

Chapter 5.0 – Mitigation Measures Matrix

The following matrix identifies each of the environmental impact categories listed in FAA Order 5050.4.B, *Airport Environmental Handbook*, paragraph 47.e, along with the potential impacts and recommended mitigation strategies developed in Chapter 4. This is a condensed summary of the mitigation measures identified in each impact category. Detailed analysis of mitigation measures is provided in each section.

**Table 5.1
Mitigation Measures Matrix**

Environmental Impact Category	Potential Environmental Impacts	Recommended Mitigation Measures
4.1 Noise	<ul style="list-style-type: none"> ▪ Short-term increases in noise levels from construction activities during daylight hours. 	<ul style="list-style-type: none"> ▪ Use of appropriate noise control techniques (e.g. mufflers) on construction equipment. ▪ Height-restricted trees and shrubs planted as a result of the obstruction removal program should dampen noise exposure in areas where the obstruction clearing was performed. ▪ Continued efforts by airport staff to advise pilots of good neighbor noise abatement procedures and communication with neighbors and pilots to address noise complaints.
4.2 Land Use	None	None
4.3 Social Impacts	None	None
4.4 Induced Socioeconomic	None	None
4.5 Air Quality	<ul style="list-style-type: none"> ▪ Fugitive dust emissions (temporary & short-term). ▪ Emission of air pollutants (temporary & short-term). 	<ul style="list-style-type: none"> ▪ FAA A/C 150/5370-10 <i>Standards for Specifying Construction of Airports, Item P-156 Temporary Air and Water Pollution, Soil Erosion, and Siltation Control</i> are to be included into all project specifications and bid documents. ▪ Properly maintain construction equipment. ▪ Use of enclosed vehicles for transportation of debris off-site ▪ Covered dump trucks. ▪ Use of direct trucking routes ▪ Water down larger sites to eliminate airborne dust.
4.6 Historic, Architectural, Archaeological, and Cultural Resources	None	None

Environmental Impact Category	Potential Environmental Impacts	Recommended Mitigation Measures
4.7 Water Quality	<ul style="list-style-type: none"> ▪ Slight alterations to stormwater flow due to added impervious surfaces. ▪ Increased soil disturbance and potential for runoff of sediments into surface waters. 	<ul style="list-style-type: none"> ▪ WQC and FWA permits ▪ Submission of a NOI, NOT, and SWPPP ▪ Compliance with all applicable Federal, state, and local regulations ▪ Appropriate soil erosion & sediment control design considerations. ▪ New storm drainage construction as per published BMP's. ▪ Improvements in infiltration systems including bio-retention cells, elongated drains, etc. ▪ Construction of drainage sub-basins and rain barrels for improved stormwater control
4.8 DOT Section 4(f)/6(f) Lands	None	None
4.9 Biotic Communities	None	None
4.10 Threatened or Endangered Species of Flora and Fauna	None	None
4.11 Wetlands	<ul style="list-style-type: none"> ▪ Proposed based aircraft apron expansion would have a western edge approximately 150' east of Bailey Brook ▪ Ramp from RY 16 to apron would be located 50' east of delineated wetlands ▪ Proposed partial parallel taxiway to RY 16-34 would be located approximately 190' east and 470' west of delineated wetlands 	<ul style="list-style-type: none"> ▪ Implementation of appropriate soil erosion and sediment control techniques as needed during construction activities to minimize any potential impacts. ▪ Construction of drainage sub-basins ▪ Improvements in infiltration systems including bio-retention cells, elongated drains, etc. ▪ Construction of drainage sub-basins and rain barrels for improved stormwater control
4.12 Floodplains	<ul style="list-style-type: none"> ▪ Additional impervious surface could increase the occurrence and frequency of flooding. 	<ul style="list-style-type: none"> ▪ Implementation of controls including engineering changes to the existing stormwater drainage system to redirect stormwater to areas where flooding is not a problem. ▪ Construction of drainage sub-basins and rain barrels for improved stormwater control
4.13 Coastal Zone Management	None	None
4.14 Coastal Barriers	None	None
4.15 Wild and Scenic Rivers	None	None
4.16 Farmland	None	None
4.17 Energy Supply and Natural Resources	None	None
4.18 Light Emissions	None	None

Environmental Impact Category	Potential Environmental Impacts	Recommended Mitigation Measures
4.19 Solid Waste Impact	<ul style="list-style-type: none"> ▪ Waste disposal during project implementation will be separate from normal airport solid waste. ▪ Proposed projects are not expected to significantly increase long-term solid waste volumes. 	<ul style="list-style-type: none"> ▪ Waste disposal will be handled on an individual basis & managed according to federal, state, and local regulations. ▪ Opportunities for recycling will be explored. ▪ Use of "green" architecture, design standards, and construction
4.20 Construction Impacts	<ul style="list-style-type: none"> ▪ Noise and dust at project sites & during delivery of materials/equipment through city streets ▪ Creation of burrow pits and disposal of spoil ▪ Air pollution from burning debris (e.g. asphalt batching) ▪ Water pollution from erosion 	<ul style="list-style-type: none"> ▪ FAA A/C 150/5370-10 <i>Standards for Specifying Construction of Airports, Item P-156 Temporary Air and Water Pollution, Soil Erosion, and Siltation Control</i> are to be included into all project specifications and bid documents.
4.21 Cumulative Impacts	None	None