

August 8, 2019

U.S. Army Corps of Engineers Wilmington District Raleigh Regulatory Field Office 3331 Heritage Trade Dr., Suite 105

Wake Forest, NC 27587

Attention:

Regulatory Project Manager

Raleigh Field Office

Mr. David Bailey

NC Department of Environmental Quality

Division of Water Resources Water Quality Permitting Section

512 N. Salisbury St., Archdale Bldg. 9th

Floor

Raleigh, NC 27604

Ms. Karen Higgins

Supervisor

401 & Buffer Permitting Branch

Subject: Application for Section 404 Permit, Section 401 Water Quality Certification, and

Jordan Buffer Exemption for Rental Car Facilities Relocation at Piedmont Triad

International Airport, Guilford County NC

The Piedmont Triad Airport Authority (PTAA) hereby applies for Individual Permit and Water Quality Certification under Sections 404 and 401 of the Clean Water Act (CWA), 15A NCAC 2H .0500 as amended, and Jordan Buffer Exemption under 15A NCAC 2B .0267. Unavoidable impacts to jurisdictional Waters of the United States (WOTUS) are anticipated for required relocation of the existing rental car facilities at the Piedmont Triad International Airport (GSO). This Project has been addressed in an Environmental Assessment (EA) with a Finding of No Significant Impact (FONSI), enclosed, by the Federal Aviation Administration (FAA). consistent with the National Environmental Policy Act (NEPA). Jurisdictional resources within the Project area have been verified (SAW-2017-00101 and 00103, see EA Appendix A) by the United States Army Corps of Engineers (USACE) with mitigation and riparian buffer rule applicability determined by the North Carolina Department of Environmental Quality (NCDEQ) Division of Water Resources (DWR) on January 20, 2017 (EA Appendix A).

Proposed Project

The PTAA is obligated to remove obstructions to the visibility of Taxiway E from the Air Traffic Control Tower (ATCT) as determined by the Federal Aviation Administration (FAA) Comparative Safety Analysis (EA Appendix A). The "Proposed Action" is to resolve this visibility obstruction and includes the following four key components (EA Figure 2):



- 1. Site preparation and stabilization of approximately 49 acres of developed land including **Removal of Existing Rental Car Facilities** and adjacent air cargo structures and re-grading to allow line-of-sight from the ATCT to Taxiway E (EA Figure 3);
- 2. Site preparation (including hauling of approximately 300,000 cubic yards clean fill from the existing rental car facilities, above) of approximately 44 acres of approved future aerospace development. Adjacent to this location, approximately 10 acres of clearing and grading for construction and continuation of utilities along the **Proposed Worldwide Drive** right-of-way, including electrical/lighting, communications, and stormwater management (Air Cargo site, EA Figure 4);
- 3. Site preparation of approximately 57 acres of land including clearing and grading for construction of paved parking areas for approximately 2,360 spaces and infrastructure for approximately 16,900 square feet building space, including connection of utilities, stormwater management, and communications for the **Proposed New Rental Car Facilities** (Inman site, EA Figure 5); and
- 4. Site preparation and stabilization of approximately 28 acres for **Proposed Spoil Embankment** of approximately 600,000 cubic yards of clean fill (from the Inman site,

above) adjacent to and north of the Honda Aircraft Company Maintenance Repair and Overhaul (MRO) facility (Chimney Rock site, EA Figure 6).

The proposed project schedule is dependent on receipt of appropriate regulatory approvals including documented compliance with the CWA. Removal of the existing rental car facilities is contingent on completion of appropriate replacement with suitable access and functionality. Notwithstanding concurrent scheduling of component construction to the extent practicable, environmental protection measures for the proposed fill sites and haul roads would commence along with project components exempt from permitting or otherwise regulatorily approved as soon as possible, potentially in 2019. Project completion would be anticipated at least two years after commencement.

Project Purpose and Need

The purpose of the Proposed Action is to **eliminate a "line-of-sight" issue for the proposed ATCT** created by existing rental car facilities, thereby requiring the relocation of the facilities posing visibility obstructions (see FAA Comparative Safety Analysis, EA Appendix A). The Proposed Action must be implemented in accordance with FAA design standards and Federal Aviation Regulations (FAR) while maintaining rental car service provider neutrality. Because the parameters of the ATCT line-of-sight are not flexible, the only viable alternative is to eliminate the obstruction and move the subject facilities.

The existing Hertz rental car facility is located on high ground between the proposed ATCT and Taxiway E and must be excavated to provide appropriate line-of-sight. To prevent competitive disadvantage to Hertz, the remaining rental car facilities must also be relocated with Hertz. The new rental car facilities location will require appropriate vehicle access to and from the Terminal area. Excess earth from both the existing Hertz site and proposed new rental car site must be moved to the nearest appropriate respective locations. Ancillary needs with potential to be met by a project alternative present the potential for significant efficiencies in cost-savings, aviation safety, and regulatory compliance. Such needs include development of an additional terminal public roadway to serve as redundant vehicle access and for emergency planning and evacuation, separation of public versus rental car terminal access, and advanced site preparation of dedicated aerospace tracts.

The size, orientation, and proximity of a replacement site for rental car facilities must be adequate to at least replace the existing facilities and not interfere with current or planned aviation functions and FAA compliance of the Airport. Due to the significant economic growth component of PTAA's mission, any proposed action must also be compatible with the planned aerospace development tracts at GSO. Consideration of site alternatives for associated project components (such as borrow, fill, haul routes, or site access) is similarly restricted by the aviation and economic missions of the PTAA. The Proposed Action, including all components, must not interfere with aviation or economic development specific to GSO.

The "Inman" site at the Northeast quadrant of the Inman Road / Bryan Boulevard intersection is appropriately sized and situated for the combined rental car facilities to be relocated. Continuation of Worldwide Drive (in the manner originally contemplated for its ultimate design) from Old Oak Ridge Road to Air Cargo Road both connects the relocated rental car facilities and provides an alternative Airport entry/exit for surface transportation. Moving fill excavated from

the Hertz rental car site to the aerospace development site adjacent to Worldwide Drive is the most efficient solution for earthwork required to eliminate the Taxiway E visibility issue. PTAA-owned land at the "Chimney Rock" site is the nearest appropriate location for embankment of excess fill from excavation of the proposed Inman site. The Proposed Action, including connected projects, would eliminate the current ATCT line-of-sight obstruction to Taxiway E, improve operational efficiency, facilitate emergency planning, and expedite compliance with FAA requirements at GSO.

Alternatives to the Project

As summarized in the enclosed Project Alternatives Analysis, PTAA has exerted appropriate effort to avoid siting project components with potential to impact environmental resources. Because the Proposed Action is not water-dependent, alternatives to sites involving impacts to WOTUS were assumed to exist and were explored to the extent practicable and available. The Inman Site is the preferred alternative for new location of the rental car facilities.

Access options from the Passenger Terminal to the Inman site are limited by existing land-use and transportation infrastructure. The access road must be located between the Brush Creek Conservation Easement (stream, wetland, and riparian buffer mitigation) and the adjacent aerospace development site to avoid impacts to either and efficiently connect the new rental car facilities. The only alternative route connecting Old Oak Ridge Road with Air Cargo Road to avoid a stream crossing would isolate and divide the aerospace development site. alternative would also entail additional drive distance as the roadway required would be longer. The preferred alignment for the extension of Worldwide Drive is consistent with the approved Airport Layout Plan (ALP). The CWA Section 404 Individual Permit issued for Runway 5L/23R and associated developments (Action ID SAW-2000-21655) anticipated the preferred alignment of Worldwide Drive, including the stream crossing, would be constructed once plans were advanced for the aerospace development site. Impacts to jurisdictional resources (wetlands, streams, and stream buffer) are anticipated to be minor and have already been mitigated. This alignment would avoid impacts to the existing Federal Express facility and allow for the planned development specifically for the aerospace industry. Constructing Worldwide Drive with an alignment that completely avoids jurisdictional resources would involve relocating the western portion of the road to the south which would severely impact the approved aerospace development - essentially reducing its size by more than 50 percent; and isolating it from adjacent facilities. This alignment would also decrease the aerospace use of property that is dedicated to accommodating aviation activity. This alignment would eliminate the potential to construct nearly 15 future aircraft parking positions resulting in an uneconomic remnant of the property. Significantly, this site is also located between parallel runways, which renders it a premium aerospace development location. Other areas either on-, or off-airport property would have to be identified to accommodate the demand for the planned aviation activity with extensive coordination effort required to re-designate this area as non-aeronautical use. The proposed Worldwide Drive stream crossing, therefore, becomes an unavoidable necessity to maintain the integrity of this important aerospace development site, consistent with the approved ALP.

The use of fill material for site preparation on airport sites that may be recovered in the future for airport-related development is an efficient use of resources and minimizes earthwork, hauling, and associated environmental impacts from repeated use of heavy equipment and vehicles. The

closest available site for disposal of clean fill to be excavated from the rental car facilities is the aerospace development tract adjacent to the FedEx Mid-Atlantic Hub, discussed in the previous paragraph. Additional rationale for deposition of fill from the existing rental car facilities to the aerospace development site is summarized as follows:

- 1) PTAA's mission includes planning and constructing economic development assets;
- 2) This location is PTAA's premier aerospace site due to setting between two runways;
- 3) This location will be developed for a future tenant, if not for FedEx; and
- 4) Avoiding development of this site now would simply be postponing a significant element of PTAA's mission and result in more expensive development in the future.

Stream and associated riparian buffer resources at the Chimney Rock site are completely avoided by the proposed spoil (anticipated from the Inman site) embankment at that location. The Chimney Rock site is preferred due to the minimization of haul distance and potential environmental impacts associated with driving heavy equipment and vehicles.

Affected Environment

Maintained/Disturbed and Mixed Pine/Hardwood Forest terrestrial communities were identified at three component locations (Chimney Rock, Inman, and Air Cargo sites) included in the Project. These communities, along with terrestrial wildlife, aquatic communities, and invasive species, were summarized in the Biological Assessment appended to the EA. Approximately 37 acres mixed pine/hardwood forest would potentially be impacted by the Project. One of the two man-made ponds may also be impacted. Wildlife potentially displaced include limited terrestrial and aquatic species typical of the area. The North Carolina Stream Assessment Method (NCSAM v2.1) and North Carolina Wetland Assessment Method (NCWAM v5) were applied to streams and wetlands verified in the jurisdictional determinations at three Project component locations and the results of these aquatic resource assessments were summarized in the previously transmitted letter dated February 10, 2017 from Michael Baker International (see EA Appendix A).

Minimization of Impacts

Given the lack of alternative site locations and restrictions on site access routes, four alternative options for development of the Inman site for rental car facilities were considered in addition to the "No-Action" Alternative. The first option (initially preferred by PTAA) contemplates complete development of the site including direct impacts to natural resources. Due to the presence of jurisdictional wetlands and streams on the site, significant effort was afforded to avoiding these resources, consistent with CWA guidance, during the advancement of preliminary designs. Therefore, PTAA abandoned the complete site development option in favor of more environmentally sustainable "avoidance" alternatives, as follows:

Inman Site Development Option 2 was conceived as an attempt to avoid direct impacts to jurisdictional wetlands, streams, and riparian buffers to the extent practicable. The environmental resources associated with these jurisdictional areas (such as fish, wildlife, plants, floodplains, surface waters, and groundwater) are similarly avoided. Option 2 contemplates 21.66 acres of development including 2,104 parking spaces and 16,900 square feet of buildings,

disturbing 52.6 acres and involving 816,000 cubic yards of cut. Because the existing Inman site is entirely pervious, the development of the minimum acreage for the rental car facilities and parking creates the need for stormwater management. Maximization of side-slope steepness at the development perimeters to avoid the adjacent natural resources also exacerbates the necessity for appropriate stormwater management. Appropriate areas will be developed as Stormwater Control Measures (SCM) suitable for locations near airports. The specific location of such SCM within the development site is dictated by stormwater management design protocols as discussed in the enclosed Stormwater Management Report. This option is being advanced as the Preferred Alternative.

In addition to the avoidance of direct impacts to natural resources, a third option was conceived to explore the feasibility of re-locating stormwater management to facilitate specific and appropriate continuity of a hydrologic source for the headwater streams and wetlands to be preserved on-site. Option 3 contemplates 21.50 acres of development including 2,300 parking spaces and 16,900 square feet of buildings, disturbing 52.6 acres and involving 816,000 cubic yards of cut. This option significantly isolates a portion of the parking area and may result in competitive disadvantage to one or more of the GSO rental car tenants. Therefore, this option was not advanced for further study.

Based on the limited space and vertical height restrictions (Runway Protection Zone) at the proposed new rental car location, constraints of the site (jurisdictional resources on both sides and in the middle of the facility), and lack of practicable alternatives; it was anticipated in the draft EA that up to 1,662 linear feet stream channel and 1.8 acres of wetlands could be impacted by the proposed Project.

PTAA has redesigned the new rental car facilities to reduce impacts to approximately 0.08 acres wetlands, 1.72 acres open water, and no permanent riparian buffer. Temporary impacts estimated at 0.02 acres wetland and 1,557 square feet riparian buffer are based on potential 10-foot incursion from permanent impact zone during construction. These potential temporary impacts, if any, will be restored immediately following construction completion and removal of temporary protection measures.

Wetland Impacts

Impact Site	Permanent or Temporary	Reason for Impact	Wetland	Туре	NCWAM	Impact Area (acres)
1	P	Parking#1	WD4	Headwater Forest	LOW	0.07
3	P		WD2		HIGH -	0.01
	T					0.02
					Total:	0.10

Riparian Buffer Impacts

Impact Site	Permanent or Temporary	Reason for Impact	Type of Impact	Stream	Zone 1 Impact (sq. ft.)	Zone 2 Impact (sq. ft.)
4	_	Parking#2				405
5	T	SCM#3	Exempt	SB		41
6	_	SCIVI#3		-		1,111
				Total:	0	1,557

PTAA is further minimizing potential unavoidable adverse effects of the Project consistent with FAA requirements and Section 404(b)(1) guidelines to the extent possible as follows:

- Construction of stream culverts will minimize smothering of organisms by utilizing "pump-around"; minimize construction time; control turbidity through adherence to the Erosion and Sedimentation Control (E&SC) Plan; avoid unnecessary discharge; prevent creation of standing water; and prevent drainage of wet areas.
- During construction, physiochemical conditions will be maintained, and potency and availability of pollutants will be reduced; material to be discharged will be limited; treatment substances may be added if necessary; chemical flocculants may be utilized to enhance the deposition of suspended particulates in appropriate disposal areas.
- The effects of dredged or fill material may be controlled by selecting discharge methods and disposal sites where the potential for erosion, slumping or leaching of materials into the surrounding aquatic ecosystem will be reduced. These methods include using containment levees, sediment basins, and cover crops to reduce erosion.
- Discharge effects will also be controlled by containing discharged material properly to prevent point and nonpoint sources of pollution; and timing the discharge to minimize impact, for instance during periods of unusual high-water flows.
- The effects of a discharge will be minimized by the manner in which it is dispersed, such as, where environmentally desirable, orienting dredged/fill material to minimize undesirable obstruction to the surface water or natural flow, and utilizing natural contours to minimize the size of the fill; using silt screens or other appropriate methods to confine suspended particulates/turbidity to a small area where settling or removal can occur; selecting sites or managing discharges to confine and minimize the release of suspended particulates to give decreased turbidity levels and to maintain light penetration for organisms; and setting limitations on the amount of material to be discharged per unit of time or volume of receiving water.
- Discharge technology will be adapted to the needs of the site. The applicant will consider using appropriate equipment or machinery, including protective devices, and the use of such equipment in activities related to the discharge of dredged or fill material; employing appropriate maintenance and operation on equipment or machinery, including adequate training, staffing, and working procedures; using machinery and techniques that are especially designed to reduce damage to streams; designing access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low

- and high water flows, accommodate fluctuating water levels, and maintain circulation and faunal movement; employing appropriate machinery and methods of transport of the material for discharge.
- Minimization of adverse effects on populations of plants and animals will be achieved by minimizing changes in water flow patterns which would interfere with the movement of animals; managing discharges to avoid creating habitat conducive to the development of undesirable airport wildlife hazards; avoiding sites having unique habitat or other value, including habitat of threatened or endangered species; using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics; timing discharge to avoid spawning or migration seasons and other biologically critical time periods; and avoiding the destruction of remnant natural sites within areas already affected by development.

Compensatory Mitigation

In order to comply with FAA wildlife hazard avoidance protocols (FAA AC 150/5200-33B) and the United States Environmental Protection Agency (USEPA) mitigation rule, unavoidable impacts are proposed to be mitigated off-site. There are no adjacent resources which would be impacted or require mitigation as a result of the Project. Impacts to any nearby jurisdictional streams or wetlands will be avoided. Proposed impacts to 1,221 linear feet of stream tributary to Brush Creek located at the Air Cargo site have already been mitigated at the Causey Farm Mitigation site under USACE Action ID SAW-2000-021655 (DWR File 00-0846), deemed successful in 2009 and 2010. Mitigation required based on proposed impacts is estimated at 0.16 Wetland Mitigation Units based on 1:1 replacement for 0.07 acres LOW rated wetland WD4 and 3:1 replacement for 0.03 HIGH rated wetland WD2 impacts.

2.08 WMU are currently available at PTAA's Causey Farm mitigation site for use on future GSO projects, pending Corps review and approval. PTAA is hereby requesting approval to apply 0.16 WMU available at Causey Farm to mitigate the proposed GSO Rental Car Facilities Relocation project impacts. The mitigation proposed will thus meet the estimated requirement.

Cumulative Impacts

No cumulative Project environmental effects are anticipated: Past GSO projects have included the HAECO Facility Improvements, Honda MRO, Honda Connector Road, Taxiway D Extension, Ballinger Road Extension, and the extension of Taxiway M. Only the HAECO and Connector Road projects involved quantifiable impacts (Individual and Nationwide CWA Section 404/401 Permits). Adjacent projects include the Cross-Field Taxiway and Site Development Projects and NCDOT roadway improvements in the Project vicinity (I-73 Connector, US-220/NC-68 Connector, I-840, widening US-220, and widening Market Street). No significant environmental impacts have been determined for these projects. Tree clearing for the Runway 23L approach zone adjacent to the proposed New Rental Car Facilities location is proposed to coincide with the Project construction time-frames, but this is limited to the 42-acre area north of Old Oak Ridge Road and the other side of I-73. Cumulatively, the Rental Car Facilities Relocation would not add significant impacts, rather, the NCDOT roadway

improvements anticipate such Airport development. Development of the proposed action would not involve construction or development activity in residential areas, and there would be no shifts in population movement or increase in the demands for public services. The proposed action would not disrupt local traffic patterns or reduce the levels of service of roads serving the Airport and its surrounding communities.

Fish and Wildlife

As of October 14, 2018, the United States Fish and Wildlife Service (USFWS) lists Small Whorled Pogonia as threatened and Schweinitz's Sunflower as endangered in Guilford County. Suitable habitat is not present at the any of the sites surveyed for the project. Identified forested areas do not appear to include suitable persistent canopy breaks. A review of North Carolina Natural Heritage Program (NCNHP) records indicated no known occurrences within 1.0 mile of the Airport. The USFWS previously listed small-whorled pogonia as a historic record in Guilford County, indicating that this species was last observed within the County more than 50 years ago. However, a single plant was recently discovered near the Town of Gibsonville approximately 20 miles east of the Airport.

The Project is anticipated to have no effect on these species - suitable habitat is not present at the Project sites and review of NCNHP records indicated no known occurrences within 1 mile. Habitat ranges for Endangered (Cape Fear shiner, Roanoke logperch) and At Risk (Atlantic pigtoe) aquatic species listed do not include the project vicinity.

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large dominant trees are utilized for nesting sites, typically within 1.0 mile of open water. A desktop Geographic Information System (GIS) assessment of the Airport, as well as the area within a 1.13-mile radius (1.0 mile plus 660 feet) of the three sites, was performed using 2016 color aerial photography. Lake Higgins (a water body large enough and sufficiently open to be considered a potential feeding source) was identified within this search radius. A survey of the Chimney Rock, Inman, and Air Cargo sites and the area within 660 feet of these sites was conducted. No bald eagle nests were observed within this search polygon. Review of the NCNHP database revealed no known occurrences of this species within 1.0 mile of the Airport. Since there is potential foraging habitat within the review area, a survey of the project study area and the area within 660 feet of the project limits for potential nesting habitat was conducted. Most of the wooded areas within and near the project study areas are planted pine or pine flatwoods that have previously been logged. As a result of planting and/or past logging, most of the largest and oldest trees are even-aged stands without the "dominant" canopy trees required for nesting by bald eagles.

As of October 14, 2018, the USFWS list no Candidate species for Guilford County. Federal Species of Concern are not legally protected under the Endangered Species Act and are not subject to its provisions, including Section 7, until they are formally proposed or listed as Threatened or Endangered. Organisms that are listed as Endangered, Threatened, or Special Concern on the NCNHP list of Rare Plant and Animal Species are afforded state protection under the State Endangered Species Act of 1987 and the North Carolina Plant Protection and Conservation Act of 1979.

There are no State-listed endangered or threatened species known to occur within 1 mile of the Project. Current species listed for the "Guilford" 7.5-minute United States Geographic Survey (USGS) Topographic Quadrangle from March 3, 2017 search of the NCNHP database included the Bald Eagle (State Threatened) and Greensboro Burrowing Crayfish (State Special Concern). The North Carolina Wildlife Resources Commission (NCWRC) have recorded Greensboro burrowing crayfish and Appalachian golden-banner (State Special Concern - Vulnerable) in the Project vicinity. No Project activity contemplates take of species listed in the Migratory Bird Treaty Act.

Historic, Cultural, Scenic, and Recreational Values

No National Register of Historic Places (NRHP) resources will be impacted by the Project according to the HPOWEB map and the State Historic Preservation Office (SHPO) had no comment in response to early NEPA coordination for the proposed Project. The Project components are located entirely within Airport-owned property. On May 26, 2019, a field investigation of 15 architectural resources within the Area of Potential Effect (APE) approximately 2000 feet from the center of the Inman site was conducted. The survey found that none of the 15 properties is considered eligible for the NRHP under any criterion. A GIS Predictive Model was used to identify areas within the Inman Site (excluding the two ponds) that have a high probability for the presence of archaeological sites and that may be subject to direct and indirect effects from the proposed relocation of the rental car facilities. The outcome of the GIS Predictive Model was a spatial depiction of the project area that has a high probability for the presence of historic and prehistoric archaeological resources based on an analysis of environmental conditions and historic data. Four sites (two prehistoric lithic scatters and two historic sites with building foundations and a scatter of artifacts) were identified on the 18-acres (about 30 percent) of the 57-acre project APE that were identified as having a high-probability for the presence of archaeological sites. None of the sites retains enough integrity to recommend them as being eligible for the National Register. No further archaeological work was recommended. No parks, national forest, wildlife refuge, recreational areas, Section 106, Section 4(f), or Section 6(f) resources will be impacted by the Project. No National Wild and Scenic Rivers, Nationwide Rivers Inventory (NRI)-listed rivers, river segments, or study rivers are located at or near the Airport.

Stormwater

Application of appropriate stormwater management controls consistent with the State Stormwater Design Manual, Water Supply Watershed Protection Program, and Jordan Water Supply Nutrient Strategy regulations will address potential water quality and runoff quantity changes resulting from the additional impervious surfaces (see enclosed Stormwater Management Report and Plans). Protection of downstream drinking water sources will be ensured through appropriate adherence to PTAA's watershed protection and inspection protocols, mandated by the Water Supply Watershed Management and Protection Rules of the PTAA and the PTAA 2001 Stormwater Management Plan (SMP). The Project will also be subject to the Airport's Individual National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater Permit (NCS000508) including the Airport Stormwater Pollution Prevention Plan (SPPP), discharge monitoring program, spill response procedures, and Spill

Prevention Control and Countermeasures (SPCC) plan. Stormwater management specifications include:

- Water quality treatment for the 1-inch storm event;
- The 1-year 24-hour storm event discharge shall be less than the pre-development discharge;
- GSO is low density (<24% built-upon area); and
- Retention / detention ponds (open water with accessible shore) not desired near Airport.

The existing rental car facilities, once demolished, will be converted into green space with some existing pavement to remain. Since there is a net reduction in impervious surface, no additional stormwater management is required.

Construction of Worldwide Drive and the adjacent aerospace development footprint was part of the ultimate development included in the 2001 SMP which anticipated 80 acres of total impervious surface draining to Pond F-1. This pond was also sized to minimize impacts to the Brush Creek Conservation Easement. Based on the Project impervious surfaces for this area, water quality requirements, and existing pond characteristics; Pond F-1 remains appropriate to provide stormwater management for the development proposed at this location.

Appropriate SCMs will be provided at the proposed New Rental Car Facility at the Inman Road site as bioretention cells with risers. Site infiltration testing and geotechnical investigation will ensure that the SCMs provide for infiltration as required and that no ponding occurs. The SCMs will also provide appropriate flood control and discharge to existing wetlands at non-erosive rates. The outfalls will be strategically placed to provide suitable runoff to existing streams and wetlands to avoid hydrologic impact to these natural features.

A shallow swale has been designed between the riparian buffer and the edge of spoil at the Chimney Rock site to control runoff from the embankment. Since there is no change in impervious surface here, no additional SCMs are proposed.

Prior to the commencement of construction, an E&SC plan for the Project will be submitted to NCDEQ and PTAA will obtain the applicable E&SC approval and NPDES construction stormwater permit. Potential temporary impacts to surface water quality as a result of Project construction activities will be effectively mitigated through adherence to the approved E&SC plan and NPDES permit requirements, as well as through compliance with FAA Standards for Specifying Construction of Airports.

Other Federal, State, or Local Requirements

Through the NEPA process, FAA has explored practicable Project alternatives and impact minimization prior to addressing compensatory mitigation (sequencing). The FAA has also explored potential environmental impacts relating to Air Quality; Biological Resources; Climate; DOT Section 4(f) Resources; Farmland; Hazardous Materials, Solid Waste, and Pollution Prevention; Historical, Architectural, Archeological, and Cultural Resources; Land Use; Noise and Compatible Land Use; Socioeconomics, Environmental Justice, Children's Environmental Health and Safety Risks; Visual Effects; Water Resources; Cumulative Impacts; Permits and Certifications; and Mitigation, as summarized in the EA.

In consideration of 15A NCAC 02H .0502 (a), the following information is summarized for filing the Section 401 CWA Water Quality Certification application:

- (1) the date of application August 8, 2019;
- (2) the name, address, and phone number of the applicant. If the applicant is not the property owner(s), the name, address, and phone number of the property owner(s) Piedmont Triad Airport Authority; Mr. J. Alex Rosser, Deputy Executive Director; 1000A Ted Johnson Parkway; Greensboro, NC 27409; Telephone (336) 665-5600;
- (3) if the applicant is a corporation, the name and address of the North Carolina process agency, and the name, address, and phone number of the individual who is the authorized agent of the corporation and responsible for the activity for which certification is sought. The corporation must be registered with the NC Secretary of State's Office to conduct business in NC see (2) above;
- (4) the nature of the activity to be conducted by applicant **airport rental car facilities** relocation, see previous text and enclosures for details;
- (5) whether the discharge has occurred or is proposed **proposed**;
- (6) the location of the discharge, stating the municipality, if applicable; the county; the drainage basin; the name of the receiving waters; and the location of the point of discharge with regard to the receiving waters Piedmont Triad International Airport, Guilford County, see permit drawings for specific discharge locations;
- (7) a description of the receiving waters, including type (creek, river, swamp, canal, lake, pond, or estuary) if applicable; nature (fresh, brackish, or salt); and wetland classification riparian wetlands, open water pond, and riparian buffer, tributary to Horsepen Creek, see previous text for details;
- (8) a description of the type of waste treatment facilities, if applicable **not applicable**;
- (9) a map(s) or sketch(es) with a scale(s) and a north arrow(s) that is legible to the reviewer and of sufficient detail to delineate the boundaries of the lands owned or proposed to be utilized by the applicant in carrying out the activity; the location, dimensions, and type of any structures erected or to be erected on the lands for use in connection with the activity; and the location and extent of the receiving waters, including wetlands within the boundaries of the lands see enclosed permit drawings;
- (10) an application fee as required by G.S. 143-215.3D(e) check enclosed; and
- (11) a signature by the applicant for the federal permit or license or an agent authorized by the applicant. If an agent is signing for the applicant, an agent authorization letter must be provided. In signing the application, the applicant certifies that all information contained therein or in support thereof is true and correct to the best of their knowledge **signed application enclosed**.

A lack of practical alternatives has been demonstrated pursuant to 15A NCAC 02H .0506(f). After consideration of size and configuration of the proposed activity, and all alternative designs, the basic Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impact to surface waters or wetlands.

Minimization of impacts has been demonstrated pursuant to 15A NCAC 02H .0506(g) because the surface waters are able to continue to support the existing uses after Project completion, and the impacts are required due to the spatial and dimensional requirements of the Project; the location of existing structural and natural features that dictate the placement and configuration of the proposed Project; and the purpose of the Project and how the purpose relates to placement and configuration.

The Project: (1) has no practical alternative; (2) will minimize adverse impacts to surface waters based on consideration of existing topography, vegetation, fish and wildlife resources, and hydrological conditions; (3) will not result in the degradation of groundwater or surface waters; (4) will not result in cumulative impacts, based upon past or reasonably anticipated future impacts, that cause or will cause a violation of downstream water quality standards; (5) provides for protection of downstream water quality standards through on-site stormwater treatment; and (6) provides for replacement of existing uses through mitigation. Additional regulatory requirements are addressed in the EA.

We appreciate your consideration of this request. Please feel free to contact me (rossera@gsoair.org, 336.665.5620) or Richard Darling (rdarling@mbakerintl.com, 919.481.5740) with questions or comments. One (1) complete and collated original application with supporting documentation is being provided to USACE with four (4) complete and collated copies to DWR along with the application fee.

Sincerely,

PIEDMONT TRIAD AIRPORT AUTHORITY

J. Alex Rosser, P.E.

Deputy Executive Director

RD/AR:kh

Enclosures: FAA Environmental Assessment (38 pages with 3 appendices)

Eng Form 4345 (3 pages, PTAA signed) Project Alternatives Analysis (5 pages)

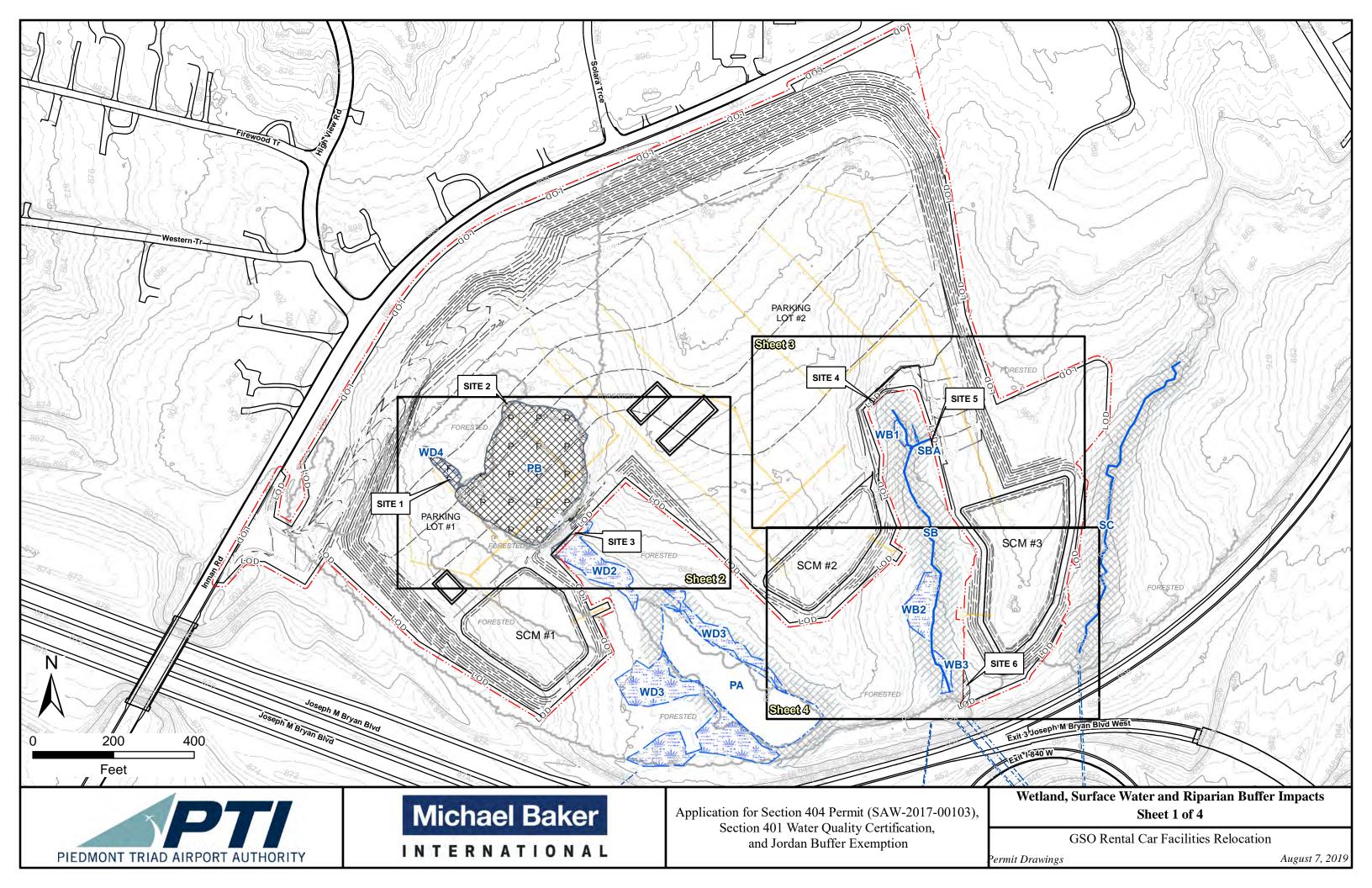
Permit Drawings (4 sheets, full size and 11"×17")

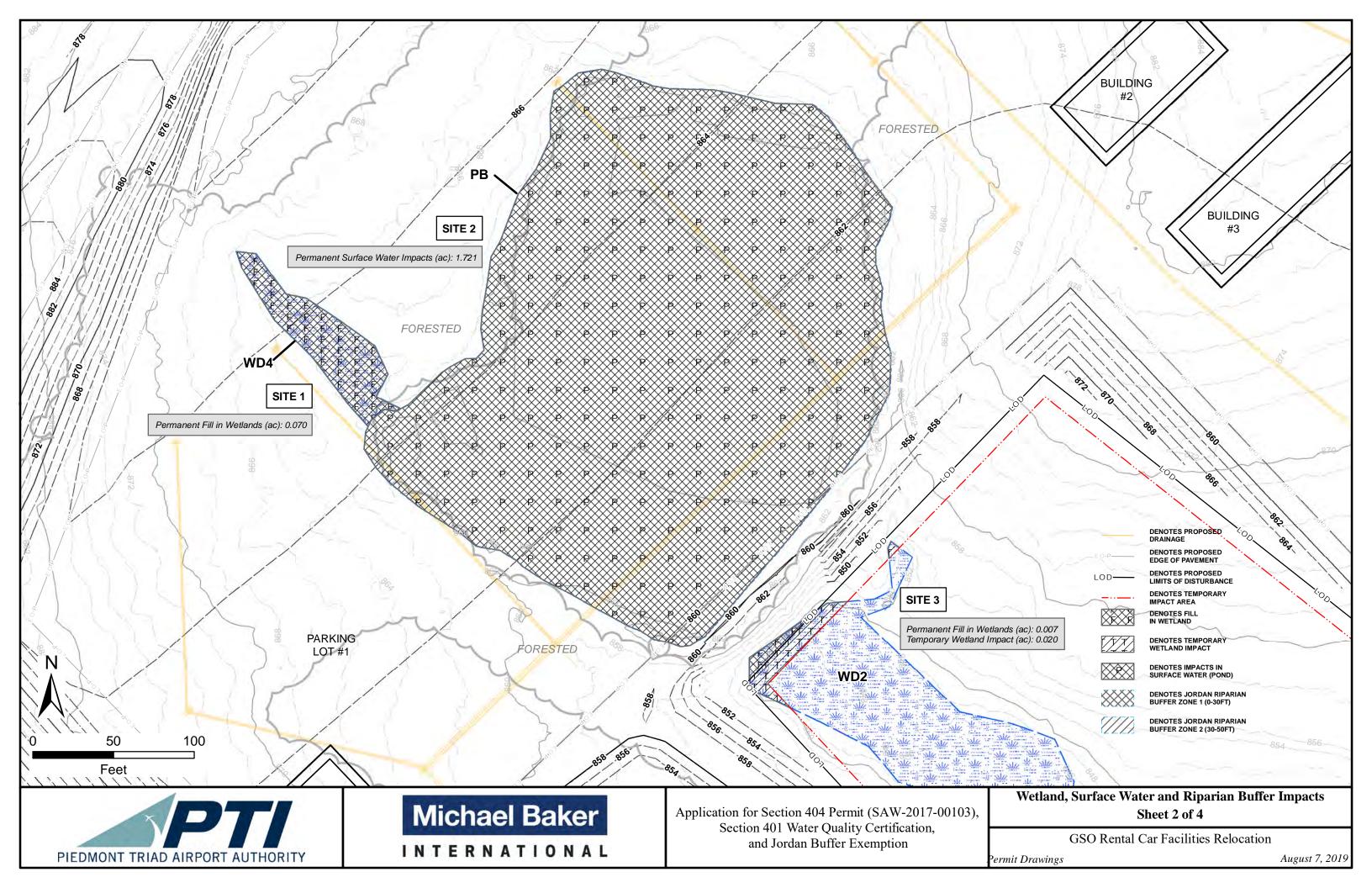
Stormwater Management Report (113 pages with 25 plan sheets)

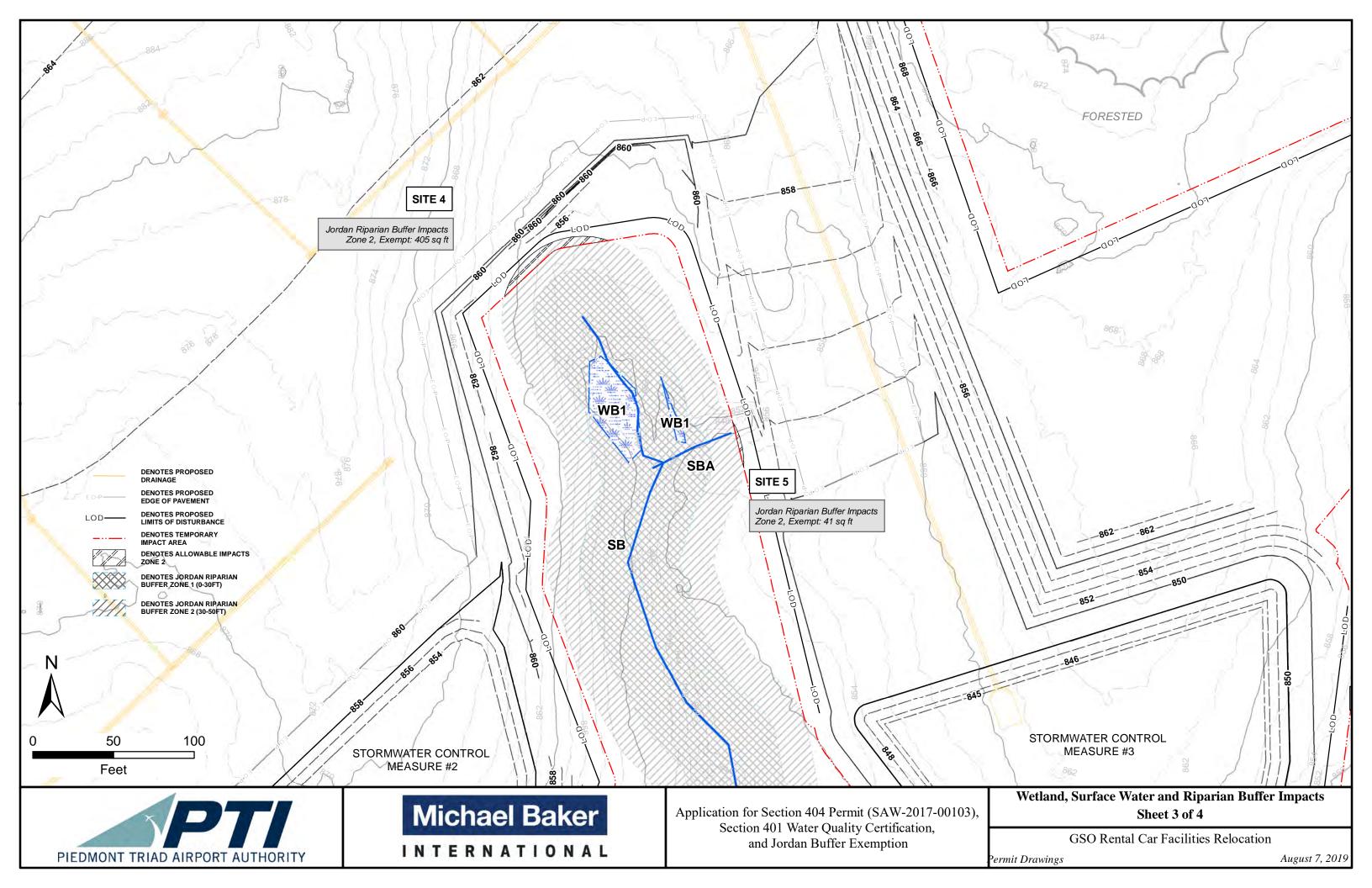
DWR 401 Application Fee (PTAA \$570 check)

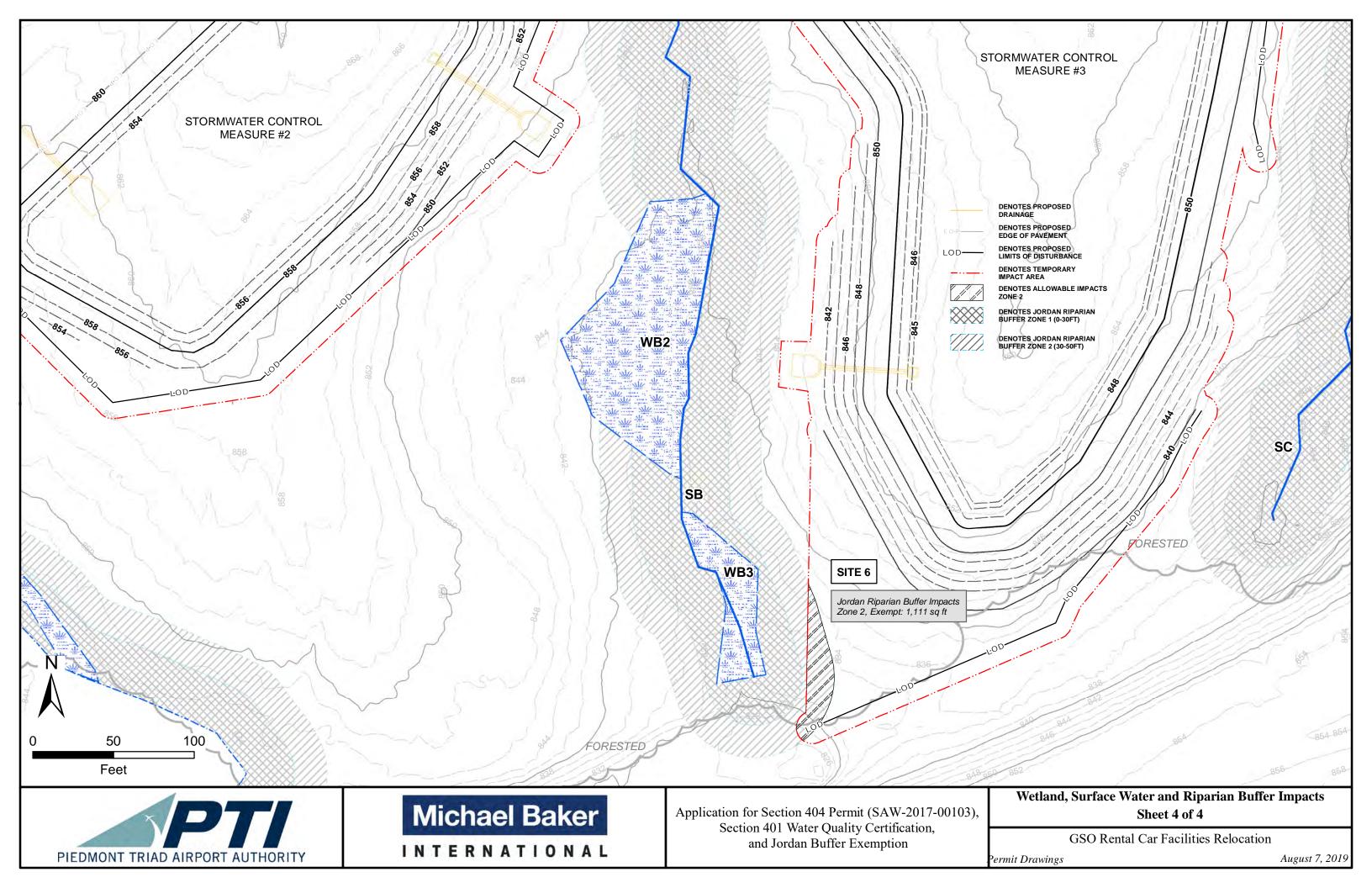
cc: Sue Homewood, DWR-WSRO

Richard Darling, Michael Baker International











Memorandum

TO: J. Alex Rosser, PE DATE: July 25, 2019

FROM: Richard Darling SUBJECT: GSO Rental Car Facilities Relocation

PROJECT ALTERNATIVES

The fundamental precept of the Clean Water Act (CWA) Section 404(b)(1) Guidelines is that discharges of dredged or fill material into waters of the United States, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem. The Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." Based on this provision, the applicant is required in every case to evaluate opportunities for use of non-aquatic areas and other aquatic sites that would result in less adverse impact on the aquatic ecosystem. A permit cannot be issued, therefore, in circumstances where a less environmentally damaging practicable alternative for the proposed discharge exists.

Reasonable alternative locations and concepts to proposed project components are evaluated and summarized in the following text. Alternatives to removing the existing rental car (RAC) facilities and locating new facilities are limited by the project Purpose and Need. Locating appropriate sites to haul excess fill from both these sites are similarly limited by distance, suitability, aviation safety, and economics. Environmental concerns apply additional limitations to alternatives, but opportunities with significant efficiencies are also presented.

Removal of Existing Rental Car Facilities

The only viable solution to resolving the Taxiway E visibility issue is to remove the obstruction. The use of remote cameras to transfer live video feed of hidden portions of the taxiway is a limited alternative, only temporarily applicable for the existing tower due to its limited remaining life. The existing Hertz building and several feet of topography at this location must be removed to comply with FAA safety requirements. The excess material removed from the site would be deposited at an existing, approved airport waste site (or similar). The excess material could then be recovered should it be needed for future airport-related development. The temporary, on-site storage of excess material for future airport needs is an efficient alternative and provides a means of reducing redundant and expensive earthwork and hauling. The proposed aerospace development site adjacent to the FedEx Mid-Atlantic Hub (Air Cargo site) is suitably close to the existing RAC facilities to minimize haul distance and is also appropriately designated to receive such fill in the context of future aviation development. There are no closer suitable sites.

Proposed New Rental Car Facilities

Site Requirements for the relocated RAC facilities are based on the existing characteristics – approximately 2,400 total parking spaces required in four co-located sites within no more than three driving miles of the GSO Terminal. A review of Guilford County GIS for adequately sized sites within suitable distance of the GSO Terminal revealed no available parcels without potential similar or more severe impacts to aquatic resources. Potential sites not owned by PTAA would require such significant additional time and effort to purchase, re-zone, and secure FAA approval as to be inconsistent with the project need and purpose to resolve the line-of-site issue. Only two sites with potentially reasonable location for RAC parking not owned by PTAA were identified in a GIS search of suitably sized and zoned parcels (Figure 1). Both of these are located over 4 miles from the RAC pickup/drop-off and because they are neither owned by PTAA nor considered in the ALP for RAC, they are not available to meet the project need and purpose.

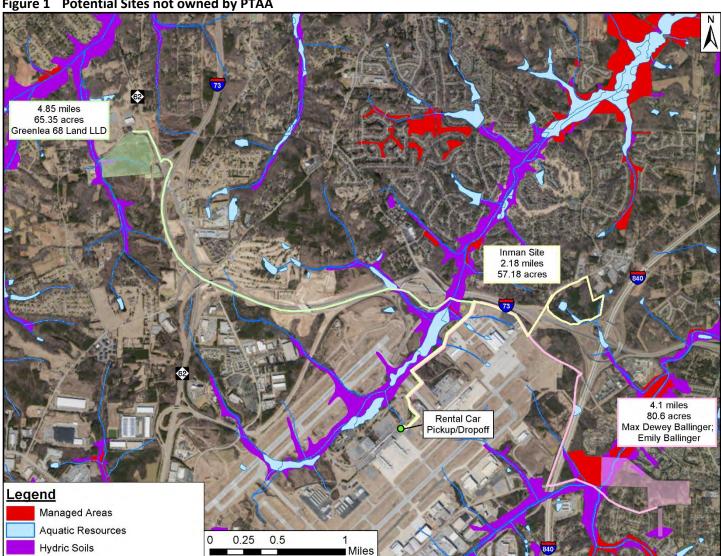


Figure 1 Potential Sites not owned by PTAA

The only other potential areas with adequate size for relocation of the RAC facilities include the proposed aerospace development sites owned by Airport Authority. Each of these five tracts (Figure 2) appear adequately sized for the combined RAC facilities but are strategically located with runway/taxiway frontage - significant for aerospace development, but not necessary for airport RAC facilities. These sites would also involve additional driving distances to the Terminal and potential RAC development complications arising from their intimacy with airside operations. Due to the unique features of the other appropriately sized GSO sites for aerospace development, these locations were removed from consideration for the RAC facilities. Development as RAC facilities would be an inefficient and inappropriate use of these Airport properties and interfere with PTAA's aerospace development mission.

Figure 2 Aerospace Development Sites



Not depicted on Figure 2 is the aerospace development site dedicated in 2001, but as yet undeveloped. This site remains the Airport Sponsor's potentially most important location for aerospace development due to its location between parallel runways, and adjacent to Taxiway E, Air Cargo Road, and the existing FedEx Mid-Atlantic Hub. This site was excluded from consideration for development of either RAC facilities or roadway due to its significance for future aviation development. The Inman site (also not shown on Figure 2) is the only suitable location not obligated for aerospace but with adequate size, orientation, and proximity, for RAC facility development.

Proposed Worldwide Drive

Access options from the Passenger Terminal to the Inman site are limited by existing land-use and transportation infrastructure. The access road must be located between the Brush Creek Conservation Easement (stream, wetland, and riparian buffer mitigation) and the adjacent aerospace development site to avoid impacts to either and efficiently connect the new RAC facilities. The only alternative route connecting Old Oak Ridge Road with Air Cargo Road to avoid a stream crossing would isolate and divide the aerospace development site. This alternative would also entail additional drive distance as the roadway required would be longer. The preferred alignment for the extension of Worldwide Drive

is consistent with the approved Airport Layout Plan (ALP). The Environmental Impact Statement / Record of Decision (EIS/ROD) and subsequent CWA permits issued for Runway 5L/23R and associated developments anticipated the preferred alignment of Worldwide Drive, including the stream crossing, would be constructed once plans were advanced for the aerospace development site. Impacts to jurisdictional resources (wetlands, streams, and stream buffer) are anticipated to be minor and have already been mitigated. This alignment would avoid impacts to the existing Federal Express facility and allow for the planned development specifically for the aerospace industry. Constructing Worldwide Drive with an alignment that completely avoids jurisdictional resources would involve relocating the western portion of the road to the south which would severely impact the approved aerospace development - essentially reducing its size by more than 50 percent; and isolating it from adjacent facilities. This alignment would also decrease the aerospace use of property that is dedicated to accommodating aviation activity. This alignment would eliminate the potential to construct nearly 15 future aircraft parking positions resulting in an uneconomic remnant of the property. Significantly, this site is also located between parallel runways, which renders it a premium aerospace development location. Other areas either on-, or off-airport property would have to be identified to accommodate the demand for the planned aviation activity with extensive coordination effort required to re-designate this area as non-aeronautical use. The proposed Worldwide Drive stream crossing, therefore, becomes an unavoidable necessity to maintain the integrity of this important aerospace development site, consistent with the approved ALP.

The use of fill material for site preparation on airport sites that may be recovered in the future for airport-related development is an efficient use of resources and minimizes earthwork, hauling, and associated environmental impacts from repeated use of heavy equipment and vehicles. The closest available site for disposal of clean fill to be excavated from the RAC facilities is the aerospace development tract adjacent to the FedEx Mid-Atlantic Hub, discussed in the previous paragraph. Additional rationale for deposition of fill from the existing RAC facilities to the aerospace development site is summarized as follows:

- 1) PTAA's mission includes planning and constructing economic development assets;
- 2) This location is PTAA's premier aerospace site due to setting between two runways;
- 3) This location will be developed for a future tenant, if not for FedEx; and
- 4) Avoiding development of this site now would simply be postponing a significant element of PTAA's mission and result in more expensive development in the future.

Proposed Spoil Embankment

Stream and associated riparian buffer resources at the Chimney Rock site are completely avoided by the proposed spoil (anticipated from the Inman site) embankment at that location. The Chimney Rock site is preferred due to the minimization of haul distance and potential environmental impacts associated with driving heavy equipment and vehicles.

No-Action Alternative

The No-Action Alternative would avoid most environmental consequences, including the potential continued existence of wetlands, streams, and forested uplands adjacent to the Inman / Old Oak Ridge Road intersection, but without management in context of their developed surroundings. The no-action alternative does not meet the Project purpose or need because continued existence of high-ground and structures at the Hertz facility would prohibit appropriate visibility of Taxiway E from the Air Traffic Control Tower (ATCT), contrary to FAA requirements. The ability of all RAC facilities to function efficiently at GSO would be compromised by lack of growth or modernization potential. A lack of redundant vehicle entry/exit capability or separation of RAC traffic from private transport would continue to hinder GSO efficiency and emergency planning. If the proposed fill site is not adequately prepared for aerospace development, GSO would be deprived of a specifically-planned economic development, contrary to Airport's mission. If Worldwide Drive is not connected, as planned, the RAC companies would be forced to use the main GSO entrance for access to the passenger terminal, requiring a significantly longer drive with consequent gas, mileage, and time inefficiencies.

Least Environmentally Damaging Practicable Alternative

Based on the considerable deliberation of potential impacts to environmental resources discussed the EA, the Airport Sponsor is advancing the Option 2 alternative for development of the Inman site. This option is summarized in the as the Proposed Action and contemplates avoidance and minimization of impacts to the extent practicable. The Proposed Action includes relocating all the existing RAC facilities from their current location to the Inman site and developing that site with appropriate access.



Memphis Airports District Office 2600 Thousand Oaks Blvd., Suite 2250 Memphis, TN 38118-2486

Phone: 901-322-8180

July 23, 2019

Mr. Alex Rosser, P. E. Deputy Executive Director Piedmont Triad Airport Authority 1000 A Ted Johnson Parkway Greensboro, NC 27409

RE: FONSI – Rental Car Relocation
Piedmont Triad International Airport (GSO)

Dear Mr. Rosser:

The Federal Aviation Administration (FAA) Memphis Airports District Office has reviewed the Environmental Assessment (EA) for the referenced project. Based on our review, the EA supports a Finding of No Significant Impact (FONSI).

To finalize the environmental process for this action, please issue an announcement of availability of the FONSI along with the final EA in a newspaper of general circulation.

If you have any questions related to this environmental review, please contact Aaron Braswell of my staff at (901) 322-8192 or at Aaron.Braswell@faa.gov.

Phillip J. Brader

Manager, Mentphis Hirports District Office

Enclosure

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Rental Car Facilities Relocation Piedmont Triad International Airport Greensboro, NC

I. Introduction/Background

In accordance with the National Environmental Policy Act (NEPA), this Finding of No Significant Impact (FONSI) announces final agency determinations and approvals for those Federal Actions by the Federal Aviation Administration (FAA) that are necessary to support the proposed developments at the Piedmont Triad International Airport in Greensboro, North Carolina.

II. Proposed Federal Action

The airport sponsor has requested FAA funding assistance for the following project:

- Site preparation for the removal of terrain obstruction 49 acres of land including removal of existing renting facilities and adjacent air cargo structures.
- Site preparation for 44 acres of future aviation development.
- Site preparation for 10 acres for future road (Worldwide Drive) and associated right-of-way.
- Site preparation of 57 acres and construction of new rental car facilities.
- Site preparation of 28 acres for spoil embankment.
- Relocation of utilities.

III. Purpose and Need

The FAA has defined the purpose and need for implementing the proposed action as being necessary to eliminate a line-of-site deficiency for the new air traffic control tower (ATCT). The existing terrain and rental car facilities would preclude air traffic controllers from adequately viewing the airfield. The criteria for establishing the new rental facilities is based on meeting FAA airport design guidelines, compliance with imaginary airspace surfaces in Federal Aviation Regulations (FARs), and fair business practices to have all airport rental car facilities in the same geographic vicinity.

IV. Alternatives

Federal guidelines concerning the environmental review process require that all reasonable and practicable alternatives that might accomplish the objectives of a proposed project be identified and evaluated. Such an examination ensures that alternatives are not prematurely dismissed and may lead to consideration of alternatives that fulfill the project's purpose and need as well as enhance environmental quality or have a less detrimental effect. The alternatives evaluated for this Environmental Assessment (EA) are listed below.

- 1. Inman Site Alternative 1
- 2. Inman Site Alternative 2 (Preferred Alternative and Proposed Federal Action)
- 3. Inman Site Alternative 3
- 4. Other site location Alternatives
- 5. No Action Alternative

These alternatives are described in Chapter 3 of the EA. As can be noted in the EA, other sites located beyond the Inman Site, were not considered suitable for development. Three development alternatives were considered at the Inman Site. The second Inman Site Alternative was selected as the preferred alternative as it limited environmental impacts and best satisfied the criteria outlined in the purpose and need statement.

V. Environmental Impacts

The EA analyzed all environmental categories based on FAA Order 5050.4B, "National Environmental Policy Act Implementing Instructions for Airport Projects" (NEPA). Those Resource Categories that the Sponsor's preferred alternative has the potential to impact are discussed below. Mitigation measures for the environmental impacts are discussed in Section VI.

V A. Air Quality and Greenhouse Gases

The proposed action is not expected to result in net increases in operating emissions. The project will result in additional emissions during construction. Based on air quality modeling, the construction emissions will be below the level of significance.

V B. Biological Resources

The proposed action will impact 37 acres of mixed pine/hardwood forest, including ponds, stream channels, and wetlands. As such, the action will impact both terrestrial and aquatic species. Based on site assessment, the project locations do not feature suitable habitat for state or federally-listed species, or the species are not known to occur within a one-mile radius of the project site.

V C. Section 4(f) Lands

The proposed action will occur on airport owned property and will not impact Section 4(f) Lands.

V D. Farmlands

The proposed action will occur on airport owned property and will not impact farmlands.

V E. Hazardous Materials, Solid Waste, and Pollution Prevention

The proposed action will produce solid waste due to the demolition of existing structures. Solid waste will be disposed of in proper facilities. No hazardous materials are known to be present within the facilities to be demolished. If hazardous materials are encountered during construction, contractors will follow state protocols for treating and disposing of the waste.

V F. Section 106 Resources

Based on both a historical architecture survey and an archaeological survey, the proposed undertaking will not affect potentially eligible resources to the National Register of Historic Places (NRHP).

V G. Land Use

The proposed action will take place on existing airport property. The action is consistent with local land use plans.

V H. Natural Resources and Energy Supply

The action will result in the use of natural resources and energy supply both during construction and in operation. The resources to be consumed are in sufficient supply and are readily available.

V I. Noise and Compatible Land Use

The proposed action is expected to create short-term noise impacts from construction activities. Impacts are not expected to be significant due to the limited duration. The action is not expected to alter aircraft activity.

V J. Socioeconomics, Environmental Justice, Children's Environmental Health and Safety Risks

The proposed action is located on airport property. The action will result in a temporary increase in economic activity during construction. No known impacts are expected to disproportionately effect children or environmental justice communities.

V K. Visual Effects

The proposed action has potential to impact residential areas near the project area. However, given the extent of existing lighting in the project vicinity, including airport and commercial development, the impacts are not expected to be significant.

V L. Water Resources

The project site features several jurisdiction waters including wetlands, streams, and ponds. Based on the sponsor's efforts to avoid many of these resources, the propose action is expected to impact 0.1 acres of wetlands, 1.72 acres of open water non-jurisdictional ponds, 1,694 linear feet of streams, and 184,674 square feet of State protected riparian buffer. See mitigation in Section VI for more information.

V M. Cumulative Effects

The proposed action was considered in conjunction with past actions and future actions that are reasonably foreseeable. Based on the EA, the action will not lead to cumulative significant impacts to any environmental categories identified in FAA Orders 1050.1F and 5050.4B.

VI. Environmental Mitigation

The Airport Sponsor shall be responsible for obtaining all necessary construction permits or certifications as described in Section VI A. below prior to initiating construction activities near or on the environmental resource requiring the permit. Project related permits, certifications, and other mitigation measures required for the proposed action are discussed below. It should be noted that best management practices (BMPs) are considered standard operating procedure and are not considered mitigation; therefore, they are not discussed in this section.

VI A. Permits and Certifications

The project will require the following permits or certifications:

- 1. USACE 404
- 2. NC Division of Water 401
- 3. NPDES General Storm Water Permit

VI B. Mitigation

Without proper mitigation, the proposed action may exceed the threshold of significance. Mitigation shall be completed for the following environmental categories:

• Water Resources: It is anticipated that the action will impact up to 0.1 acres of jurisdictional wetlands; 1,694 linear feet of streams; and 184,674 square feet of riparian buffer. Mitigation is expected to occur via compensation and use of a wetland mitigation bank such as the Causey farm site or other mitigation banks within the local watershed. Anticipated replacement ratios are 3:1 for wetlands; 2:1 for streams; and 2.4:1 for buffer. The estimated mitigation cost for the preferred alternative, based on a replacement ratio of 3:1 is \$100,000.00.

VII. Public Involvement

The following agencies were consulted in the preparation of this EA:

- Federal Aviation Administration
- U.S. Department of Agriculture/Natural Resources Conservation Office
- U.S. Army Corps of Engineers
- U.S. Department of the Interior/Fish and Wildlife Service
- U.S. Department of the Interior, Office of Environmental Policy and Compliance
- U.S. Environmental Protection Agency
- N.C. Department of Administration, State Environmental Review Clearinghouse

A public notice was placed in the Winston-Salem Journal, High Point Enterprise, and Greensboro News Record announcing the availability of the draft EA, the opportunity for comment, and the opportunity to request a public hearing. The public review period

lasted for 30 days and ended on July 7, 2019. No comments or requests for a public meeting were made.

VIII. Decision

After careful and thorough consideration of the facts contained herein, the undersigned finds that approval of the proposed development is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

Date:

Approved:

hillip J. Braden

Manager, MEM-ADO



Environmental Assessment

FEDERAL AVIATION ADMINISTRATION MEMPHIS AIRPORTS DISTRICT OFFICE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF AVIATION

Airport Name: Piedmont Triad International Airport (GSO)

Proposed Project: Rental Car Facilities Relocation
Project Location: Guilford County, North Carolina

Date Submitted to FAA/SBG: July 11, 2019

This environmental assessment becomes a Federa	document when evaluated, signed, and dated by
the Responsible FAA/SBG Official.	
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Responsible FAA/SBG Official	Date /

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Acronyms

AC (FAA) Advisory Circular

ACEIT Airport Construction Emissions Inventory Tool

ALP Airport Layout Plan
AOA Air Operations Area
APE Area of Potential Effect
ATCT Air Traffic Control Tower

BMP Best Management Practice BMU Buffer Mitigation Unit

CEQ Council on Environmental Quality

CERCLIS Comprehensive Environmental Response Compensation and Liability Information

System

CFR Code of Federal Regulations

CWA Clean Water Act

DMS (NCDEQ) Division of Mitigation Services
DWM (NCDEQ) Division of Waste Management
DWR (NCDEQ) Division of Water Resources

E&SC Erosion and Sediment Control EA Environmental Assessment

ECOS (USFWS) Environmental Conservation Online System

EIS Environmental Impact Statement

EJ Environmental Justice

ESFO (USFWS) Ecological Services Field Office

FAA Federal Aviation Administration FAR Federal Aviation Regulations

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

GDOT Greensboro Department of Transportation

GHG Greenhouse Gas

GIS Geographic Information System

GNR Greensboro News Record

GPD Greensboro Planning Department GSO Piedmont Triad International Airport

HPE High Point Enterprise HUC Hydrologic Unit Code

HVAC Heating Ventilation and Air-Conditioning

IPaC (USFWS) Information for Planning and Consultation

MRO Maintenance Repair and Overhaul

NAAQS National Ambient Air Quality Standards NCAC North Carolina Administrative Code

NCDEQ North Carolina Department of Environmental Quality

NCDOT North Carolina Department of Transportation
NCNHP North Carolina Natural Heritage Program
NCSAM North Carolina Stream Assessment Method
NCWAM North Carolina Wetland Assessment Method
NCWRC North Carolina Wildlife Resources Commission

NEPA National Environmental Policy Act

NPDES National Pollutant Discharge Elimination System

NRHP National Register of Historic Places

NRI Nationwide Rivers Inventory

PESA Phase I Environmental Site Assessment

PTAA Piedmont Triad Airport Authority

QA/QC Quality Assurance / Quality Control

RAC Rent-A-Car

RIBITS Regulatory In-lieu fee and Bank Information Tracking System

ROD Record of Decision
RPZ Runway Protection Zone

SBG State Block Grant SCH State Clearinghouse

SCM Stormwater Control Measure SHPO State Historic Preservation Office SMP Stormwater Management Plan

SMU Stream Mitigation Unit

SPCC Spill Prevention Control and Countermeasures

SPPP Stormwater Pollution Prevention Plan

SRP Spill Response Procedures

US United States

USACE United States Army Corps of Engineers
USDOT United States Department of Transportation
USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey UST Underground Storage Tank

WMU Wetland Mitigation Unit WOTUS Waters of the United States WSJ Winston-Salem Journal

WSRO (NCDEQ) Winston-Salem Regional Office

WSWMP (PTAA) Water Supply Watershed Management and Protection

1 Proposed Action

The Piedmont Triad Airport Authority (PTAA) is the "Airport Sponsor" of the Piedmont Triad International Airport (GSO), west of the city of Greensboro in Guilford County, North Carolina (Figure 1). The Airport Sponsor is obligated to remove obstructions to the visibility of Taxiway E from the Air Traffic Control Tower (ATCT) as determined by the Federal Aviation Administration (FAA) Comparative Safety Analysis (Appendix A, Attachment 1). The "Proposed Action" is to resolve this visibility obstruction and includes the following four key components (Figure 2):

- 1. Site preparation and stabilization of approximately 49 acres of developed land including **Removal of Existing Rental Car Facilities** and adjacent air cargo structures (Figure 3) and re-grading to allow line-of-sight from the ATCT to Taxiway E;
- 2. Site preparation (including hauling of approximately 300,000 cubic yards clean fill from the existing rental car facilities, above) of approximately 44 acres of future aerospace development, approved previously (FAA, 2001). Adjacent to this location, approximately 10 acres of clearing and grading for construction and continuation of utilities along the **Proposed Worldwide Drive** right-of-way, including electrical/lighting, communications, and stormwater management (Air Cargo site, Figure 4);
- 3. Site preparation of approximately 57 acres of land including clearing and grading for construction of paved parking areas for approximately 2,360 spaces and infrastructure for approximately 16,900 square feet building space, including connection of utilities, stormwater management, and communications for the **Proposed New Rental Car Facilities** (Inman site, Figure 5); and
- 4. Site preparation and stabilization of approximately 28 acres for **Proposed Spoil Embankment** of approximately 600,000 cubic yards of clean fill (from the Inman site, above) adjacent to and north of the Honda Aircraft Company Maintenance Repair and Overhaul (MRO) facility (Chimney Rock site, Figure 6).

The proposed project schedule is dependent on receipt of appropriate regulatory approvals including documented compliance with the National Environmental Policy Act (NEPA) and Clean Water Act (CWA). Removal of the existing rent-a-car (RAC) facilities is contingent on completion of appropriate replacement with suitable access and functionality. Notwithstanding concurrent scheduling of component construction to the extent practicable, environmental protection measures for the proposed fill sites and haul roads would commence along with project components exempt from permitting or otherwise regulatorily approved as soon as possible, potentially in 2019. Project completion would be anticipated at least two years after commencement. The requested federal actions considered in this Environmental Assessment (EA) include FAA acceptance of the NEPA analysis completed to support the Proposed Action and issuance of an environmental finding necessary to allow Federal funding for those actions determined eligible. FAA acceptance of a NEPA analysis document and issuance of a decision document or finding is only a determination that the document satisfies applicable environmental statutes and regulations.

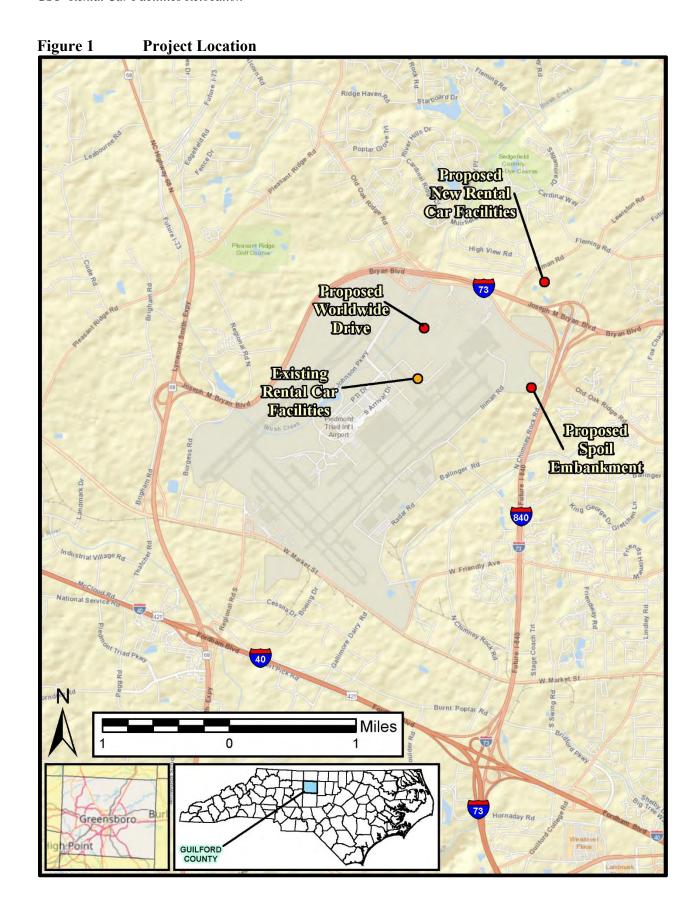
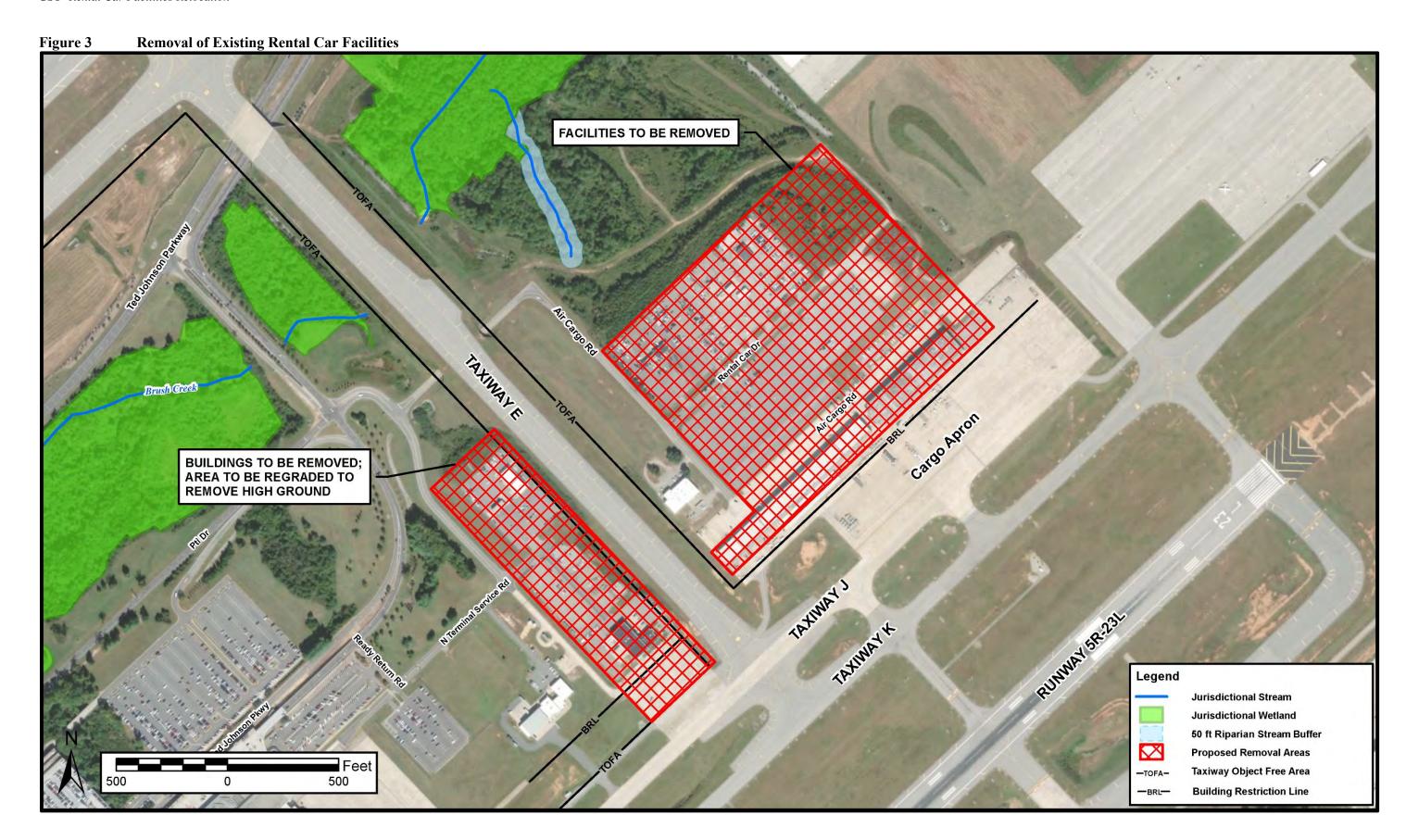
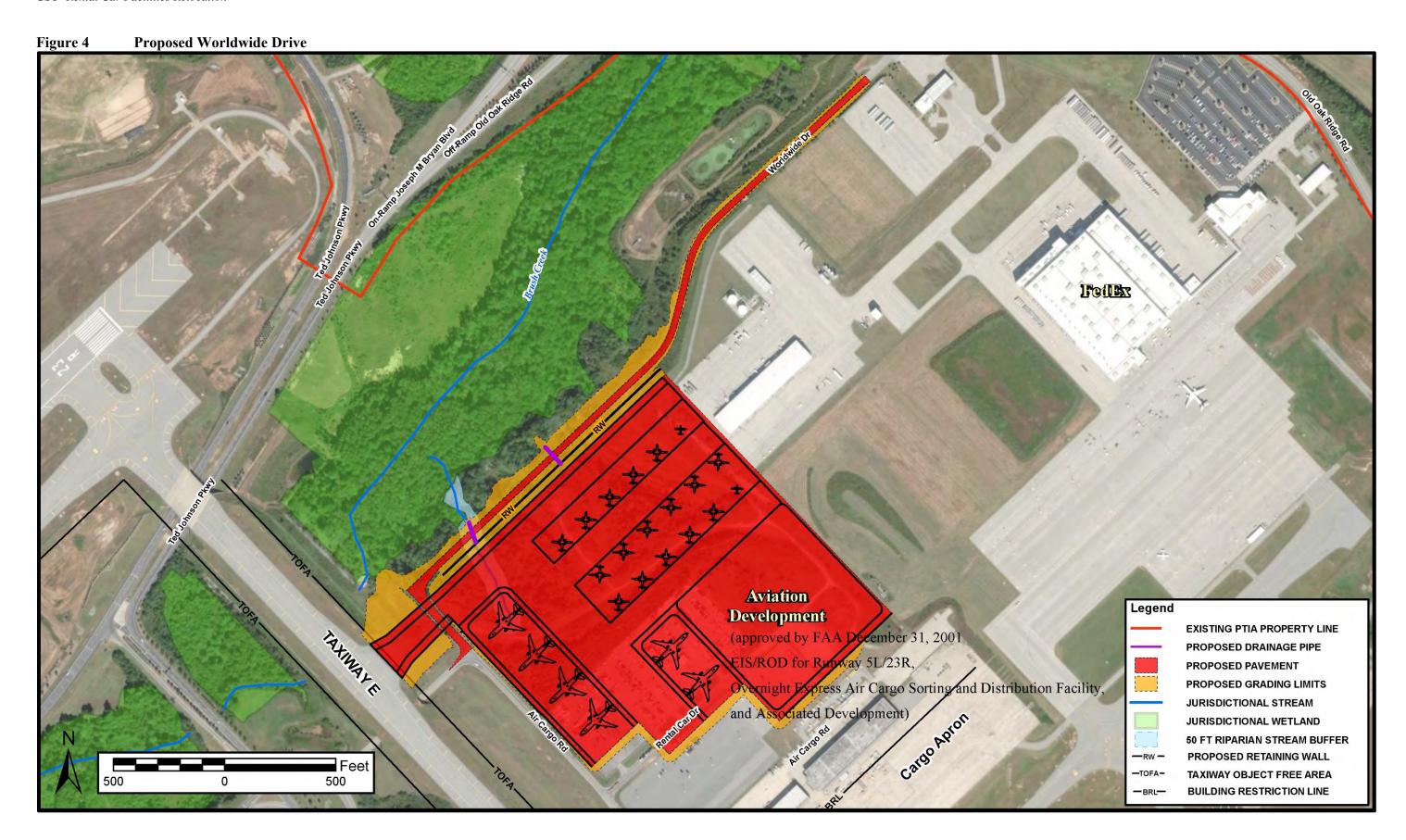
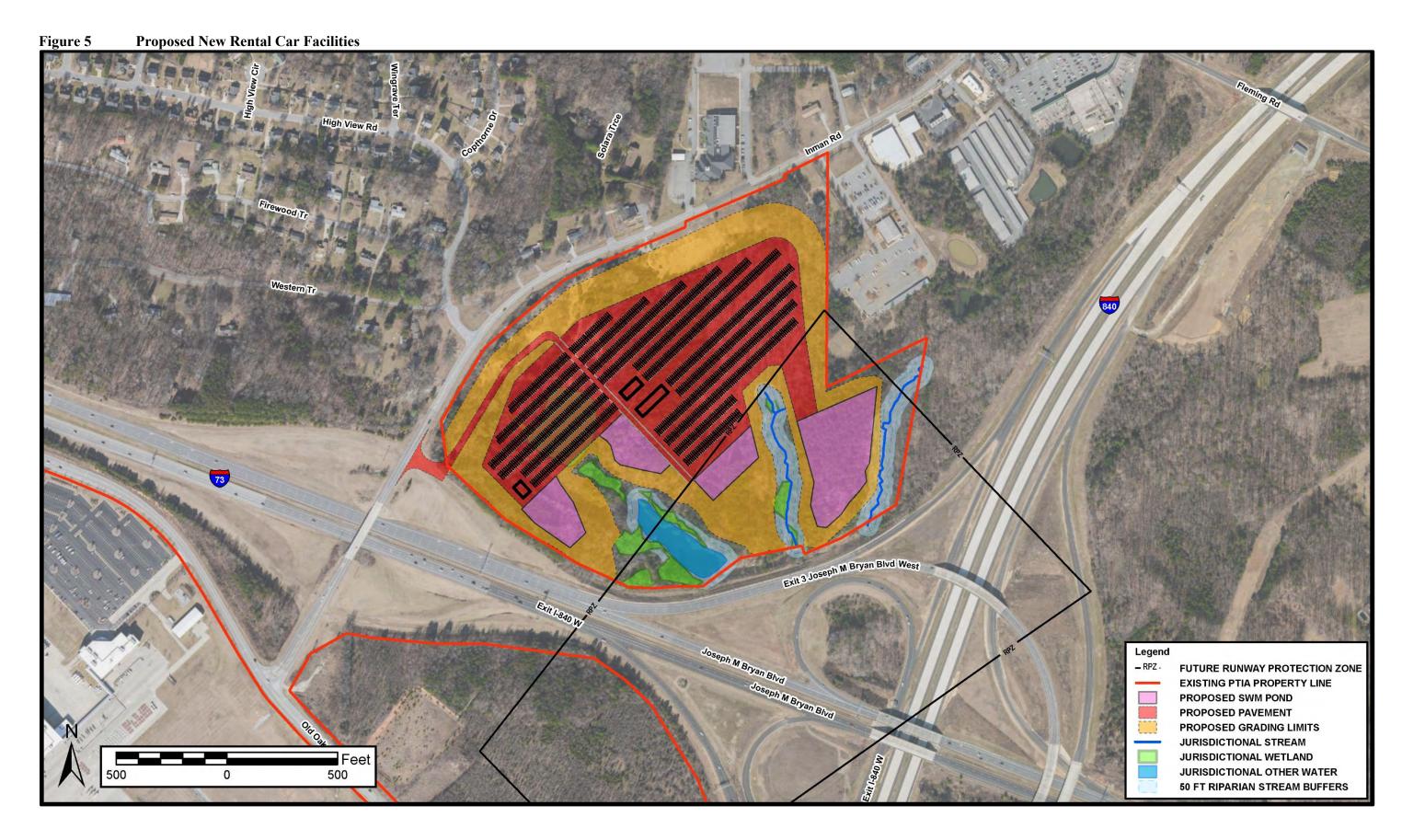


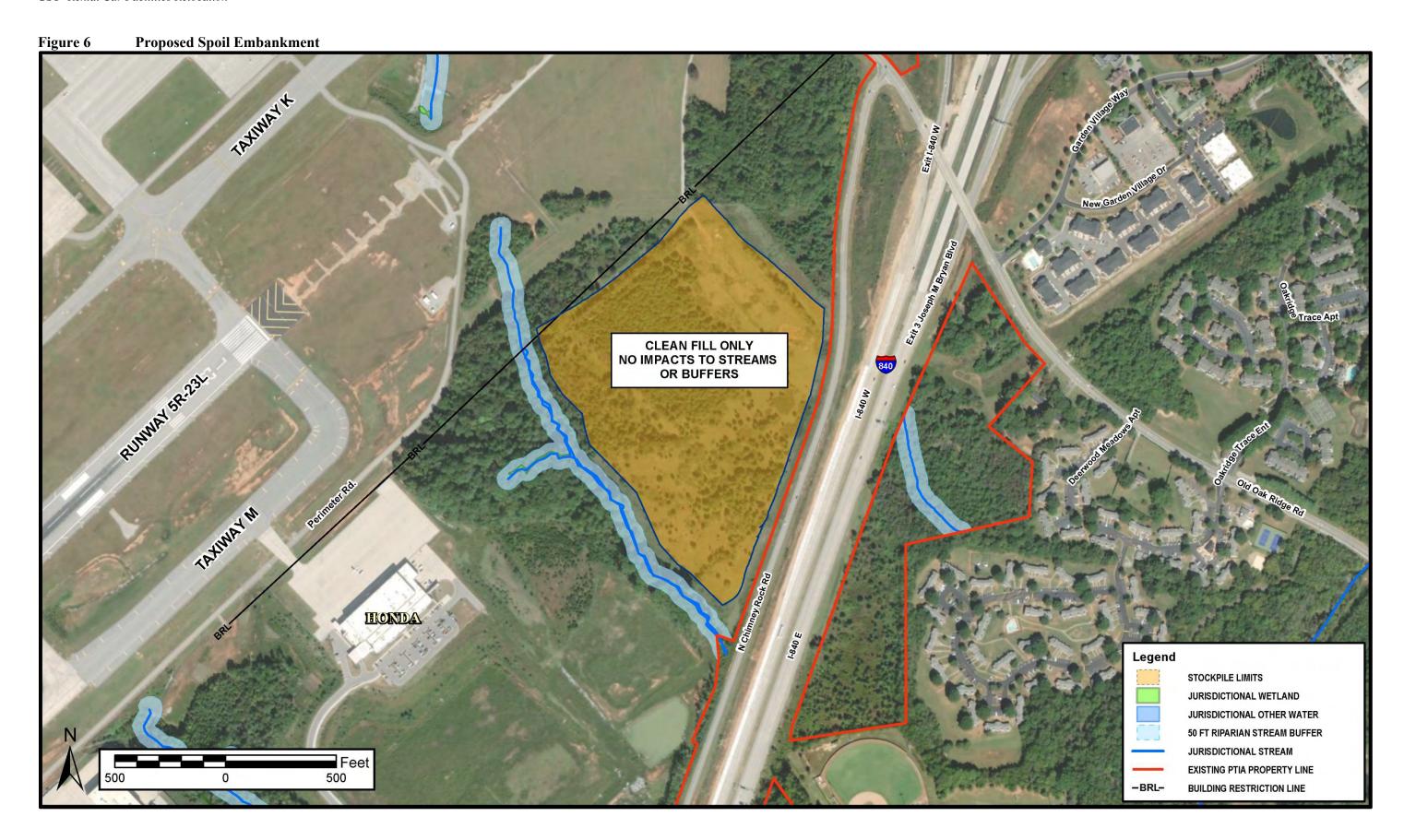
Figure 2 Project Components











2 Purpose and Need

The purpose of this NEPA analysis is to allow the FAA to approve an update to the Airport Sponsor's ALP depicting the Proposed Action, as previously defined in Section 1. A finding by the FAA is a preliminary step in allowing the Airport Sponsor to proceed with the activities described and seek federal funding participation for project components as determined eligible. The purpose of the Proposed Action is to eliminate a "line-of-sight" issue for the proposed ATCT created by existing rental car facilities, thereby requiring the relocation of the facilities posing visibility obstructions. The Proposed Action must be implemented in accordance with FAA design standards and Federal Aviation Regulations (FAR) while maintaining rental car service provider neutrality. Because the parameters of the ATCT line-of-sight are not flexible, the only viable alternative is to eliminate the obstruction and move the subject facilities.

The existing Hertz rental car facility is located on high ground between the proposed ATCT and Taxiway E and must be excavated to provide appropriate line-of-sight (see Appendix A, Attachment 1). To prevent competitive disadvantage to Hertz, the remaining rental car facilities must also be relocated with Hertz. The new rental car facilities location will require appropriate vehicle access to and from the Terminal area. Excess earth from both the existing Hertz site and proposed new rental car site must be moved to the nearest appropriate respective locations. Ancillary needs with potential to be met by a project alternative present the potential for significant efficiencies in cost-savings, aviation safety, and regulatory compliance. Such needs include development of an additional terminal public roadway to serve as redundant vehicle access and for emergency planning and evacuation, separation of public versus rental car terminal access, and advanced site preparation of dedicated aerospace tracts.

The size, orientation, and proximity of a replacement site for rental car facilities must be adequate to at least replace the existing facilities and not interfere with current or planned aviation functions and FAA compliance of the Airport. Due to the significant economic growth component of the Airport Sponsor's mission, any proposed action must also be compatible with the planned aerospace development tracts at GSO. Consideration of site alternatives for associated project components (such as borrow, fill, haul routes, or site access) is similarly restricted by the aviation and economic missions of the PTAA. The Proposed Action, including all components, must not interfere with aviation or economic development specific to GSO.

The "Inman" site at the Northeast quadrant of the Inman Road / Bryan Boulevard intersection (Figure 1, Figure 2, Figure 5) is appropriately sized and situated for the combined rental car facilities to be relocated. Continuation of Worldwide Drive (in the manner originally contemplated for its ultimate design) from Old Oak Ridge Road to Air Cargo Road (Figure 4) both connects the relocated rental car facilities and provides an alternative Airport entry/exit for surface transportation. Moving fill excavated from the Hertz rental car site to the aerospace development (Figure 4) site adjacent to Worldwide Drive is the most efficient solution for earthwork required to eliminate the Taxiway E visibility issue. PTAA-owned land at the "Chimney Rock" site (Figure 6) is the nearest appropriate location for embankment of excess fill from excavation of the proposed Inman site. The Proposed Action, including connected projects, would eliminate the current ATCT line-of-sight obstruction to Taxiway E, improve operational efficiency, facilitate emergency planning, and expedite compliance with FAA requirements at GSO.



3 Alternatives

Alternatives are considered to the degree commensurate with the nature of the proposed action and agency experience with the environmental issues involved. Generally, the greater the degree of impacts, the wider the range of alternatives. Brief explanation is provided for why alternatives considered were eliminated from further study. All reasonable alternatives and the No-Action Alternative were evaluated and are summarized in the following subsections prior to consideration of the Preferred Alternative.

3.1 Reasonable Alternatives Considered

Reasonable alternative locations and concepts to proposed project components are evaluated and summarized in the following six subsections. Alternatives to removing the existing rental car facilities and locating new facilities are limited by the project Purpose and Need as discussed in Section 1. Locating appropriate sites to haul excess fill from both these are similarly limited by distance, suitability, aviation safety, and economics. Environmental concerns, as discussed in the following subsections, apply additional limitations to alternatives but opportunities with significant efficiencies are also presented.

3.1.1 Removal of Existing Rental Car Facilities

The only viable solution to resolving the Taxiway E visibility issue is to remove the obstruction. The use of remote cameras to transfer live video feed of hidden portions of the taxiway is a limited alternative, only temporarily applicable for the existing tower due to its limited remaining life. The existing Hertz building and several feet of topography at this location must be removed to comply with FAA safety requirements. The excess material removed from the site would be deposited at an existing, approved airport waste site (or similar). The excess material could then be recovered should it be needed for future airport-related development. The temporary, on-site storage of excess material for future airport needs is an efficient alternative and provides a means of reducing redundant and expensive earthwork and hauling. The proposed aerospace development site adjacent to the FedEx Mid-Atlantic Hub (Air Cargo site) is suitably close to the existing rental car facilities to minimize haul distance and is also appropriately designated to receive such fill in the context of future aviation development. There are no closer suitable sites.

3.1.2 Proposed New Rental Car Facilities

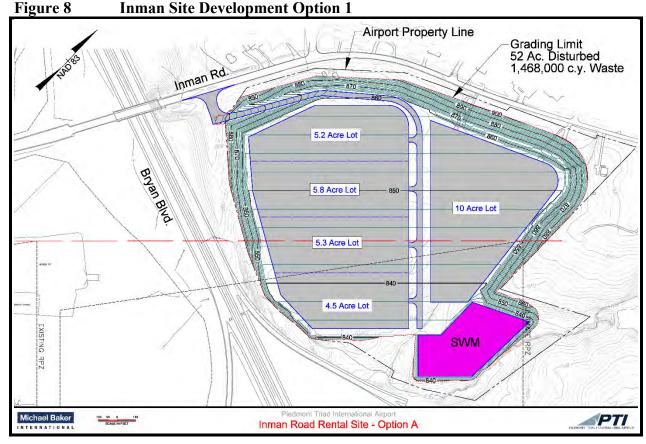
The only other potential areas with adequate size for relocation of the rental car facilities include the proposed aerospace development sites owned by PTAA. Each of these five tracts (Figure 7) appear adequately sized for the combined rental car facilities but are strategically located with runway/taxiway frontage – significant for aerospace development, but not necessary for airport rental car facilities. These sites would also involve additional driving distances to the Passenger Terminal and potential rental car development complications arising from their intimacy with airside operations. Due to the unique features of the other appropriately sized GSO sites for aerospace development, these locations were removed from consideration for the rental car facilities. Development as rental car facilities would be an inefficient and inappropriate use of these Airport properties and interfere with PTAA's aerospace development mission.





Not depicted on Figure 7 is the aerospace development site dedicated in 2001, but as yet undeveloped. This site remains the Airport Sponsor's potentially most important location for aerospace development due to its location between parallel runways, and adjacent to Taxiway E, Air Cargo Road, and the existing FedEx Mid-Atlantic Hub. This site was excluded from consideration for development of either rental car facilities or roadway due to its significance for future aviation development. The Inman site (also not shown on Figure 7) is the only suitable location not obligated for aerospace but with adequate size, orientation, and proximity, for rental car facility development.

Given the lack of alternative site locations and restrictions on site access routes, four alternative options for development of the Inman site for rental car facilities were considered in addition to the "No-Action" Alternative. The first option (Figure 8, initially preferred by the Airport Sponsor) contemplates complete development of the site including direct impacts to natural resources.

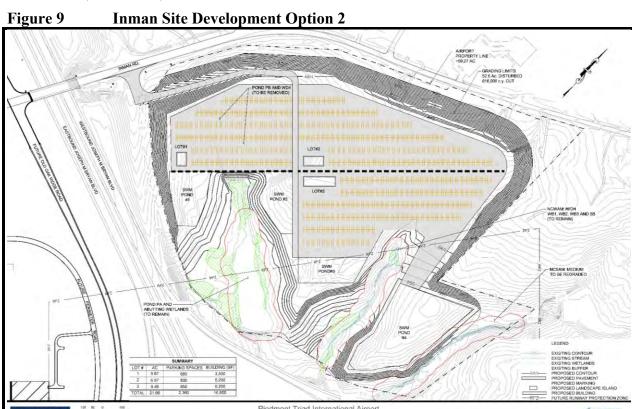


Due to the presence of jurisdictional wetlands and streams on the site, significant effort was afforded to avoiding these resources, consistent with CWA guidance, during the advancement of preliminary designs. Therefore, the Airport Sponsor abandoned the complete site development option in favor of more environmentally sustainable "avoidance" alternatives, presented in Sections 3.1.3 and 3.1.4.

3.1.3 Inman Site Development Option 2

This option (Figure 9) was conceived as an attempt to avoid direct impacts to jurisdictional wetlands, streams, and riparian buffers to the extent practicable. The environmental resources associated with these jurisdictional areas (such as fish, wildlife, plants, floodplains, surface waters, and groundwater) are similarly avoided. Option 2 contemplates 21.66 acres of development including 2,360 parking spaces and 16,900 square feet of buildings, disturbing 52.6 acres and involving 816,000 cubic yards of cut. Because the existing Inman site is entirely pervious, the development of the minimum acreage for the rental car facilities and parking creates the need for stormwater management. Maximization of side-slope steepness at the development perimeters to avoid the adjacent natural resources also exacerbates the necessity for appropriate stormwater management. Four stormwater management areas are therefore included downslope of the parking areas. For preliminary planning purposes, these areas have been designed as ponds to determine their approximate size and adequacy to match pre- and post-development runoff. However, due to the concern for ponds to attract wildlife hazardous to aviation, these areas would likely be developed as stormwater Best Management Practice (BMP) sites that are more suitable for locations near airports. Designing the ponds as BMPs would be consistent with current FAA and

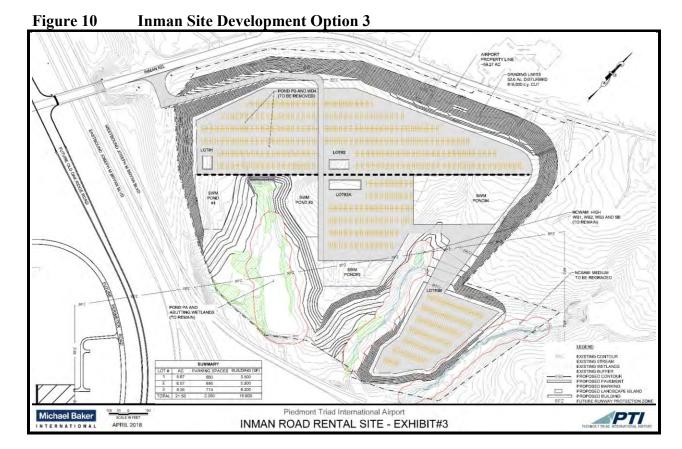
North Carolina guidance. The specific location of such BMPs within the development site is dictated by stormwater management design protocols and has the potential to impact the hydrology of downstream and upstream water resources. This option is being advanced as the Preferred Alternative (Section 3.3).



3.1.4 Inman Site Development Option 3

In addition to the avoidance of direct impacts to natural resources, this option (Figure 10) was conceived to explore the feasibility of re-locating stormwater management to facilitate specific and appropriate continuity of a hydrologic source for the headwater streams and wetlands to be preserved on-site. Option 3 contemplates 21.50 acres of development including 2,300 parking spaces and 16,900 square feet of buildings, disturbing 52.6 acres and involving 816,000 cubic yards of cut. This option significantly isolates a portion of the parking area and may result in competitive disadvantage to one or more of the GSO rental car tenants. Therefore, this option was not advanced for further study.

INMAN ROAD RENTAL SITE - EXHIBIT#2



3.1.5 Proposed Worldwide Drive

Access options from the Passenger Terminal to the Inman site are limited by existing land-use and transportation infrastructure. The access road must be located between the Brush Creek Conservation Easement (stream, wetland, and riparian buffer mitigation) and the adjacent aerospace development site to avoid impacts to either and efficiently connect the new rental car facilities (see Figure 4). The only alternative route connecting Old Oak Ridge Road with Air Cargo Road to avoid a stream crossing would isolate and divide the aerospace development site. This alternative would also entail additional drive distance as the roadway required would be longer. The preferred alignment for the extension of Worldwide Drive is consistent with the approved ALP. The Environmental Impact Statement / Record of Decision (EIS/ROD) (FAA, 2001) and subsequent CWA permits issued for Runway 5L/23R and associated developments anticipated the preferred alignment of Worldwide Drive, including the stream crossing, would be constructed once plans were advanced for the aerospace development site. jurisdictional resources (wetlands, streams, and stream buffer) are anticipated to be minor and have already been mitigated. This alignment would avoid impacts to the existing Federal Express facility and allow for the planned development specifically for the aerospace industry. Constructing Worldwide Drive with an alignment that completely avoids jurisdictional resources would involve relocating the western portion of the road to the south which would severely impact the approved aerospace development - essentially reducing its size by more than 50 percent; and isolating it from adjacent facilities. This alignment would also decrease the aerospace use of property that is dedicated to accommodating aviation activity. This alignment would eliminate the potential to construct nearly 15 future aircraft parking positions resulting in an uneconomic

remnant of the property. Significantly, this site is also located between parallel runways, which renders it a premium aerospace development location. Other areas either on-, or off-airport property would have to be identified to accommodate the demand for the planned aviation activity with extensive coordination effort required to re-designate this area as non-aeronautical use. The proposed Worldwide Drive stream crossing, therefore, becomes an unavoidable necessity to maintain the integrity of this important aerospace development site, consistent with the approved ALP.

As discussed in Section 3.1.1, the use of fill material for site preparation on airport sites that may be recovered in the future for airport-related development is an efficient use of resources and minimizes earthwork, hauling, and associated environmental impacts from repeated use of heavy equipment and vehicles. The closest available site for disposal of clean fill to be excavated from the rental car facilities is the aerospace development tract adjacent to the FedEx Mid-Atlantic Hub, discussed in the previous paragraph. Additional rationale for deposition of fill from the existing rental car facilities to the aerospace development site is summarized as follows:

- 1) PTAA's mission includes planning and constructing economic development assets;
- 2) This location is PTAA's premier aerospace site due to setting between two runways;
- 3) This location will be developed for a future tenant, if not for FedEx; and
- 4) Avoiding development of this site now would simply be postponing a significant element of PTAA's mission and result in more expensive development in the future.

3.1.6 Proposed Spoil Embankment

Stream and associated riparian buffer resources at the Chimney Rock site (see Figure 6) are completely avoided by the proposed spoil (anticipated from the Inman site) embankment at that location. The Chimney Rock site is preferred due to the minimization of haul distance and potential environmental impacts associated with driving heavy equipment and vehicles.

3.2 No-Action Alternative

The No-Action Alternative would avoid most environmental consequences, including the potential continued existence of wetlands, streams, and forested uplands adjacent to the Inman / Old Oak Ridge Road intersection, but without management in context of their developed surroundings. The no-action alternative does not meet the Project purpose or need because continued existence of high-ground and structures at the Hertz facility would prohibit appropriate visibility of Taxiway E from the ATCT, contrary to FAA requirements. The ability of all rental car facilities to function efficiently at GSO would be compromised by lack of growth or modernization potential. A lack of redundant vehicle entry/exit capability or separation of rental car traffic from private transport would continue to hinder GSO efficiency and emergency planning. If the proposed fill site is not adequately prepared for aerospace development, GSO would be deprived of a specifically-planned economic development, contrary to PTAA's mission. If Worldwide Drive is not connected, as planned, the rental car companies would be forced to use the main GSO entrance for access to the passenger terminal, requiring a significantly longer drive with consequent gas, mileage, and time inefficiencies.

3.3 Preferred Alternative

Based on the considerable deliberation of potential impacts to environmental resources discussed in Sections 3.1.2, 3.1.3, and 3.1.4; the Airport Sponsor is advancing the Option 2 alternative for development of the Inman site. This option is summarized in Section 3.1.3 and as the Proposed Action in Section 1 and contemplates avoidance and minimization of impacts to the extent the preliminary planning phase of this Proposed Action reasonably allows. The Proposed Action includes relocating all the existing rental car facilities from their current location to the Inman site and developing that site with appropriate access. Rationale for the preferred site access (Worldwide Drive) and fill locations (Air Cargo site and Chimney Rock site) are discussed in Sections 3.1.5 and 3.1.6 respectively.



4 Affected Environment and Environmental Consequences

This section succinctly describes the environmental conditions of the potentially affected geographic areas. The discussion of the affected environment is necessary to understand the impacts of the alternatives. Data and analyses are presented commensurate with the importance of the impact. This section of the EA discusses, in comparative form, the reasonably foreseeable environmental impacts of the proposed action and the no action alternative. The focus of this analysis is on resources that would be directly or indirectly affected. The analysis includes consideration of possible conflicts with the objectives of Federal, regional, state, tribal, and local land use plans, policies, and controls for the area concerned, as well as other conflicts concerning alternative uses of available resources. Relevant supporting documentation is included in Appendix A and regulatory correspondence is attached in Appendix B. Thirteen environmental impact categories are addressed in the following subsections:

- 1. Air Quality
- 2. Biological Resources (including fish, wildlife, and plants)
- 3. Climate
- 4. Department of Transportation Act, Section 4(f)
- 5. Farmlands
- 6. Hazardous Materials, Solid Waste, and Pollution Prevention
- 7. Historical, Architectural, Archeological, and Cultural Resources
- 8. Land Use
- 9. Natural Resources and Energy Supply
- 10. Noise and Compatible Land Use
- 11. Socioeconomics, Environmental Justice, Children's Environmental Health and Safety Risks
- 12. Visual Effects (including light emissions)
- 13. Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

The no action, proposed action, and reasonable alternatives would not affect Coastal Resources because Guilford County is not one of North Carolina's twenty coastal counties. Cumulative Impacts, Permits and Certifications, and Mitigation are summarized in subsequent sections as they have potential to involve multiple impact categories and consequences.

4.1 Air Quality

Air quality is the measure of the condition of the air expressed in terms of ambient pollutant concentrations and their temporal and spatial distribution. Air quality regulations in the United States are based on concerns that high concentrations of air pollutants can harm human health, especially for children, the elderly, and people with compromised health conditions; as well as adversely affect public welfare by damage to crops, vegetation, buildings, and other property. Greenhouse gases (GHGs) are a separate component of air quality studies (see Section 4.3).

Guilford County is identified as unclassified/attainment for all National Ambient Air Quality Standards (NAAQS) and as such, the region is not subject to Transportation Conformity under the Clean Air Act. The Proposed Action is anticipated to have no meaningful impact on airside operations and will not facilitate any additional aircraft activity. No net increase in operating emissions is anticipated because of the Proposed Action. A construction-related emissions

inventory analysis (Appendix A, Attachment 2) was completed to ensure that no meaningful air quality impacts occur. It was determined that general conformity would be appropriate, specifically a comparison of total construction emissions to the United States Environmental Protection Agency (USEPA) *de minimis* values to ensure the project will not have meaningful air quality impacts. Using FAA guidance and the accompanying Airport Construction Emissions Inventory Tool (ACEIT), a conservative estimate of the total construction emissions was developed. While the project is anticipated to take two years to complete, with no available schedule the total two-year construction emissions were compared to the annual *de minimis* level set by USEPA. The total estimated construction emissions were found to be significantly below the *de minimis* levels. Therefore, the proposed action will not have a significant or meaningful impact on regional or local air quality.

4.2 Biological Resources (including fish, wildlife, and plants)

Biological resources are valued for their intrinsic, aesthetic, economic, and recreational qualities and include fish, wildlife, plants, and their respective habitats. Biological resources include terrestrial and aquatic plant and animal species; game and non-game species; special status species (state or Federally-listed threatened or endangered species, marine mammals, or species of concern, such as species proposed for listing or migratory birds); and environmentally-sensitive or critical habitats.

Assessment of natural communities and protected species was conducted in general accordance with North Carolina Department of Transportation (NCDOT) Natural Environment Section guidance and procedures.

Depending on final design, approximately 37 acres of mixed pine/hardwood forest, including perennial stream channels and wetlands (Section 4.13), could be impacted by the Project. Two man-made ponds would also be partially impacted, depending on final design. Wildlife displaced could include the limited terrestrial and aquatic species typical of the area. Species observed or expected for the Project sites are listed in the Biological Assessment completed for the United States Fish and Wildlife Service (USFWS) On-Line Project Review (Appendix A, Attachment 4). Loss of isolated potential habitat will be mitigated in conjunction with the mitigation (see Section 6) of wetland, stream, and riparian buffer impacts (Section 4.13) and will not result in fragmentation or impacts to off-site habitat. Terrestrial Communities, Terrestrial Wildlife, Aquatic Communities, Invasive Species, Endangered Species Act Protected Species, Bald Eagle and Golden Eagle Protection Act, Endangered Species Act Candidate Species, Federal Species of Concern, and State-Protected Species are discussed in the following subsections.

4.2.1 Terrestrial Communities

Two terrestrial communities were identified at the three properties (Chimney Rock, Inman, and Air Cargo sites): Maintained/Disturbed areas and Mixed Pine/Hardwood Forest. The location and extent of these terrestrial communities within the study areas and the area of each cover type at each site are detailed in the Biological Assessment (Attachment 4, Page A-29). A brief description of each community type follows.

4.2.1.1 Maintained/Disturbed

Maintained/Disturbed areas dominate the Airport and include areas outside the Air Operations Area (AOA) where vegetation is routinely or periodically mowed. Vegetation remnant in this

community typically includes low growing grasses and herbs such as fescue, clover, wild onion, lespedeza, Chinese privet, kudzu, and multiflora rose. Maintained/disturbed land generally includes roadside shoulders, utility corridors, and maintained lawns associated with residential, industrial, and recreational development. Maintained lawns and roadside shoulders generally consisted of low-growing grasses and weedy forbs such as fescue, white clover, geranium, dandelion, Carolina horse nettle, and wild onion. These areas include scattered native and ornamental trees and saplings such as white oak, northern red oak, Virginia pine, mimosa, tree of heaven, Bradford pear, Kentucky coffee tree and crepe myrtle. Utility corridors included similar grass and forb species, but more commonly dominated by large weedy herbs and opportunistic species such as lespedeza, goldenrod, sunflowers, milkweed, ragweed, and Queen Anne's lace, and occasionally dense shrubs such as sweetgum, red maple, eastern red cedar, blackberry, smooth sumac, and multiflora rose. Several areas are dominated by a dense growth of vines such as poison ivy, Virginia creeper, English ivy, and kudzu.

4.2.1.2 Mixed Pine/Hardwood Forest

Small fragmented areas of Mixed Pine/Hardwood Forest occur generally along the margins of roadways and along stream corridors and include forested communities of varying ages and levels of disturbance. Canopy trees include loblolly pine, Virginia pine, red maple, tulip poplar, sweetgum, white oak, southern red oak, northern red oak, mockernut hickory, and black cherry. Saplings present include canopy species as well as American beech, red mulberry, persimmon, American holly, eastern red cedar, flowering dogwood, and sassafras. In mesic areas near streams and wetlands, species adapted to wet conditions such as willow oak, American elm, green ash, redbud, river birch, black willow, tag alder, ironwood, and tulip poplar tend to dominate the canopy and sapling layers. Shrubs are thickest along woodland edges and in mesic areas near streams, wetlands and pond edges. These areas include Chinese privet, autumn olive, highbush blueberry, strawberry bush, spicebush, and sedges. Vines present include poison ivy, Japanese honeysuckle, Virginia creeper, common greenbrier, and muscadine grape. Herbs within this community are sparse to frequent and include Christmas fern, rattlesnake fern, ebony spleenwort, Japanese stilt grass, large whorled pogonia, Indian cucumber-root, Solomon's seal, wild ginger, ground cedar, and spotted wintergreen.

4.2.2 Terrestrial Wildlife

Terrestrial communities in the study areas are comprised primarily of disturbed habitats that may support a limited diversity of wildlife species. Mammals that commonly exploit habitats found at the Airport include eastern grey squirrel, eastern cottontail, raccoon, white-tailed deer, groundhog, and Virginia opossum. Birds that commonly use forest and forest edge habitats include American crow, blue jay, Carolina chickadee, tufted titmouse, Carolina wren, downy woodpecker, yellow-bellied sapsucker, northern mockingbird, sharp-shinned hawk, indigo bunting, eastern towhee, northern cardinal, red-bellied woodpecker, and white-eyed vireo. Birds that may use the open habitat within the study area include house finch, barn swallow, American kestrel, American robin, European starling, mourning dove, great crested flycatcher, eastern bluebird, field sparrow, eastern meadowlark, red-shouldered hawk, and turkey vulture. Reptile and amphibian species that may use terrestrial communities located at the Airport include marbled salamander, white-spotted slimy salamander, American toad, gray treefrog, spring peeper, eastern box turtle, eastern fence lizard, five-lined skink, black racer, rat snake, eastern ribbon snake, and copperhead.

4.2.3 Aquatic Communities

Aquatic communities at the project sites are supported by intermittent and perennial piedmont streams and two open-water ponds. Perennial streams may contain gizzard shad, golden shiner, rosyside dace, eastern silvery minnow, spottail shiner, tessellated darter, bluehead chub, creek chub, margined madtom, redbreast sunfish, and northern dusky salamander. Intermittent streams on-site are relatively small and may support aquatic communities of spring peeper, crayfish, and various benthic macroinvertebrates. Open-water ponds may contain species such as common carp, grass carp, yellow bullhead, pumpkinseed, bluegill, redfin pickerel, and eastern mosquitofish. Aquatic-dependent wildlife expected to utilize these communities include painted turtle, yellow-bellied slider, northern water snake, beaver, great blue heron, green heron, and belted kingfisher.

4.2.4 Invasive Species

Ten species from the NCDOT Invasive Exotic Plant List for North Carolina (NCDOT, 2012) occur at the Airport. Five level 1 (Threat) invasive species were identified: Chinese privet, multiflora rose, Japanese stilt grass, tree of heaven, and kudzu. Four level 2 (Moderate Threat) invasive species were identified: mimosa, autumn olive, English ivy, and Japanese honeysuckle. One level 3 (Watch List) invasive species was identified: Bradford pear.

4.2.5 Endangered Species Act Protected Species

As of October 14, 2018, the USFWS lists Small Whorled Pogonia as threatened and Schweinitz's Sunflower as endangered in Guilford County (Appendix A, Attachment 3). A brief description of these species' habitat requirements follows. Habitat requirements are based on the current best available information from referenced literature and/or USFWS.

Small-whorled pogonia occurs in young as well as maturing (second to third successional growth) mixed-deciduous or mixed-deciduous/coniferous forests. It does not appear to exhibit strong affinities for a particular aspect, soil type, or underlying geologic substrate. In North Carolina, the perennial orchid is typically found in open, dry deciduous woods and is often associated with white pine and rhododendron. The species may also be found on dry, rocky, wooded slopes; moist slopes; ravines lacking stream channels; or slope bases near braided channels of vernal streams. The orchid, often limited by shade, requires small light gaps or canopy breaks, and typically grows under canopies that are relatively open or near features like logging roads or streams that create long-persisting breaks in the forest canopy.

Schweinitz's sunflower occurs in full to partial sun and is found in areas with poor soils, such as thin clays that vary from wet to dry. It is believed that this species once occurred in natural forest openings or grasslands. Many of the remaining populations occur along roadsides.

Suitable habitat is not present at the any of the three sites surveyed for the project. Identified forested areas do not appear to include suitable persistent canopy breaks. A review of North Carolina Natural Heritage Program (NCNHP) records indicated no known occurrences within 1.0 mile of the Airport. The USFWS previously listed small-whorled pogonia as a historic record in Guilford County, indicating that this species was last observed within the County more than 50 years ago. However, a single plant was recently discovered near the Town of Gibsonville approximately 20 miles east of the Airport.

The Project is anticipated to have no effect on these species - suitable habitat is not present at the Project sites and review of NCNHP records indicated no known occurrences within 1 mile

(Appendix A, Attachment 5). Habitat ranges for Endangered (Cape Fear shiner, Roanoke logperch) and At Risk (Atlantic pigtoe) aquatic species listed do not include the project vicinity.

4.2.6 Bald Eagle and Golden Eagle Protection Act

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large dominant trees are utilized for nesting sites, typically within 1.0 mile of open water. A desktop Geographic Information System (GIS) assessment of the Airport, as well as the area within a 1.13-mile radius (1.0 mile plus 660 feet) of the three sites, was performed using 2016 color aerial photography. Lake Higgins (a water body large enough and sufficiently open to be considered a potential feeding source) was identified within this search radius. A survey of the Chimney Rock, Inman, and Air Cargo sites and the area within 660 feet of these sites was conducted. No bald eagle nests were observed within this search polygon. Review of the NCNHP database revealed no known occurrences of this species within 1.0 mile of the Airport.

Since there is potential foraging habitat within the review area, a survey of the project study area and the area within 660 feet of the project limits for potential nesting habitat was conducted. Most of the wooded areas within and near the project study areas are planted pine or pine flatwoods that have previously been logged. As a result of planting and/or past logging, most of the largest and oldest trees are even-aged stands without the "dominant" canopy trees required for nesting by bald eagles. It is more likely that bald eagles would utilize potential nesting sites within one mile of the Cape Fear River and not near the project study areas. No water body large enough and sufficiently open to be considered a potential feeding source for Bald Eagle is located within 1.13 miles of the Project and there are no known occurrences of this species within 1 mile of the Project.

4.2.7 Endangered Species Act Candidate Species, Federal Species of Concern, and State-Protected Species

As of October 14, 2018, the USFWS list no Candidate species for Guilford County. Federal Species of Concern are not legally protected under the Endangered Species Act and are not subject to its provisions, including Section 7, until they are formally proposed or listed as Threatened or Endangered. Organisms that are listed as Endangered, Threatened, or Special Concern on the NCNHP list of Rare Plant and Animal Species are afforded state protection under the State Endangered Species Act of 1987 and the North Carolina Plant Protection and Conservation Act of 1979.

There are no State-listed endangered or threatened species known to occur within 1 mile of the Project (see Attachment 4). Current species listed for the "Guilford" 7.5-minute United States Geological Survey (USGS) Topographic Quadrangle from March 3, 2017 search of the NCNHP database included the Bald Eagle (State Threatened) and Greensboro Burrowing Crayfish (State Special Concern). The North Carolina Wildlife Resources Commission (NCWRC) have recorded Greensboro burrowing crayfish and Appalachian golden-banner (State Special Concern - Vulnerable) in the Project vicinity (Appendix B, Correspondence 7). No Project activity contemplates take of species listed in the Migratory Bird Treaty Act.

4.3 Climate

Scientific measurements show that Earth's climate is warming, with concurrent impacts including warmer air temperatures, increased sea level rise, increased storm activity, and an increased

intensity in precipitation events. Research has shown there is a direct correlation between fuel combustion and GHG emissions.

A USEPA inventory program, the Greenhouse Gas Reporting Program is currently in place for facilities with the potential to emit at least 25,000 tons/year of carbon dioxide (CO₂) or proportioned quantities of CO₂ equivalents (40 CFR Part 60). The reporting requirement and 25,000-ton threshold are for stationary sources; there are currently no federal standards for reporting GHG emissions from aviation sources, as well as no significance thresholds. Due to the short time that the GHG inventory program has been in effect and its limited scope, little data on the relative importance of industrial operations and/or construction activities in contributing to climate change is available. USEPA's inventory program is the current phase of an ongoing investigation into the long-term climate change effects of GHG emissions and their sustained presence in the atmosphere.

Additional GHG emissions anticipated from increase in ground vehicle use (additional distance for rental car shuttling to and from the Passenger Terminal and new facilities) could be mitigated by consideration of electric or hybrid-electric powered vehicles and the increased efficiency afforded by newly designed rental car facilities.

4.4 Department of Transportation Act, Section 4(f)

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites.

The Project components are located entirely within Airport-owned property. No parks, national forest, wildlife refuge, recreational areas, USDOT Act Section 4(f), or Section 6(f) resources will be impacted by the Project (Appendix A, Attachment 6).

4.5 Farmlands

Farmlands are defined as those agricultural areas considered important and protected by Federal, State, and local regulations. Important farmlands include all pasturelands, croplands, and forests (even if zoned for development) considered to be prime, unique, or of statewide or local importance.

The Project components are located entirely on existing Airport property and will not impact Prime, Unique, Statewide or Locally Important Farmland as defined in the Farmland Protection Policy Act.

4.6 Hazardous Materials, Solid Waste, and Pollution Prevention

The following were evaluated in terms of existing and potential for impact by the Project:

- Waste streams that would be generated by the Project, potential for the wastes to impact environmental resources, and the impacts on waste handling and disposal facilities that would likely receive the wastes;
- Potential hazardous materials that could be used during construction and operation of the Project, and applicable pollution prevention procedures;

- Potential to encounter existing hazardous materials at contaminated sites during construction, operation, and decommissioning of the Project; and
- Potential to interfere with any ongoing remediation of existing contaminated sites at the proposed Project sites or in the immediate vicinity of the Project.

No significant or reportable spills or contamination incidents have been reported for the Project sites under the Airport's Spill Prevention Control and Countermeasures (SPCC) plan (PTAA, 2018a) which was initiated in 2004. Pollution prevention is facilitated at GSO through Spill Response Procedures (PTAA, 2018b) included in the SPCC plan and the GSO Stormwater Pollution Prevention Plan (SPPP) (PTAA, 2018c). Rental car companies are potential generators of hazardous waste. Because the proposed Project involves the same rental car tenants, they will be responsible for updating their facility information with the USEPA. Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites within 1 mile of the Project sites (Appendix B, Correspondence 2) are located in adjacent or downstream watersheds. During construction and demolition, every feasible effort will be made to minimize the generation of waste, to recycle materials for which viable markets exist, and to use recycled products and materials in the development of this Project, where suitable. Waste generated by this Project that cannot be beneficially reused or recycled will be disposed of at a solid waste management facility approved to manage the respective waste type. Contractors will be required to provide proof of proper disposal for waste generated from this Project (Correspondence 4). Hazardous waste generated from the demolition, construction, operation, maintenance, and/or remediation (e.g. excavated soil) from the proposed Project will be managed in accordance with North Carolina Hazardous Waste Rules. Proposed Project activities generating a solid waste will require determination whether it is a hazardous waste. If a Project site generates more than 220 pounds of hazardous waste in a calendar month, the North Carolina Department of Environmental Quality (NCDEQ) Division of Waste Management (DWM) Hazardous Waste Section will be notified, and the site must comply with the small quantity generator requirements. If a Project site generates more than 2200 pounds of hazardous waste in a calendar month, DWM will be notified, and the facility must comply with the large quantity generator requirements (Correspondence 8). The NCDEQ Winston-Salem Regional Office (WSRO) will be notified if "orphan" Underground Storage Tank (UST)s are discovered during Project excavation activities. Demolition of structures containing asbestos material will comply with applicable regulations, including notification and removal prior to demolition.

Results of the Phase I Environmental Site Assessments (PESA) completed for the Project locations (Appendix A, Attachment 7) indicated the following recognized environmental concerns (REC):

- Potential for impact to the existing Hertz Rental Car site from undocumented release of petroleum or hazardous materials associated with the two 10,000-gallon gasoline USTs and associated dispensers, the automotive service and repair performed, and the former inground hydraulic lifts at this facility.
- Potential for impact to the existing Enterprise Rental Car location from undocumented releases of petroleum or hazardous materials associated with the 10,000-gallon gasoline UST and associated dispensers, the automotive service and repair performed, and the former in-ground hydraulic lifts at this facility.

- Potential for impact to the existing Avis/Budget Rental Car location from undocumented release of petroleum or hazardous materials associated with the 10,000-gallon gasoline UST and associated dispensers, two 1,000-gallon oil USTs, the automotive service and repair performed, and the former in-ground hydraulic lifts at this facility.
- Potential for impact to the existing National/Alamo Rental Car location from undocumented release of petroleum or hazardous materials associated with two 550-gallon used oil USTs, the automotive service and repair performed, and the former in-ground hydraulic lifts at this facility.
- Potential for impact to the original cargo building location from undocumented releases of petroleum or hazardous materials associated with the automotive service and repair facility in this building.
- Potential for undocumented release from the Colonial Pipeline that is located immediately north of the southern portion of the proposed new rental car facilities (Inman) site.

Appropriate measures will be undertaken to investigate and remediate potential undocumented releases at the existing rental car facilities prior to completion of site re-grading.

4.7 Historical, Architectural, Archeological, and Cultural Resources

Historical, architectural, archeological, and cultural resources encompass a range of sites, properties, and physical resources relating to human activities, society, and cultural institutions. Such resources include past and present expressions of human culture and history in the physical environment, such as prehistoric and historic archaeological sites, structures, objects, districts, which are considered important to a culture or community. Historical, architectural, archeological, and cultural resources also include aspects of the physical environment, namely natural features and biota, that are a part of traditional ways of life and practices and are associated with community values and institutions.

No National Register of Historic Places (NRHP) architectural resources will be impacted by the Project according to the HPOWEB map (Appendix A, Attachment 8) and the State Historic Preservation Office (SHPO) had no comment in response to early coordination for the proposed Project (Appendix B, Correspondence 10). On May 26, 2019, a field investigation of 15 architectural resources within the Area of Potential Effect (APE) approximately 2000 feet from the center of the Inman site was conducted. The survey (Appendix A, Attachment 9) found that none of the 15 properties is considered eligible for the NRHP under any criterion. A GIS Predictive Model was used to identify areas within the Inman Site (excluding the two ponds) that have a high probability for the presence of archaeological sites and that may be subject to direct and indirect effects from the proposed relocation of the rental car facilities. The outcome of the GIS Predictive Model (Attachment 10) was a spatial depiction of the project area that has a high probability for the presence of historic and prehistoric archaeological resources based on an analysis of environmental conditions and historic data. Four sites (two prehistoric lithic scatters and two historic sites with building foundations and a scatter of artifacts) were identified on the 18-acres (about 30 percent) of the 57-acre project APE that were identified as having a high-probability for the presence of archaeological sites (Attachment 10). None of the sites retains enough integrity to recommend them as being eligible for the National Register. No further archaeological work was recommended.

4.8 Land Use

Section 1502.16(c) of the Council on Environmental Quality (CEQ) Regulations requires the discussion of environmental impacts including "[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned." Appropriate action has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. This assurance relates to existing and planned land uses.

The Project is consistent with current plans for development of the area in which the airport is located. No community disruption or business relocation will result from the Project as it is located entirely within Airport-owned property and consistent with planned land uses and zoning (Appendix A, Attachment 11). A portion of the ultimate Runway Protection Zone (RPZ) for Runway 23L is mapped in the ALP over the southeastern part of the proposed new rental car location (Inman site, see Figure 5) as "Future RAC/Storage Remote Car Parking" (FAA, 2018). The small area of parking surfaces in this location are being designed at elevations significantly under critical elevation such that vehicle and structure heights are sufficiently below approach and departure surfaces. Much of this area is planned for stormwater management due to low elevation and includes streams and wetlands being avoided by project impacts. Development of the proposed action would not involve any construction or development activity in residential areas, and there would be no shifts in population movement or increase in the demands for public services. Some streams, wetlands, and jurisdictional ponds may be impacted - reducing or eliminating the current wildlife hazard potential of these areas to the Airport. The proposed stormwater management system(s) may include new and/or existing water control/treatment feature(s) and would be maintained to discourage waterfowl and/or other potentially hazardous wildlife consistent with FAA Advisory Circular 150/5200-33B - Hazardous Wildlife Attractants on or Near Airports.

4.9 Natural Resources and Energy Supply

The Project will involve consumption of natural resources (water, asphalt, aggregate, wood, etc.) and use of energy supplies (coal, natural gas, fuel, etc.) due to construction, operation, and/or maintenance of the proposed action or alternative(s). All elements of the Project will be designed with a view to their aesthetic impact and conservation of resources such as energy, pollution prevention, harmonization with the community environment, and sensitivity to the concerns of the traveling public.

Project construction and operation will involve energy and natural resource consumption, primarily electric power. Proposed buildings will include improved thermal efficiency, efficient heating, ventilation, and air-conditioning (HVAC) and lighting equipment, and low-flow plumbing fixtures. Energy-sustainable buildings and utilizing applicable forms of proven renewable energy (e.g. solar power for supplemental electricity and lighting in the parking areas) will be considered. During construction, overall diesel emission reduction activities will be considered through various measures such as switching to cleaner fuels, retro-fitting current equipment with emission reduction technologies, re-powering older engines with newer cleaner engines, replacing older vehicles, and reducing idling through operator training and/or contracting policies. Contractors will be required to use dust abatement measures, such as wetting, mulching, or seeding exposed areas, where appropriate, to address air quality concerns. The Project is expected to have minimal

impact on operational energy and natural resource consumption. There are no known issues related to local energy suppliers meeting this increased demand for electric power.

4.10 Noise and Compatible Land Use

Noise is considered unwanted sound that can disturb routine activities (e.g., sleep, conversation, student learning) and can cause annoyance. Noise is often the predominant aviation environmental concern of the public. The compatibility of existing and planned land uses with proposed aviation actions is usually determined in relation to the level of aircraft noise.

The proposed Project would not change Airport runway configurations, aircraft operations and/or movements, aircraft types using the Airport, or aircraft flight characteristics. Therefore, existing and future aircraft noise levels would not be affected (Appendix A, Attachment 12). Construction, demolition activities, and new roadway could create non-aeronautical noise. Noise impacts are not expected to be significant. Any impacts resulting from construction noise are expected to occur during daytime hours and will be temporary in nature. Significant noise impacts from construction are not anticipated.

4.11 Socioeconomics, Environmental Justice, Children's Environmental Health and Safety Risks

Socioeconomics is an umbrella term used to describe aspects of a project that are either social or economic in nature. A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by the proposed action and alternative(s). Socioeconomic analysis is project specific and is dependent upon the existence of a relationship between natural or physical environmental effects and socioeconomic effects.

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

It is a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to. Children may experience a different intensity of impact as compared to an adult exposed to the same event. Children are also more likely to exhibit behaviors that put them at a greater risk for exposure to hazards. Children under age 5 are more susceptible than adults to environmental hazards due to the fact they are more heavily exposed to toxins in proportion to their body weight. Children under age 5 breathe more air, drink more water, and eat more food per unit of body weight than adults do, so they may experience higher rates of exposure to toxins, pollutants, and pathogens. Children between ages 5 and 18 may face higher risks of exposure to hazardous chemicals due to their growing participation in activities outside of the home.

Environmental Justice (EJ) indices for environmental variables in the Project area appear less than national averages (Appendix A, Attachment 13). No additional employees are anticipated by rental car tenants to staff the proposed new facilities. Construction employment would be temporary and would not result in significant impacts. The Project is not expected to impact

children, minority, and/or low-income populations as the Project is located entirely within existing Airport property. Development of the proposed action would not involve any construction or development activity in residential areas, and there would be no shifts in population movement or increase in the demands for public services. The proposed action would not disrupt local traffic patterns or reduce the levels of service of roads serving the Airport and its surrounding communities.

4.12 Visual Effects (including light emissions)

Visual effects deal broadly and subjectively with the extent to which the proposed action or alternative(s) would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment. Visual effects are also discussed in other sections of the EA.

The Project has no potential for visual impacts to USDOT Act Section 106 resources, Section 4(f) properties, protected coastal areas and rivers, scenic roads/byways, scenic trails, or sensitive wildlife species. Lights associated with existing industry along Old Oak Ridge Road would be supplemented by lighting proposed for the rental car facilities. In and of itself, this new lighting could impact residential areas to the northwest. However, the impact is anticipated to be minimal given the degree of existing lighting in the area. Existing lighting from the Bryan Boulevard interchanges and commercial development along Inman and Fleming Roads would also diffuse the Project's additional light emissions. In addition, because the new rental car facilities will be significantly below the elevations of nearby residential areas, lighting will not be directly visible and will be further shielded by surrounding landscape vegetation.

4.13 Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

Water resources are surface waters and groundwater that are vital to society; they are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. Surface water, groundwater, floodplains, and wetlands do not function as separate and isolated components of the watershed, but rather as a single, integrated natural system. Disruption of any one part of this system can have consequences to the functioning of the entire system. Potential direct disruption of these resources and potential for impacts to the quality of the water resources is discussed. No National Wild and Scenic Rivers, Nationwide Rivers Inventory (NRI)-listed rivers, river segments, or study rivers are located at or near the Airport.

4.13.1 Wetlands

Wetlands, streams, and other waters, collectively "Waters of the United States" (WOTUS) are regulated under the jurisdiction of the USACE and in North Carolina by the NCDEQ Division of Water Resources (DWR). The North Carolina Stream Assessment Method (NCSAM version 2.1) and the North Carolina Wetland Assessment Method (NCWAM version 5) were applied to streams and wetlands verified in jurisdictional determinations (Appendix A, Attachment 14, Attachment 15, Attachment 16, and Attachment 17) at the three applicable project component locations. Thirteen jurisdictional aquatic features (Figure 4, Figure 5, Figure 6) were identified, consisting of eight wetlands (totaling 1.83 acres) and four streams (totaling 3,526 linear feet).

Additionally, two jurisdictional ponds (other waters, totaling 3.195 acres) were identified at the Inman site.

Based on the limited space at the proposed new rental car location, constraints of the site (jurisdictional resources on both sides and in the middle of the facility), and lack of practicable alternatives; up to 1.83 acres (ac.) of wetlands and 3,526 linear feet (l.f.) stream channel could be impacted by the proposed Project Option 1. PTAA has redesigned the proposed new rental car facilities (Option 2) to reduce direct impacts to only 0.1 ac. wetlands. Water quality impact thresholds and mitigation for any unavoidable impacts to jurisdictional water resources will be resolved through the CWA Section 404 and 401 permitting processes (Appendix B, Correspondence 5, Correspondence 6) as discussed in Section 6.

4.13.2 Floodplains

No Federal Emergency Management Agency (FEMA) floodplains will be directly impacted by the Project (Appendix A, Attachment 18). The floodplain of Brush Creek is within a dedicated preservation/mitigation Conservation Easement and will be avoided during construction and operation of Worldwide Drive. Potential impacts to floodplain mapped downstream of the proposed new rental car facilities will be addressed through appropriate regulatory coordination and stormwater management.

4.13.3 Surface Waters

The Preferred Alternative will result in approximately 80 acres of additional impervious surface. Application of appropriate stormwater management controls consistent with the State Stormwater Design Manual, Water Supply Watershed Protection Program, and Jordan Water Supply Nutrient Strategy regulations will address potential water quality and runoff quantity changes resulting from the additional impervious surfaces. Protection of downstream drinking water sources will be ensured through appropriate adherence to PTAA's watershed protection (PTAA, 2019a) and inspection (PTAA, 2019b) protocols, including Water Supply Watershed Management and Protection Rules (PTAA, 2001a) and the PTAA Stormwater Management Plan (PTAA, 2001b). The Project will be constructed consistent with State erosion and sediment control (E&SC) and National Pollutant Discharge Elimination System (NPDES) construction stormwater management regulations. Compliance with FAA Standards for Specifying Construction of Airports (AC 150/5370-10) will further limit construction impacts to water resources. The Project will also be subject to the Airport's Individual NPDES Industrial Stormwater Permit (NCS000508) including the SPPP, discharge monitoring program (PTAA, 2019c), Spill Response Procedures, and SPCC plan.

4.13.4 Groundwater

Potential impacts to groundwater at the subject site are similarly limited by restrictions imposed by the regulations applicable to wetlands, floodplains, and surface waters. Based on adherence to CWA regulations and applicable permits required (Section 6), no significant impacts to groundwater are anticipated. Additional potential impacts to surface and groundwater associated with hazardous materials are discussed in Section 4.6.



5 Cumulative Impacts

The CEQ Regulations define a cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (see 40 CFR §1508.7). Cumulative impacts can be viewed as the total combined impacts on the environment of the proposed action or alternative(s) and other known or reasonably foreseeable actions.

No cumulative Project environmental effects are anticipated: Past GSO projects have included the HAECO Facility Improvements, Honda MRO, Honda Connector Road, Taxiway D Extension, Ballinger Road Extension, and the extension of Taxiway M. Only the HAECO and Connector Road projects involved quantifiable impacts (Individual and Nationwide CWA Section 404/401 Permits). Adjacent projects include the Cross-Field Taxiway and Site Development Projects and NCDOT roadway improvements (Appendix B, Correspondence 3) in the Project vicinity (I-73 Connector, US-220/NC-68 Connector, I-840, widening US-220, and widening Market Street). No significant environmental impacts have been determined for these projects. Tree clearing for the Runway 23L approach zone adjacent to the proposed New Rental Car Facilities location is proposed to coincide with the Project construction time-frames, but this is limited to the 42-acre area north of Old Oak Ridge Road and the other side of I-73. Cumulatively, the Rental Car Facilities Relocation would not add significant impacts, rather, the NCDOT roadway improvements anticipate such Airport development. NCDEQ will also evaluate cumulative project impacts specific to water quality during the CWA Section 401 Water Quality Certification process. Development of the proposed action would not involve construction or development activity in residential areas, and there would be no shifts in population movement or increase in the demands for public services. The proposed action would not disrupt local traffic patterns or reduce the levels of service of roads serving the Airport and its surrounding communities.



6 Permits and Certifications

The Affected Environment and Environmental Consequences subsections include information to demonstrate compliance with those applicable requirements. Anticipated permits, licenses, other approvals, or reviews that may apply are identified as follows.

CWA Section 401 (Water Quality Certification), 403 (NPDES Permit NCS000508 update), 404 (Individual Permit), State Water Quality (15A NCAC 02H .0500), and NPDES Construction General Stormwater (NCG010000) permits will be required (Appendix B, Correspondence 9). Based on preliminary discussion with USACE and NCDEQ, no unusual or insurmountable impediments to permitting are anticipated (Correspondence 5, Correspondence 6). However, because planned air-cargo development has not yet expanded to the aerospace development site, Worldwide Drive has not been completed and portions of a stream, previously permitted to be impacted in this vicinity, still exist. The USACE has preliminarily determined that a new Individual Section 404 permit may be required for proposed impacts to jurisdictional resources previously authorized by the Individual Permit issued for the FedEx Mid-Atlantic Hub (USACE Action ID SAW-2000-21655) due to its expiration in 2013. A corresponding Section 401 certification would also be required.

A 404/401 pre-application meeting was convened on June 24, 2019 at the USACE Raleigh Regulatory Field Office. The 404/401 permit applications will be submitted consistent with discussions at that meeting and this EA.

No open burning is anticipated with the Project. Demolition of structures containing asbestos material will comply with applicable regulations, including notification and removal prior to demolition. NCDEQ will be notified if "orphan" USTs are discovered during Project excavation. Plans for water line relocations will be submitted to the DWR Public Water Supply Section.



7 Mitigation

As defined in the CEQ Regulations at 40 CFR §1508.20, mitigation includes avoiding the impact; minimizing the impact; rectifying the impact by repairing, rehabilitating, or restoring the environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources.

Unavoidable impacts to WOTUS and other biological and natural resources will be appropriately mitigated through the CWA Section 401, 404, and State environmental permitting processes and as anticipated in the following subsections. There are no adjacent resources which would be impacted or require mitigation because of the Project and potential impacts to nearby environmental resources will be avoided pursuant to the anticipated requirements of regulatory permits and compliance. Based on impacts to CWA and State jurisdictional resources estimated for the Preferred Alternative (Section 4.13), the proposed mitigation strategy is summarized in the following subsections.

7.1 Avoidance

As summarized in Section 3, the Airport Sponsor has exerted appropriate effort to avoid siting project components with potential to impact environmental resources through the required alternatives analysis. Because the Proposed Action is not water-dependent, alternatives to sites involving impacts to WOTUS were assumed to exist and were explored to the extent available.

7.2 Minimization

PTAA anticipates minimizing potential unavoidable adverse effects of the project consistent with CWA Section 404(b)(1) guidelines to the extent practicable, as follows:

- Construction of stream culverts will minimize smothering of organisms by utilizing "pump-around"; minimize construction time; control turbidity through adherence to the Erosion and Sedimentation Control (E&SC) Plan; avoid unnecessary discharge; prevent creation of standing water; and prevent drainage of wet areas.
- During construction, physiochemical conditions will be maintained, and potency and availability of pollutants will be reduced; material to be discharged will be limited; treatment substances may be added if necessary; chemical flocculants may be utilized to enhance the deposition of suspended particulates in appropriate disposal areas.
- The effects of dredged or fill material may be controlled by selecting discharge methods and disposal sites where the potential for erosion, slumping or leaching of materials into the surrounding aquatic ecosystem will be reduced. These methods include using containment levees, sediment basins, and cover crops to reduce erosion.
- Discharge effects will also be controlled by containing discharged material properly to prevent point and nonpoint sources of pollution; and timing the discharge to minimize impact, for instance during periods of unusual high-water flows.
- The effects of a discharge will be minimized by the manner in which it is dispersed, such as, where environmentally desirable, orienting dredged/fill material to minimize undesirable obstruction to the surface water or natural flow, and utilizing natural contours to minimize the size of the fill; using silt screens or other appropriate methods to confine

suspended particulates/turbidity to a small area where settling or removal can occur; selecting sites or managing discharges to confine and minimize the release of suspended particulates to give decreased turbidity levels and to maintain light penetration for organisms; and setting limitations on the amount of material to be discharged per unit of time or volume of receiving water.

- Discharge technology will be adapted to the needs of the site. The Airport Sponsor will consider using appropriate equipment or machinery, including protective devices, and the use of such equipment in activities related to the discharge of dredged or fill material; employing appropriate maintenance and operation on equipment or machinery, including adequate training, staffing, and working procedures; using machinery and techniques that are especially designed to reduce damage to streams; designing access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low and high water flows, accommodate fluctuating water levels, and maintain circulation and faunal movement; employing appropriate machinery and methods of transport of the material for discharge.
- Minimization of adverse effects on populations of plants and animals will be achieved by minimizing changes in water flow patterns which would interfere with the movement of animals; managing discharges to avoid creating habitat conducive to the development of undesirable airport wildlife hazards; avoiding sites having unique habitat or other value, including habitat of threatened or endangered species; using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics; timing discharge to avoid spawning or migration seasons and other biologically critical time periods; and avoiding the destruction of remnant natural sites within areas already affected by development.

7.3 Compensation

In order to comply with FAA wildlife hazard avoidance protocols and the USEPA mitigation rule, unavoidable impacts are proposed to be mitigated off-site. Mitigation preliminarily anticipated to be required based on proposed unavoidable impacts of the Preferred Alternative is summarized in terms of wetland, stream, and riparian buffer mitigation units (WMU, SMU, BMU, respectively). Specific mitigation ratios have not yet been discussed with regulatory agencies, so those used to estimate potential impact compensation are preliminary only, based on applicable guidance, as follows:

- 0.092 acre Wetland impact could require 0.28 WMU at 3:1 ratio;
- 1,694 linear feet Stream impact could require 3,388 SMU at 2:1 ratio;
- 184,674 square feet Buffer impact could require 438,537 BMU.

Proposed impacts to 1,221 linear feet of stream tributary to Brush Creek located at the Air Cargo site have already been mitigated at the Causey Farm mitigation site under USACE Action ID SAW-2000-021655 (DWR File 00-0846), deemed successful in 2009 and 2010.

Additional successful mitigation in the form of 2.08 WMUs are currently available at PTAA's Causey Farm mitigation site for use on future GSO projects, pending Corps review and approval (USACE, 2016).

As of October 12, 2017, the USACE Regulatory In-lieu fee and Bank Information Tracking System (RIBITS) presented five mitigation banks with 622.91 stream (SMU) and 2.67 wetland (WMU) credits under Federal jurisdiction available for the Project Service Area in the Cape Fear 02 Hydrologic Unit (HUC 03030002). This availability is constantly changing and will be reviewed and updated during CWA permitting for the project. Compensation for any remaining balance of unavoidable impacts to wetlands, stream channels, and riparian buffers may be provided by the NCDEQ Division of Mitigation Services (DMS). If required, an In-Lieu Fee Request will be submitted to DMS pending approval by USACE and DWR.

Based on the approach summarized above, the cost of mitigating the anticipated stream, wetland, and riparian buffer impacts for the Preferred Alternative (Option 2) is estimated at approximately \$100K. The cost of mitigating for the maximum impacts (Option 1) is estimated at approximately \$5.7M through the DMS (Appendix A, Attachment 19). If PTAA is required to use available private mitigation bank(s), these estimates would likely be exceeded. Mitigation costs for the other build alternatives would range between these two approximations. Due to the preliminary status of design planning for the Inman Site, mitigation estimates are anticipated "worst-case-scenario" and should be reduced during the Section 404/401 permitting process.



8 References

- FAA. (2001). Airports, Airport Environmental Records of Decision, North Carolina, Piedmont Triad International Airport (GSO) (Greensboro, NC). Retrieved from Federal Aviation Administration:
 - https://www.faa.gov/airports/environmental/records_decision/media/rod_greensboro.pdf
- FAA. (2018). *Airport Layout Plan*. Retrieved from Airport Master Plan Update: http://airportmasterplan.homestead.com/ALP Drawing Set.pdf
- NCDOT. (2012). *Invasive Exotic Plants of North Carolina*. Raleigh, NC. Retrieved from https://connect.ncdot.gov/resources/Environmental/Compliance%20Guides%20and%20P rocedures/Invasive Exotic Plants Manual May 2012.pdf
- PTAA. (2001a). Water Supply Watershed Management and Protection Rules of the Piedmont Triad Airport Authority. Retrieved from PTIA Environment SharePoint, Watershed Ordinance: https://projects.mbakercorp.com/PTIA/Documents/PTIA_WSWMP_Rule.pdf
- PTAA. (2001b). *Stormwater Management Plan*. Retrieved from PTIA Environment SharePoint, 2001 SMP: https://projects.mbakercorp.com/PTIA/Documents/PTIA_SMP.pdf
- PTAA. (2018a). Spill Prevention Control and Countermeasures Plan. Retrieved from PTIA Environment SharePoint, Spill Prevention, SPCC Plan: https://projects.mbakercorp.com/PTIA/SitePages/SPCC.aspx
- PTAA. (2018b). *Spill Response Procedures*. Retrieved from PTIA Environment SharePoint, Spill Prevention, Spill Response: https://projects.mbakercorp.com/PTIA/SitePages/SRP.aspx
- PTAA. (2018c). Stormwater Pollution Prevention Plan. Retrieved from PTIA Environment SharePoint, NPDES, SPPP: https://projects.mbakercorp.com/PTIA/SitePages/SPPP.aspx
- PTAA. (2019a). Watershed Reporting. Retrieved from PTIA Environment SharePoint, Watershed Ordinance, Watershed Reporting: https://projects.mbakercorp.com/PTIA/Watershed%20Management/Forms/Watershed%20Management.aspx
- PTAA. (2019b). Watershed Inspection. Retrieved from PTIA Environment SharePoint, Watershed Ordinance, Watershed Inspection: https://projects.mbakercorp.com/PTIA/Stormwater%20Maintenance/Forms/AllItems.asp x
- PTAA. (2019c). *Discharge Monitoring*. Retrieved from PTIA Environment SharePoint, Monitoring: https://projects.mbakercorp.com/PTIA/SitePages/NPDES%20Discharge%20Monitoring.aspx
- USACE. (2016). *Department of the Army Permit SAW-2015-00920*. Section 404 Individual Permit, HAECO Facility Improvements, Regulatory Division, Wilmington, NC. Retrieved from https://projects.mbakercorp.com/PTIA/404/HAECO IP.pdf



Appendix A Supporting Documentation

Attachment 1	FAA Comparative Safety Analysis dated 10/31/2013	A-1
Attachment 2	BAKER Air Quality Analysis dated 3/11/2019	A-6
Attachment 3	USFWS Guilford County Listed Species dated 10/4/2018	A-18
Attachment 4	USFWS Raleigh ESFO On-Line Project Review (IPaC) dated 4/3/2017	A-20
Attachment 5	NCNHP Guilford Quadrangle Species/Community Search dated 3/3/2017	A-39
Attachment 6	GDOT Road Projects Map dated 3/2/2017	A-40
Attachment 7	PILOT Phase I Environmental Site Assessments dated 11/7/2018	A-41
Attachment 8	SHPO HPOWEB GIS Service dated 3/16/2017	. A-333
Attachment 9	LEGACY Architectural Investigations dated 6/3/2019	. A-334
Attachment 10	LEGACY Archaeological Survey dated 7/19/2019	. A-362
Attachment 11	GPD Generalized Future Land Use Map dated 3/2/2017	. A-442
Attachment 12	PTAA Forecast 2014 Noise Exposure Map dated 11/2007	. A-443
Attachment 13	USEPA EJScreen Report dated 3/21/2017	. A-444
Attachment 14	USACE Determination SAW-2017-00101 dated 3/14/2017	. A-447
Attachment 15	USACE Determination SAW-2017-00103 dated 3/17/2017	. A-451
Attachment 16	NCDEQ Mitigation and Buffer Determination dated 1/30/2017	. A-455
Attachment 17	BAKER NCWAM and NCSAM dated 2/10/2017	. A-460
Attachment 18	FEMA FIRM Panels 7825, 7826, & 7836 dated 6/18/2007	. A-536
Attachment 19	NCDEQ Mitigation In-Lieu Fee Schedule effective 7/1/2019	. A-537

Attachment 1 FAA Comparative Safety Analysis dated 10/31/2013



U.S. Cepartment of Transportation Federal Aviation Administration

OCT 3 | 2013 Mr. Mickie Elmore Director of Development Piedmont Triad Airport Authority P.O. Box 35445 Greensboro, North Carolina 27425

Re: Proposed ATCT/TRACON Development

Dear Mr. Elmore:

As agreed to during our work at the Airway Facilities Tower Integration Lab (AFTIL) concerning the Federal Aviation Administration (FAA) plan to replace the Air Traffic Control Tower (ATCT) and Terminal Radar Approach Control facilities (TRACON) at Piedmont Triad International Airport (GSO), I am providing your office with the impacts to GSO as a result of the proposed ATCT/TRACON location.

The Comparative Safety Analysis (CSA) completed for the proposed structure at Site 1b identified the controller's view of aircraft and vehicular movement on the southern portion of TWY "E" being obstructed by the Emory building, Hertz Service Center and embankment as a hazard with a medium initial risk. The mitigation strategy identified in the CSA to eliminate this risk is to:

- a) Remove Emery Building
- b) Remove Hertz Service Center
- c) Lower visual obstructing grade of embankment between PTI Drive and Taxiway "E"

The Piedmont Triad Airport Authority (PTAA) is identified as the responsible party to complete the mitigation with a planned completion date of prior to commissioning of the new ATCT

Current FAA policy requires a written confirmation from the GSO Airport stating they have advised the user community of the proposed new ATCT and the affects the above impacts would have on their operations at the airport. Following your coordination with the user community, please complete and return the enclosed form (Airport Concurrence Form) confirming the coordination with the users and their acceptance of the above proposed airspace procedures changes. Receipt of this completed form is necessary for us to continue beyond the design phase of this project.

If there are any remaining questions concerning these findings, I can be reached at 202-385-8789.

Sincerely

Ed Tatem

ATO Terminal Facilities Planning

cc: ATO Planning and Requirements Group AJV-E3
Technical Operations – Engineering Services AJW-E11D
ATO GSO AT Manager TEF-GSO

Comparative Safety Assessment

Hazard Worksheets for Site 1b.

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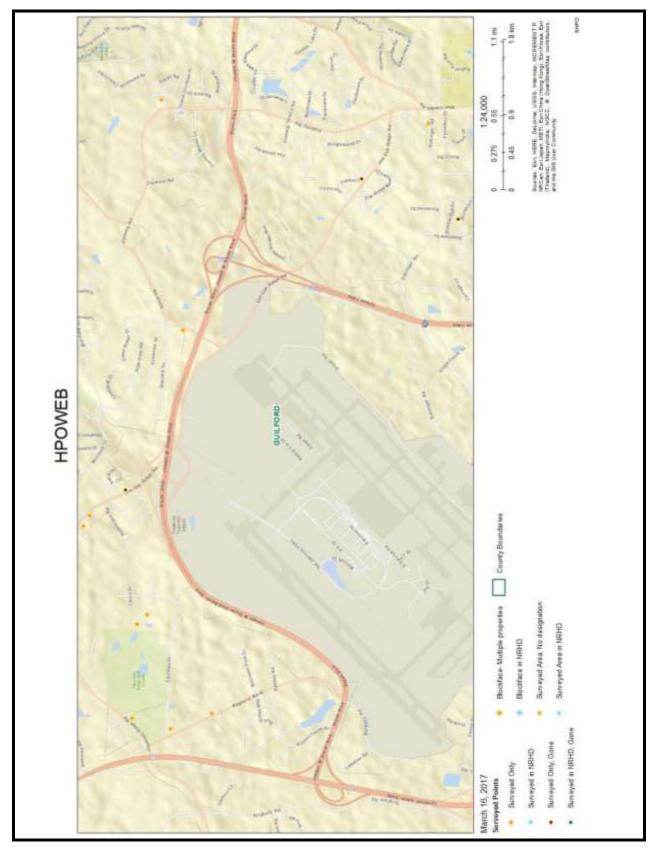
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Attachment 8 SHPO HPOWEB GIS Service dated 3/16/2017



Correspondence 12 USFWS Letter from Pete Benjamin dated 4/17/2017



United States Department of the Interior

PISH AND WILDLIFE SERVICE Baleigh ES Vield Office Post Office Box 13726 Raleigh, North Carolina 27636-3726

April 17, 2017

Richard Darling Michael Baker International 200 Centreport Dr., Suite 350 Greensboro, NC 27409

Re: Rental Car Facilities Relocation Piedmont Triad International Airport - Guilford Co., NC

Dear Mr. Darling:

This letter is to inform you that the Service has established an on-line project planning and consultation process which assists developers and consultants in determining whether a federally-listed species or designated critical habitat may be affected by a proposed project. For future projects, please visit the Raleigh Field Office's project planning website at https://www.fws.gov/raleigh/pp.html. If you are only searching for a list of species that may be present in the project's Action Area, then you may use the Service's Information, Planning, and Consultation System (IPaC) website to determine if any listed, proposed, or candidate species may be present in the Action Area and generate a species list. The IPaC website may be viewed at https://ecos.fws.gov/ipac/. The IPaC web site contains a complete and frequently updated list of all endangered and threatened species protected by the provisions of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act), a list of federal species of concern that are known to occur in each county in North Carolina, and other resources.

Section 7 of the Act requires that all federal agencies (or their designated non-federal representative), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species. A biological assessment or evaluation may be prepared to fulfill that requirement and in determining whether additional consultation with the Service is necessary. In addition to the federally-protected species list, information on the species' life histories and habitats and information on completing a biological assessment or evaluation and can be found on our web page at http://www.fws.gov/raleigh. Please check the web site often for updated information or changes.

The term "federal species of concern" refers to those species which the Service believes might be in need of concentrated conservation actions. Federal species of concern receive no legal protection and their designation does not necessarily imply that the species will eventually be proposed for listing as a federally endangered or threatened species. However, we recommend that all practicable measures be taken to avoid or minimize adversa impacts to federal species of concern.

If your project contains suitable habitat for any of the federally-listed species known to be present within the county where your project occurs, the proposed action has the potential to adversely affect those species. As such, we recommend that surveys be conducted to determine the species' presence or absence within the project area. The use of North Carolina Natural Heritage program data should not be substituted for actual field surveys.

If you determine that the proposed action may affect (i.e., likely to adversely affect or not likely to adversely affect) a federally-protected species, you should notify this office with your determination, the results of your surveys, survey methodologies, and an analysis of the effects of the action on listed species, including consideration of direct, indirect, and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed action will have no effect (i.e., no beneficial or adverse, direct or indirect effect) on federally listed species, then you are not required to contact our office for concurrence (unless an Environmental Impact Statement is prepared). However, you should maintain a complete record of the assessment, including steps leading to your determination of effect, the qualified personnel conducting the assessment, habitat conditions, site photographs, and any other related articles.

With regard to the above-referenced project, we offer the following remarks. Our comments are submitted pursuant to, and in accordance with, provisions of the Endangered Species Act.

Based on the information provided and other information available, it appears that the proposed action is not likely to adversely affect any federally-listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at these sites. We believe that the requirements of section 7(a)(2) of the Act have been satisfied for your project. Please remember that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

However, the Service is concerned about the potential impacts the proposed action might have on aquatic species. Aquatic resources are highly susceptible to sedimentation. Therefore, we recommend that all practicable measures be taken to avoid adverse impacts to aquatic species, including implementing directional boring methods and stringent sediment and erosion control measures. An erosion and sedimentation control plan should be submitted to and approved by the North Carolina Division of Land Resources, Land Quality Section prior to construction. Erosion and sedimentation controls should be installed and maintained between the construction site and any nearby down-gradient surface waters. In addition, we recommend maintaining natural, vegetated buffers on all streams and creeks adjacent to the project site.

The North Carolina Wildlife Resources Commission has developed a Guidance Memorandum (a copy can be found on our website at (http://www.fws.gov/raleigh) to address and mitigate secondary and cumulative impacts to aquatic and terrestrial wildlife resources and water quality. We recommend that you consider this document in the development of your projects and in completing an initiation package for consultation (if necessary).

2

http://www.ncwildlife.org/Portals/0/Conserving/documents/2002 GuidanceMemorandumforSecondaryandCumulativeImpacts.pdf

We hope you find our web page useful and informative and that following the process described above will reduce the time required, and eliminate the need, for general correspondence for species' lists. If you have any questions or comments, please contact John Ellis of this office at (919) 856-4520 ext. 26.

Sincerely.

Pere Benjamin Field Supervisor

Correspondence 10 SHPO Letter from Ramona Bartos dated 3/23/2017



North Carolina Department of Natural and Cultural Resources State Historic Preservation Office

Ramoon M. Bartos, Administrator

Governor Roy Cooper Secretary Said H. Hamilton Office of Archives and History Depoty Secretary Kevin Cherry

March 23, 2017

Richard Darling Michael Baker International 200 Centreport Drive, Suite 350 Greenshoro, NC 27409

Re: Rental Car Facilities Relocation, Piedmont Triad International Airport GSO, Guilford County, ER 17-0332

Dear Mr. Darling:

Thank you for your letter of February 22, 2017, concerning the above project.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@neder.gov. In all future communication concerning this project, please cite the above referenced tracking number.

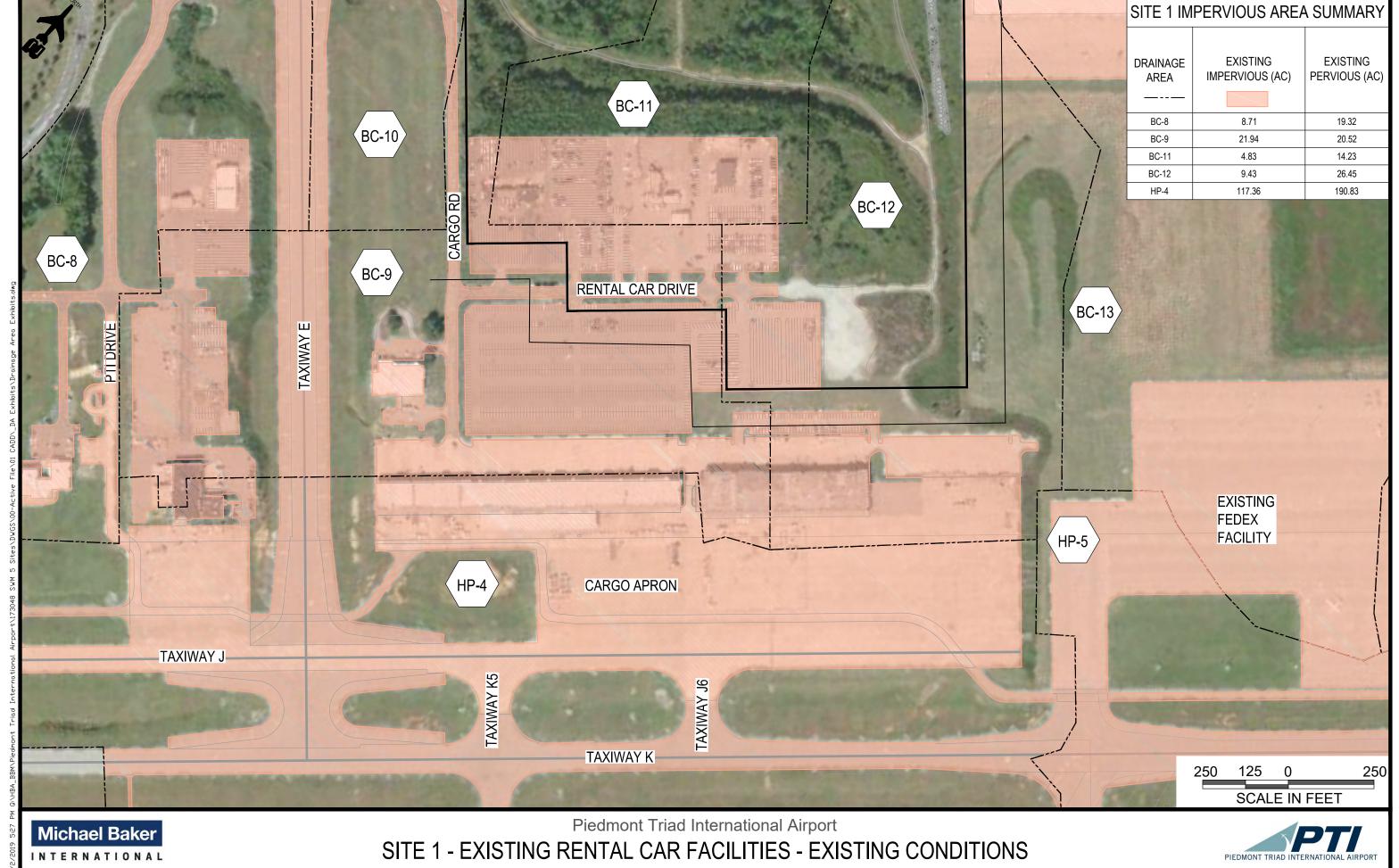
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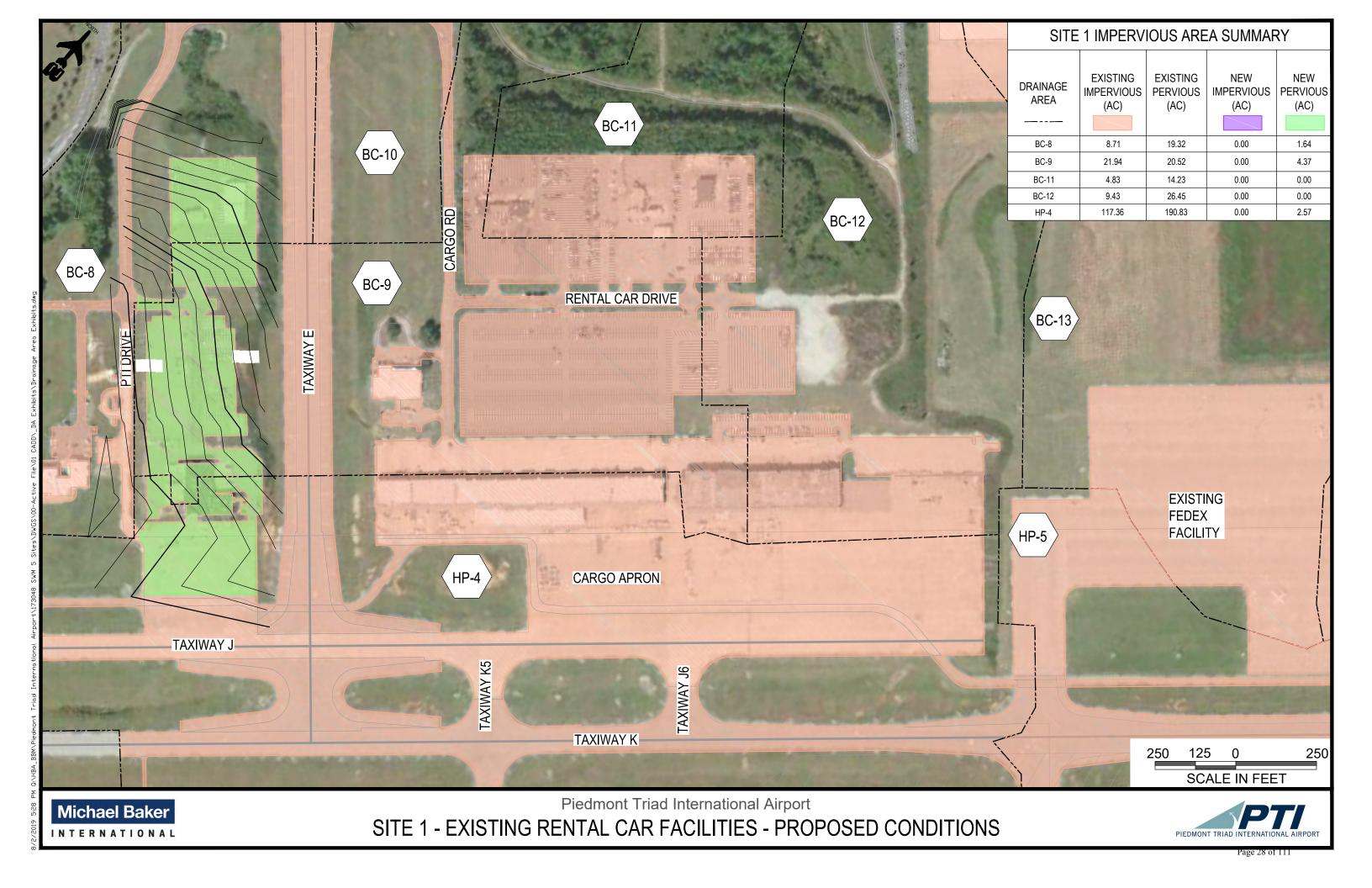
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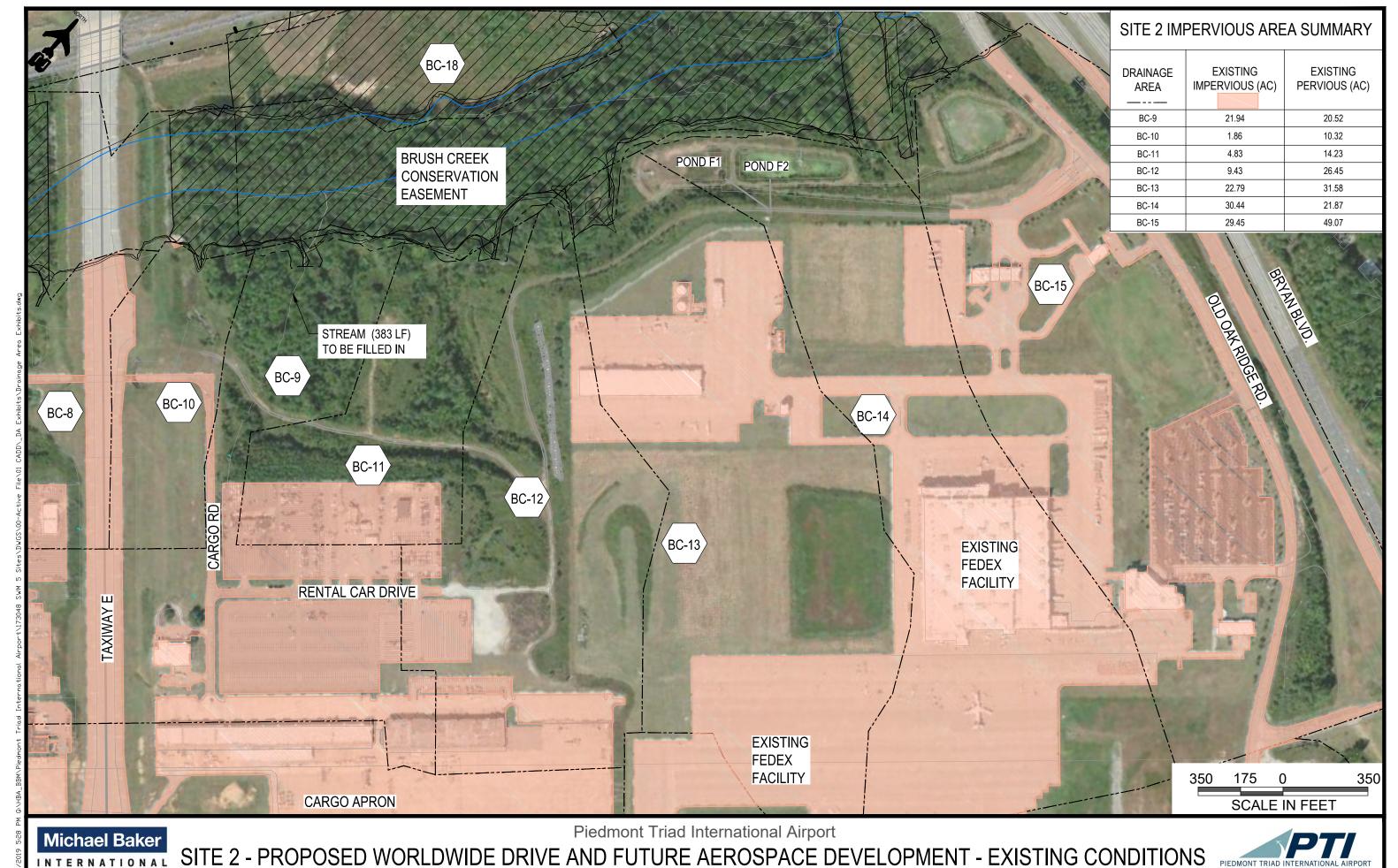
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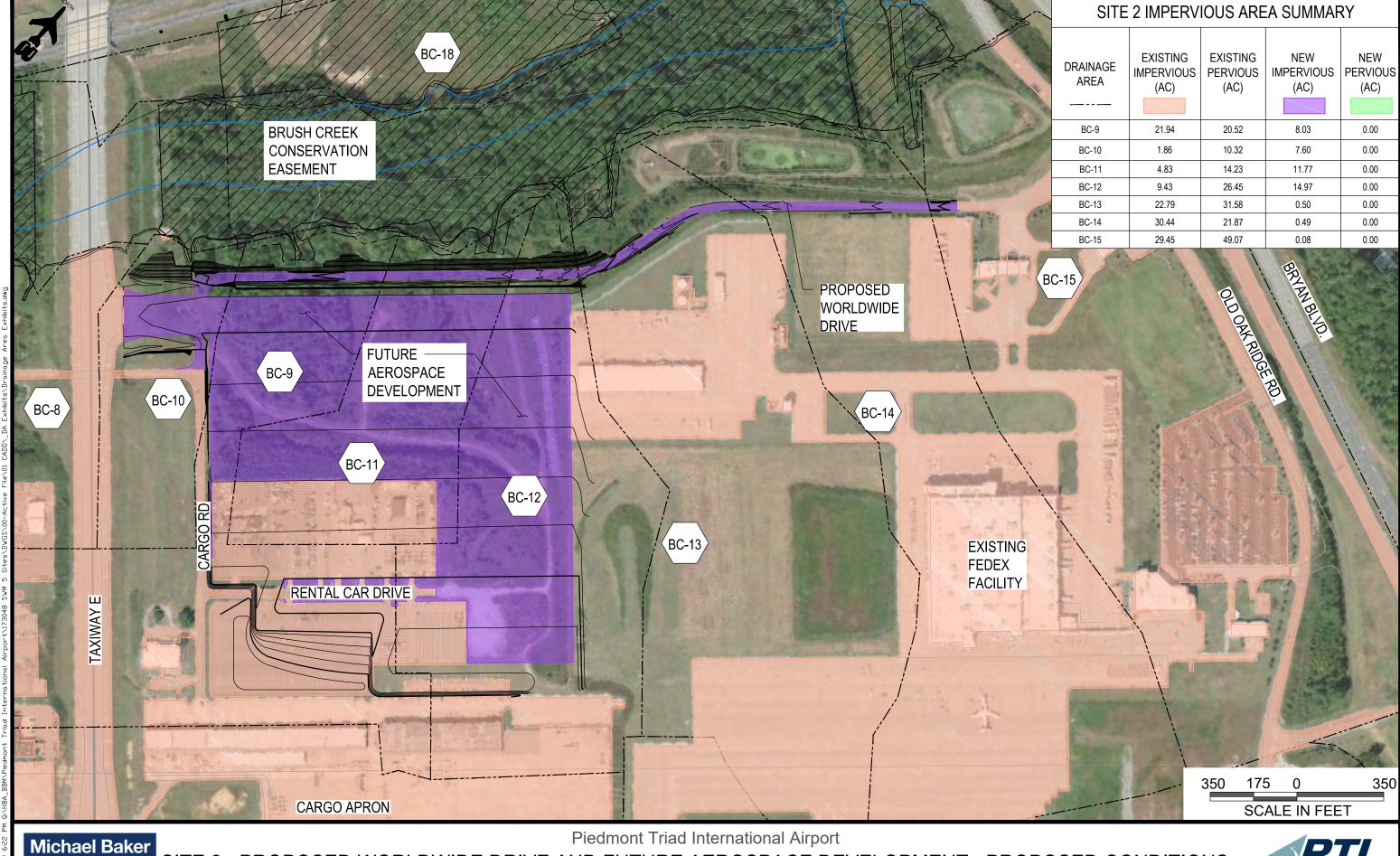
Lucation 100 East Jones Street, Baleigh NC 27601 Mulling Address: 4617 Mall Service Center, Rateigh SC 17609-4617 Telephone/Fast (919) 807-8570 807-8590

APPENDIX A-2: EXISTING CONDITIONS EXHIBITS PROPOSED AND FUTURE CONDITIONS EXHIBITS









IN THE RING AT LONG LE SITE 2 - PROPOSED WORLDWIDE DRIVE AND FUTURE AEROSPACE DEVELOPMENT - PROPOSED CONDITIONS PIEDMONT TRIAD INTERNAL

