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## Appendix I – Hazardous Materials – Abridged Version

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July 12, 2019

William Ballard, AICP  
Project Manager  
Mead & Hunt, Inc.  
2605 Port Lansing Road  
Lansing, MI 48906

**Subject: Recommendations for Proposed Ann Arbor Municipal Airport Runway Extension, Ann Arbor, Michigan**

Dear Mr. Ballard:

Lawhon & Associates, Inc. (L&A) has completed a Phase I Environmental Site Assessment (ESA) for the proposed Ann Arbor Municipal Airport Runway Extension and Taxiway Reconfiguration Project located at 801 Airport Drive in Ann Arbor, Michigan in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Designation: E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Any exceptions to, or deletions from this practice are described in Section 2.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property. In L&A's opinion, no further investigation regarding the subject property is warranted at this time.

If you have any questions, please contact Ms. Sally Betz or Mr. Trevor Berger at (614) 481-8600.

Sincerely,

Sally Betz  
Environmental Scientist

Trevor Berger  
Department Manager

***PHASE I ENVIRONMENTAL SITE ASSESSMENT:  
Ann Arbor Municipal Airport Runway Extension Project  
Ann Arbor, Michigan  
(L&A Project 19-0016)***



***Prepared for:***

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***July 12, 2019***



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# **PHASE I ENVIRONMENTAL SITE ASSESSMENT**

## **Ann Arbor Municipal Airport Runway Extension Project**

### **Ann Arbor, Michigan**

### **(L&A Project 19-0016)**

## **1.0 SUMMARY**

Lawhon & Associates, Inc. (L&A) has completed a Phase I Environmental Site Assessment (ESA) for the proposed Runway Extension Project located at the Ann Arbor Municipal Airport in Ann Arbor, Michigan (the subject property), in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Designation: E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. L&A performed an on-site visual inspection, a driving tour of the vicinity, a review of government agency databases, and a review of historical data in order to achieve this objective. Any exceptions to, or deletions from, this practice are described in Section 2.5 of this report. A site plan is presented in Appendix 9.1.1.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property.

## **2.0 INTRODUCTION**

### **2.1 PROPERTY LOCATION AND DESCRIPTION**

The Ann Arbor Municipal Airport is a general aviation airport owned and operated by the City of Ann Arbor, Michigan. The airport is located in Pittsfield Charter Township, Washtenaw County, Michigan and consists of approximately 733 acres on 13 parcels. The airport is bound by Ellsworth Road to the north, State Road to the east, Avis Farms Technology Park to the south and Lohr Road to the west. A map of the subject property and vicinity is presented in Appendix 9.1.2.

### **2.2 PURPOSE**

L&A's objective was to identify, to the extent feasible pursuant to the process prescribed in ASTM Designation: E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, recognized environmental conditions in connection with the subject property. In doing so, this Phase I ESA is intended to permit the user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on liability (hereinafter, the "landowner liability protections") available under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended (42 U.S.C. §9601).

The term recognized environmental condition is defined in ASTM E 1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment".

Additionally, the terms controlled recognized environmental condition, historical recognized environmental condition, and de minimis condition are utilized in ASTM E 1527-13 to clarify the determination of recognized environmental conditions; these terms are defined as follows:

A controlled recognized environmental condition is “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls”.

A historical recognized environmental condition is “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls”. A historical environmental condition is not currently a recognized environmental condition.

A de minimis condition is “a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions”.

### **2.3 SCOPE OF SERVICES AND CONTRACTUAL DETAILS**

The scope of services, as well as special terms and conditions are outlined in the proposal dated February 1, 2018. A copy of the executed proposal for services and attached General Conditions is presented in Appendix 9.2.

This practice does not address specific requirements of state or local laws, or federal laws other than the “All Appropriate Inquiry” provisions of Comprehensive Environmental Response, Compensation and Liability Act’s (CERCLA’s) innocent landowner defense. It should be noted that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. Nor does this practice address whether requirements in addition to “All Appropriate Inquiry” have been met in order to qualify for the innocent landowner defense. It should also be noted that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on property that are not addressed in this practice and that may pose risks of civil and/ or criminal sanctions for non-compliance.

### **2.4 RELIANCE**

The Report is intended for the sole use of Mead & Hunt, Inc., and any parent company, affiliates, successors, and assigns (Collectively, the “Relying Parties”) are permitted to rely on this report. The Relying Parties may rely on the Report subject to any limitations placed on the scope, nature and type of L&A’s services as stated in the Report. Pursuant to this Report, the Relying Parties are the only third parties to whom L&A grants the right to rely upon the Report. No other third party may rely on the Report unless the express written consent of L&A is first obtained.

### **2.5 LIMITING CONDITIONS, DEVIATIONS, EXCEPTIONS, AND SIGNIFICANT ASSUMPTIONS**

As indicated in ASTM Designation: E 1527-13, no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. This practice is intended to reduce, but not eliminate, uncertainty



regarding the potential for recognized environmental conditions in connection with a property, and this practice recognizes reasonable limits of time and cost.

The conclusions presented in this report are professional opinions based on data contained in the report. They are intended for the purpose, site location and project indicated. This report is not an exhaustive study of contamination at the subject property and should not be interpreted as such. No sampling, testing, or chemical analyses were completed as part of this study.

Additionally, it should be noted that portions of this report are based on unverified information supplied to L&A by third-party sources. While efforts have been made to substantiate third-party information, L&A cannot guarantee its completeness or accuracy.

L&A has performed all activities appropriate and necessary to evaluate the environmental status of the property under ASTM E 1527-13 guidelines and consistent with good commercial and customary practice for this region.

It should be noted that this report is time sensitive and has specific limitations related to the viability of the information contained herein. Specific to Phase I ESAs, the Standard imposes a “shelf life”<sup>1</sup> on the reports and components thereof, as well as specific user obligations. It is the responsibility of the user to verify the continued viability of the report.

### **3.0 USER PROVIDED INFORMATION**

L&A provided a questionnaire to a representative of the Ann Arbor Municipal Airport requesting information specified in ASTM E 1527-13 indicating the extent of their knowledge pertaining to the subject property. As of the date of this report, L&A has not received a completed questionnaire. A copy of the questionnaire is provided in Appendix 9.3.

#### **3.1 TITLE RECORDS**

Title records for the subject property were not provided to L&A.

#### **3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS**

L&A was not provided information regarding environmental liens against the subject property that have been filed or recorded under federal, tribal, state, or local law.

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<sup>1</sup> According to the Standard, the shelf life, or “continued viability,” of the ESA is “Subject to Section 4.8, an environmental site assessment meeting or exceeding this practice and completed less than 180 days prior to the date of acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction is presumed to be valid. If within this period the assessment will be used by a different user than the user for whom the assessment was originally prepared, the subsequent user must also satisfy the user’s Responsibilities in Section 6. Subject to Section 4.8 and the user’s Responsibilities set forth in Section 6, an environmental site assessment meeting or exceeding this practice and for which the information was collected or updated within one year prior to the date of acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction may be used provided that the following components of the inquiries were conducted or updated within 180 days of the date of purchase or the date of the intended transaction: (i) interviews with owners, operators, and occupants; (ii) searches for recorded environmental cleanup liens;(iii) reviews of federal, tribal, state, and local government records; (iv) visual inspections of the property and of adjoining properties; and (v) the declaration by the environmental professional responsible for the assessment or update.”

### **3.3 SPECIALIZED KNOWLEDGE**

Specialized knowledge or experience related to the subject property or nearby properties was not provided.

### **3.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES**

Information regarding the purchase price of the subject property was not provided. However, it is not anticipated that the price would have been discounted due to environmental issues.

### **3.5 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION**

Commonly known or reasonably ascertainable information about the subject property that would be indicative of releases or threatened releases was not provided.

### **3.6 OBVIOUS INDICATORS OF RELEASES**

Information related to the degree of obviousness of the presence or likely presence of releases or threatened releases at the subject property was not provided.

### **3.7 REASON FOR PERFORMING THE ESA**

L&A was engaged by Mead & Hunt, Inc. to perform this Phase I ESA as part of due diligence activities prior to acquiring the subject property.

### **3.8 PROCEEDINGS INVOLVING THE PROPERTY**

Information of pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property was not provided. Additionally, information regarding notices from any governmental entity regarding possible violations of environmental laws or possible liability relating to hazardous substances or petroleum products was not provided.

### **3.9 OTHER**

L&A was provided with Phase I and Phase II ESA reports dated November 2018 and January 2019, which were performed on a portion of the airport property. See Section 4.4.9 for additional information.

## **4.0 RECORDS REVIEW**

### **4.1 PHYSICAL SETTING**

#### **4.1.1 Topographic Map**

The United States Geological Survey (USGS) 7.5' Series Ypsilanti West, Michigan Quadrangle Topographic Map, dated 2014, was provided by EDR. The subject property is situated at an elevation of approximately  $\pm 830$  feet above mean sea level, and is located south of Interstate 94. The subject property is shown as the Ann Arbor Municipal Airport. A copy of this map is presented in Appendix 9.7.4.

#### 4.1.2 Soil Survey Map

A general soil profile of the subject property and surrounding area was obtained from the United States Department of Agriculture – Natural Resource Conservation Service (USDA-NRCS) Web Soil Survey. The subject property is primarily located within the Boyer-Fox-Sebewa soil association, which contains poorly drained to well drained soils formed in glacial outwash.

Four individual soil types are present within the subject property area. Soil descriptions from the USDA NRCS web soil survey are provided in the following table:

Soil Symbol	Soil Name	Landform	Drainage	Parent Material
FoB	Fox sandy loam, till plain, 2–6 percent slopes	Outwash plains and terraces	Well	Glaciofluvial deposits over outwash
MdA	Matherton sandy loam, 0–4 percent slopes	Outwash plains, drainageways, terraces	Somewhat poor	Glaciofluvial deposits over outwash
Pa	Palms muck	Moraines, till plains, depressions	Very poor	herbaceous organic material over loamy till
WaA	Wasepi sandy loam, 0–4 percent slopes	Drainageways, lake plains, deltas	Somewhat poor	Glaciofluvial deposits over outwash

A copy of the soil report is provided in Appendix 9.4.2.

#### 4.2 FEDERAL, STATE, AND TRIBAL ENVIRONMENTAL RECORDS

The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions in connection with the subject property. L&A contracted with Environmental Data Resources, Inc. (EDR) to assemble a Radius Report detailing federal, state, and tribal database information specified by ASTM as described below.

##### ASTM Specified Standard Environmental Record Sources

Standard Environmental Record Source	Search Distance
<b>Federal National Priorities List (NPL) sites</b>  The NPL is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the U.S. Department of Health and Human Services and the U.S. EPA in order to become an NPL site.	<b>1.0 mile</b>

Standard Environmental Record Source	Search Distance
<p><b>Federal Delisted NPL sites</b></p> <p>The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.</p>	<p><b>0.5 mile</b></p>
<p><b>Federal Superfund Enterprise Management (SEMS)</b></p> <p>The Superfund Enterprise Management (SEMS), formerly known as the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) contains sites which are either proposed to be on, or are on the NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities</p>	<p><b>0.5 mile</b></p>
<p><b>Federal SEMS Archive</b></p> <p>The Superfund Enterprise Management System (SEMS) Archive, formerly known as the CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP) database, contains information pertaining to sites which have been removed from the SEMS (CERCLIS) database. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that the EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.</p>	<p><b>0.5 mile</b></p>
<p><b>Federal Resource Conservation and Recovery Act (RCRA) Corrective Actions (CORRACTS) facilities list</b></p> <p>The EPA maintains this database of Resource Conservation and Recovery Act (RCRA) facilities which have conducted, or are undergoing "corrective action." A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.</p>	<p><b>1.0 mile</b></p>
<p><b>Federal RCRA non-CORRACTS Treatment, Storage, and Disposal (TSD) facilities list</b></p> <p>The EPA's RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. RCRA TSD facilities are facilities which treat, store, and / or dispose of hazardous waste.</p>	<p><b>0.5 mile</b></p>

Standard Environmental Record Source	Search Distance
<p><b>Federal RCRA generators list</b></p> <p>RCRA Large Quantity Generators (LQGs) are facilities which generate at least 1,000 kilograms/ month of non-acutely hazardous waste (or 1 kilogram/ month of acutely hazardous waste).</p> <p>RCRA Small Quantity Generators (SQGs) are facilities which generate between 100 and 1,000 kilograms/ month of non-acutely hazardous waste (or 1 kilogram/ month of acutely hazardous waste).</p> <p>RCRA Conditionally Exempt Small Quantity Generators (CESQGs) are facilities which generate less than 100 kilograms/ month of non-acutely hazardous waste (or 1 kilogram/ month of acutely hazardous waste).</p> <p>RCRA Non Generators are facilities that do not presently generate hazardous wastes.</p>	<p><b>Subject property and adjoining properties</b></p>
<p><b>Federal institutional control/engineering control registries</b></p> <p>The Engineering Controls Sites List is a listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.</p> <p>The list of Sites with Institutional Controls is a listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.</p>	<p><b>0.5 mile</b></p>
<p><b>Federal Emergency Response Notification System (ERNS) list</b></p> <p>Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the U.S. Coast Guard, the National Response Center, and the Department of Transportation.</p>	<p><b>Subject property only</b></p>
<p><b>State and tribal hazardous waste sites (equivalent SEMS)</b></p> <p>There is no State/ Tribal Equivalent NPL database maintained for the State of Michigan</p>	<p><b>N/A</b></p>
<p><b>State and tribal landfill and/or solid waste disposal site lists</b></p> <p>The EDR Radius Report includes a search for sites appearing on the Solid Waste Facilities / Landfill Sites list in Michigan</p>	<p><b>0.5 mile</b></p>
<p><b>State and tribal leaking storage tank lists</b></p> <p>A review of Leaking Underground Storage Tank (LUST) Incident Reports. LUST records contain an inventory of reported LUST incidents.</p>	<p><b>0.5 mile</b></p>
<p><b>State and tribal registered storage tank lists</b></p> <p>A review of registered underground storage tanks (USTs) was included in the Radius Report.</p>	<p><b>Subject property and adjoining properties</b></p>

<b>Standard Environmental Record Source</b>	<b>Search Distance</b>
<b>State and tribal institutional control/engineering control registries</b> A review of Michigan Department of Environment, Great Lakes & Energy (EGLE) sites with Institutional Controls and sites with Engineering Controls databases was included in the EDR Radius Report.	<b>0.5 mile</b>
<b>State and tribal voluntary cleanup sites</b> There is no State voluntary cleanup site maintained for the State of Michigan	<b>N/A</b>
<b>State and tribal Brownfield sites</b> A review of the Michigan Brownfield Inventory was included in the Radius Report.	<b>0.5 mile</b>

Additionally, the EDR Radius Report includes searches of local Brownfield lists, local lists of landfill/solid waste disposal sites, local lists of hazardous waste/contaminated sites, local land records, records of emergency release reports, and numerous other ascertainable records potentially relevant to recognized environmental conditions in connection with the subject property. This section presents the findings of the EDR Radius Report, a copy of which is provided in Appendix 9.5.

#### **4.2.1 Federal National Priorities List (NPL)**

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the U.S. Department of Health and Human Services and the U.S. EPA in order to become an NPL site.

The radius Report did not identify any NPL sites within one (1) mile of the subject property.

#### **4.2.2 Federal Delisted NPL**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

The Radius Report did not identify any Delisted NPL sites within 0.5 miles of the subject property.

#### **4.2.3 Superfund Enterprise Management (SEMS)**

The Superfund Enterprise Management (SEMS), formerly known as the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) contains sites which are either proposed to be on, or are on the NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities.

The Radius Report did not identify any SEMS sites within 0.5 miles of the subject property.

#### **4.2.4 Federal SEMS Archive**

The SEMS Archive, formerly known as the CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP) database, contains information pertaining to sites which have been removed from the SEMS (CERCLIS) database. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that the EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

The Radius Report identified one (1) SEMS Archive site within 0.5 miles of the subject property. The listed site is located greater than 1,000 feet from the subject property, and is not anticipated to adversely impact the runway extension project at the subject property.

#### **4.2.5 Federal RCRA CORRACTS**

The EPA maintains this database of Resource Conservation and Recovery Act (RCRA) facilities which have conducted, or are undergoing "corrective action." A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.

The Radius Report identified one (1) RCRA CORRACTS site within one (1) mile of the airport facility. The listed site is located greater than 1,000 feet from the subject property, and is not anticipated to adversely impact the runway extension project at the subject property.

#### **4.2.6 Federal RCRA non-CORRACTS TSD**

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment, or disposal of hazardous waste. RCRA treatment, storage, or disposal (TSD) facilities are facilities which treat, store, and/ or dispose of hazardous waste.

The Radius Report identified one (1) Federal RCRA non-CORRACTS TSD site within one (1) mile of the airport facility. The listed site is located greater than 1,000 feet from the subject property, and is not anticipated to adversely impact the subject property.

#### **4.2.7 Federal RCRA Generator**

RCRA Large Quantity Generators (LQGs) are facilities which generate at least 1,000 kilograms/ month of non-acutely hazardous waste (or 1 kilogram/ month of acutely hazardous waste). The Radius Report identified one (1) RCRA LQG located at 680 Fairfield Court, and is located over 3,000 feet south of the runway extension project area. No violations were reported in the Radius Report, and as such, the facility is not anticipated to adversely impact the runway extension project at the subject property.

RCRA Small Quantity Generators (SQGs) are facilities which generate between 100 and 1,000 kilograms/ month of non-acutely hazardous waste (or 1 kilogram/ month of acutely hazardous waste). A Costco retail store is located north of the airport at 771 Airport Blvd. No violations were reported in the Radius Report, and as such, Costco is not anticipated to adversely impact the runway extension project.

RCRA Conditionally Exempt Small Quantity Generators (CESQGs) are facilities which generate less than 100 kilograms/ month of non-acutely hazardous waste (or 1 kilogram/ month of acutely hazardous waste). The Radius Report identified 23 CESQG sites within 0.25 miles of the airport property, including one (1) which is located on-site. The University of Michigan Survival Flight facility was listed as a CESQG of ignitable waste with no reported violations. Visual observations during the site reconnaissance did not identify any environmental concerns. As such, the University of Michigan Survival Flight facility is not anticipated to adversely impact the runway extension project.

Based on distance from the airport property, lack of reported violations and/or small quantity of wastes generated, the remaining CESQG sites are not anticipated to impact the runway extension project.

#### **4.2.8 Federal Institutional Control / Engineering Control Registries**

The list of Sites with Institutional Controls is a listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

The Engineering Controls Sites List is a listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

The Radius Report did not identify any US Institutional Control/ Engineering Control sites databases within 0.5 miles of the airport facility.

#### **4.2.9 Federal – Emergency Response Notification System (ERNS)**

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the U.S. Coast Guard, the National Response Center, and the Department of Transportation.

The airport was not identified on the ERNS database.

#### **4.2.10 State / Tribal Landfill and/or Solid Waste Disposal**

A search to 0.5 miles within the subject property to identify all sites appearing on the Old Solid Waste Landfill List and the Licensed Solid Waste Facilities in Michigan was conducted by EDR, and is included in the Radius Report.

No landfills or solid waste disposal sites were identified in the Radius Report.



#### **4.2.11 State / Tribal Leaking UST**

A review of the Michigan Department of Licensing and Regulatory Affairs (LARA) list of sites with reported closed or leaking UST systems (LUST List) is included in the Radius Report.

The Radius Report identified 19 LUST List incidents within 0.5 miles of the airport property, several of which occurred on airport property. Avfuel Corp (903 Airport Drive) reported a release on September 21, 1998. The release incident was subsequently closed on December 1, 1998. Ann Arbor Air Services, Inc. (4230 S. State Street) reported a release on June 11, 1996, and has a closed date of July 11, 1996. The address of 4230 S. State Street was also identified as the Ann Arbor Airport, and reported a release in March 1989. The incident was subsequently closed in April 1996. Information on the release incidents was requested from the Department of Licensing and Regulatory Affairs (LARA) Storage Tank Division, and is discussed in Section 4.3.5.

Based on distance from the proposed airport improvements, regulatory status, and/or anticipated groundwater flow direction, the remaining LUST sites listed in the regulatory database report are not anticipated to impact the subject property's runway extension project.

#### **4.2.12 State / Tribal Registered UST**

A review of the LARA list of registered underground storage tanks (USTs) was included in the Radius Report.

According to the Radius Report, 16 registered USTs were identified on airport property, or within 0.25 miles of the airport facility. The University of Michigan Flyers (1075 Airport Drive), AVFuel Corporation (903 Airport Drive), Roisen Enterprises (719 Airport Drive), and Ann Arbor Airport Services/Ann Arbor Airport (4320 S. State Street) are discussed further in Section 4.3.5.

Based on distance from the proposed airport improvements, regulatory status, and/or anticipated groundwater flow direction, the remaining UST sites listed in the regulatory database report are not anticipated to impact the subject property.

#### **4.2.13 State / Tribal Institutional Control / Engineering Control Registries**

A review of the State sites with Engineering Controls and Institutional Engineering Controls is included in the Radius Report.

The Radius Report identified three (3) engineering and institutional control sites within 0.5 miles of the airport property. Based on distance from the proposed airport improvements, regulatory status, and/or anticipated groundwater flow direction, the remaining site listed in the regulatory database report is not anticipated to impact the subject property.

#### **4.2.14 State / Tribal Brownfield Sites**

A review of the Michigan Brownfield Inventory was included in the Radius Report.

According to the Radius Report, one (1) Michigan Brownfield site was identified within 0.5 miles of the airport property. The site is located greater than 1,000 feet from proposed airport improvements, and as such, is not anticipated to adversely impact the runway extension project.

#### **4.2.15 Michigan Spills Database**

The Michigan Spills Database is provided by the Michigan Department of Environment, Great Lakes & Energy (EGLE), and was reviewed as part of the Radius Report.

The airport was not identified on the Spills database.

#### **4.2.16 Orphan Summary**

Not all sites or facilities identified in the database records can be accurately located in relation to the subject property due to incomplete information being supplied to the regulatory agencies and are referred to as “orphan sites” by EDR. The “Orphan Summary” section of the EDR Radius Map Report identified two (2) orphan listings. Based on a drive-by reconnaissance of the subject property vicinity and review of location and status information provided in the database report, the remaining facilities identified on the does not appear to be located at either the subject property or any adjacent property.

### **4.3 LOCAL/REGIONAL ENVIRONMENTAL RECORDS**

#### **4.3.1 Local Fire Authority**

On May 10, 2019, Ms. Sally Betz of L&A submitted an information request to the Pittsfield Township Fire Department to determine if any information is maintained on file regarding potential environmental concerns, such as USTs/ASTs and hazardous material storage or spills on the airport property. As of the date of this report, L&A has not received a response the local fire department. If information is received from this department, which indicates conditions that would alter the conclusions of this Phase I ESA, L&A will notify Mead & Hunt, Inc. and issue an addendum to this report. A copy of L&A’s information request letter is provided in Appendix 9.6.1.

#### **4.3.2 Local Health Department**

On May 10, 2019, Ms. Sally Betz of L&A submitted an information request to the Washtenaw County Health Department in an attempt to obtain any information the department might have regarding health problems or environmental contamination incidents associated with the airport property. On May 17, 2019, an email response was received from Ms. Tanganika Hargrove, Customer Service Specialist with the Washtenaw County Health Department. Ms. Hargrove indicated that the health department maintains no information on the airport property.

Copies of L&A’s information request letter, and email received from Ms. Hargrove are provided in Appendix 9.6.2.

#### **4.3.3 Michigan Department of Environment, Great Lakes & Energy (EGLE)**

On May 10, 2019, Ms. Sally Betz with L&A contacted EGLE regarding any available information concerning the airport property. On May 13, 2019, a response was received from Ms. Nicole Florence, Secretary for the EGLE Hazardous Waste Section (HWS). Ms. Florence indicated that the only records maintained by HWS include site identification information and hazardous waste manifest data. She stated that information can be accessed by visiting the electronic EGLE Waste Data System. Copies of L&A’s information request, and email received from Ms. Florence are provided in Appendix 9.6.3.

L&A also reviewed publically available information on EGLE's Environmental Mapper. It was indicated that various storage tanks have been located on the airport property. Information on the storage tanks was requested from LARA, and is discussed in Section 4.3.4.

#### **4.3.4 Local Building and Zoning Department Records**

On May 10, 2019, Ms. Sally Betz of L&A submitted an information request to the Washtenaw County Building Inspection Department to determine if any information is maintained on file which could indicate situations and/or operations relating to current or past use of the airport property. On May 10, 2019, an email response was received from Ms. Tonya Harwood, Building Inspection & Environmental Health Administrative Supervisor for Washtenaw County. Ms. Harwood requested additional information to better respond to L&A's request. L&A requested more detailed building inspection and permit records; however, as of the date of this report, L&A has not received a response from Washtenaw County. If information is received from this department, which indicates conditions that would alter the conclusions of this Phase I ESA, L&A will notify Mead & Hunt, Inc. and issue an addendum to this report. A copy of L&A's information request letter is provided in Appendix 9.6.4.

#### **4.3.5 Department of Licensing and Regulatory Affairs (LARA)**

Ms. Sally Betz with L&A submitted an electronic information request to the Underground Storage Tank Division of LARA on May 10, 2019 for UST information for the airport property. On May 17, 2019, a response was received from a representative of the LARA Freedom of Information Act (FOIA) office. The following information was provided:

- The Ann Arbor Air Services, Inc., which operated at 4320 S. State Street at the southeast end of the airport property, removed two (2) 4,000-gallon gasoline USTs in 1996. Associated Inspection Reports did not indicate the presence of contamination. As such, L&A has no reason to believe that the former USTs have negatively impacted the proposed project area.
- Roisen Enterprises, Inc., which operated at 719 Airport Drive at the northeast end of the airport property, removed two (2) 12,000-gallon gasoline USTs in 1988. The USTs were subsequently replaced by two (2) 15,000-gallon USTs, which were closed in place in August 2003. No UST site assessment information was available; therefore, the potential exists for a release to have occurred. However a previous Phase I ESA and subsequent Phase II investigation were conducted in 2018 by PM Environmental, Inc. See Section 4.4.9 for additional information.
- University of Michigan Flyers, located on the northwest side of the airport at 1075 Airport Drive, removed a 6,000-gallon gasoline UST in September 1998. The UST Site Assessment Report indicated that contamination concentrations were below threshold detection levels, and no evidence of a confirmed release was observed. As such, L&A has no reason to believe that the former UST has negatively impacted the proposed project area.
- AVFuel, located on the northern portion of the airport property at 903 Airport Drive, removed two (2) 15,000-gallon USTs in May 1990. It was indicated that a closure assessment was completed. Indications of a release were not reported in the information received from LARA. Two (2) 25,000-gallon and one (1) 12,000-gallon gasoline USTs

were also removed in September 1998. Soil staining and associated odors were observed during the closure inspection. Confirmatory soil samples were collected; however, laboratory results were not provided, nor was additional information on any remedial activities. Nevertheless, the anticipated location of the former USTs is located greater than 900 feet from existing runways, and L&A has no reason to believe that the former USTs have negatively impacted the proposed project area.

No information was provided for the Ann Arbor Airport located at 801 Airport Drive.

Copies of the information received from LARA are provided in Appendix 9.6.5.

#### **4.3.6 Ann Arbor Municipal Airport**

A Draft Environmental Assessment (EA) for the Ann Arbor Municipal Airport was obtained from the airport website. As part of the EA, a review of federal and state records was completed to identify contaminated properties or properties of environmental concern. It should be noted that the review was not a Phase I ESA, and was not conducted in accordance with ASTM 1527-13 standards or FAA Order 1050.19B Environmental Due Diligence Audits. Several sites were found on the airport property, or within a one (1) mile radius of the airport. The listings were mostly related to USTs and ASTs and small quantity generators of hazardous waste.

The EA indicated that no USTs are currently located on the airport property. Various ASTs are located on site including a self-contained aboveground 1,500-gallon split fuel tank utilized for maintenance operations is located on-site, a 3,000-gallon gasoline AST utilized by the University of Michigan Flyers and three (3) 20,000-gallon gasoline and Jet A fuel ASTs. All fuel is stored in tanks in accordance with EGLE guidelines.

According to the EA report, there would be no impacts to the fuel storage tanks during runway improvements; however, if contaminated soil was encountered during construction activities, proper characterization, handling and disposal methods would be utilized.

Due to size, a copy of the EA has not been provided in the appendices.

#### **4.3.7 City of Ann Arbor**

On June 14, 2019, Ms. Sally Betz submitted an electronic information request to the City of Ann Arbor's Public Works Department requesting any information regarding the airport's municipal water connection and any current or former on-site water wells. On June 26, 2019, an email response was received from Ms. Jacqueline Beaudry, City Clerk for the City of Ann Arbor. Ms. Beaudry indicated that the City of Ann Arbor has four (4) water wells on the airport property, three (3) of which are currently providing water to the Treatment Plant for general treatment and distribution to City of Ann Arbor customers. The fourth well is used for monitoring purposes.

Ms. Beaudry also indicated that the Airport is connected to both the City's and Pittsfield Township municipal water systems. She provided connection dates, which are indicated below.

- 801 Airport Drive – City of Ann Arbor Terminal Building: 1976
- 747 Airport Drive – Bijan Air: 1976
- 903 Airport Drive – AvFuel Corp: 2000
- 719 Airport Drive – Aviation Center: 1987

- 875 Airport Drive – Federal Aviation Administration: 1982
- 950 W. Airport Drive, Unit 1 – Solo Aviation: 2009
- 950 W. Airport Drive, Unit 2 – Solo Aviation: 2009
- 950 W. Airport Drive, Unit 3 – TFK Aviation: 2009
- 950 W. Airport Drive, Unit 4 – Skypics: 2010
- 950 W. Airport Drive, Unit 5 – Cahoot Air: 2010
- 950 W. Airport Drive, Unit 6 – KKB: 2010

A copy of the email received from Ms. Beaudry is provided in Appendix 9.6.6.

#### **4.3.8 Well Records**

L&A conducted a review of the EGLE’s Environmental Mapper online resource tool to evaluate the airport property for the presence of water wells.

Various water wells were located on airport property, south of the existing runways. Additional information on the status and use of potential on-site wells was requested from the City of Ann Arbor. Please see Section 4.3.7 for additional information.

A copy of the water well map is provided in Appendix 9.6.7.

### **4.4 HISTORICAL USE RECORDS**

L&A reviewed the readily available historical sources described in the following sections to ascertain the historical uses of the subject property and immediately adjacent properties to evaluate the presence of activity that could present RECs. Information, as summarized below, was obtained dating back to 1902.

#### **4.4.1 Aerial Photographs**

Historic aerial photographs of the site and surrounding areas were obtained from EDR. These photographs were examined to assist in determining past land use. The available photographs are dated 1937, 1940, 1949, 1955, 1962, 1969, 1973, 1978, 1983, 1987, 1992, 1993, 2006, 2009, 2012 and 2016; and are presented in Appendix 9.7.1.

From at least 1937 through 1962, the subject property was primarily agricultural land, although several runways and associated structures were located on the east side of the airport property. The surrounding areas were also agricultural land with residences along major roadways.

Over time, the airport expanded its runways and additional airport buildings and hangars were present on-site. Surrounding areas continued to develop, primarily along W. Ellsworth Road, and in areas south of the airport.

#### **4.4.2 Fire Insurance Maps**

L&A engaged EDR to search their library for Sanborn® Fire Insurance Maps (Sanborn® maps) in an effort to determine historical land uses for the subject property and surrounding area. Sanborn® maps contain areas of interest for the purpose of evaluating insurable risk of buildings. After a review of available mapping, EDR informed L&A that there is no coverage for the subject property. A copy of the letter indicating “no coverage” is presented in Appendix 9.7.2.

#### 4.4.3 Property Tax Files

A review of property tax records was conducted utilizing Washtenaw County Auditor's online database. A review of the available records indicated that the airport is owned and operated by the City of Ann Arbor, Michigan and consists of approximately 733 acres on 13 parcels.

Auditor records only documented the current assessment information for the subject property. No historical information was available for review.

The airport property consists of the following tax parcels: L-12-16-200-016, L-12-17-100-002, L-12-17-100-007, L-12-17-100-008, L-12-17-100-010, L-12-17-200-001, L-12-17-200-002, L-12-17-200-003, L-12-16-200-016, L-12-17-300-002, L-12-17-400-001, L-12-17-400-003 and L-12-17-400-004.

#### 4.4.4 Recorded Deed / Ownership Records and Environmental Lien / AUL Search

Based on available information, the subject property has operated as an airport since at least the late 1930s, as such, deed / ownership records were not reviewed as part of this effort.

#### 4.4.5 USGS Topographic Maps

In addition to the Ypsilanti West, Michigan Quadrangle Topographic Map dated 2014 discussed in Section 4.1.1, L&A reviewed historical topographic maps dated 1902, 1904, 1906, 1908, 1967, 1973-75 and 1983 provided by EDR. Copies of the historical topographic maps are presented in Appendix 9.7.3. Beginning in 1967, the subject property was identified as the Ann Arbor Municipal Airport. Prior to that time, the subject property was shown as undeveloped with areas of potential wetland environments. The Wood Outlet Drain was shown west and south of existing runways.

#### 4.4.6 Local Street Directories

L&A reviewed (an abstract of) EDR's Digital Archive Directories in an attempt to determine previous occupants of the subject property. Copies of the directories are presented in Appendix 9.7.4.

Based on available information, the airport's main address is 801 Airport Drive, and was identified as the following:

Address	Directory Date	Local Street Directory Listing
801 Airport Drive	1974-1988	Ann Arbor Municipal Airport
		National Car Rental
	1974	Michigan Farmers Union Green Thumb
	1984	Budget Rent-A-Car
	1988	Campus Auto Rental

Address	Directory Date	Local Street Directory Listing
801 Airport Drive cont'd	1988-1995	CTM Aviation Services, Inc.
	1992-2000	City of Ann Arbor
	1992-1995	Ann Arbor Flyers, Inc.
	1995	Whits Rent-A-Truck Co.
	2000-2014	ADM Inc.
	2000	Lynch Industries, Inc.
	2005-2010	Riley Aviation
	2005-2014	Solo Aviation, Inc.

Additional addresses are also associated with airport operations including 719, 747, 875, 903 and 1075 Airport Drive. The listings for these addresses are provided in the following table:

Address	Directory Date	Local Street Directory Listing
712 Airport Drive	1984-2000	Ann Arbor Avionics Inc.
719 Airport Drive	1974	Gordon Aviation Inc., charter and rental service
	1979	Waypoint Aviation Inc., charter and flight school
	1984-1992	Roisen Enterprises Inc., aircraft maintenance and service
	1992	Ann Arbor Air Freight
		Bonded Business Service, Inc.
		Transportation Systems, Inc.
2005-2014	Aviation Center Inc.	
747 Airport Drive	2000-2010	Bijan Air Inc.
875 Airport Drive	1974-2010	Federal Aviation Administration
903 Airport Drive	1974	Central States Aircraft
	1979	Transidyne General
	1984-1988	Discount Tires

Address	Directory Date	Local Street Directory Listing
903 Airport Drive cont'd	1992-2000	Data Resource Co.
	1992-2005	Twining Bob Aircraft Sales
	1992	Indiana Discount Tire Company
	2000-2010	Mayfield Assoc. Inc.
1075 Airport Drive	1992-2014	University of Michigan Flyers, Inc.

Beginning in the early 1970s, the surrounding area was listed primarily as commercial properties. See Sections 4.2 and for a discussion of nearby properties, which were identified on the regulatory database report provided in Appendix 9.5.

#### **4.4.7 Building Department Records**

Building Department Records are discussed above. Please refer to Section 4.3.4.

#### **4.4.8 Zoning/Land Use Records**

Zoning/land use records are discussed above. Please refer to Section 4.3.4.

#### **4.4.9 Previous Environmental Reports / Documents**

L&A was provided with a Phase I ESA for the Aviation Center, which is located on the east side of the airport property. The previous ESA, prepared by PM Environmental, Inc. (PM) in November 2018, indicated that the area of the Aviation Center was developed for agricultural purposes prior to 1937. Agricultural activities ceased between 1955 and 1960. The area remained vacant until the current Aviation Center building was constructed in 1965. PM identified the following RECs:

- The Aviation Center has been occupied by various aircraft service operations since its initial construction in 1965. However, on-site operations preceded environmental regulations and waste management/disposal procedures. As such, the historical waste management practices associated with aircraft service operations are unknown and may be a source of subsurface contamination.
- Review of EGLE facility file information documented the removal of two (2) 12,000-gallon gasoline USTs in 1988. The USTs were subsequently replaced by two (2) 15,000-gallon gasoline USTs. The 15,000-gallon USTs were last used in March 2003, and were closed in place in August 2003. No UST site assessment information was available. Therefore, the potential exists for a release to have occurred from the former USTs.
- The Aviation Center utilized a private septic system prior to its connection to the municipal sewer system in 2002. On-site floor drains have been connected to an oil/water separator since 1987, although prior to 1987, floor drains may have discharged to the former on-site septic system. The historical waste management



practices associated with aircraft service operations, and the former on-site septic field are unknown and may be a source of subsurface contamination.

- An oil/water separator is located in the southeastern portion of the hangar. The separator utilizes an in-ground pit, which is designed to separate grease/oil from water. Based upon its long-term operation (since 1987), the potential exists for failure of the drainage systems (i.e. cracks, leaks) to have occurred over time.

To evaluate the RECs identified in PM's November 2018 Phase I ESA, PM collected 11 soil samples and three (3) groundwater samples for the laboratory analysis of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs) and metals in December 2018.

Laboratory analytical results indicated that VOCs, PAHs, PCBs and metals were not detected in any of the soil samples above laboratory detection limits and/or residential cleanup screening levels. Concentrations of VOCs, PAHs and metals were not detected in groundwater above laboratory detection limits. As such, PM stated that the RECs identified in the November 2018 Phase I ESA were adequately evaluated, and no further investigation was warranted.

Due to their size and copyright securities, the reports have not been provided in the appendices.

## **5.0 SITE RECONNAISSANCE**

On May 29, 2019, Ms. Sally Betz with L&A, performed a reconnaissance to visually and physically observe the subject property and the immediate vicinity for potential evidence and/or practices that could represent RECs. Ms. Betz was accompanied by Mr. Dan Smith, a representative of the airport maintenance staff, during the site reconnaissance. Representatives from the Aviation Center and Solo Aviation also provided access to certain areas of the airport property.

At the time of the reconnaissance, the visibility at the subject property was good and weather conditions did not interfere with the observations. The following methodology was used when performing the reconnaissance:

- Observed the readily accessible portions of the interior portions of the subject property buildings.
- Observed the exterior portions of the subject property by traversing the grounds and traveling the perimeter.
- Observed adjacent land uses from the periphery of the subject property boundaries.

Photographs taken during site reconnaissance are presented in Appendix 9.8.

## **5.1 GENERAL SITE SETTING**

The Ann Arbor Municipal Airport is a general aviation airport owned and operated by the City of Ann Arbor, Michigan. The airport is located in Pittsfield Charter Township and consists of approximately 733 acres. The subject property is improved with over 20 permanent aviation service buildings, including the administration building, maintenance facilities, hangars, and the FAA Airport Traffic Control Tower. The airport facility is in close proximity to state highways

including US-23, M-14, US-12 and Interstate 94. Direct access to the airport is provided from Ellsworth and State Road. Residential, business, light industrial, recreational, agricultural and wooded areas are located adjacent to the airport.

## **5.2 USES AND CONDITION OF THE PROPERTY**

The airport has operated on the subject property since at least the late 1920s to early 1930s, and currently provides aircraft flight training and full maintenance of aircrafts.

## **5.3 SITE OBSERVATIONS**

### **5.3.1 Hazardous Substances and Petroleum Products in Connection with Identified Uses of the Subject Property**

The airport property provides aircraft flight training and performs full maintenance of aircrafts. Various amounts of typical petrochemicals associated with these types of repairs including the bulk storage of gasoline, diesel, Jet A fuel and used oil as well as numerous retail-sized containers of maintenance products/cleaners were observed in various maintenance hangars, storage areas and garages. The materials observed do not appear to pose a hazard to the subject property, provided they continue to be used as designed and are properly handled. However, normal wear and staining was observed on the concrete flooring in several maintenance hangars, and absorbent materials were being used in several maintenance areas located on the west side of the airport. See Section 5.3.3 for additional information on the hazardous substances and petroleum products utilized for airport operations.

### **5.3.2 Storage Tanks**

#### **5.3.2.1 Underground Storage Tanks (USTs)**

The airport property was observed for the presence of USTs. No obvious visual evidence indicating the current presence of USTs (i.e. vent pipes, fill ports, etc.) was noted. See Sections 4.2 and 4.3.5 for information of previously removed USTs.

#### **5.3.2.2 Aboveground Storage Tanks (ASTs)**

L&A observed the following ASTs on the airport property:

- An approximately 300-gallon used oil AST was observed in the southeastern portion of the Aviation Center hangar. The AST was stored within secondary containment with minimal staining. Fill ports were observed on top of the AST.
- Three (3) 20,000-gallon aviation gasoline ASTs were observed on the west side of the airport property. The tanks were observed in good condition, and no evidence of a release was observed.
- An approximately 275-gallon AST was observed on the east side of the airport property. L&A could not determine if the AST was still in use; however, no visual evidence of a release or distressed vegetation was observed.

- A 1,500-gallon diesel UST utilized for on-site maintenance was observed on the northwest side of the airport property. The AST was observed in good condition with no visual indications of a release.
- A 1,500-gallon fuel tank, utilized by the University Michigan Flyers, was observed on the northwest side of the airport property. The AST was observed in good condition, and no visual indicators of a release were observed.
- A portable Jet A fuel AST was observed in the Survival Flight Maintenance Department.
- Various tanker trucks carrying Jet A fuel were observed parked near the airport terminal building.

No visual evidence indicating the historical presence of ASTs (i.e. secondary containments, concrete saddles, etc.) was observed.

### **5.3.3 Drums and Containers of Hazardous Substances, Petroleum Products, and/or Unidentified Substances**

The following hazardous substances and/or petroleum products associated with aircraft maintenance and flight training were observed:

- Various gasoline, Jet A fuel, diesel and waste oil ASTs ranging from 275 gallons to 20,000-gallons were observed.
- Number consumer-sized containers of routine maintenance supplies (i.e. aerosols, engine oil), small quantity containers of gasoline and kerosene (less than 5-gallons), and 55-gallon drums containing engine oil and soaps were observed in the maintenance hangar located on the northwest side of the airport property. Numerous 5-gallon buckets, the contents of which are unknown, were also observed without lids. Normal wear and staining was observed on the concrete flooring throughout the maintenance hangar. Stains appeared to be the result of recurring leaks and spills of used engine oil as well as poor housekeeping. Spillage and visual evidence of releases were also observed on the ground surface in the vicinity of multiple 5-gallon buckets and three (3) 55-gallon drums containing engine oil. Absorbent material was being used to contain the spilled oil and the concrete flooring appeared in good condition with no evidence of cracking.
- Small quantity containers of kerosene, various consumer-sized aerosols cans, and two (2) 55-gallon drums, the contents of which are unknown, were observed in the University of Michigan Flyers maintenance shop. A locked flammable storage cabinet was also observed in this area, and presumably contains other routine maintenance supplies. Normal wear and staining was observed on the concrete flooring, however, no current signs of a release were observed, and the concrete flooring was observed in good condition with no evidence of cracking.
- Numerous aerosol cans, paint cans, 5-gallon buckets of asphalt patch, three (3) 55-gallon drums of hydraulic oil, and several 55-gallon drums of waste oil were observed in a maintenance garage located on the northwest side of the subject property, north of the University of Michigan Flyers maintenance shop. A locked flammable storage cabinet was also observed in this area, and presumably contains other routine maintenance

supplies. A portable parts washer, which utilizes a 30-gallon drum was also observed. Although secondary containment pallets were being utilized, spillage and visual evidence of releases were observed on the concrete surface in the vicinity of the parts washer and 55-gallon drums of new and used oil. Absorbent material was being used to contain the spilled oil and the concrete flooring appeared in good condition with no evidence of cracking. Normal wear and staining was also observed throughout the garage.

- The Survival Flight Maintenance Department utilizes routine maintenance supplies stored in a flammable storage cabinet. No environmental concerns were noted.
- L&A observed various small (1-gallon or less) consumer packaged containers of engine oil, cleansers and oil filters in a glass display case in the waiting area of the Aviation Center. Boxed and unopened retail-sized containers of engine oil and lubricating fluid were also observed in a storage/garage area of the Aviation Center. The materials and products were observed in their sealed, original containers and in designated storage areas. No environmental concerns were noted.

Various small quantity containers of gasoline, paint cans and aerosols, 5-gallon buckets of lubricating oil, a 55-gallon drum of engine oil, and a 55-gallon drum, the contents of which are unknown, were observed in the maintenance area of the Aviation Center. Numerous unlabeled 5-gallon buckets were also observed without lids. Many were located within the secondary containment structure of a 300-gallon used oil AST. The concrete flooring in the areas of material storage was observed in good condition with no significant cracking. The aviation center also utilizes an oil/water separator, which discharges to the municipal sanitary sewer system.

- A car wash garage utilized to wash on-site rental cars utilizes various 55-gallon drums of soaps and windshield washer solvent, as well as retail-sized containers of glass cleaner and disinfectants. No environmental concerns were noted.
- Small quantities of gasoline, diesel and kerosene are stored in shed utilized by Solo Aviation. The materials observed appeared to be properly stored and do not pose a hazard to the airport property provided they continue to be used as designed and are properly handled. Two (2) 55-gallon poly drums were also observed in the storage shed. The drums were unlabeled and the contents could not be determined. However, the drums were in good condition, and no evidence of leaks or spills were observed.

#### **5.3.4 Odors**

L&A did not observe any strong, pungent, or noxious odors during the property inspection.

#### **5.3.5 Indications of Polychlorinated Biphenyls (PCBs)**

Various pad and pole-mounted transformers were located throughout the airport property. Labeling on these transformers was either inaccessible or non-existent. Untested transformers are to be assumed to be PCB-contaminated (containing between 50-499 parts per million (ppm) PCBs), rather than PCB-containing (over 500 ppm PCBs), and thus are not subject to EPA regulation as PCB-containing equipment. These transformers are owned and maintained by the local utility company. In L&A's opinion, any issue relating to these units would be the

responsibility of the local utility. A visual inspection of the transformers by L&A staff revealed no evidence of leaks.

The airport property also uses “dry-type” step-down transformers. “Dry-type” transformers do not use oils for cooling purposes; therefore, this transformer is not expected to contain PCBs.

Universal Waste includes PCB containing fluorescent lights and ballasts and mercury thermostat switches. Although not of concern while in proper use, these materials should be addressed as part of any reuse or demolition activities.

### **5.3.6 Interior Observations**

The subject property is improved with over 20 permanent aviation service buildings, including the administration building, maintenance facilities, hangars, and the FAA Airport Traffic Control Tower. Interior finishes throughout the airport include drywall ceilings and walls, dropped ceilings, metal deck ceilings, sheet metal walls, painted and unfinished poured concrete floors and carpeted and tiled floors, which appeared to be in good condition with no staining, cracking, or damage observed.

An oil/water separator was observed in the southeastern portion of the Aviation Center hangar. The oil/water separator utilizes an in-ground pit, which separates grease/oil from water prior to discharging to the municipal sanitary sewer system. On-site floor drains observed in the Aviation Center discharge to the oil/water separator. Other floor drains, which likely discharge to the municipal sewer system, were observed within restrooms, maintenance areas throughout the airport. No staining or evidence of poor waste management was observed in the vicinity of the drains.

Normal wear and staining was observed on the concrete flooring throughout various maintenance hangars. Stains appeared to be the result of recurring leaks and spills of used engine oil as well as poor housekeeping in some areas. See Section 5.3.3 for additional information.

### **5.3.7 Exterior Observations**

Exterior areas of the airport property include asphalt parking areas, taxiways and runways, agricultural land, which is leased to local farmers, and maintained grass and landscaped areas.

The general surficial characteristics of the subject property indicate that storm water likely runs-off from paved and/or grassy surfaces where it infiltrates into the soil, or is directed to storm water catch basins throughout the property. An unnamed stream flows south through an open ditch. It is enclosed in a concrete culvert south and west of the existing runway.

Various solid waste dumpsters were observed throughout the airport property. No excessive odors or overflowing/excessive ground trash were noted in the vicinity of the dumpster. In addition, L&A did not observe visual evidence indicating filling or dumping of trash, construction debris, or demolition debris on the airport property.

No areas of staining or stressed vegetation were observed at the subject property.

L&A did not observe obvious surficial evidence indicating the current or historical presence of septic systems, cesspools, or other wastewater discharges on or adjacent to the subject property.

See Section 4.3.5 for information on on-site wells.

#### **5.4 USES AND CONDITIONS OF THE ADJOINING PROPERTIES**

To the extent that they were visibly and/or physically observable, L&A viewed the adjacent properties from the subject property and public right-of-ways to evaluate their apparent land use for the potential to indicate RECs in connection with the subject property. L&A representatives did not physically enter any of the adjacent properties. L&A's observations are as follows.

The airport property is bound by Ellsworth Road to the north, State Road to the East, Avis Farms Technology Park to the South and Lohr Road to the west. Residential, business, industrial, recreational, agricultural and wooded areas are located adjacent to the airport.

No uses or conditions were observed at the time of the site inspection that would suggest that the subject property had been adversely impacted by activities at adjacent properties.

### **6.0 INTERVIEWS**

#### **6.1 INTERVIEWS WITH OWNERS AND OCCUPANTS**

##### **6.1.1 Interview with Owner**

An Environmental Questionnaire was provided to the owner of the subject property, a copy of which is presented in Appendix 9.9. As of the date of this report, a completed owner questionnaire has not been returned to L&A. However, as discussed in Section 5.0 Site Reconnaissance, Mr. Dan Smith, a representative of the airport maintenance staff, accompanied L&A on a tour of the subject property. Information provided by Mr. Smith during the site reconnaissance did not reveal indications of recognized environmental conditions in connection with the subject property. Information provided by Mr. Smith regarding features and conditions observed during the site reconnaissance has also been incorporated into Section 5.0.

If a response to the questionnaire is received from the owner, which indicates conditions that would alter the conclusions of this Phase I ESA, L&A will notify Mead & Hunt, Inc. and issue an addendum to this report.

##### **6.1.2 Interview with Site Manager**

As discussed in Section 5.0 Site Reconnaissance, Mr. Dan Smith accompanied L&A on a tour of the subject property. Information provided by Mr. Smith regarding features and conditions observed during the site reconnaissance has been incorporated into Section 5.0.

##### **6.1.3 Interviews with Occupants**

L&A spoke to Mr. Mark Roisen, President of the Ann Arbor Aviation Center, which is located on the northeast side of the airport. Mr. Roisen indicated that the current aircraft training center, flight school, and aircraft maintenance and service business since has been present on-site

since the early 1980s. According to Mr. Roisen, floor drains in the Aviation Center discharge to an oil/water separator, which utilizes an in-ground pit to separate grease/oil from water.

A representative of Solo Aviation provided access to an on-site storage shed; however she was not interviewed at the time of the site reconnaissance. Several other occupants/employees of the airport were on-site at the time of the site reconnaissance. However, they were not interviewed during the site reconnaissance and therefore, did not reveal indications of recognized environmental conditions in connection with the subject property.

## **6.2 INTERVIEWS WITH STATE AND LOCAL GOVERNMENT OFFICIALS**

As discussed in Section 4.3 Local/Regional Environmental Records, L&A contacted numerous State and local government officials regarding files/knowledge associated with the subject property. Information provided by these officials is discussed in the respective report sections.

## **7.0 ADDITIONAL SERVICES**

No additional services were included as part of this effort.

## **8.0 EVALUATION**

### **8.1 FINDINGS AND OPINIONS**

The observations and information obtained over the course of this assessment, and the likelihood of impacts to the subject property from identified conditions, were evaluated utilizing the experience and judgment of the environmental professional considering: assumed groundwater flow direction, predominant soil type with moderate hydraulic conductivity, and other site specific conditions.

Based on the information gathered as part of this Phase I ESA, L&A offers the following opinions relative to the potential for environmental impact on the subject property by the conditions identified:

- The subject property and surrounding areas historical agricultural use is not anticipated to negatively impact the subject property. Although the historic agricultural utilization of property can result in application of pesticides that do not degrade over time, it is reasonable to assume that, pesticides when applied for their intended purpose in accordance with label directions have a low potential for environmental impact and do not represent RECs. Additionally, in row-crop productions, application rates are typically smaller, and periodic plowing would increase soil contact with pesticide residues, therefore accelerating the decomposition of pesticide residues.
- Based on their regulatory status, distance from the subject property, and/or their hydrogeologic relationship, it is L&A's opinion that the adjacent properties and facilities identified in the regulatory database report have a low potential for environmental impact to the subject property and do not represent RECs.
- Normal wear and staining was observed on the concrete flooring throughout various maintenance hangars. Stains appeared to be the result of recurring leaks and spills of used engine oil as well as poor housekeeping. However, the spills appeared surficial in nature and the concrete flooring was intact with no significant cracking. Furthermore, the

proposed runway extension project area is located south of airport service buildings. As such, L&A has no reason to believe that the proposed runway extension project area has been negatively impacted by on-site maintenance operations.

- According to available information, 16 registered USTs were identified on airport property, or within 0.25 miles of the airport facility. Based on information received from LARA and proximity to the proposed runway extension project area, L&A has no reason to believe that the former USTs have impacted the airport runway area.

## **8.2 DATA GAPS**

L&A did not document any data gaps during preparation of this Phase I ESA, with the exception of the following:

- Responses from the local building and fire departments were not received at the time of issuance of this report. Based on the other information obtained as part of this effort and L&A's professional experience, it is L&A's opinion that the lack of responses from local and state agencies does not significantly impact the ability of the EP to render professional opinions and conclusions regarding the subject property.
- An Environmental Questionnaire provided to the subject property owner has not been returned to date. Based on the other information obtained as part of this effort and L&A's professional experience, it is L&A's opinion that the lack of a response from a representative of the property owner does not significantly impact the ability of the EP to render professional opinions and conclusions regarding the subject property.

## **8.3 CONCLUSIONS**

L&A has completed a Phase I ESA in conformance with the scope and limitations of ASTM Designation: E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for the proposed Runway Extension Project located at the Ann Arbor Municipal Airport in Ann Arbor, Michigan. Any exceptions to, or deletions from, this practice are described in Section 2.5 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property.

Ms. Sally Betz was the onsite technical specialist assigned to this project, and prepared the report including the compiling of historical, government agency, and database records. Mr. Trevor Berger reviewed pertinent information and assisted in developing L&A's conclusions and recommendations. The qualifications of these individuals are presented in Appendix 9.10.

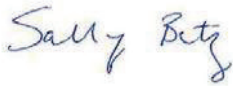
We, Sally Betz and Trevor Berger, declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §310.10 of 40 CFR 312, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

The conclusions and recommendations contained in this report are based upon professional opinions with regard to the subject matter. Supporting documentation has been included in the Appendices to this report or referenced in Appendix 9.11 for the purpose of reconstruction of the assessment.



If you have any questions, please contact Ms. Sally Betz or Mr. Trevor Berger at 614-481-8600.

Sincerely,

Handwritten signature of Sally Betz in blue ink.

Sally Betz  
Environmental Scientist

Handwritten signature of Trevor Berger in blue ink.

Trevor Berger  
Department Manager