleum products in the proposed project area, excavation and dewatering operations will be monitored for evidence of petroleum products. If contaminated soil is encountered, MWAA will notify Virginia DEQ to determine if additional site characterization is required. If contaminated soils are found, the soil will be hauled offsite for disposal. If necessary, dewatering discharge will be processed by means of oil-water separation and two-stage carbon adsorption.*
- *Permits - An Individual Permit for Activities in Waters and Wetlands of the Commonwealth of Virginia has been obtained. A Joint Permit Application was submitted to the Norfolk District of USACE and VDEQ, and these agencies have issued permits for the proposed NAR project. Also, an application for Subaqueous Lands permit for the construction of bridges across Horsepen Run is under review by VMRC. No difficulties are anticipated in obtaining the VMRC permit.*
- *Environmental Justice - The proposed NAR project is not expected to cause adverse social or socioeconomic impact on the communities surrounding the airport. Since the proposed project will occur within the Washington Dulles International Airport property boundary, it is not expected to result in any adverse human health or environmental effects to minority or low-income populations. The proposed project involves construction located entirely within the airport proper; therefore, the project will not result in the relocation of residences and businesses or disrupt established communities or planned development.*

Dulles Lake currently receives stormwater from the FBO Expansion project site and from a portion of the NAR project site. After construction, these flows will be directed to stormwater management ponds before they enter Dulles Lake. The stormwater management pond for the FBO Expansion project will drain into the existing unnamed Dulles Lake tributary/drainage channel upstream of the reach that will be relocated under the NAR project (Figure 7). The discharge from the above referenced NAR stormwater management pond will enter this tributary downstream of the proposed relocation reach. All stormwater from the two proposed projects will flow to the north through Loudoun County until it reaches the Potomac River. No impacts to

water quality are expected since both projects will have to conform to VDOT erosion and sediment control practices.

Jurisdictional wetlands will be impacted as a result of constructing the North Area Roadways project; however, the FBO Expansion project will not impact jurisdictional wetlands. The NAR project will permanently impact less than one acre (0.823 acres) of wetlands and 1,156 linear feet of stream channel. The stormwater pond planned for the FBO Expansion project will drain into the existing unnamed tributary/ drainage channel on the west edge of the site, which is to be realigned as part of the NAR project. A total of 811 linear feet of stream and 0.575 acres of wetlands will be permanently impacted at the unnamed tributary/drainage channel leading to Dulles Lake for construction of the NAR project. MWAA is coordinating the construction of the realignment of the drainage channel and stormwater management systems for both projects to ensure that no conflicts are encountered that could potentially impact water quality.

It is not expected that the effects of the proposed action (FBO Expansion), when added to the effects of the NAR project, will cause significant impacts on the environmental impact categories summarized above; therefore, no adverse cumulative impacts associated with these projects are expected.

Planned Development in the Washington Dulles International Airport Region

The Washington Dulles International Airport region is rapidly growing with business parks and industrial centers. Most of this development is subject to the approval of either Fairfax County or Loudoun County and must comply with local environmental requirements. A Final Environmental Impact Statement (EIS) has been prepared for the Dulles Corridor Rapid Transit Project by the Virginia Department of Rail and Public Transportation in cooperation with the Federal Transit Administration (FTA) and Washington Metropolitan Area Transit Authority (WMATA). The Final EIS found that social and environmental effects from the project are anticipated to be minimal, because most of the proposed improvements would occur within the medians of the Dulles Connector Road, DAAR, and the Dulles Greenway. Consequently, no cumulative impacts associated with the North Area Roadways is anticipated.

Regional Ground Transportation Projects

Multiple roadway and transportation improvement projects are currently underway or in the planning process in the vicinity surrounding Washington Dulles International Airport. Virginia DOT projects include the following:

- I-66 Corridor Study
- Dulles Toll Road "Smart Travel" Improvements
- Route 28 Improvements (Between I-66 and Route 7)
- Park-and-Ride Lot Feasibility Studies (I-95, I-395, I-66, and Dulles Toll Road)

Fairfax County-specific projects include:

- Improvements to Dulles Toll Road Interchange at Hunter Mill Road
- Pedestrian and bicycle trail construction at Sully Road (Route 28), Route 50, and Adkins Road

All transportation projects that involve federal funding are subject to evaluation under NEPA. The projects identified above are in various phases of the process, but each has or will address potential for cumulative impacts with Washington Dulles International Airport.

10. MITIGATION

(a) Describe those mitigation measures to be taken to avoid creation of significant impacts to a particular resource as a result of the proposed project, and include a discussion of any impacts that cannot be mitigated, or that cannot be mitigated below the threshold of significance (TOS) (See 5050.4A).

The proposed project will add additional impervious surface to the Airport's drainage area. Potential impacts to water quality resulting from converting pervious surface to impervious surface will be minimized by complying with applicable regulations. One new stormwater management pond will be constructed to minimize potential impacts to water quality. This stormwater pond will drain to the drainage channel leading to Dulles Lake. See Sections 4 and 9(6) for more detailed information.

No additional environmental impacts are expected from this project, therefore no other mitigation measures are needed.

(b) Provide a description of the resources that are in or adjacent to the project area that must be avoided during construction. **Note:** The mitigation measures should be incorporated into the project's design documents.

***Wetlands** – There are no wetlands affected by this project. The portion of an unnamed tributary downstream of this project is classified as a wetlands which will be relocated as part of the North Area Roadways project. The permit for the relocation has been acquired under that project. The construction of this project will be upstream from the designated wetlands.*

There are no other resources that would need to be avoided in or adjacent to the project area during construction.

11. PUBLIC INVOLVEMENT

Describe what efforts would be made to involve the public with this proposed project. Discuss the appropriateness of holding public meetings and/or public hearings, making the draft document available for public comment, or the preparation of a public involvement plan, etc.

The public will be notified of the proposed project through the review of this EA and the FONSI. A public hearing is not necessary since the project does not involve a new location, a new runway, or a major runway extension. Additionally, a public meeting was also found unnecessary since the project has minimal environmental impacts.

12. PREPARER CERTIFICATION

I certify that the information I have provided above is, to the best of my knowledge, correct.

Signature Tracy Collier

2/3/05
Date

Tony Collier, P.E., Operations Manager-Aviation Services
Name, Title

Michael Baker Jr., Inc.
Affiliation

13. AIRPORT SPONSOR CERTIFICATION

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s), and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) has occurred.

Signature

2/8/05
Date

<p><u>Frank D. Holly, Jr., Vice President for Engineering</u></p> <p>Name, Title</p>
--

Metropolitan Washington Airports Authority
Affiliation

Note: This page to be completed by FAA only

14. FAA DECISION:

Having reviewed the above information, certified by the responsible airport official, it is the FAA decision that the proposed project(s) of development warrants environmental processing as indicated below.



The proposed development action has been found to qualify for a Short Environmental Assessment.



The proposed development action exhibits conditions that require the preparation of a detailed Environmental Assessment (EA).



The following additional documentation is necessary for FAA to perform a complete environmental evaluation of the proposed project: _____

***Action Reviewed/Recommended by:**


(FAA Environmental Specialist)

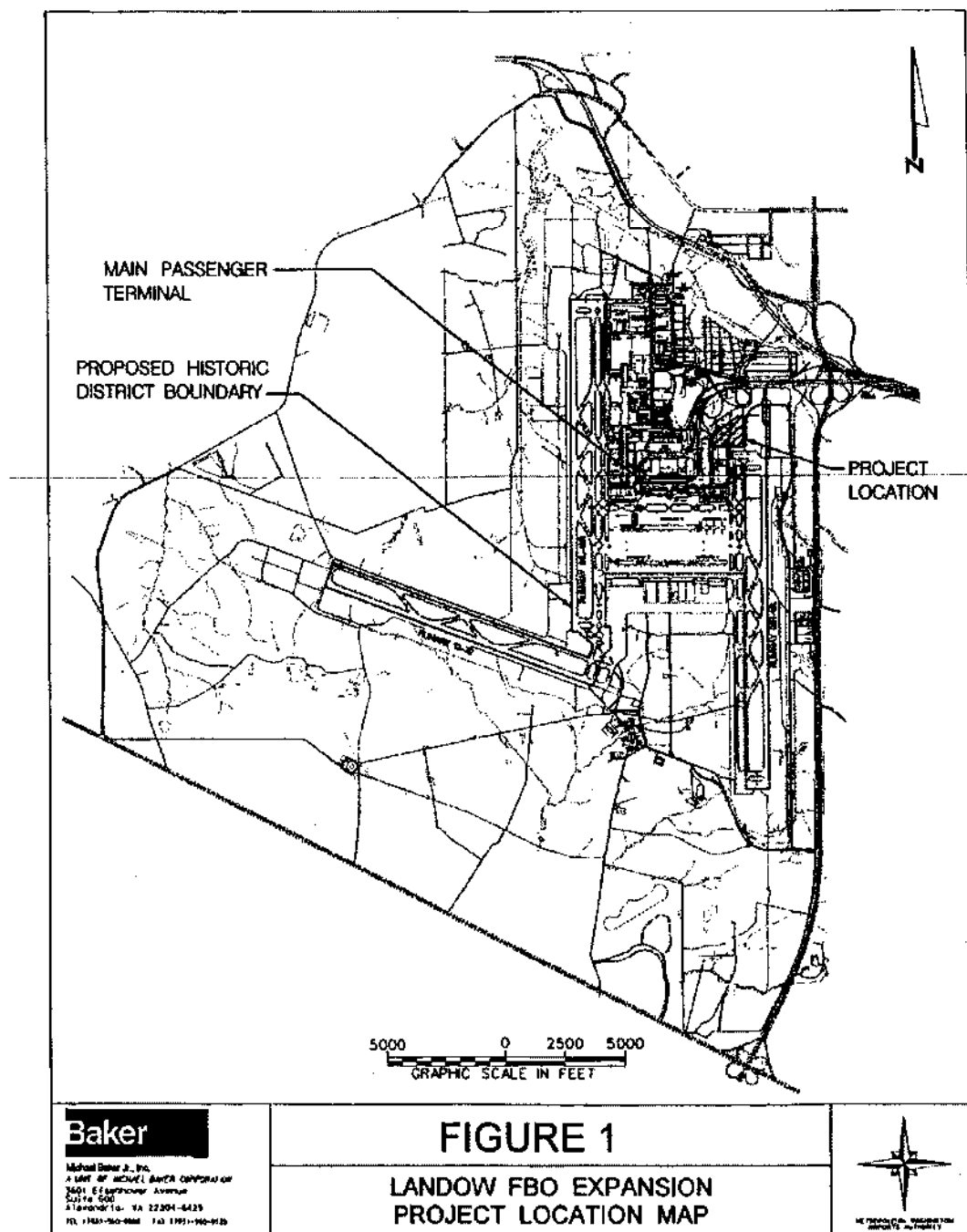
2/16/05
Date

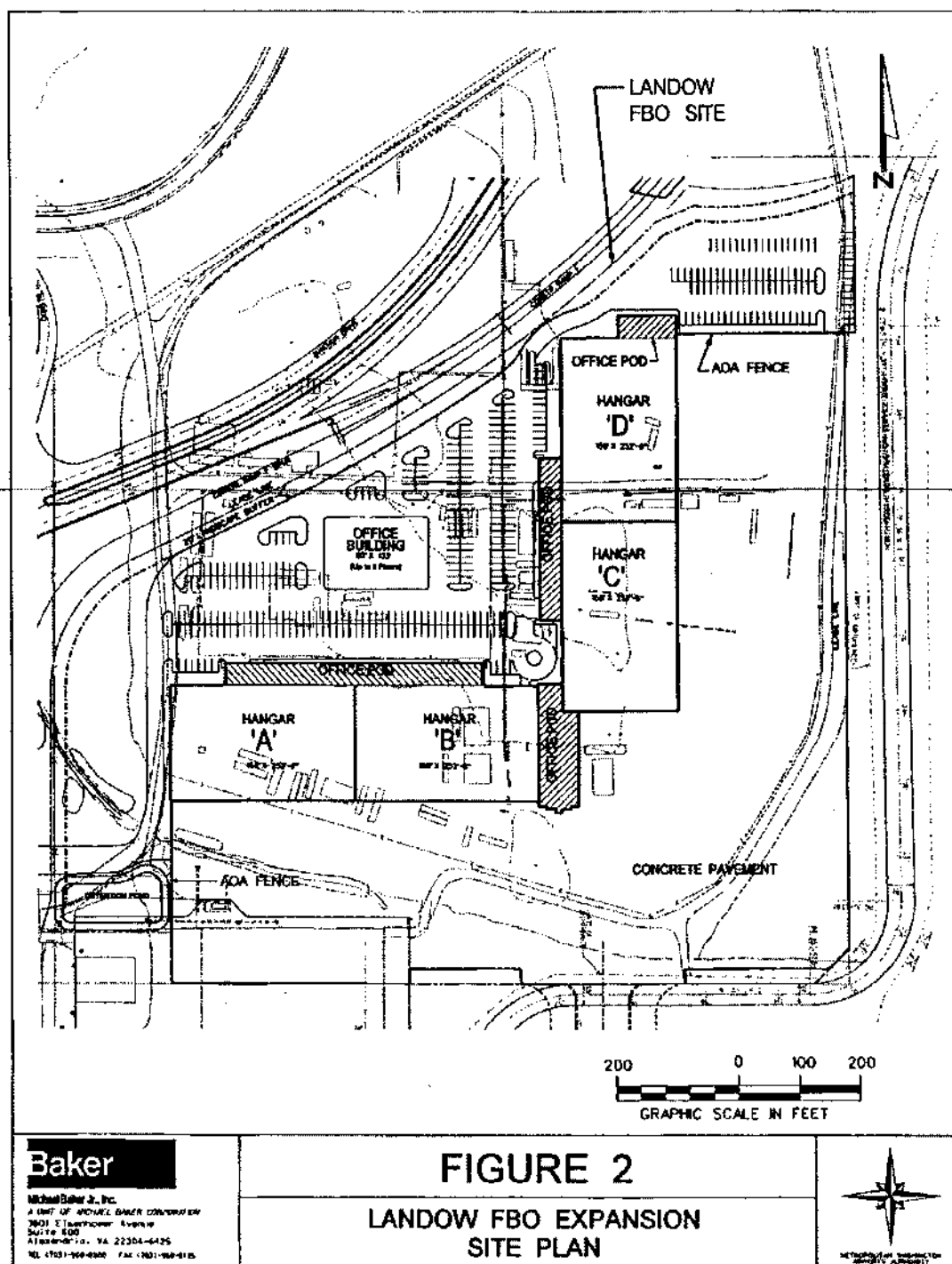
***Approved:**


(FAA Approving Official)

2/16/05
Date

* The above FAA approval only signifies that the proposed development action(s), as described by the information provided in this Evaluation Form, initially appears to qualify for the indicated environmental processing action. This may be subject to change after more detailed information is made known to the FAA by further analysis, or through additional federal, state, local or public input, etc.





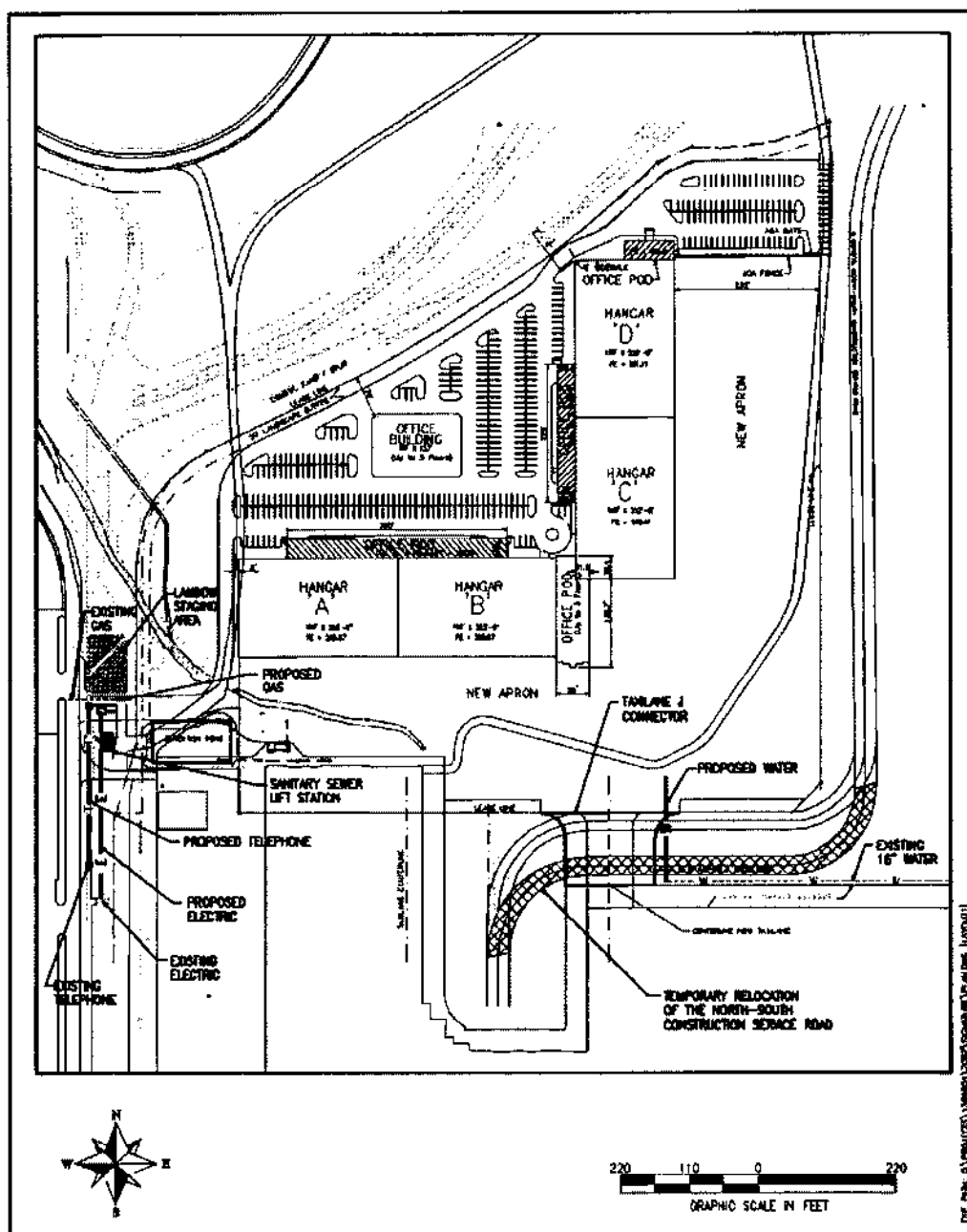


Figure 3. MNA FBO EXPANSION SITE PLAN



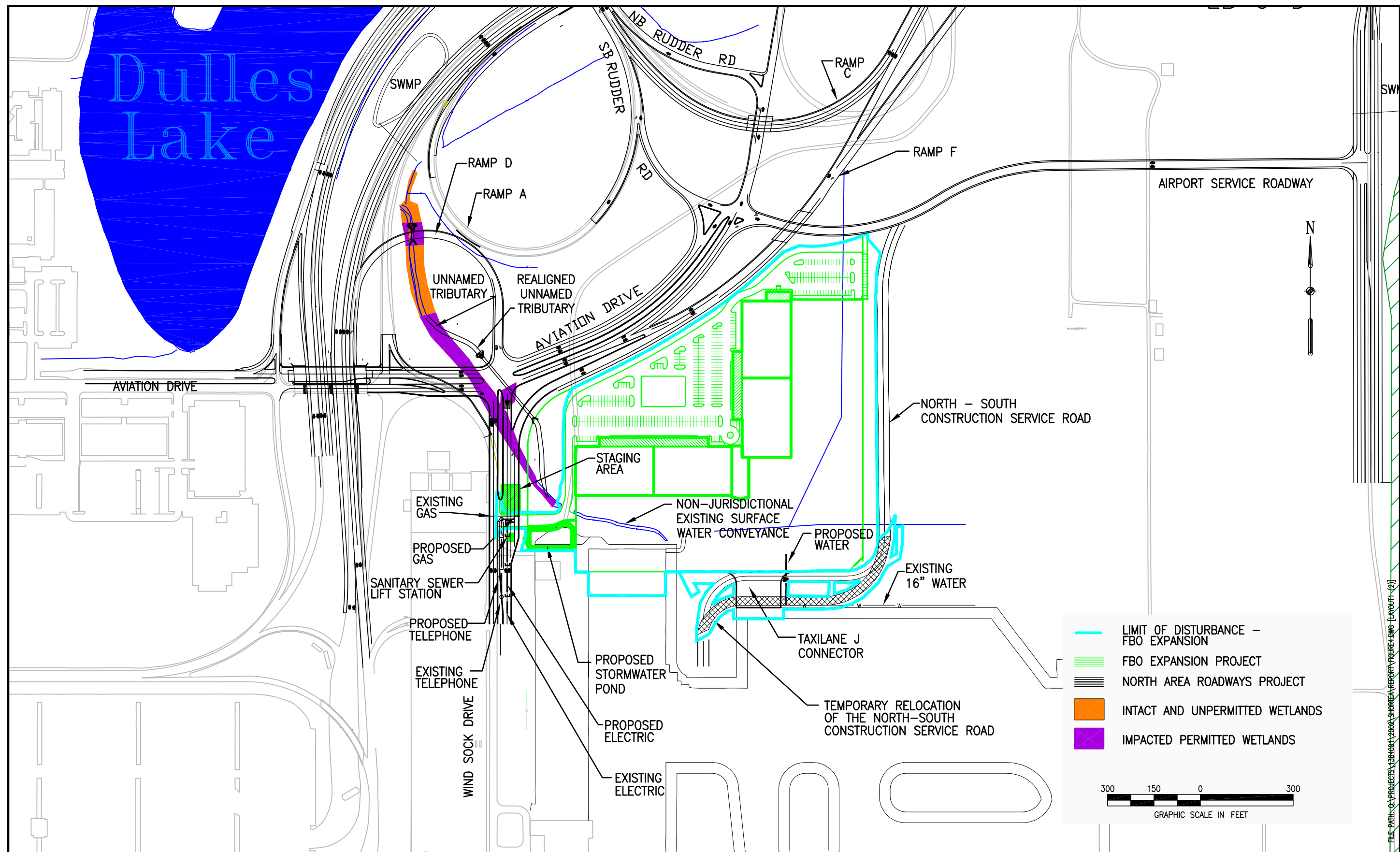


FIGURE 4. JURISDICTIONAL WETLANDS IN THE VICINITY OF FBO EXPANSION.

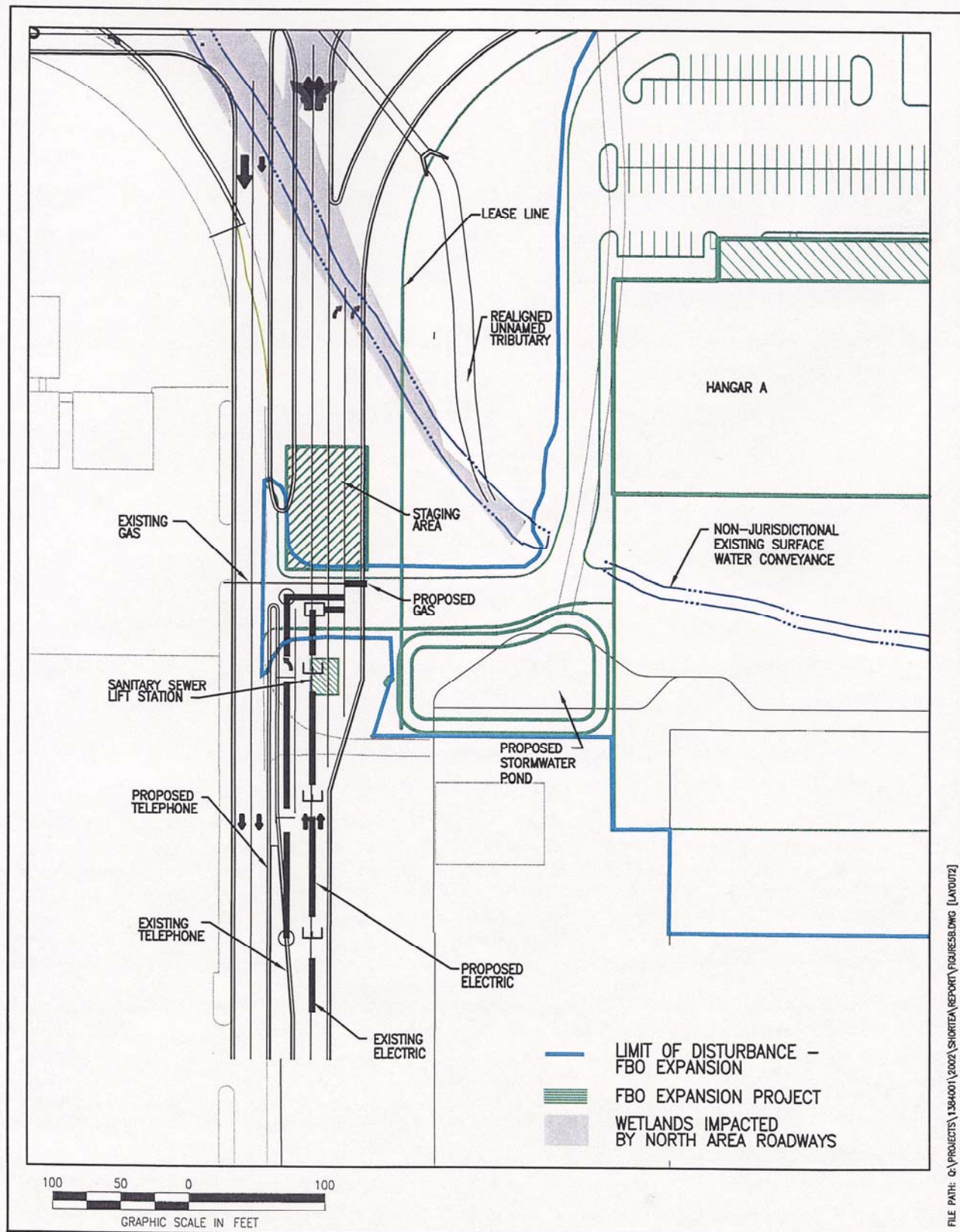
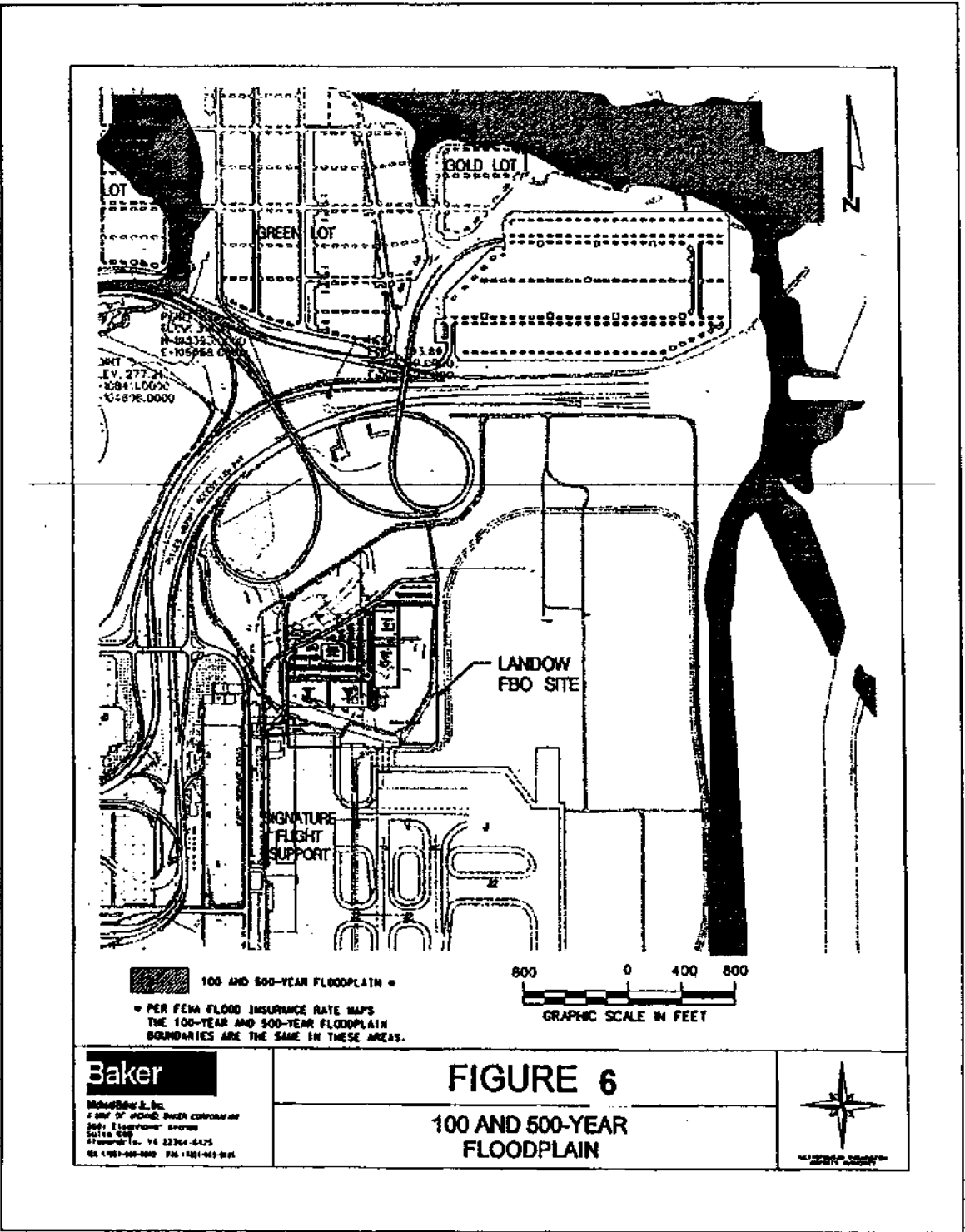


Figure 5. Jurisdictional Wetlands in the Vicinity of the Limits of Disturbance.





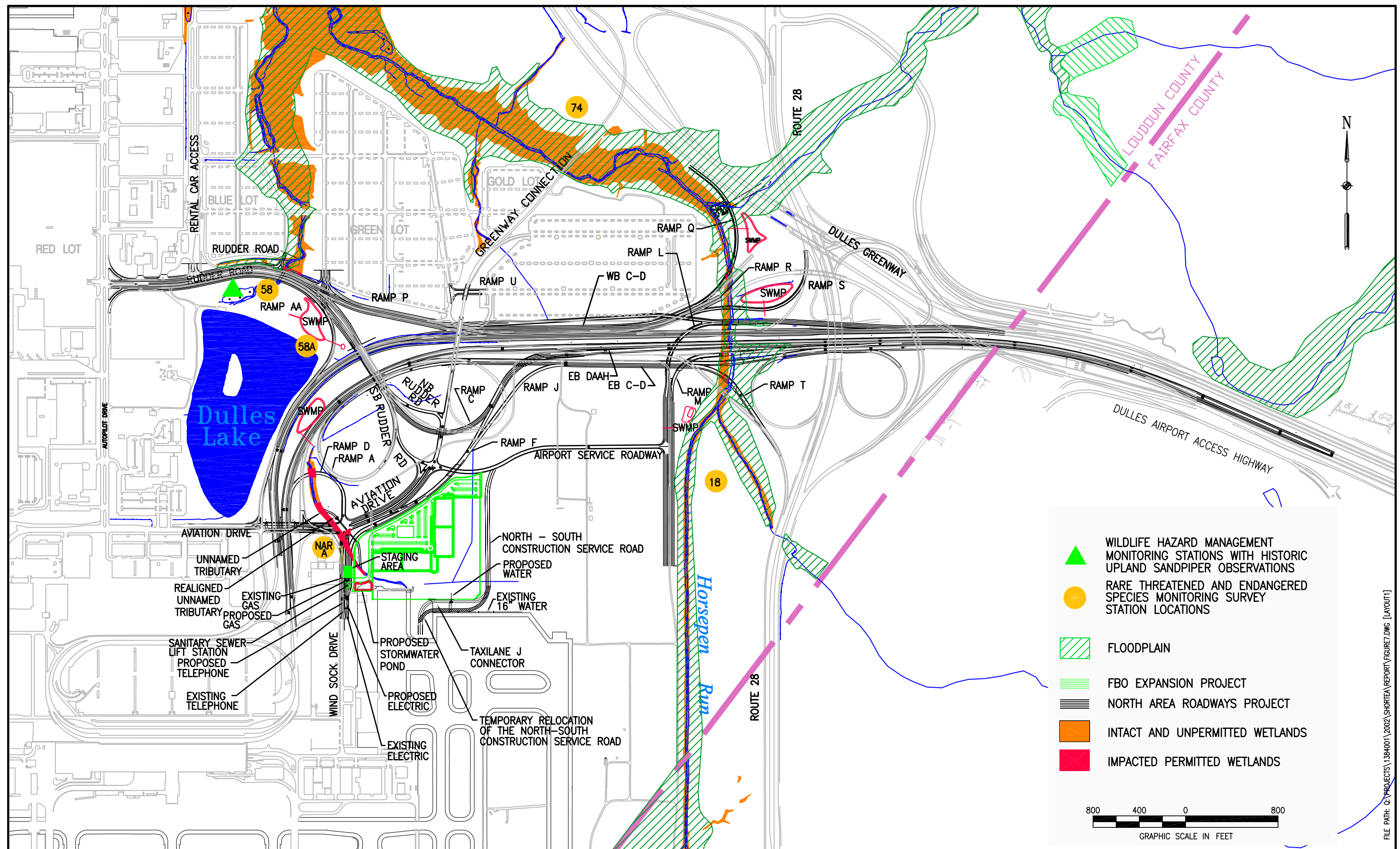


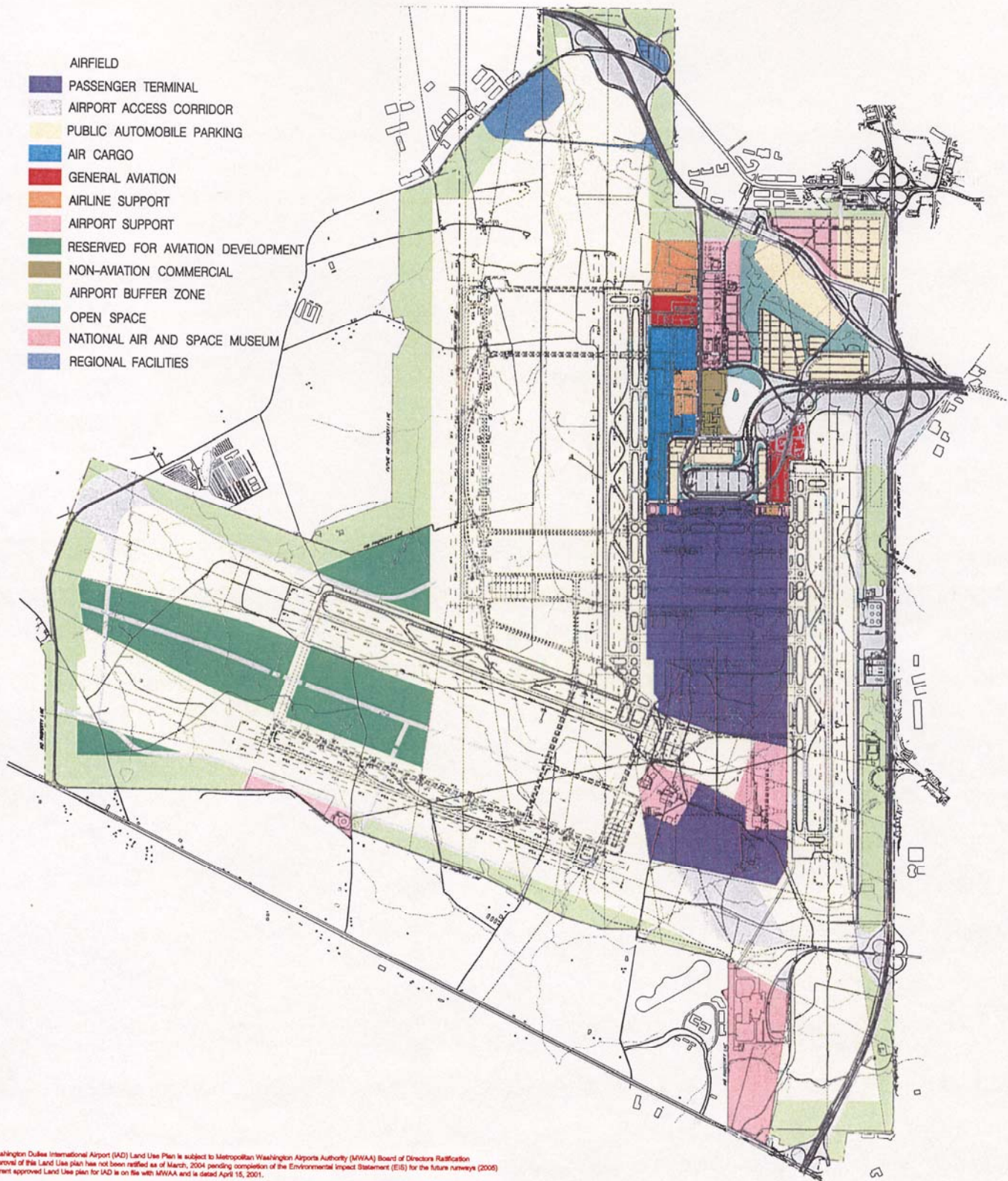
FIGURE 7. PROPOSED DEVELOPMENT CONCURRENT AND IN THE VICINITY OF THE FBO EXPANSION PROJECT.

**FBO EXPANSION
Washington Dulles International Airport**

AIRPORT LAND USE PLAN

Attachment A

- AIRFIELD
- PASSENGER TERMINAL
- AIRPORT ACCESS CORRIDOR
- PUBLIC AUTOMOBILE PARKING
- AIR CARGO
- GENERAL AVIATION
- AIRLINE SUPPORT
- AIRPORT SUPPORT
- RESERVED FOR AVIATION DEVELOPMENT
- NON-AVIATION COMMERCIAL
- AIRPORT BUFFER ZONE
- OPEN SPACE
- NATIONAL AIR AND SPACE MUSEUM
- REGIONAL FACILITIES



The Washington Dulles International Airport (IAD) Land Use Plan is subject to Metropolitan Washington Airports Authority (MWAA) Board of Directors Ratification.
 The approval of this Land Use Plan has not been ratified as of March, 2004 pending completion of the Environmental Impact Statement (EIS) for the future runways (2006).
 The current approved Land Use plan for IAD is on file with MWAA and is dated April 15, 2001.

Resolution No.	Revisions to Land Use Plan Subsequent to Board Adoption	Date of Action
91-6	Amendment to include a Dulles Toll Road Extension	March 13, 1991
97-24	Amendment for the North Plaza Garage and the Green Lot Expansion	September 3, 1997
99-15	Amendments to the Master Plan	December 1, 1999
	Amendments to the Master Plan	April 15, 2001



Metropolitan Washington
 Airports Authority
 Office of Engineering
 Washington D.C. 20001

Washington Dulles International Airport

Airport Land Use Plan

Prepared By: Diana Kinosh, P.E., Planning Department	Submitted By: William C. Leppert, Sr., Planning Dept.	Approved By: Frank D. Nally, Vice President, Engineering
Date: March 2004		Drawing Number: 4

**FBO EXPANSION
Washington Dulles International Airport
VIRGINIA STATE HISTORIC PRESERVATION OFFICER
DEPARTMENT OF HISTORIC RESOURCES
STATEMENT OF CONCURRENCE**

Attachment B



NOV 15 2004

Mr. Marc Holma
State Historic Preservation Office
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA

Subject: Signature/Landow Hangar Complex
Washington Dulles International Airport,
Fairfax and Loudoun Counties.

Dear Mr. Hill:

As part of its continuing efforts to upgrade airport facilities, the Metropolitan Washington Airports Authority (Authority) is working with Signature/Landow on the design and construction of a new General Aviation aircraft maintenance hangar complex at Washington Dulles International Airport.

The proposed site is located in the northeastern portion of the airport, directly south of the Dulles International Airport Access Highway (DIAAH). As this location lies within the proposed boundary of the Dulles Airport Historic District (Figure 1), the Authority is taking the archaeological and historic architectural impact of this project into consideration.

By this submission, the Authority is initiating formal agency consultation on the potential impact of this project on the eligible contributing elements of the Historic District. This consultation is related to the development of environmental documentation pursuant to Section 102 (c) of the National Environmental Policy Act of 1969 (NEPA).

In addition to fulfilling environmental documentation requirements under NEPA, the design review and agency consultation procedures are consistent with the stipulations of the 1987 Programmatic Memorandum of Agreement regarding Section 106 of the National Historic Preservation Act (36 CRF Part 800) and Section 4(f) of the Department of Transportation Act (23 U.S.C. 138).

1.0 CONSULTATION BACKGROUND

Representatives of the Authority made an informal presentation on the preliminary design of this project during a meeting in your office on December 16, 2003, and made a full design presentation during a subsequent on-airport meeting on June 1, 2004. During these presentations, there was general consensus that the project would not directly impact any of the airport's contributing historic properties, and would have a very limited impact on the character of the surrounding historic district. The following factors were discussed:

- Project Location in an area of the airport which has been subject to intensive prior disturbance – reducing the potential for intact archaeological resources;
- No visual impacts to historically significant public viewpoints from the DIAAH;

3.0 PROJECT DESCRIPTION

The project consists of the development of additional General Aviation Facilities on approximately 20 acres to the north of the current Signature General Aviation Facility. The main elements of the proposed hangar facility will include: Four (4) Aircraft Maintenance Hangars (with associated office and support facilities), a Free-standing Office Building, Vehicle Parking Areas and Aircraft Apron surfaces (Figure 2).

The complex will include the following facilities (Figures 3):

- Four aircraft hangars constructed in two matching main hangar blocks, for a total of approximately 159,580 square feet of hangar space;
- Office pods adjacent to the hangars for facility operations and aircraft owner's use. Total of approximately 46,000 square feet of space;
- A future office building of up to 5 floors, approximately 11,300 square feet per floor, or up to 56,500 square feet total;
- Access roadway from Wind Sock Drive and landside parking for approximately 370 vehicles;

- Approximately 43,870 square yards of aircraft apron.

The hangars are designed to accommodate up to G500 (Group III) aircraft that comprise significant proportion of the General Aviation fleet. It is the tail height of these aircraft that sets the clear height requirement of the hangar doors and dictates the overall height of the hangar structures. The large span tilt-type doors make up the majority of the airfield facade for the hangars (Figure 4).

The complex is provided with low shop and storage areas, built along the parking lot side of the both hangar blocks. A low connecting office structure, to serve the approximately 25-50 employees of the fixed base operation and tenants will be in the southeast corner of the complex, where the two hangar blocks meet (Figure 3-5). A central office structure is proposed for the center of the parking area, and is being designed to allow for a maximum height of 5 stories, to meet future office needs of the firms utilizing the hangar complex (Figure 5 & 6).

4.0 ARCHAEOLOGICAL IMPACTS

The site preparation and construction of the new facility will require ground disturbance activities in portions of the airport already characterized by high levels of prior disturbance. The grading and construction of the DIAAH to the north, and the major runway to the east, have already heavily impacted this portion of the airport. The Authority has recently completed an airport-wide evaluation of prior soil disturbance. The facility construction impact area is shown on Land Use/Disturbance Analysis Map (Figure 6), which indicates that entire area had been determined to fall within Disturbance Levels 4 (Significant) or Level 5 (Severe). As a result, it is highly unlikely that any significant archaeological sites remain intact within this area, or that proposed project activities will impact any archaeological resources. As a result, no field investigations are recommended.

5.0 HISTORIC ARCHITECTURAL IMPACTS

The proposed hangar complex lies near the northern boundary of the historic district. As a result, there will be no direct impact on any eligible historic properties within the district's sensitive historic core. However, given the project location adjacent to the airport approach roads, the visual appearance of the new complex is being taken into careful consideration. As with all airport facilities, the hangar facility is being designed in accordance with the Authority's Design Manual that incorporates architectural design guidelines from the original Saarinen Airport Master Plan.

The height of the hangar structure is set by the maximum dimension of the aircraft to be serviced at the facility (approximately 40 feet). The north and east sides of the hangars will be

The height of the hangar structure is set by the maximum dimension of the aircraft to be serviced at the facility (approximately 40 feet). The north and east sides of the hangars will be connected with a lower office structure, which will be located between the two sets of hangars, reducing the visibility of this secondary building elements. With the exception of the central office building and connecting office structure between the two hangar structures, all elements of the hangar complex will have simple rectangular facades and flat roofs (Attachment 7). The exterior of all the structures will be covered in metal panels finished in "Dulles Grey", matching the airport's original service buildings. The number, size and location of the limited window and door openings are dictated by operational considerations and the desire to maximize natural lighting in the hangar bay and shops areas (Figure 4 & 5).

As the central office building and the connecting office structures will serve as fully occupied office space, the interior areas of structures require additional window treatments in order to provide natural lighting and exterior views. As the limited window openings found on the airport's original service would be insufficient for this use, simple alternating horizontal bands of grey metal panels and dark tinted glass was suggested for the office facades (Figures 5 & 6). It is believed that this design helps to emphasize the rectangular mass and simple surface treatment of the new facility, in keeping with airport's historic architectural character.

A similar design treatment was utilized for the expansion of the Signature's main hangar/office complex to the south. This expansion project was presented to the VDHR staff in 2000, and there was general consensus that the alternating bands of metal panel and window bands represented an appropriate compromise in providing the offices spaces with adequate windows, while maintaining compatibility to the simple metal clad buildings of the original Saarinen campus. In addition, the treatment of the office facilities matched that of the other (non-historic) 1970s office structures on the airport.

6.0 VISUAL ANALYSIS

As part of the project development, a computer-generated simulation of the proposed new facility was developed, in order to assess the visual impact of the facility. The prime focus of this analysis was the potential that the new facility might interrupt or negatively impact the historically significant series of viewpoints along the DIAAH. These selected viewing locations track the passenger approach experience, as vehicle travel along the airport access highway and enter the terminal forecourt at Saarinen Circle. This visual sequence was an intentional part of Saarinen's airport design and special care was taken to assess the potential impact of the proposed facility from these viewpoints. Given the location of the proposed facility, it was concluded that the project only had the potential to impact the first three of the DIAAH viewpoints (View Points 1-3 - Figure 7-9).

The results of the visual analysis demonstrated that the proposed hangar facility would not be visible from any of these outer viewpoints along the DIAAH. Due to the relative topography of the project location, the facility would come into view as approaching vehicles pass under the Aviation Drive bridge and begin the approach into Saarinen Circle (Sites A1 - Figure 11). Due to the significant separation of the new facility from this section of roadway, the complex would be seen low rectangular structure off to the distance in the east.

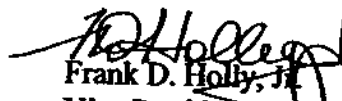
As a result, the facility will share the same general appearance and architectural character as the other original secondary service structures within the Historic District. The visual impact of the new facility will be further reduced by the planned introduction of landscape plantings along the west sides of the complex that will eventually grow up to screen the complex from the airport access road (Figure 12 - Showing landscape screening).

7.0 CONCLUSION

It is hoped that the project description contained in the attached letter is sufficient for your staff to concur with the Authority's determination that this project is to have "No Adverse Effect" on the Airport's historic resources. As always, we appreciate your assistance in our efforts to comply with the terms of the Programmatic Memorandum of Agreement.

In order to facilitate your review and comment on the proposed project, we have included a concurrence/signature line at the bottom of this letter. If the attached documentation is consider adequate to fulfill the requirements of agency consultation under the terms of this agreement, please feel free to indicate your concurrence and return a copy of the letter to the Authority.

Sincerely,


Frank D. Holly, Jr.
Vice President for Engineering

Enclosures

cc: Martha Catlin, Advisory Council on Historic Preservation (w/attachments)

FDH:dlm

H. Wall
M. Holma, VASHPO/DHR
Signature/Landow Hangar Facility
Washington Dulles International Airport
Page 6

34F

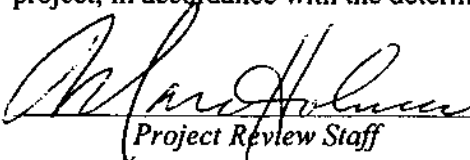
STATEMENT OF CONCURRENCE:

As a certified representative of the Virginia State Historic Preservation Officer, I have reviewed the attached project documentation, and concur with the following determinations related to the General Aviation Hangar Facility at Washington Dulles International Airport.

Concurrence with this determination demonstrates the Authority's compliance with the terms of the 1987 Programmatic Memorandum of Agreement (as regards Section 106 of the National Historic Preservation Act (36 CFR Part 800) and Section 4(f) of the Department of Transportation Act (23 U.S.C. 138).

- 1) That the joint development of the proposed Signature/Landow project represents an Authority undertaking to provide an airline tenant with necessary aircraft storage and maintenance facilities;
- 2) Given the significant prior disturbance of the project location, there will a minimal potential for the disturbance of significant and intact archaeological resources eligible for the National Register of Historic Places. As a result, no archeological field survey is recommended;
- 3) The facility shall be designed in accordance with the Authority's Design Manual (which incorporates the architectural design guidelines from the Eero Saarinen Airport Master Plan);
- 4) The architectural design of the new facility takes into account the historic architectural character of the surrounding historic district, and represents an appropriate addition to the airport built environment.
- 5) Although the facility lies within the proposed boundaries of the Dulles Airport Historic District, it should have "No Adverse Effect" on the eligible historic properties or architectural character of the district;

By my signature, the Metropolitan Washington Airports Authority is authorized to proceed with project, in accordance with the determinations outlined above.


Project Review Staff

9 Dec 04
Date

- 2004-1703
VASHPO / VDHR Project No.

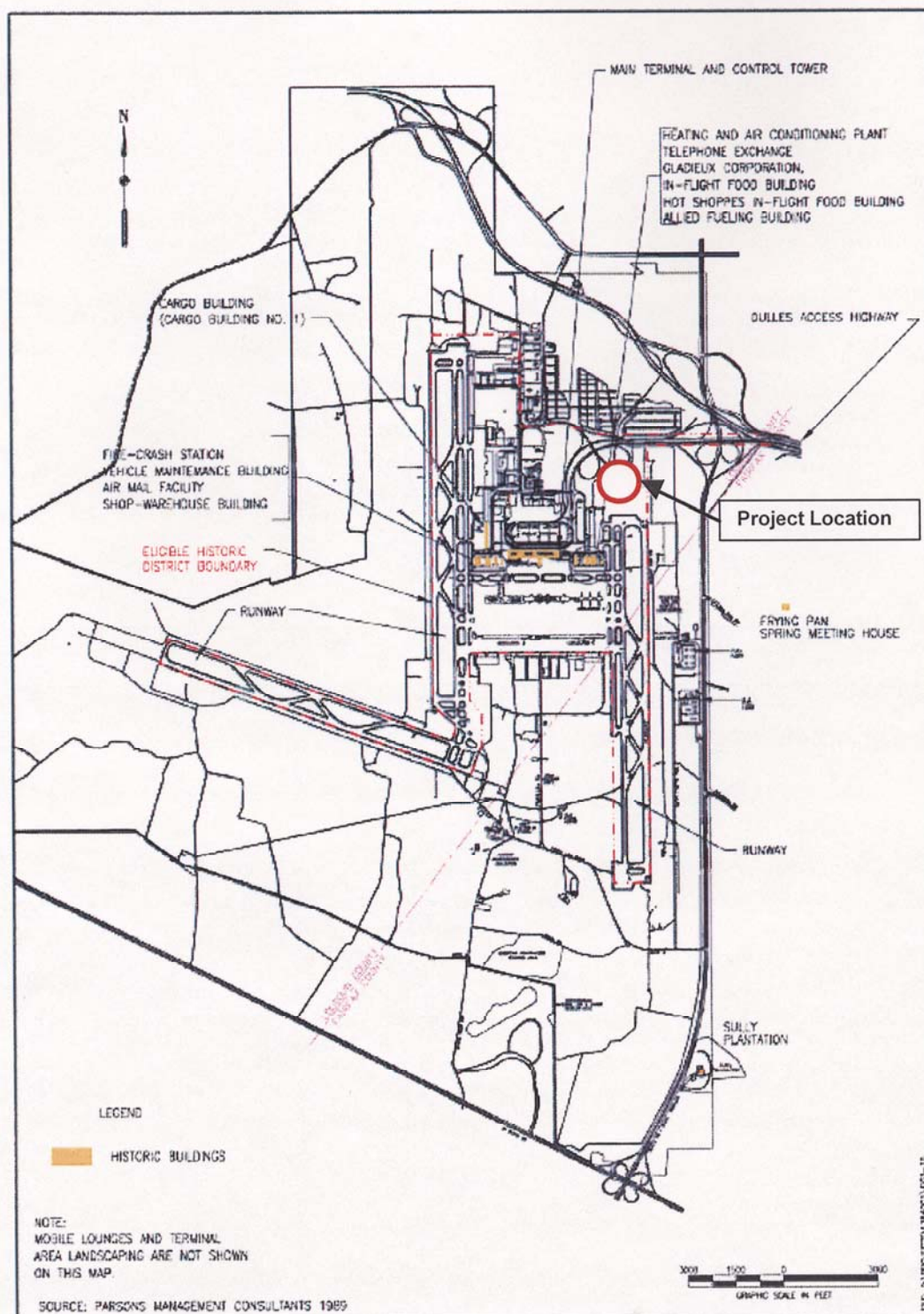


Figure 1: Signature/Landow Hangar Complex: Project Location
Showing Dulles International Airport Historic District

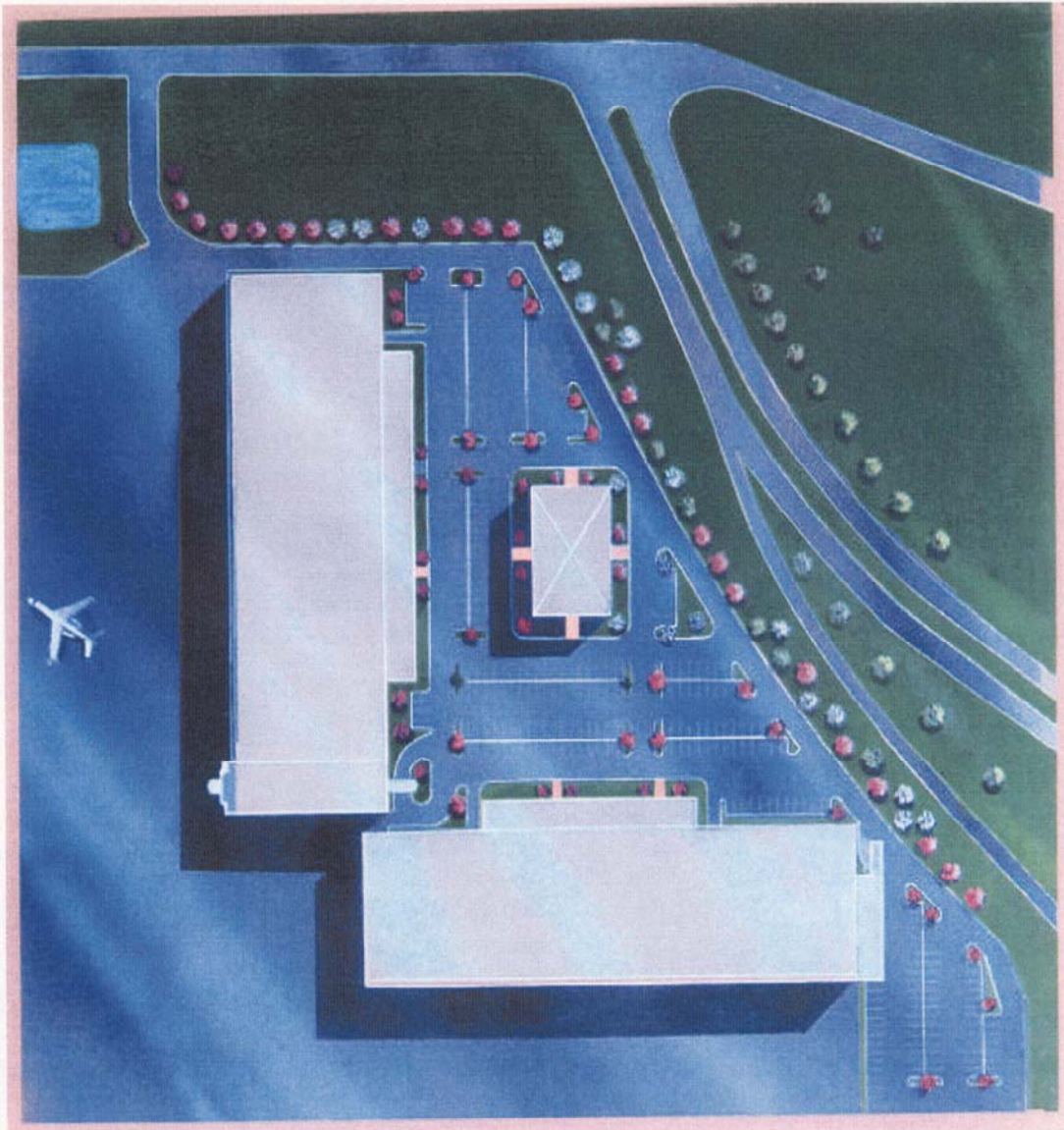


Figure 2: Signature/Landow Hangar Complex – Rendered Site Plan

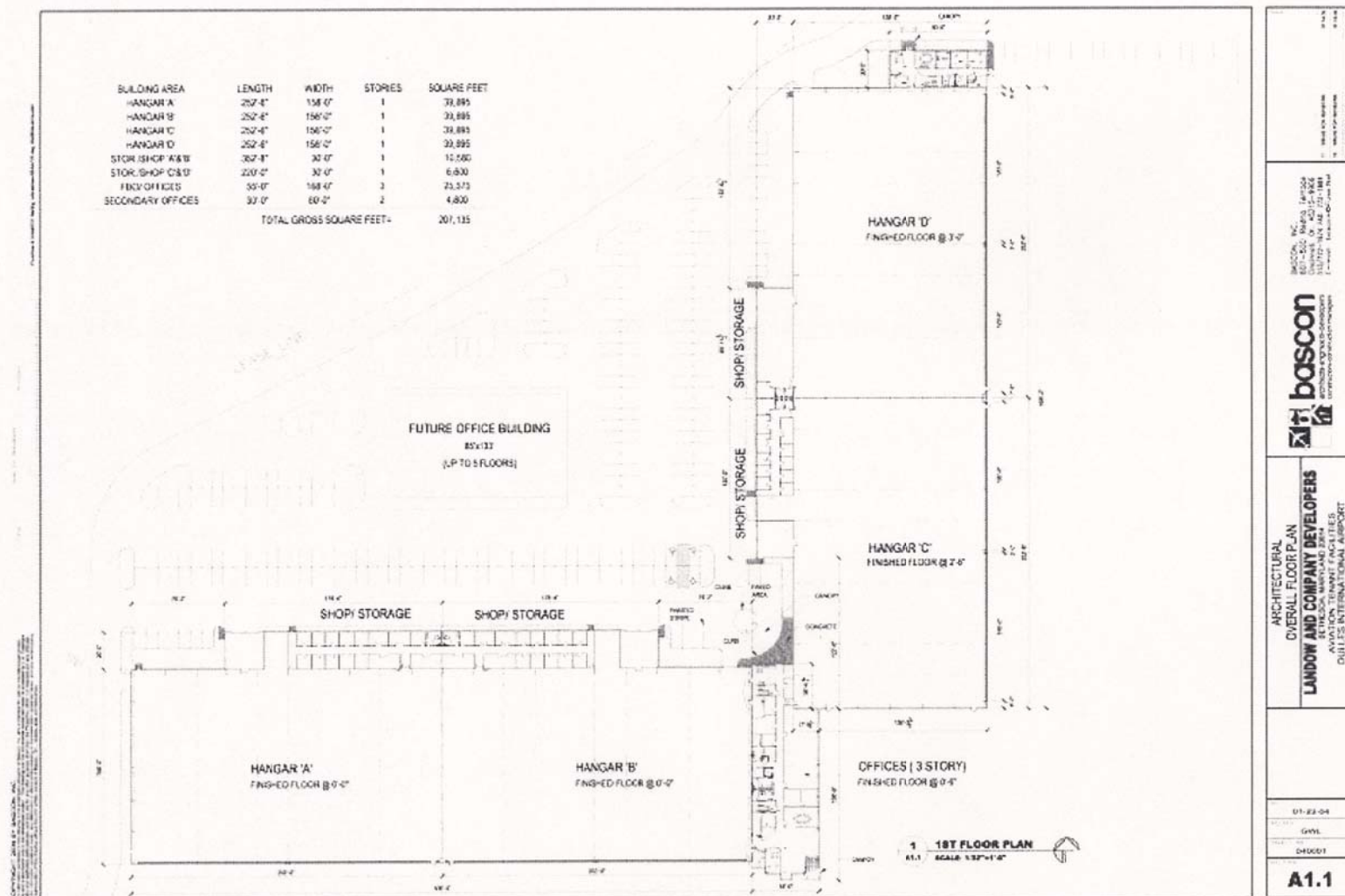


Figure 3: Signature/Landow Hangar Complex – Site Plan

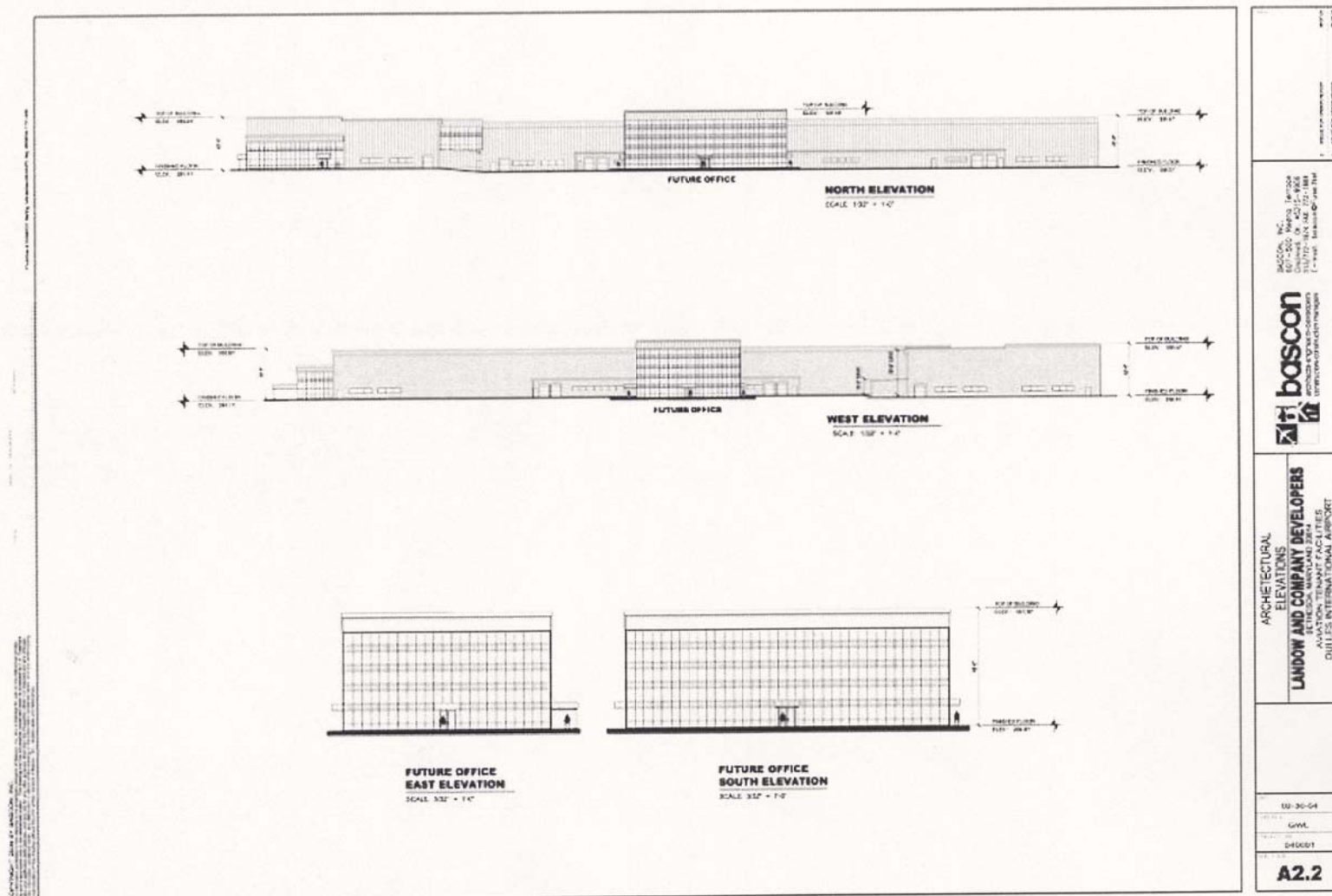


Figure 5: Signature/Landow Hangar Complex – Elevations

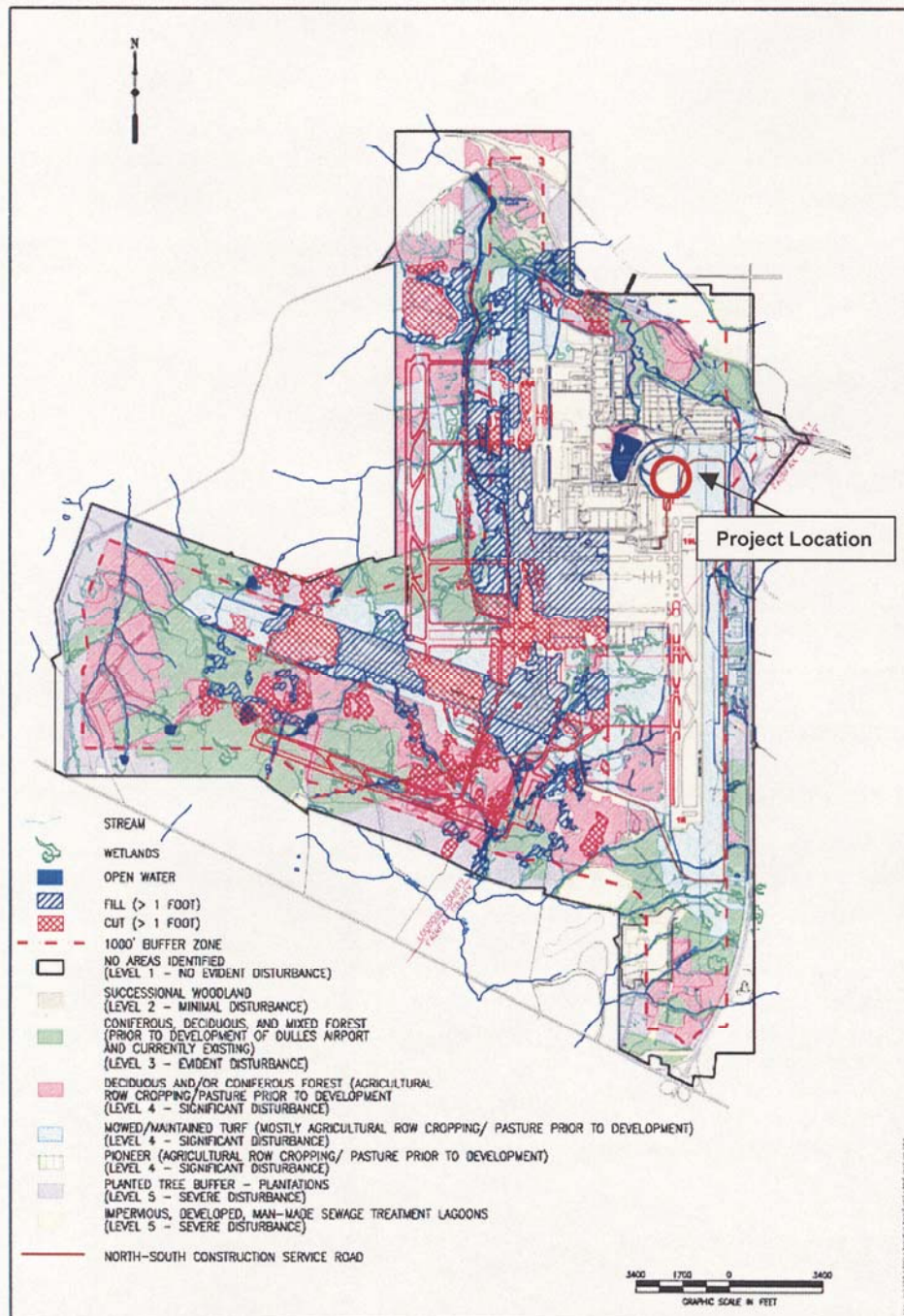


Figure 6: Signature/Landow Hangar Complex: Project Location Showing Disturbance Analysis



North Elevation



West Elevation



Figure 7: Signature/Landow Hangar Complex – Rendered Elevations

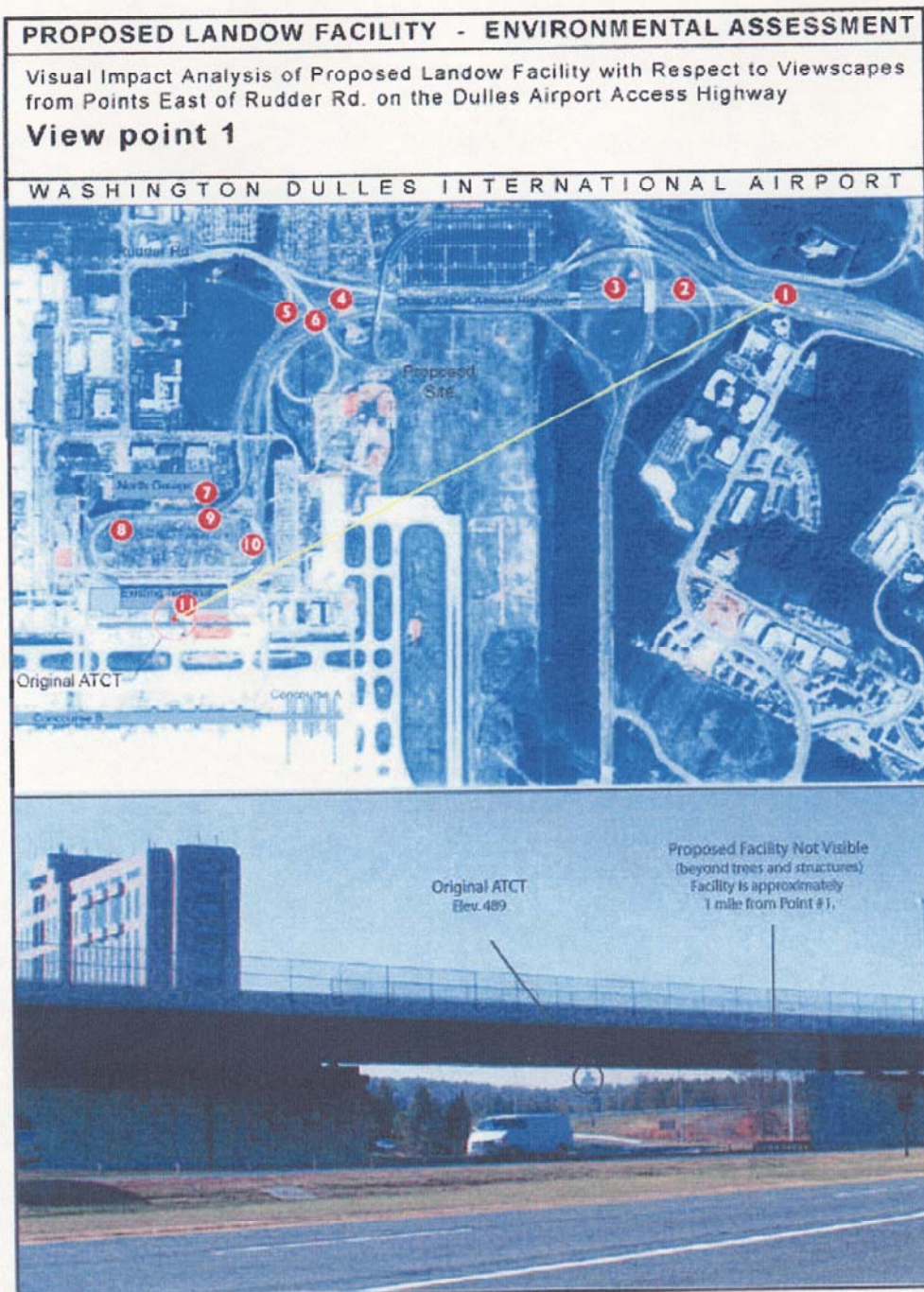


Figure 8: Signature/Landow Hangar Complex – View Point 1

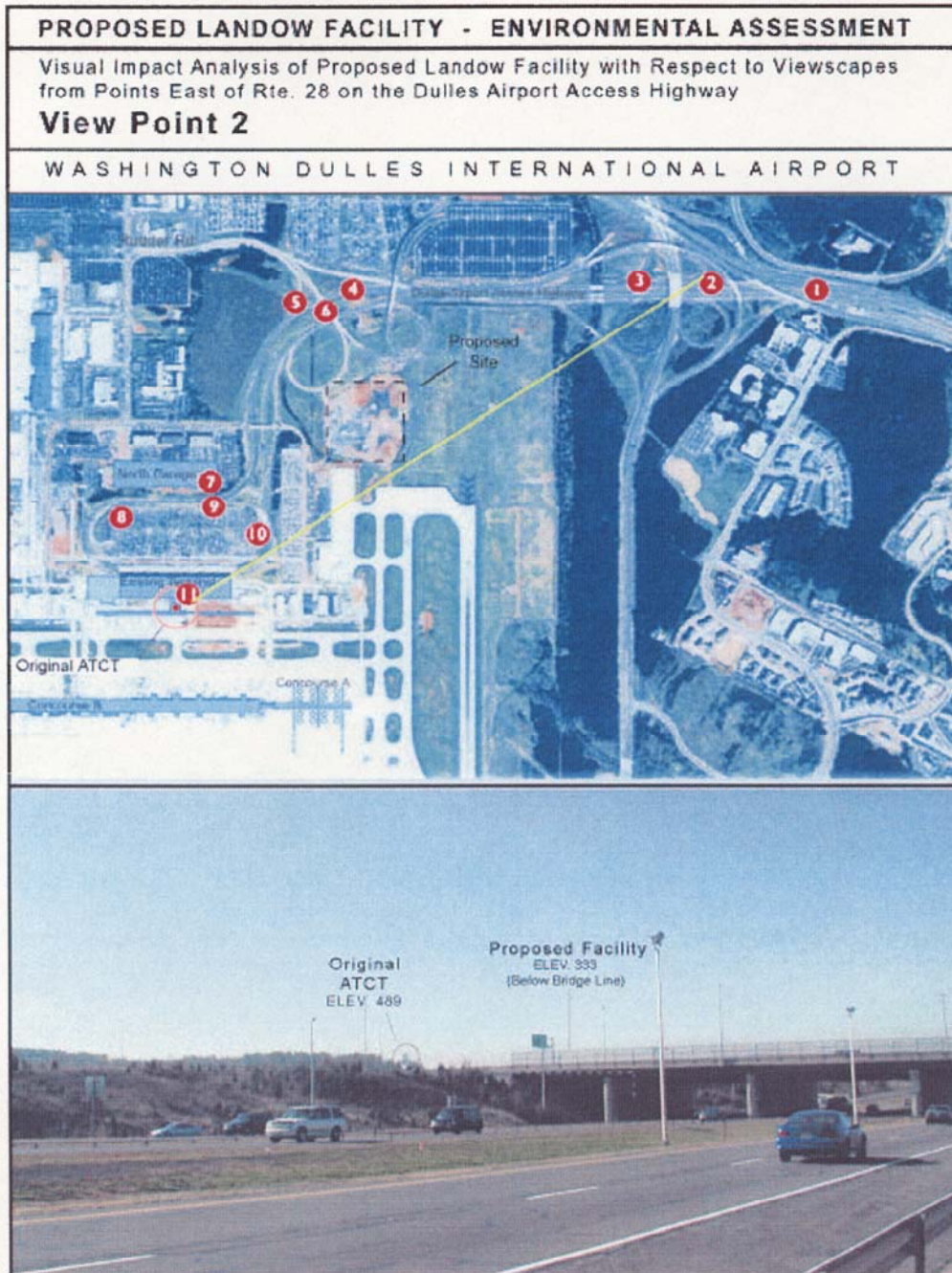


Figure 9: Signature/Landow Hangar Complex – View Point 2

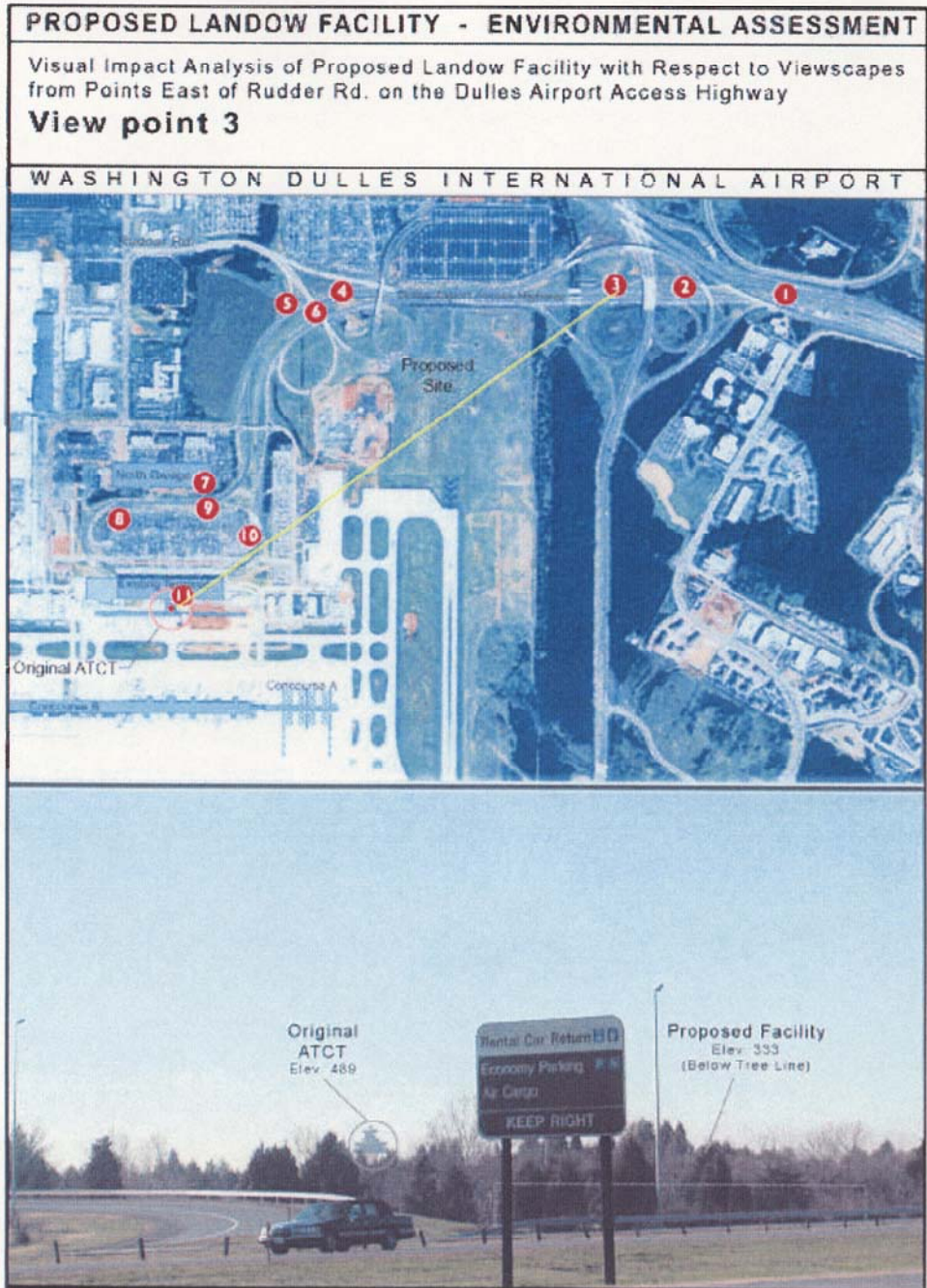


Figure 10: Signature/Landow Hangar Complex – View Point 3

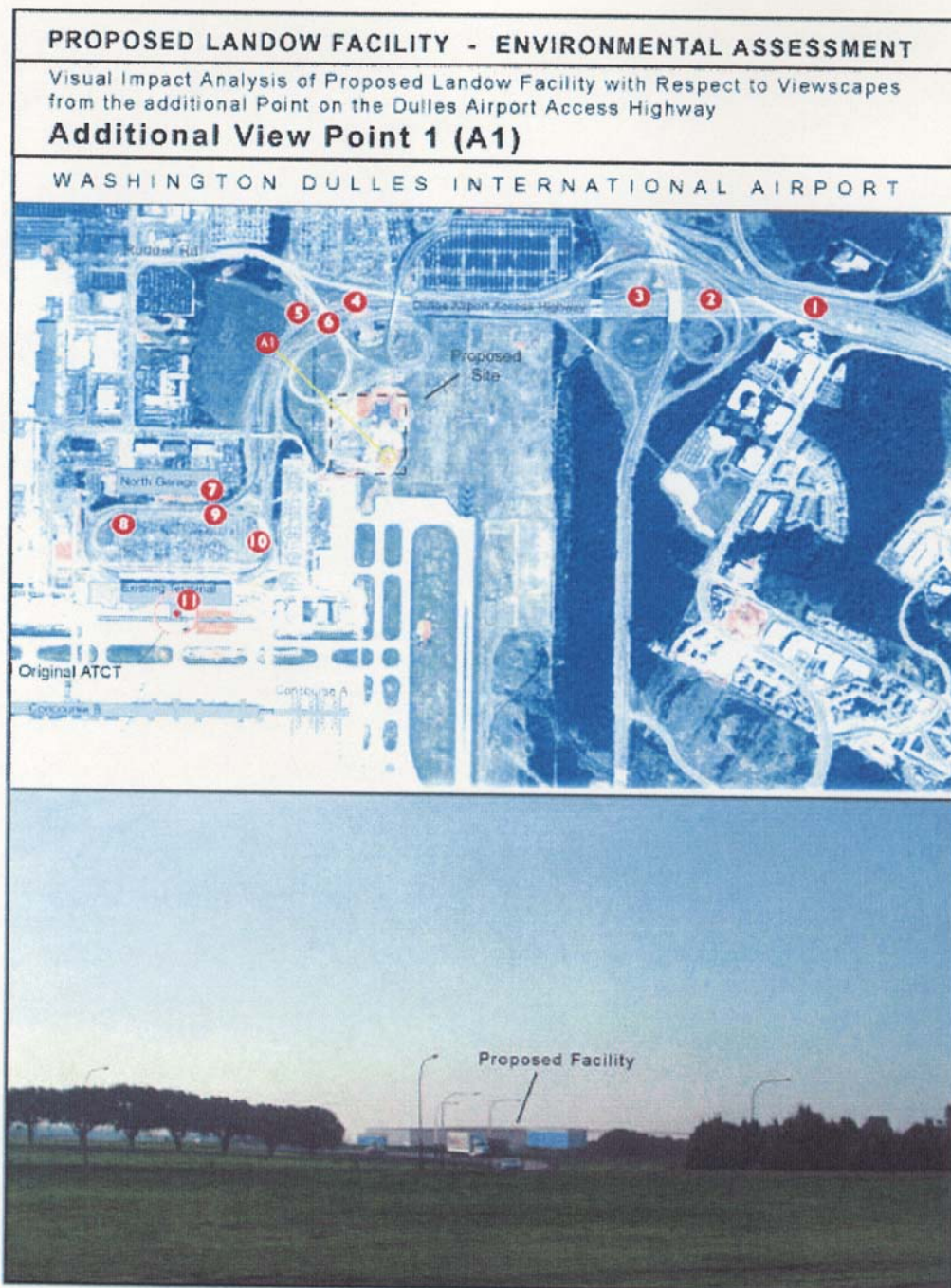


Figure 11: Signature/Landow Hangar Complex – View Pont A1

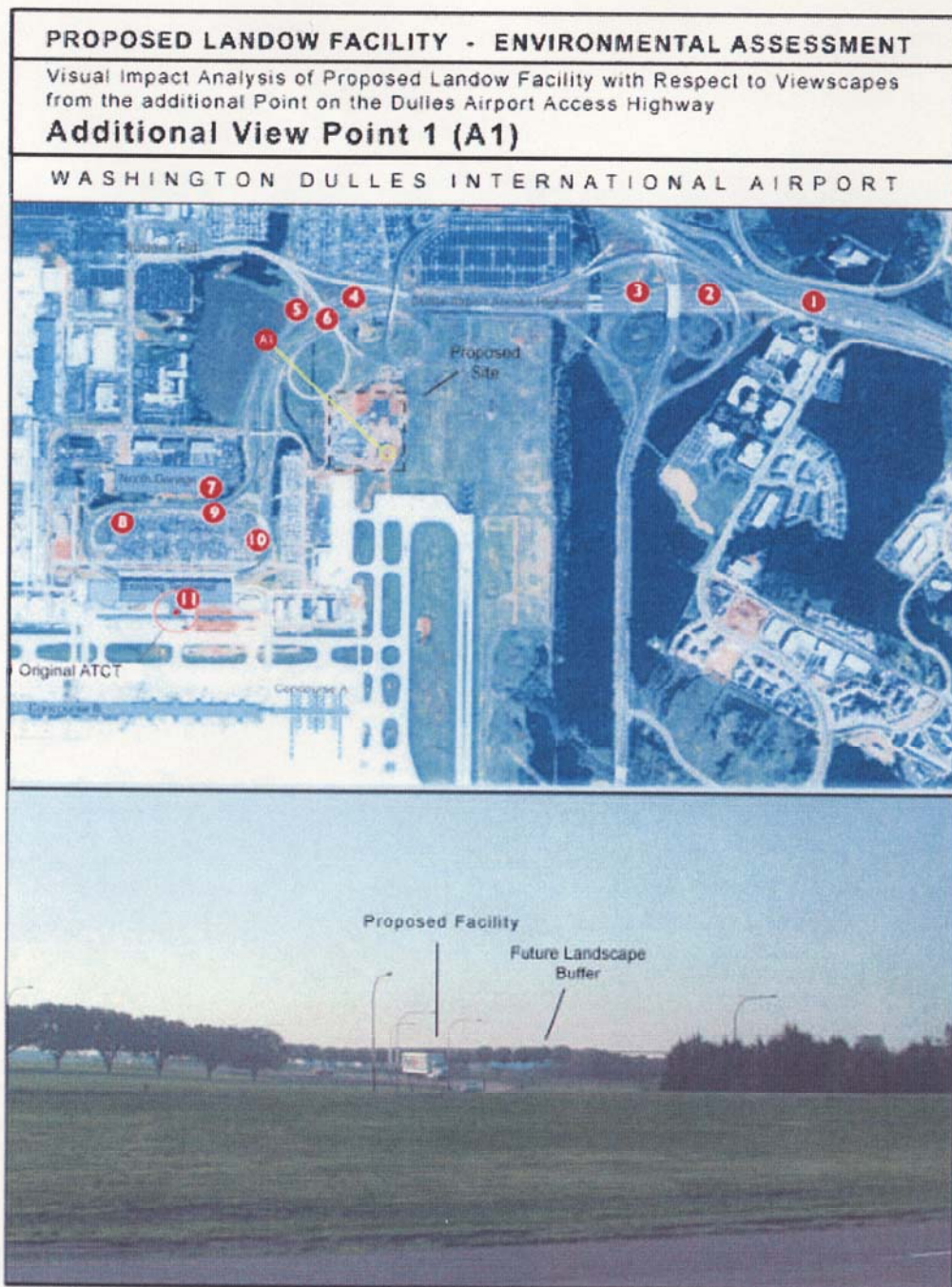


Figure 12: Signature/Landow Hangar Complex – View Pont A1
(Landscape Buffer after 10 years growth)