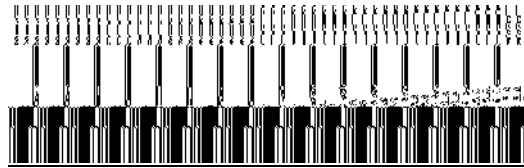


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Lockheed Martin Corporation

DRAFT

Pavement Debris Removal



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Pavement Debris Removal Work Plan

Lockheed Martin

Prepared for:



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Figure 1 – Areas to be Cleaned



1. Introduction

The following Work Plan describes the processes and procedures to be followed to complete the various tasks required to remove debris from the surface of the parking areas surrounding the Akron Airdock (Airdock). The Work Plan was developed based on the scope of services required for the project and a Debris Collection Pilot Study conducted by ARCADIS in 2007. The Work Plan in conjunction with the Health and Safety Plan (HASP) provide a comprehensive framework for the execution of the debris removal activities.

1.1 Background

During the week of September 24, 2007, ARCADIS successfully completed a Debris Collection Pilot Study on the west side of the Airdock. A Vac-Truck was used to clean up loose material, sediment, railroad ballast and other debris in several areas. The Pilot Study was performed at four separate work areas. Based on the results obtained from the pilot study, ARCADIS learned the following information.

Using a Vac-Truck for debris clean-up was an effective approach, but was a labor intensive process for loose debris removal. The vacuum hose was only capable of picking up loose debris, requiring a great deal of manual digging and manipulation of the debris with hand tools. An electric hammer drill was used to loosen up railroad ballast which was effective and could possibly be used in other areas.

A significant amount of large debris was created during the debris clean-up. The debris was too large to be sucked through the Vac-Truck hose, and had to be picked up manually or with equipment. A skid steer would probably be an effective piece of equipment for performing this work. A skid steer could also be used to clean up heavily damaged asphalt on the north and east sides of the Airdock before initializing vacuuming.

Although the Vac-Truck minimized airborne dust during the collection process, dust was created when the truck was unloaded. The same would probably occur when the debris would be loaded into a roll-off box for disposal. Dust suppression material (water) would have to be applied to the debris as it is handled and being placed in roll-off boxes to minimize dust generation.



Wet weather slows the vacuuming process significantly. Water weighs down sediment and debris making it difficult to suck up and more likely to clog the Vac-Truck hoses. It rained the second and third days of the Pilot Study and hoses had to be unclogged several times. Future work would have to be conducted during dryer conditions.

A pressure washer should be used to decontaminate the Vac-Truck. Water used in the decontamination process would be absorbed by the debris therefore eliminating generation of liquid waste. A pressure washer would be more effective at cleaning versus cleaning the Vac-Truck manually. A cleaning solvent could be used for a final wipe-down.

1.2 Description of Work Area

The work area (Figure 1) includes the parking and drive areas surrounding the Airdock. The subject areas are currently paved with asphalt or concrete. Weathering and natural “wear and tear” has left the asphalt and concrete cracked throughout the subject area. Debris containing PCB’s is located in the cracks and construction joints throughout the parking and drive areas.

1.3 Objectives

The purpose of this activity is to remove any remaining loose debris from the surface of paved areas surrounding the Airdock. This will allow the facility property owners to be able to conduct routine construction and repair activities with no special requirements related to PCB’s from the Airdock. The objectives of this project are as follows:

Remove PCB contaminated debris from the various cracks and construction joints throughout the identified work area to a visible standard.

Utilize mechanical means to remove accumulated debris in areas where the cracking has advanced to the point that the asphalt no longer has sufficient adhesion to the underlying pavements and can easily be removed.

Remove debris that has accumulated on the surface of the asphalt or concrete using scraping, sweeping, and vacuuming techniques.



1.4 Work Plan Outline

The Work Plan is organized into the following Sections:

Section 2 describes the Health and Safety requirements;

Section 3 describes the Project Team;

Section 4 describes Project Methodology;

Section 5 describes Decontamination activities;

Section 6 describes Demobilization activities;

Section 7 describes the Project Timeline;

Section 8 describes the Report activities.

2. Health and Safety

It is the policy of ARCADIS to provide a safe and healthful work environment. No aspect of operations is of greater importance than injury and illness prevention. A fundamental principle of safety management is that all injuries, illnesses, and incidents are preventable. ARCADIS will take every reasonable step to eliminate or control hazards in order to minimize the possibility of injury, illness, or incident.

A site specific Health and Safety Plan (HASP) will be prepared for the work to be



3. Project Team

3.1 ARCADIS Personnel

ARCADIS will maintain an On-Site Construction Supervisor during the project. The Construction Supervisor will be responsible for providing project status updates to the ARCADIS Project Manager, providing oversight of daily project activities, documenting of the project activities, supervising the safety program for the project, conducting safety meetings, complete safety audits when necessary, and for monitoring work activities for compliance with the HASP. The On-Site Construction Supervisor will have authority to stop or alter work if an unsafe condition exists.

3.2 Subcontractor Personnel

Project activities will be performed by Terra Contracting, LLC (Terra). Terra will provide equipment and personnel necessary to complete the project activities. Terra will have a 5-6 man crew onsite performing the activities along with a full time project manager conducting supervisory and oversight activities during the course of the project.

3.3 Lockheed Martin Personnel

Lockheed Martin maintains overall project responsibility including security, property access and health and safety. Lockheed Martin is also responsible for sample analysis, debris disposal, coordination with the various land owners and approval that the visual standard for debris removal has been achieved.



A list of key project management personnel is provided below:

Company/Organization	Title	Name	Phone Number
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4.2.3 Removal of Debris Accumulated on the Surface of Asphalt and Concrete

Once scraping activities are complete, the skid steer will be mounted with a power broom that is equipped with a water mister to suppress dust generated when going over the areas again. The use of the skid steer with the broom attachment will windrow the debris with the previous scraped materials.

In order to remove the latent debris, the area will be vacuumed using a vacuum truck equipped with a mobile chamber once the sweeping activities are concluded as described above. The windrow will be removed at the conclusion of vacuuming operations using the vacuum truck equipped with a hand lance.

5. Decontamination

At the conclusion of the pavement debris removal activities equipment such as the hose from the Vac-Truck, sweeper bags, and the sweeping brush from the skid steer will be placed with the TSCA debris waste for disposal as TSCA waste as referenced in Section 4.1. Equipment such as hand tools, air compressors will be wiped down and decontaminated using a liquid to be approved by Lockheed Martin. Once equipment has been decontaminated ARCADIS will conduct wipe sampling of the tools and equipment and analyze for the presence of PCB's. ARCADIS understands that costs associated with the sample analysis will be incurred by Lockheed Martin.

6. Demobilization

Upon completion of the work associated with the surface and crack debris removal, ARCADIS will demobilize equipment, materials, and personnel from the project site.

7. Project Timeline

7.1 Schedule

The project is estimated to take approximately 5 weeks to complete. The project team will be working up to 11 h6.3(11048 0 r day52 TDtea)-6.0S.8323 055.8(sab-6(takeT6 1 Tf0 -2e)-ea)Cde



8. Report

Within 60 days of the field work being completed, ARCADIS will provide Lockheed martin with a report containing a description of the pavement debris removal project and such illustrations, photos, sample results, maps and any other pertinent information for properly documenting all aspects of the project.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Figure

