

Lockheed Martin
Maritime Systems & Sensors
1210 Massillon Road Akron, OH 44315
Telephone 330.796.2800



June 09, 2005

Mr. Tony Martig
Mailstop DT-8J
U.S. EPA – Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Dear Mr. Martig,

The materials attached to this letter serves as Lockheed Martin Corporation's submission pursuant to Paragraph 68(a) of the Consent Agreement and Final Order between Lockheed Martin and the United States Environmental Protection Agency dated May 5, 2005. Included are the plans and schedule for remediation of the Airdock exterior and surrounding areas.

The attached plan and schedule represent a continuation of ongoing remediation efforts at the Airdock that began in 2003. Two copies are included for your convenience.

The exterior remediation activities will be coordinated by David Gunnarson. He can be reached at 330-796-8751. If you have any questions, please contact me at 330-796-8070.

Sincerely,

A handwritten signature in black ink, appearing to read "Brad Heim", with a long horizontal flourish extending to the right.

Brad Heim

Attachments:

Airdock Remediation Plan and Schedule, June 08, 2005
Airdock 2003-2004 Exterior Sampling Summary

Airdock Exterior Remediation Plan and Schedule



Lockheed Martin Corporation
June 08, 2005

Airdock Remediation Plan and Schedule

This document is submitted pursuant to Paragraph 68(a) of the Consent Agreement and Final Order between Lockheed Martin Corporation and the United States Environmental Protection Agency dated May 5, 2005. Included are the plans and schedule for remediation of the Airdock exterior and surrounding areas as well as background sample results. This plan and schedule represent a continuation of ongoing remediation efforts at the Airdock that began in 2003.

1. Background

The Airdock was constructed in 1929 for construction and maintenance of airships. The structure consists of riveted steel arches and supports covered with Robertson Protected Metal (RPM). RPM is a layered material consisting of corrugated steel covered with asphalt-impregnated asbestos felt and coated in asphalt. The building is an unheated structure and subject to the seasonal temperature variations of Akron, Ohio.

The combination of asphalt and steel and their mismatched coefficients of thermal expansion, degree of asphalt oxidation and dryness due to aging 75 years, and seasonal temperature variation can result in exfoliation of the RPM as time progresses. This process resulted in deposition of solid granular material from the siding on the ground. In 2003 it was discovered that the asphalt contains PCBs and efforts began to characterize the nature and extent of PCB's in and around the Airdock.

The type of PCB contained in the RPM is Aroclor 1268, a solid at room temperature and virtually insoluble in water. Its mobility in the exterior environment would therefore be extremely limited, present only as solid pieces and particles.

2. Remediation Efforts Already Conducted

Significant remedial activities have been underway at the Airdock since 2003. The prior remediation efforts at the Airdock have been to stop the release of siding material, prevent movement of siding material released in the past and to determine the extent of the siding material in the vicinity of the Airdock and the stormwater drainage pathway. These actions have included:

- Removing visible siding debris from the ground surface surrounding the Airdock.
- Encapsulating the Airdock roof with a rubber membrane. This has been completed for the entire Airdock roof and the south doors. The north doors are scheduled for covering in 2005 and 2006.
- Cleaning all accessible storm drain catch basins and visually inspecting the storm drain pipes.
- Installing and maintaining filter fabric on all storm drain catch basins.
- Collecting samples of the pavement, siding material, soils, stream sediments and other materials.

A description of the field sampling efforts and the results are provided in Attachment 1.

3. Future Remedial Plan Elements

The remediation strategy for the exterior of the Airdock and the surrounding areas is to encapsulate or remove siding materials coating that may contain PCBs. Once this is accomplished final cleanup of the grounds surrounding the Airdock will be performed followed by final cleaning of the storm drainage system. These actions will eliminate all exterior sources of siding coating to ensure no future releases occur.

Remediation of the Airdock and surrounding grounds will be a large and involved project with numerous contractors and equipment. The following are brief descriptions of the elements of the remedial plan along with the proposed EPA approvals.

3.1 Roof Membrane

The roof of the Airdock consists of twelve round arch segments and four end doors. The plan is to fully encapsulate the roof with a rubber membrane. To date, all of the arch segments have been covered as well as the two south doors. The work remaining includes covering the two north doors and the rear-facing lip of all four doors. The plan is to cover the northwest door and the rear-facing lip of all four doors by the end of 2005 and the northeast door by the end of 2006.

3.2 Gutters

The Airdock gutters and down spouts were in need of repair to prevent rainwater from washing the vertical siding and windows. The east side gutter and down spout have been completely replaced. Replacement of the west side gutter and downspouts is underway with completion scheduled by August 2005. All removed gutters, downspouts and associated debris were disposed of as PCB waste in accordance with 40 CFR 761.61(b).

3.3 Siding Replacement

The Airdock roof membrane ends at the gutter approximately twenty-four feet above the ground. The bottom twenty four feet of the Airdock exterior is vertical and consists of windows, doors, siding and associated structures and equipment. On the Airdock doors the rubber roof membrane ends just above the translucent panels. The plan is to replace the entire vertical siding below the gutter on the arched segments, and all translucent panels and exposed siding on the doors. In addition to the siding on the Airdock, the siding and roofing material for the four door motor buildings, the



Typical Airdock vertical siding

helium compressor (fire pump house) building and the electrical substation building will be replaced because these materials also are RPM. The new siding will be corrugated painted metal and the translucent panels will be replaced with the same material.

A detailed bid proposal and specification packages are being developed for the demolition of the siding materials and replacement with new siding, windows and doors. It is anticipated that the bid packages will be out for vendor quotation in June with work commencing in July. Because Aircraft Braking Systems Corporation (ABSC) currently leases and occupies a portion of the Airdock, it is not possible to replace all of the siding in one construction season. The plan is to replace siding where it is currently possible in 2005 including the west side of the Airdock from arch 1 through arch 6 and the two south doors. The remaining siding will be replaced by the end of 2006 once ABSC has vacated the Airdock entirely.



Typical Airdock door siding

EPA will be provided with the specific technical plans for the siding replacement. All siding will be disposed of as PCB waste in accordance with 40 CFR 761.61(b).

Once the north Airdock doors and rear lips of all four doors are covered with the rubber membrane and all of the Airdock and outbuilding vertical siding has been replaced, any residual debris will be removed for the pavement surrounding the Airdock. This final cleaning will be performed to remove residual siding particles that may have been missed from prior removal efforts. This debris removal is anticipated to begin in late 2006. Residual PCB contamination in the concrete will be addressed under the approval requested in Section 3.6 of this document.

3.4 Soil Sampling

Lockheed Martin is collecting soil samples from areas not previously investigated and where additional information is needed to delineate the extent of potential impacts. This effort includes collecting samples on Lockheed Martin property, on the grass area north of the Airdock on City of Akron airport property and on Lockheed Martin property at the storm drain outfall at Haley's ditch. These sample locations are shown in Figure 1. Information from this effort will be used to finalize the soil excavation plan.

3.5 Soil Excavation and Disposal

Based on the analytical results from prior soil sampling some soils containing PCB will be removed and properly disposed. Once the remaining sampling is completed a detailed plan will be submitted to EPA in an application for a risk-based disposal approval in

August 2005. Relevant cleanup standards such as 25 mg/kg and 1 mg/kg will be applied as appropriate. This plan will detail what standards will be applied for the specific soil removal areas.

All analytical data will be provided to EPA as part of the approval application for soil remediation. This application will include the post-remediation confirmation sample strategy.

3.6 Concrete Removal and Disposal

The concrete tarmac surrounding the Airdock has been subject to several rounds of sampling, with the average PCB concentration being less than 1 mg/kg and the highest result being 1.9 mg/kg. Lockheed Martin believes that the preponderance of data justifies (1) leaving the concrete in place with no further management or disposal regulations, and (2) allowing the on-site or off-site disposal of any removed concrete as non-PCB waste or as clean fill.

Lockheed Martin plans to request a risk-based disposal approval in accordance with 40 CFR 761.61(b) for these actions by August 2005.

3.7 Storm Drain Cleaning

Once the north Airdock doors and rear lips of all four doors are covered with the rubber membrane and all of the Airdock and outbuilding vertical siding has been replaced, the storm drain system will be cleaned. This effort will include all catch basins and drain lines that originate at or proximate to the Airdock and end at the outfall to Haley's Ditch. The plan is to use high-pressure water to scour the catch basins and drain pipes. The wash water and sediments will be collected at certain manholes and brought to a central segregation system on Lockheed Martin property. The system will segregate the sediments from the water. The water will be tested and discharged to the local sewer system in accordance with TSCA regulations and subject to appropriate approvals of the City of Akron. The sediment will be tested and properly disposed.

Once the details of the storm drain sewer repair and cleaning are finalized, application for a risk-based disposal approval under 40 CFR 761(c) will be submitted, focusing primarily on use of a visual or measurement-based standard for any pipe remaining in use or disposed of. It is anticipated that this application will be submitted mid-2006.

3.8 Storm Drain Repair

All of the storm water from the Airdock and surrounding area discharges to Haley's ditch just beyond Triplet Boulevard approximately 1 mile north of the Airdock. The end of the City of Akron storm drain system is immediately north of Triplet Boulevard. At some time in the past, an apparently unauthorized extension of the storm drain system was installed on private property immediately north of Triplet Boulevard. This segment is approximately 200 feet long and ends near a parcel of property owned by Lockheed

Martin. The land surface above the storm drain extension was paved and currently serves as a parking lot. The materials used and construction methods employed to construct the extension do not appear to meet current building standards. There are several obstructions within this segment of drain pipe and it does not perform properly.

Lockheed Martin has been in contact with the City of Akron to understand the legal and technical options for replacement and repair or removal of this storm drain extension. Once these issues have been resolved, negotiations with the private property owner will begin and a plan will be formulated to take action to properly identify and remove accumulated sediments that may contain PCBs and to rebuild the drainage system to meet current standards. Because of the issues associated with this effort, there is no schedule for its completion.

3.9 Haley's Ditch Remediation

Sediment samples and surface soil samples will be collected at six transects established along Haley's Ditch as illustrated in Figure 2. The primary purpose of the investigation of Haley's Ditch is to determine the presence and extent of PCB greater than 1 mg/kg in this area. The investigation of Haley's Ditch consists of sediment probing activities, as well as sampling and analysis of sediment from the ditch, surface soil on the bank, and within the floodplain of the ditch. The site investigation will be limited to the Haley's Ditch area bounded by the inlet structure located just north of Triplett Boulevard to approximately 600 feet down the length of the ditch. The investigation will be conducted within the boundaries of Lockheed Martin owned property. The investigation started on May 23, 2005.

Once the investigation is completed, the data will be provided to EPA along with a remedial plan and a request for a risk-based disposal approval under 40 CFR 761.61(c) for both upland and streambed sediments.

4. Schedule

The schedule of the plan for remedial actions for the Airdock is attached. Should this schedule change (e.g., if there are delays caused by adverse weather conditions or the unavailability of siding materials) Lockheed Martin will notify EPA.

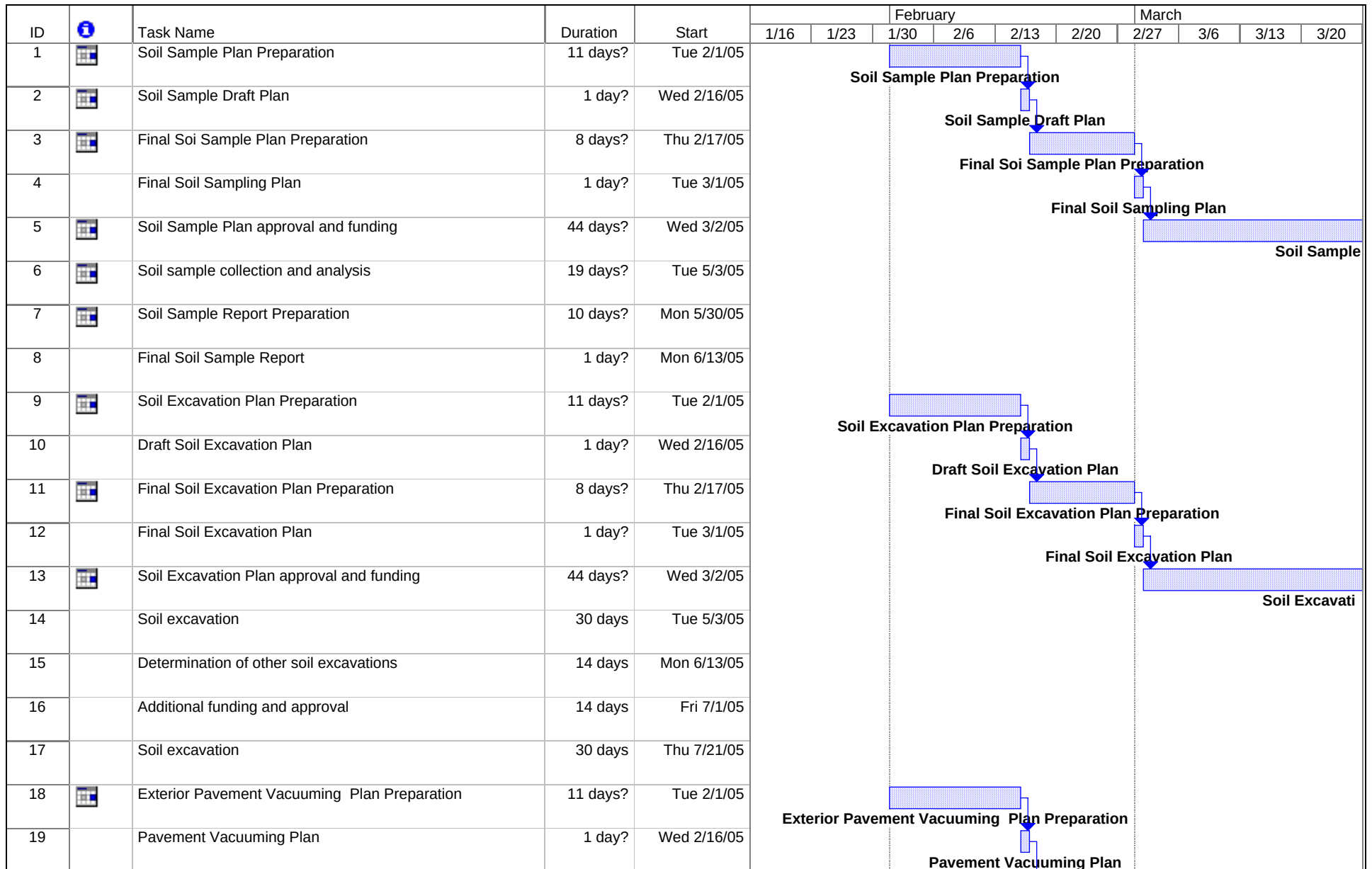
Attachments:

Figure 1 – Soil Sampling Locations

Figure 2 – Haley's Ditch Map

Figure 3 – Remediation Project Schedule

Attachment 1 – Airdock 2003-2004 Exterior Sampling Summary



Project: Akron Exterior Remediation
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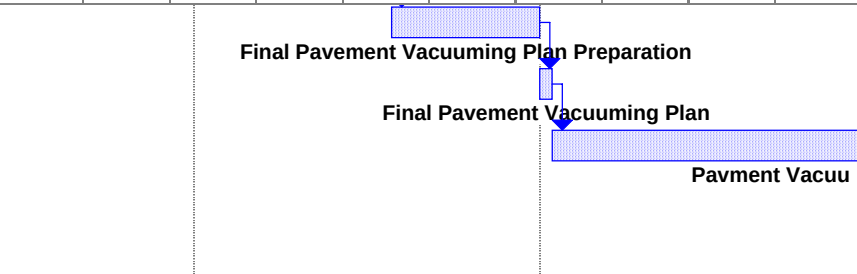
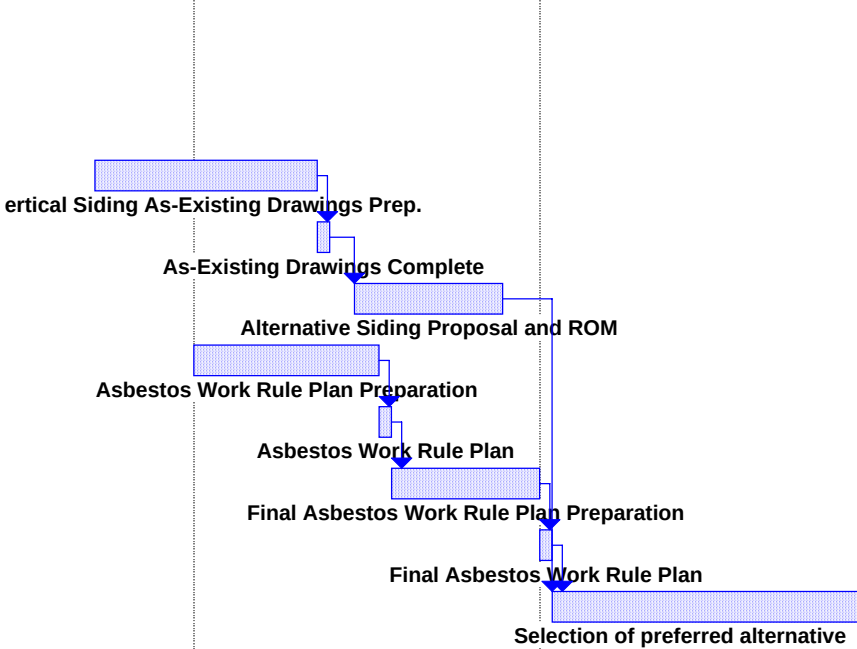
Summary

Project Summary

External Tasks

External Milestone

Deadline

ID		Task Name	Duration	Start	February						March			
					1/16	1/23	1/30	2/6	2/13	2/20	2/27	3/6	3/13	3/20
20		Final Pavement Vacuuming Plan Preparation	8 days?	Thu 2/17/05	 Final Pavement Vacuuming Plan Preparation Final Pavement Vacuuming Plan Pavment Vacuu									
21		Final Pavement Vacuuming Plan	1 day?	Tue 3/1/05										
22		Pavment Vacuuming Plan approval and funding	44 days?	Wed 3/2/05										
23		Pavement Vacuuming	30 days	Tue 5/3/05										
24		Validation sampling once siding removed	7 days	Tue 9/26/06	 Vertical Siding As-Existing Drawings Prep. As-Existing Drawings Complete Alternative Siding Proposal and ROM Asbestos Work Rule Plan Preparation Asbestos Work Rule Plan Final Asbestos Work Rule Plan Preparation Final Asbestos Work Rule Plan Selection of preferred alternative									
25		Pavment Vacuuming Plan approval and funding	14 days	Thu 10/5/06										
26		Pavement Vacuuming	14 days	Wed 10/25/06										
27		Vertical Siding As-Existing Drawings Prep.	14 days	Mon 1/24/05										
28		As-Existing Drawings Complete	1 day?	Fri 2/11/05										
29		Alternative Siding Proposal and ROM	10 days	Mon 2/14/05										
30		Asbestos Work Rule Plan Preparation	11 days?	Tue 2/1/05										
31		Asbestos Work Rule Plan	1 day?	Wed 2/16/05										
32		Final Asbestos Work Rule Plan Preparation	8 days?	Thu 2/17/05										
33		Final Asbestos Work Rule Plan	1 day?	Tue 3/1/05										
34		Selection of preferred alternative for siding	21 days	Wed 3/2/05										
35		Preparation of contract drawing and specs	21 days	Thu 3/31/05	 Preparation of contract drawing and specs Bid and award process - Part 1 Award Construction - Part 1 Siding Replacement - Part 1									
36		Bid and award process - Part 1	28 days	Fri 4/29/05										
37		Award Construction - Part 1	1 day?	Wed 6/8/05										
38		Siding Replacement - Part 1	120 days	Thu 6/9/05										

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External Tasks



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Progress



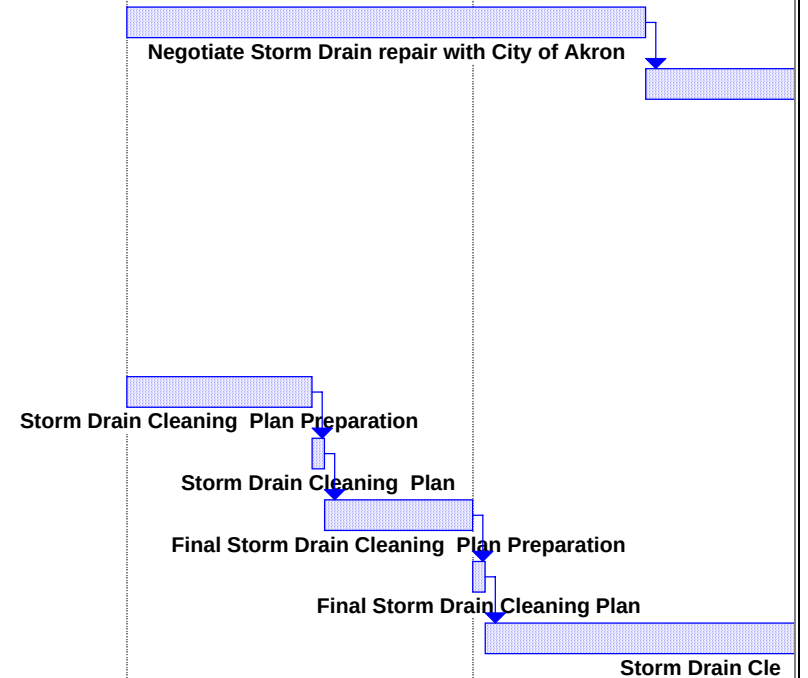
Project Summary



Deadline



ID		Task Name	Duration	Start	February						March			
					1/16	1/23	1/30	2/6	2/13	2/20	2/27	3/6	3/13	3/20
39		Wait for weather conditions	69 days	Thu 11/24/05										
40		Bid and award process - Part 2	28 days	Wed 3/1/06										
41		Award Construction - Part 2	1 day?	Mon 4/10/06										
42		Siding Replacement - Part 2	120 days	Tue 4/11/06										
43		Construction Oversight Contract	339 days?	Mon 6/6/05										
44		Negotiate Storm Drain repair with City of Akron	30 days	Tue 2/1/05										
45		Negotiate repair with property owner and City	45 days	Tue 3/15/05										
46		Preparation of contract drawing and specs	21 days	Tue 5/17/05										
47		Bid and award process	28 days	Wed 6/15/05										
48		Award Construction	1 day?	Mon 7/25/05										
49		Storm Drain Repair Construction	30 days	Tue 7/26/05										
50		Storm Drain Cleaning Plan Preparation	11 days?	Tue 2/1/05										
51		Storm Drain Cleaning Plan	1 day?	Wed 2/16/05										
52		Final Storm Drain Cleaning Plan Preparation	8 days?	Thu 2/17/05										
53		Final Storm Drain Cleaning Plan	1 day?	Tue 3/1/05										
54		Storm Drain Cleaning Plan approval and funding	44 days?	Wed 3/2/05										
55		Wait for best weather conditions	60 days	Tue 5/3/05										
56		Storm Drain Cleaning	30 days	Tue 7/26/05										
57		Storm Drain Validation sampling once siding removed	7 days	Tue 9/26/06										



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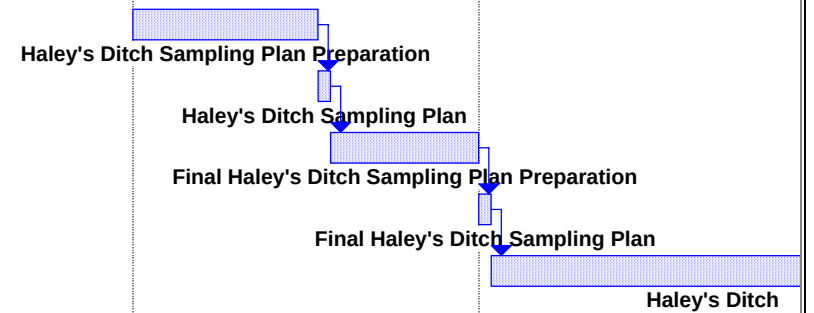
Project Summary



Deadline



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58		Storm Drain Plan approval and funding	14 days	Thu 10/5/06										
59		Final Storm Drain Cleaning	14 days	Wed 10/25/06										
60		Haley's Ditch Sampling Plan Preparation	11 days?	Tue 2/1/05										
61		Haley's Ditch Sampling Plan	1 day?	Wed 2/16/05										
62		Final Haley's Ditch Sampling Plan Preparation	8 days?	Thu 2/17/05										
63		Final Haley's Ditch Sampling Plan	1 day?	Tue 3/1/05										
64		Haley's Ditch Sampling approval and funding	44 days?	Wed 3/2/05										
65		Haley's Ditch Soil sample collection and analysis	19 days?	Tue 5/3/05										
66		Haley's Ditch Soil Sample Report Preparation	10 days?	Mon 5/30/05										
67		Final Haley's Ditch Soil Sample Report	1 day?	Mon 6/13/05										
68		Determination of follow-on actions	14 days	Tue 6/14/05										
69		Follow-on actions at Haley's Ditch	1 day?	Mon 7/4/05										
70		Airdock Gutter Replacement	120 days?	Mon 5/9/05										
71		North Door Covering - Door 1	75 days?	Mon 8/8/05										
72		North Door Covering - Door 2	75 days?	Mon 8/7/06										
73		Rear side covering of all four doors	75 days?	Mon 8/8/05										

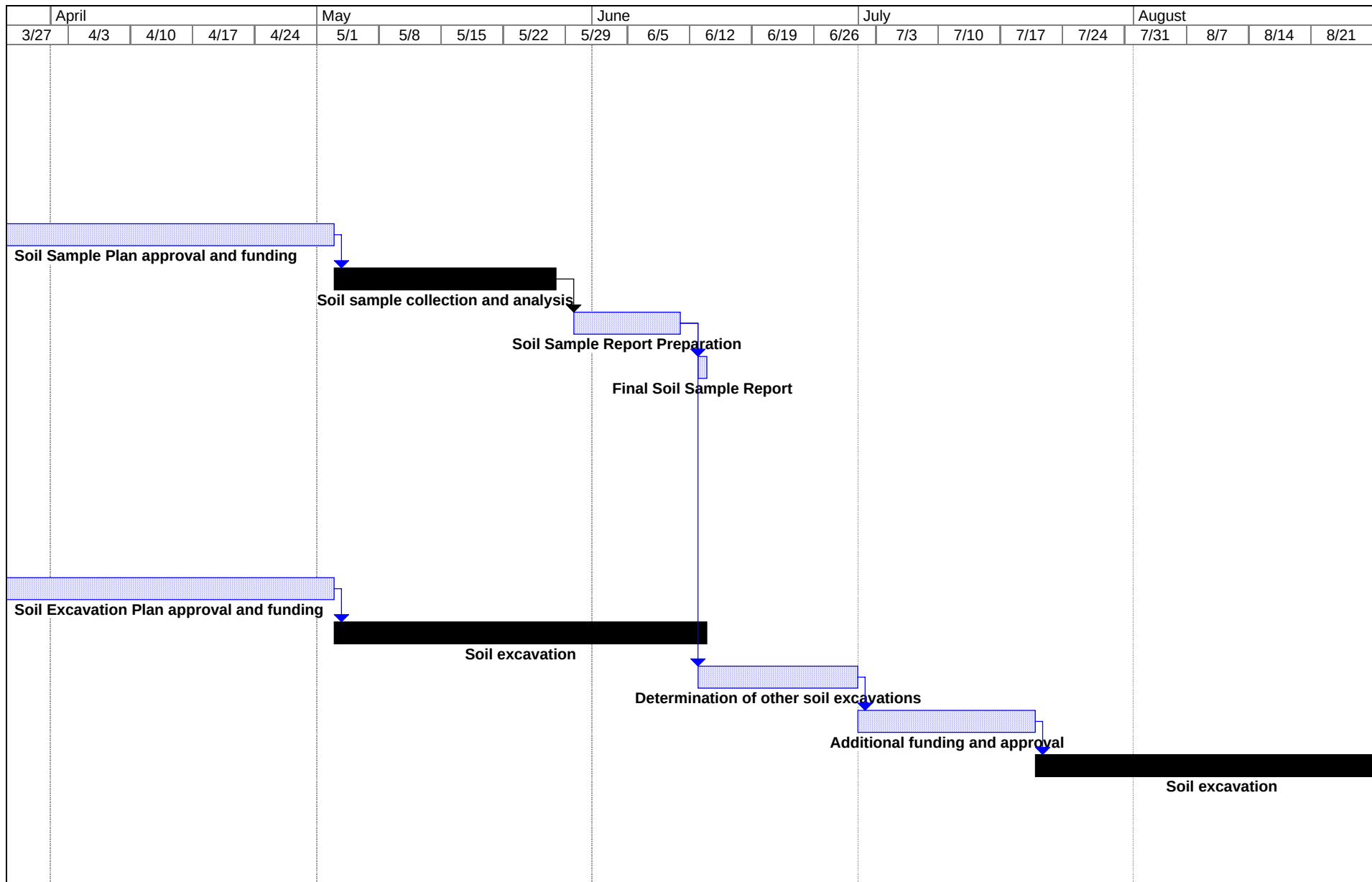


Project: Akron Exterior Remediation
Date: Fri 7/14/06

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Project Summary 

External Tasks 
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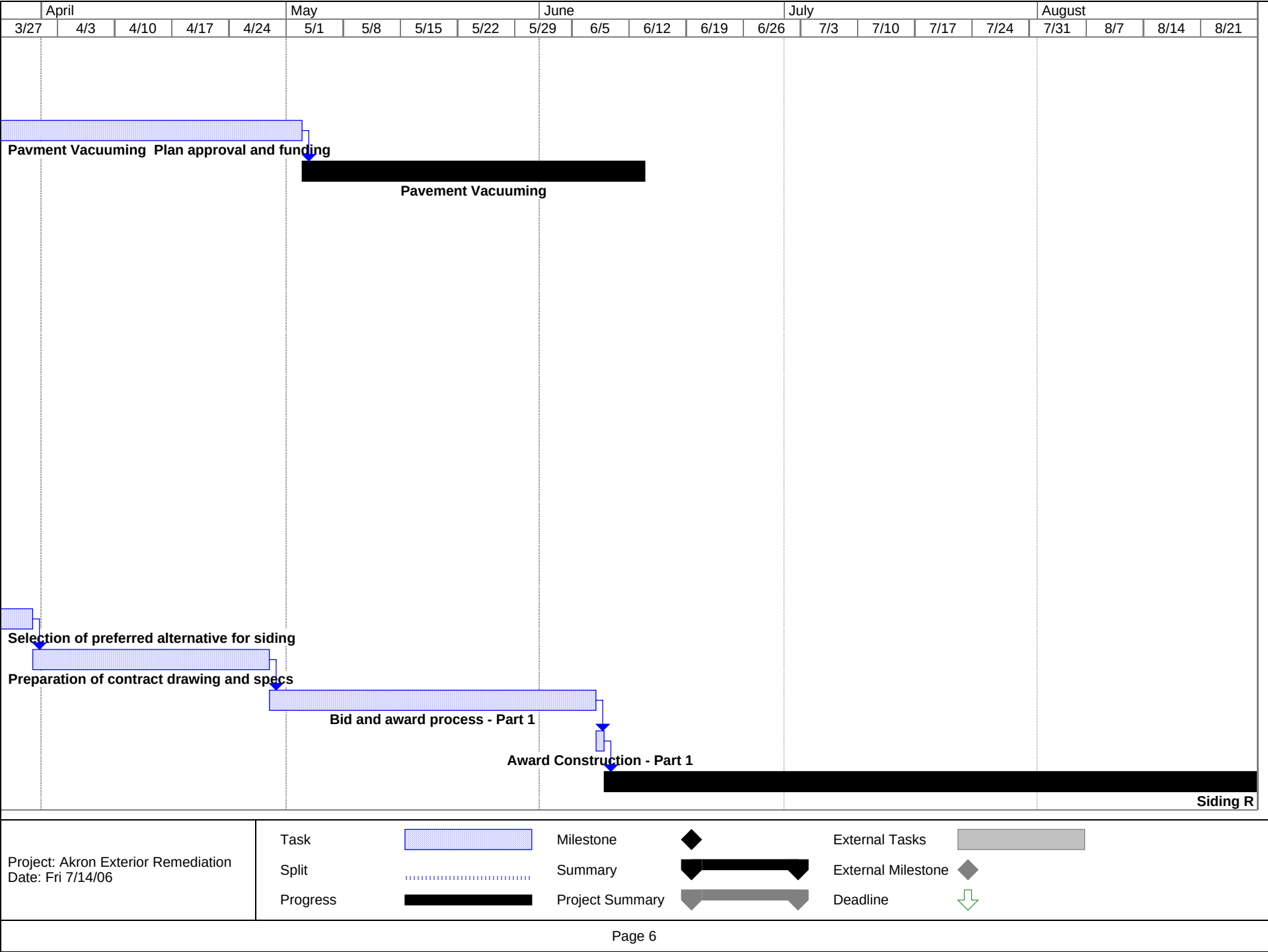
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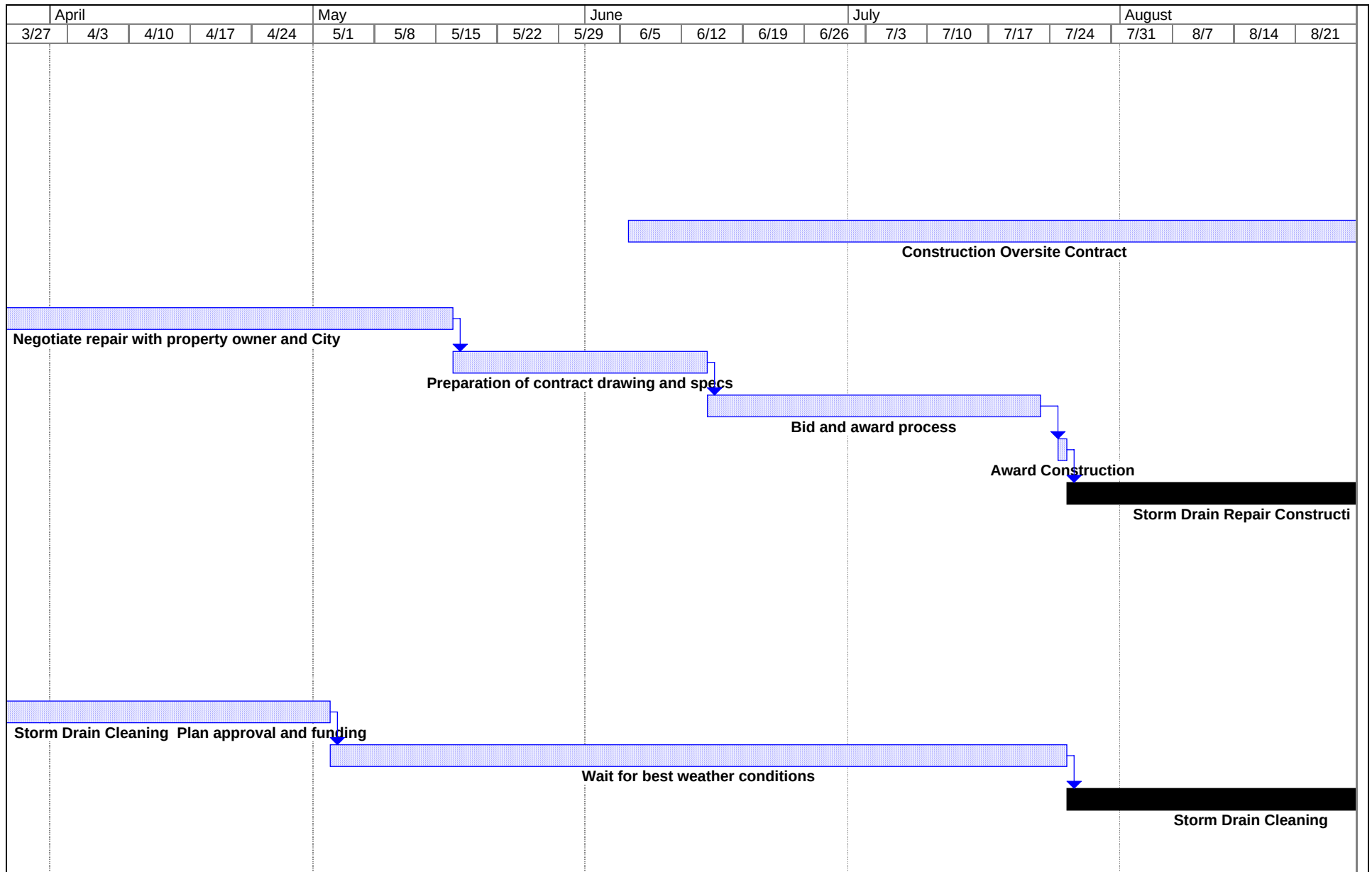
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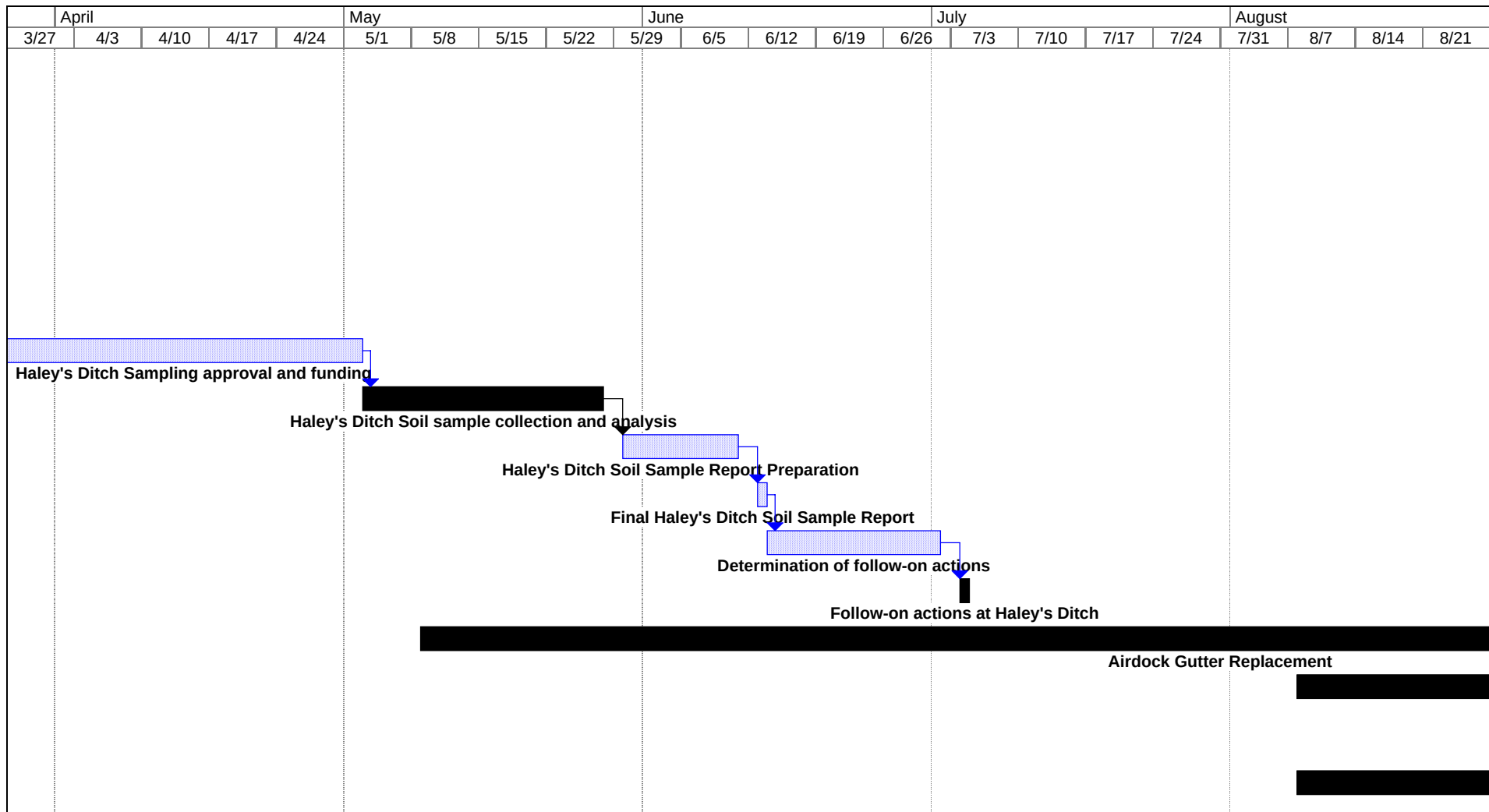
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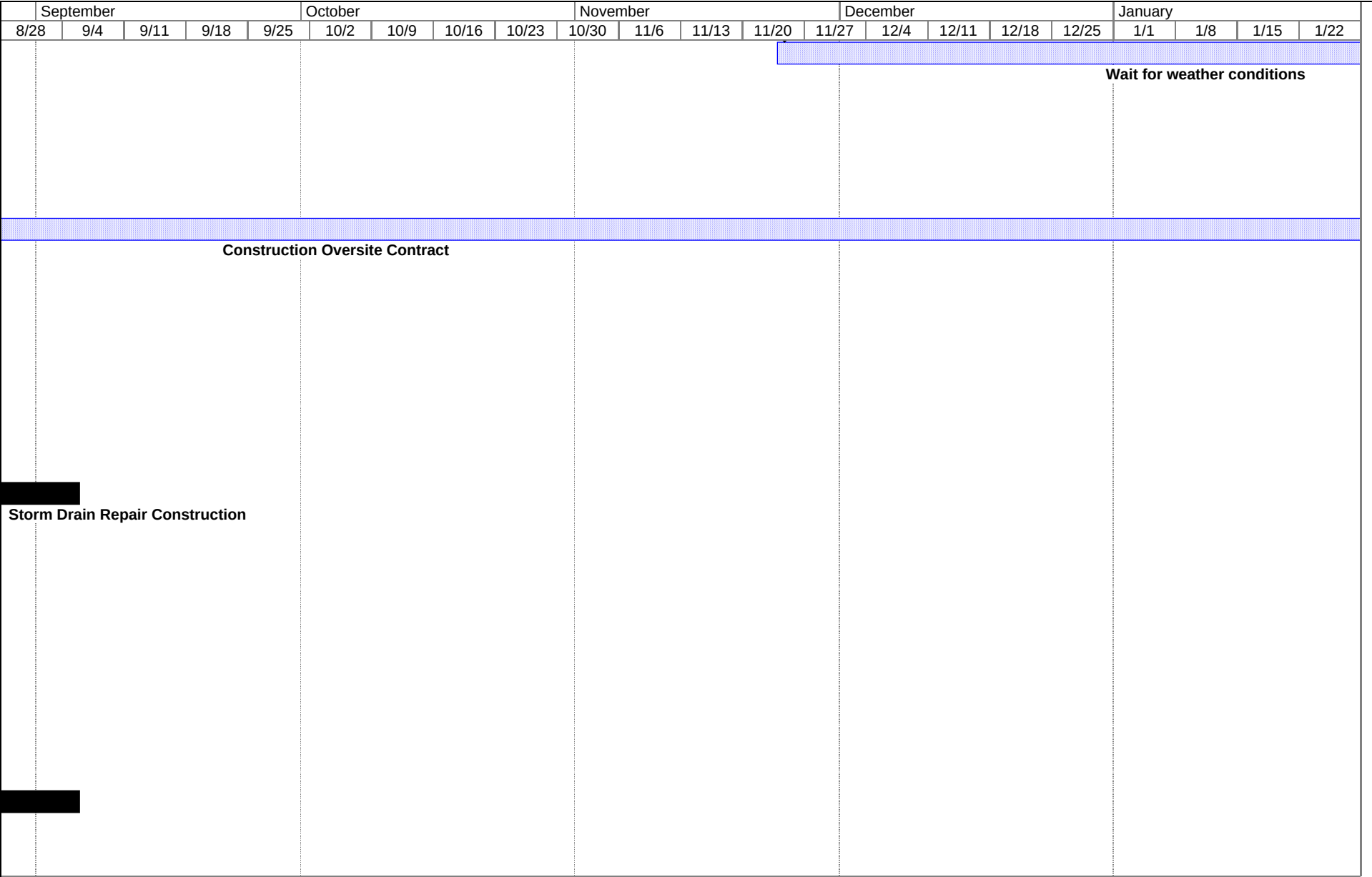
External Tasks

External Milestone

Deadline

September					October				November					December				January			
8/28	9/4	9/11	9/18	9/25	10/2	10/9	10/16	10/23	10/30	11/6	11/13	11/20	11/27	12/4	12/11	12/18	12/25	1/1	1/8	1/15	1/22

September					October				November					December				January			
8/28	9/4	9/11	9/18	9/25	10/2	10/9	10/16	10/23	10/30	11/6	11/13	11/20	11/27	12/4	12/11	12/18	12/25	1/1	1/8	1/15	1/22



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February				March				April				May				June					
1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25

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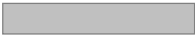




External Tasks

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February				March				April				May				June					
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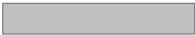




External Tasks

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February				March					April				May				June				
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July				August					September				October				November				D
7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26

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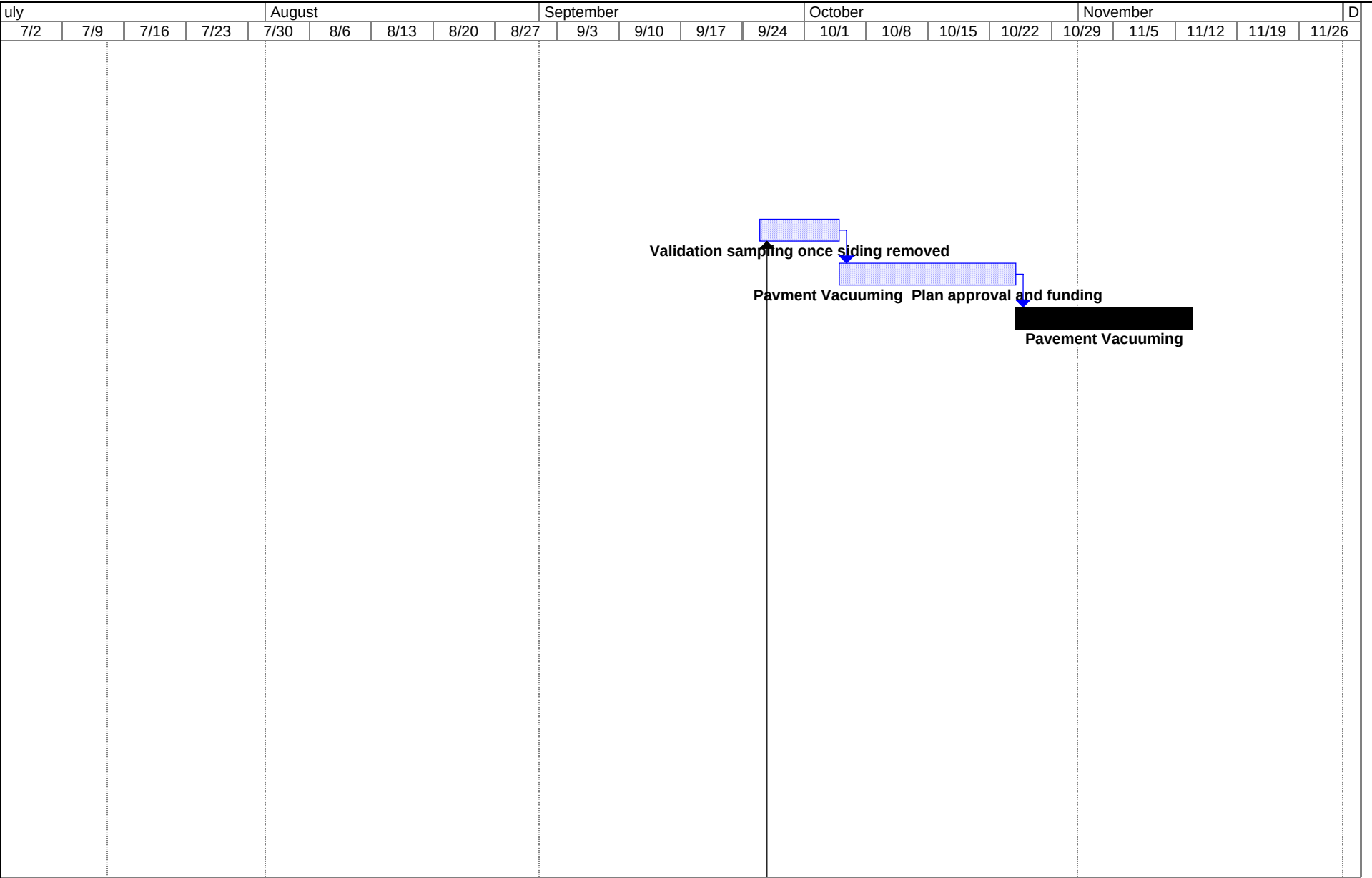


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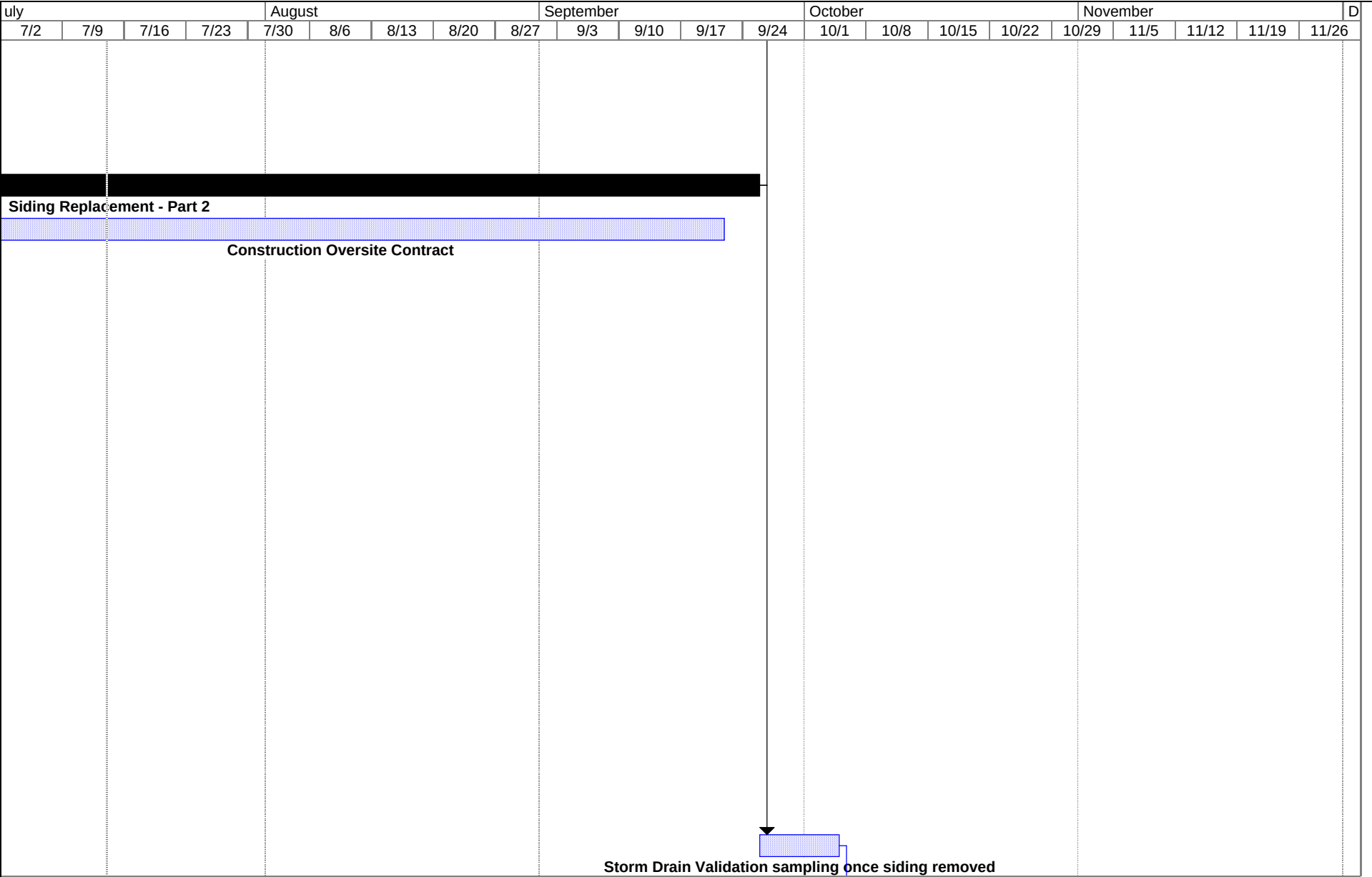
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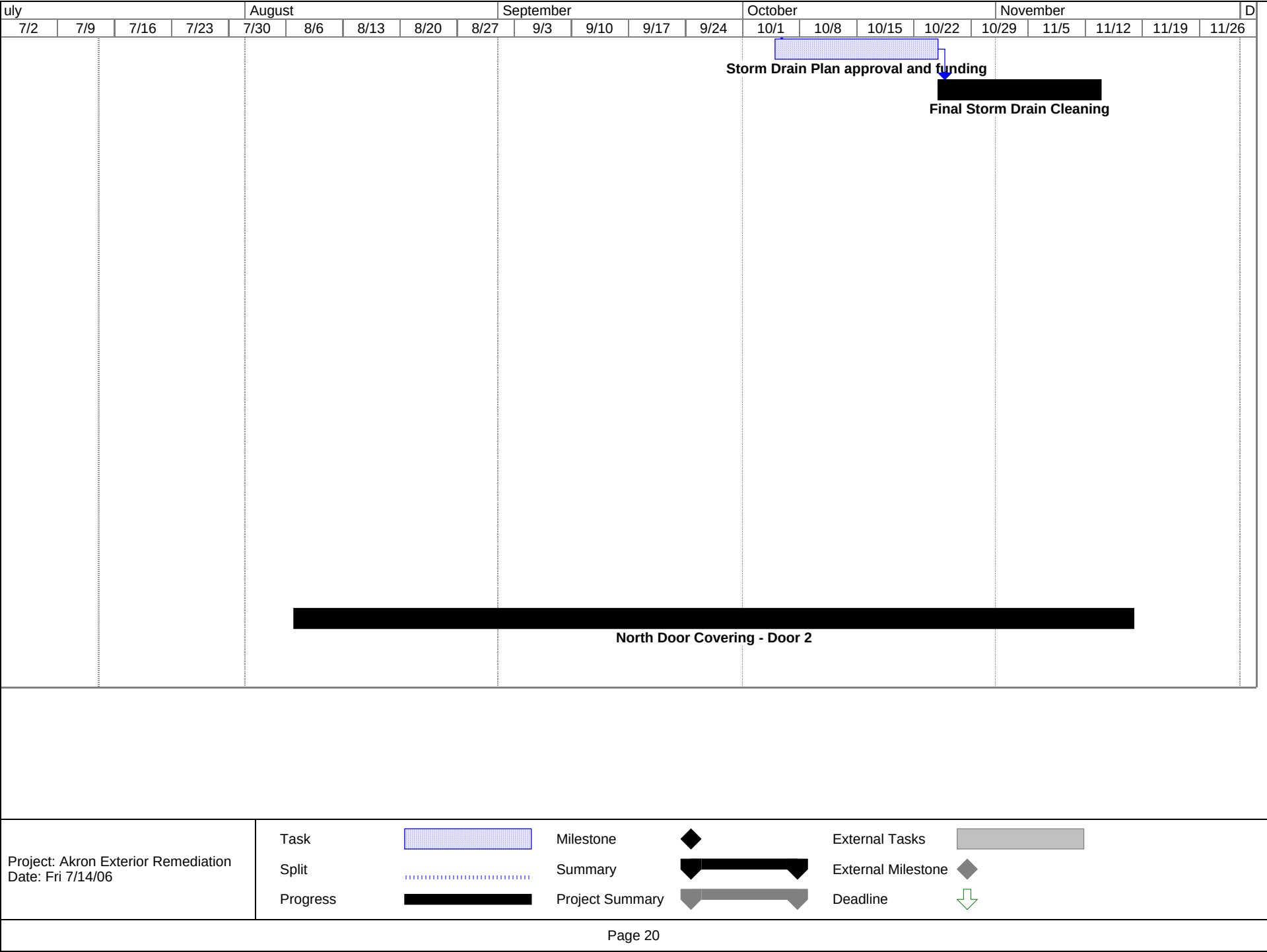
Summary

Project Summary

External Tasks

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June 09, 2005

Mr. Tony Martig
Mailstop DT-8J
U.S. EPA – Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Dear Mr. Martig,

The materials attached to this letter serves as Lockheed Martin Corporation's submission pursuant to Paragraph 68(a) of the Consent Agreement and Final Order between Lockheed Martin and the United States Environmental Protection Agency dated May 5, 2005. Included are the plans and schedule for remediation of the Airdock exterior and surrounding areas.

The attached plan and schedule represent a continuation of ongoing remediation efforts at the Airdock that began in 2003. Two copies are included for your convenience.

The exterior remediation activities will be coordinated by David Gunnarson. He can be reached at 330-796-8751. If you have any questions, please contact me at 330-796-8070.

Sincerely,

Brad Heim

Attachments:

Airdock Remediation Plan and Schedule, June 08, 2005
Airdock 2003-2004 Exterior Sampling Summary

Airdock 2003 – 2004 Exterior Sampling Summary

The following information summarizes the collection and analysis of samples taken exterior to the Airdock from September 2003 through April 2004.

1. Sample Collection

A sample identification scheme was developed to assist in providing unique sample numbers to provide a relationship between the sample number and its media. A two place code was developed to describe the type of sample media which is followed by a sequential number and preceded by "LM" for Lockheed Martin. For example, LM-SO021 represents the twenty first soil sample. An additional set of digits were added to the end of the sample number for depth-discrete sample identification.

Sample Media Codes

CB – Catch Basin (sediment)
CC – Concrete Core
SO – Soil
RM – Roof Material
RG – Rain Gutter (sediment)
SM – Siding Material
SD – Storm Ditch (sediment)

The first sample collection effort was conducted in September 2003. These samples were collected in four batches: debris, outdoor concrete, and some catch basins; more catch basins and soil; soil and indoor concrete, and; drainage outfall samples. These samples are referred to as Phase I samples. The second major sample collection effort, Phase II, was conducted in June 2004. These samples were collected from soils surrounding the Airdock and at the northern perimeter fence line. Other samples were collected independently of Phase I and II as needed. All of these samples are listed in Table 1.

2. Analysis Results

All samples were analyzed for PCB using EPA Method 8082. Because the predominant PCB present in the RPM is Aroclor 1268, a non-standard PCB, the corresponding standard was added to the analytical procedure. PCB test results are listed in Table 1 for each sample collected, showing total PCB.

The analysis results can be organized into five categories to illustrate the distribution and concentrations. These areas are the; concrete apron, grassy soils adjacent to the Airdock, soils within the concrete apron, catch basin sediments, roof gutter sediments and Haley's ditch.

3. Discussion of Analysis Results

Concrete Apron

The results of concrete core samples are shown in Figure 1. The PCB analysis results of LM-CC001 through LM-CC014 ranged from 0.05 to 1.9 mg/kg. This seems to indicate that only very small amounts of the RPM material are present in the concrete.

Soils (Grassy Areas)

Samples of soil were collected from grassy areas and in cracks and other exposed areas that are paved. The results of the samples from the grassy areas are shown in Figure 2. These results show that PCB is primarily in the top layer of soil.

Soils (Concrete Apron Area)

Samples were collected from cracks in concrete and other locations where a soil matrix sample could be collected and are shown on Figure 3. Because of the highly variable nature of the samples collected the analysis results had a wide range of results, from undetected to 9,300 mg/kg PCB. The higher numbers probably represent an accumulation of siding material particles that collected in a crack or crevasse rather than general PCB levels in soil.

Catch Basin Sediments

Samples from catch basins (LM-CB001 through LM-CB-013) ranged from 0.41 to 5100 mg/kg PCB as shown on Figure 4. This indicates that some of the RPM particles collected in some of the catch basins. Sediments from catch basins were removed and properly disposed as TSCA waste as required. Filter fabric was installed in all catch basins to collect any additional debris and these are periodically cleaned and replaced to prevent PRM debris from entering the catch basins.

Roof Gutter Sediments

Sediment samples collected from the roof gutters (LM-RG001 through LM-RG006) indicated the presence of RPM particles at a concentration of 49 to 2800 mg/kg PCB as shown on Figure 4. These sediments were removed and properly disposed as TSCA waste as required. The Airdock roof is now covered with a rubber membrane so no further RPM debris will accumulate in the gutters.

Haley's Ditch

Stormwater from the Airdock travels underground in stormwater drains from the facility boundary and exits into Haley's ditch. A few indicator samples were collected in Haley's ditch as shown in Figure 5. The results of two samples, LM-SD003 and LM-SD005 were 1.04 and 0.64 mg/kg, respectively. Results of samples of a soil pile adjacent to the ditch, LM-SO036, LM-SO040 and LM-SO041, were 50, 17, and 12.6 mg/kg, respectively.

Attachments:

Figure 1 – Concrete Apron Sample Results Map

Figure 2 – Soils Sample Results Map

Figure 3 – Concrete Area Soil Sample Results Map

Figure 4 – Catch Basin and Rain Gutter Soil Sample Results Map

Figure 5 – Haley's Ditch Soil Sample Results Map

Table 1 – Akron Airdock Exterior Sample Summary

Airdock 2003 – 2004 Exterior Sampling Summary

The following information summarizes the collection and analysis of samples taken exterior to the Airdock from September 2003 through April 2004.

1. Sample Collection

A sample identification scheme was developed to assist in providing unique sample numbers to provide a relationship between the sample number and its media. A two place code was developed to describe the type of sample media which is followed by a sequential number and preceded by “LM” for Lockheed Martin. For example, LM-SO021 represents the twenty first soil sample. An additional set of digits were added to the end of the sample number for depth-discrete sample identification.

Sample Media Codes

CB – Catch Basin (sediment)

CC – Concrete Core

SO – Soil

RM – Roof Material

RG – Rain Gutter (sediment)

SM – Siding Material

SD – Storm Ditch (sediment)

The first sample collection effort was conducted in September 2003. These samples were collected in four batches: debris, outdoor concrete, and some catch basins; more catch basins and soil; soil and indoor concrete, and; drainage outfall samples. These samples are referred to as Phase I samples. The second major sample collection effort, Phase II, was conducted in June 2004. These samples were collected from soils surrounding the Airdock and at the northern perimeter fence line. Other samples were collected independently of Phase I and II as needed. All of these samples are listed in Table 1.

2. Analysis Results

All samples were analyzed for PCB using EPA Method 8082. Because the predominant PCB present in the RPM is Aroclor 1268, a non-standard PCB, the corresponding standard was added to the analytical procedure. PCB test results are listed in Table 1 for each sample collected, showing total PCB.

The analysis results can be organized into five categories to illustrate the distribution and concentrations. These areas are the; concrete apron, grassy soils adjacent to the Airdock, soils within the concrete apron, catch basin sediments, roof gutter sediments and Haley's ditch.

3. Discussion of Analysis Results

Concrete Apron

The results of concrete core samples are shown in Figure 1. The PCB analysis results of LM-CC001 through LM-CC014 ranged from 0.05 to 1.9 mg/kg. This seems to indicate that only very small amounts of the RPM material are present in the concrete.

Soils (Grassy Areas)

Samples of soil were collected from grassy areas and in cracks and other exposed areas that are paved. The results of the samples from the grassy areas are shown in Figure 2. These results show that PCB is primarily in the top layer of soil.

Soils (Concrete Apron Area)

Samples were collected from cracks in concrete and other locations where a soil matrix sample could be collected and are shown on Figure 3. Because of the highly variable nature of the samples collected the analysis results had a wide range of results, from undetected to 9,300 mg/kg PCB. The higher numbers probably represent an accumulation of siding material particles that collected in a crack or crevasse rather than general PCB levels in soil.

Catch Basin Sediments

Samples from catch basins (LM-CB001 through LM-CB-013) ranged from 0.41 to 5100 mg/kg PCB as shown on Figure 4. This indicates that some of the RPM particles collected in some of the catch basins. Sediments from catch basins were removed and properly disposed as TSCA waste as required. Filter fabric was installed in all catch basins to collect any additional debris and these are periodically cleaned and replaced to prevent RPM debris from entering the catch basins.

Roof Gutter Sediments

Sediment samples collected from the roof gutters (LM-RG001 through LM-RG006) indicated the presence of RPM particles at a concentration of 49 to 2800 mg/kg PCB as shown on Figure 4. These sediments were removed and properly disposed as TSCA waste as required. The Airdock roof is now covered with a rubber membrane so no further RPM debris will accumulate in the gutters.

Haley's Ditch

Stormwater from the Airdock travels underground in stormwater drains from the facility boundary and exits into Haley's ditch. A few indicator samples were collected in Haley's ditch as shown in Figure 5. The results of two samples, LM-SD003 and LM-SD005 were 1.04 and 0.64 mg/kg, respectively. Results of samples of a soil pile adjacent to the ditch, LM-SO036, LM-SO040 and LM-SO041, were 50, 17, and 12.6 mg/kg, respectively.

Attachments:

Figure 1 – Concrete Apron Sample Results Map

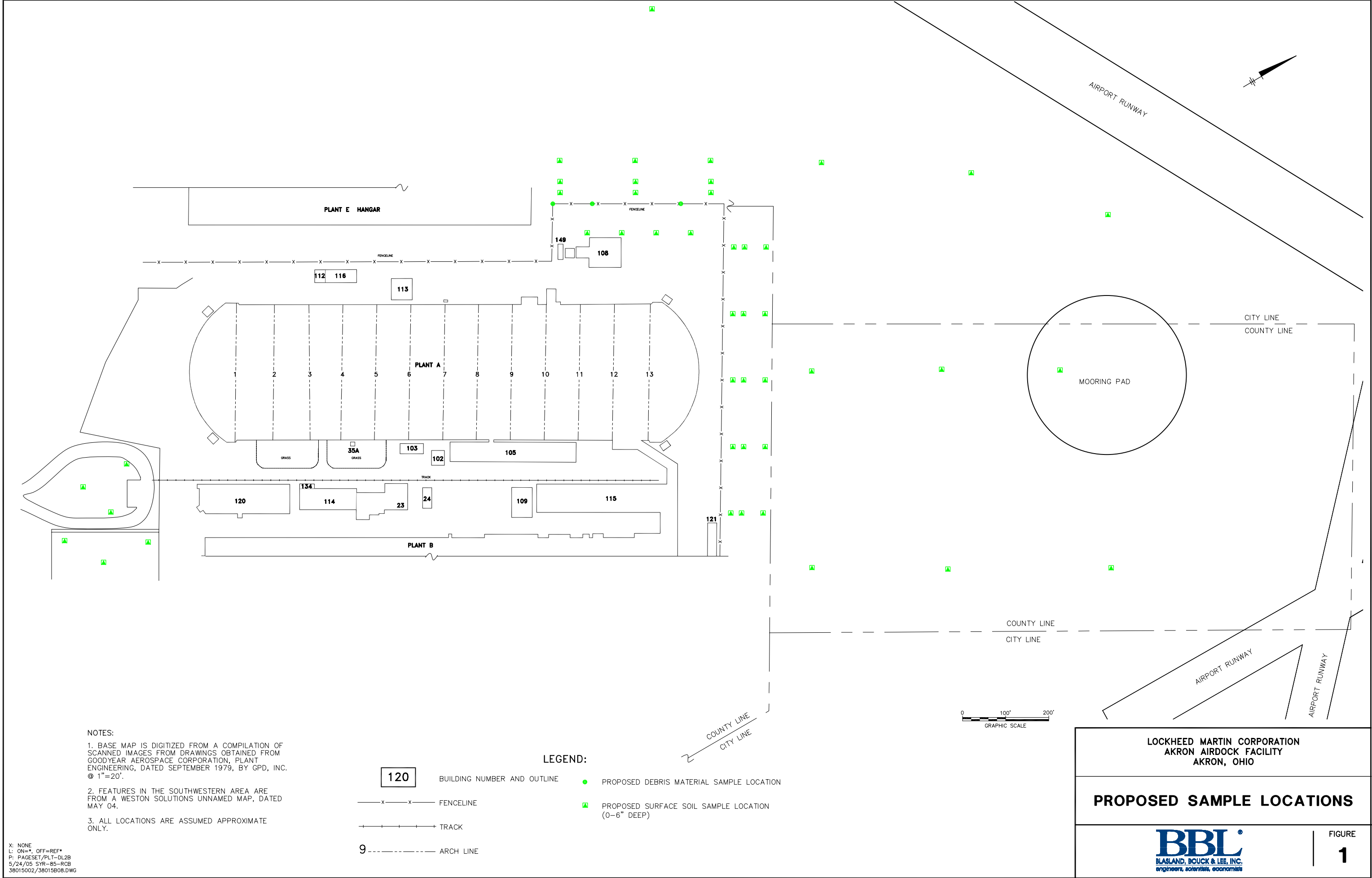
Figure 2 – Soils Sample Results Map

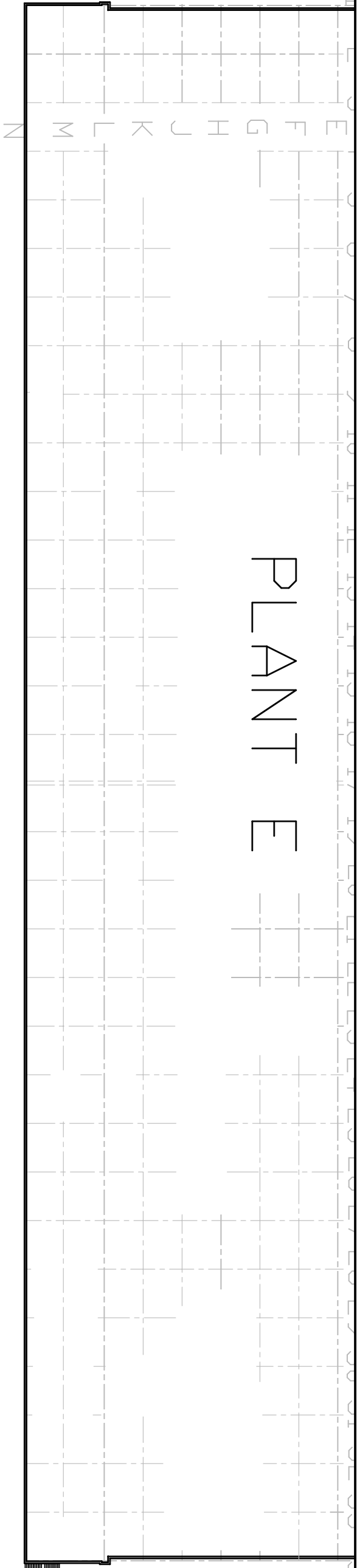
Figure 3 – Concrete Area Soil Sample Results Map

Figure 4 – Catch Basin and Rain Gutter Soil Sample Results Map

Figure 5 – Haley's Ditch Soil Sample Results Map

Table 1 – Akron Airdock Exterior Sample Summary





PLANT E

A B C D E F G H I J K L M N

1 2 3 4 5 6 7 8 9 10 11 12 13

LM-CC008
TOTAL PCBs 0.14 mg/kg

LM-CC009
TOTAL PCBs 0.26 mg/kg

LM-CC010
TOTAL PCBs 0.55 mg/kg

BLDG 108

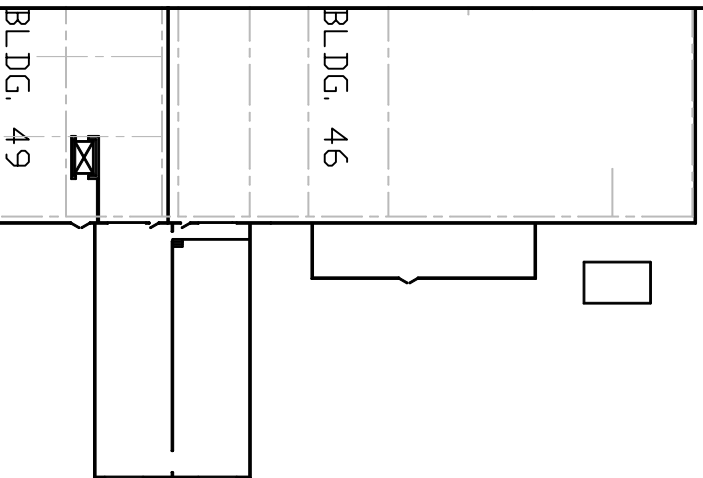
LM-CC012
TOTAL PCBs 0.19 mg/kg

LM-CC007
TOTAL PCBs 0.16 mg/kg

112 116

113

LM-CC011
TOTAL PCBs 0.12 mg/kg



BLDG. 46

BLDG. 49

LM-CC013
TOTAL PCBs 0.31 mg/kg

PLANT A

DOCK

LM-CC002
TOTAL PCBs 0.12 mg/kg

LM-CC014
TOTAL PCBs 0.083 mg/kg

LM-CC006
TOTAL PCBs 0.46 mg/kg

LM-CC005
TOTAL PCBs 0.1 mg/kg

LM-CC004
TOTAL PCBs 0.18 mg/kg

LM-CC003
TOTAL PCBs 0.169 mg/kg

AB MAINT.

AB POWER HOUSE

SUBSTATION

SUBSTATION

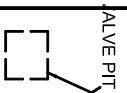
SUBSTATION

DRIP HAMMER BLDG. 109

M HANGER

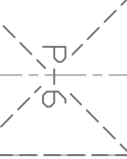
LM-CC001
TOTAL PCBs 1.9 mg/kg

PIPE SHOP



NAVE PRT

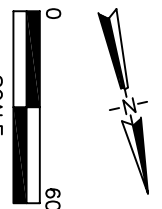
LM-NE&SS
ABSC



LEGEND

- CONCRETE CORE SAMPLING RESULTS

NOTE:
ALL SAMPLES COLLECTED 9/18/03.



SCALE



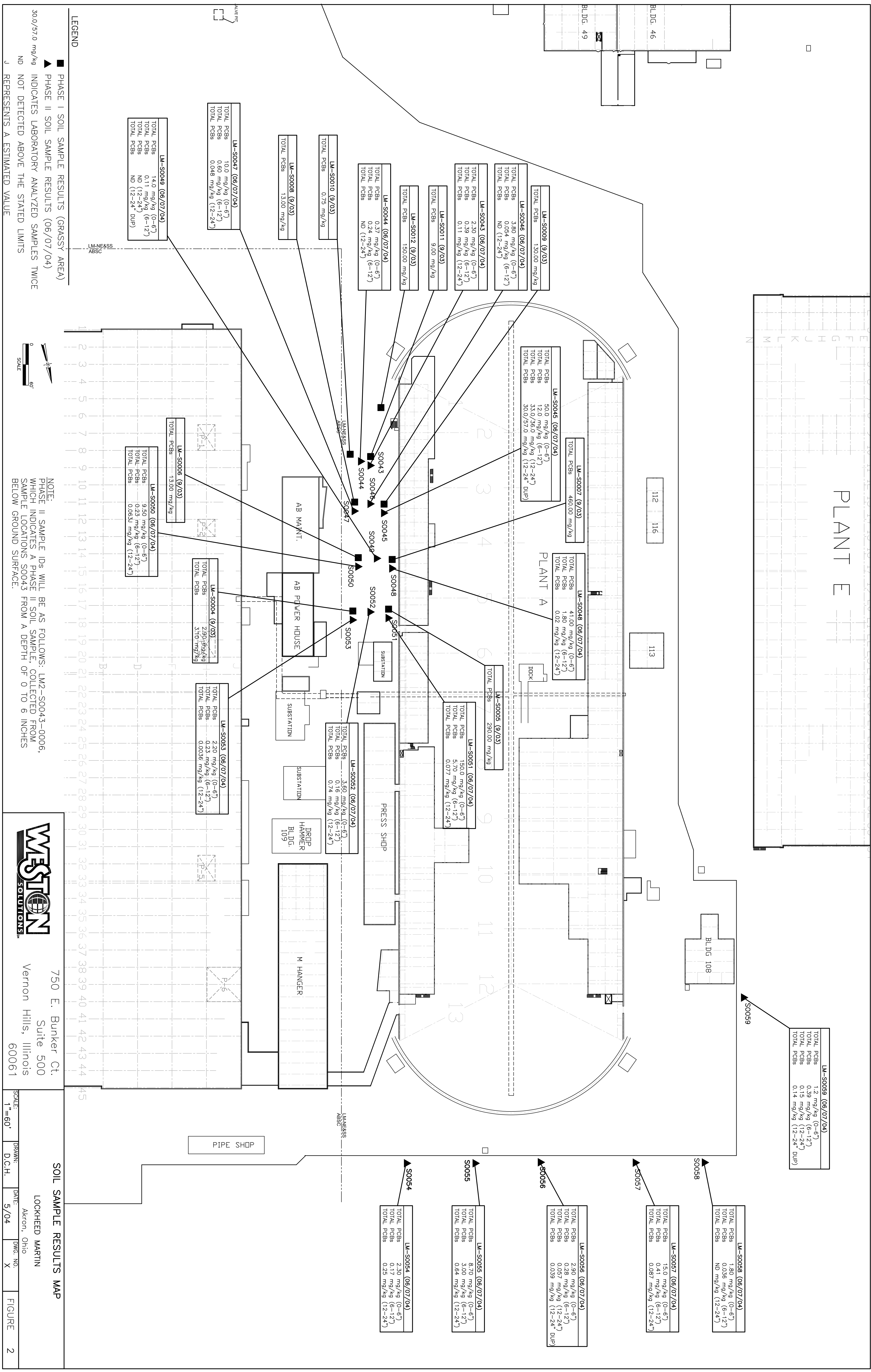
750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

CONCRETE APRON SOIL SAMPLE RESULTS MAP

LOCKHEED MARTIN

Akron, Ohio

SCALE:	DRAWN:	DATE:	DWG. NO.	FIGURE
1"=60'	D.C.H.	1/05	X	1



PLANT E

LM-S0024 (9/03)
TOTAL PCBs 7100 mg/kg
TOTAL PCBs 9300 mg/kg

LM-S0025 (9/03)
TOTAL PCBs 1.7 mg/kg

LM-S0023 (9/03)
TOTAL PCBs 700 mg/kg

LM-S0028 (9/03)
TOTAL PCBs 6.9 mg/kg

LM-S0026 (9/03)
TOTAL PCBs 100 mg/kg

LM-S0022 (9/03)
TOTAL PCBs 860 mg/kg

LM-S0018 (9/03)
TOTAL PCBs 22 mg/kg
TOTAL PCBs 35 mg/kg

LM-S0019 (9/03)
TOTAL PCBs 150 mg/kg

LM-S0016 (9/03)
TOTAL PCBs 11 mg/kg

LM-S0017 (9/03)
TOTAL PCBs 2000 mg/kg

LM-S0015 (9/03)
TOTAL PCBs 2100 mg/kg

LM-S0013 (9/03)
TOTAL PCBs 2800 mg/kg

LM-S0014 (9/03)
TOTAL PCBs 430 mg/kg

LM-S0027 (9/03)
TOTAL PCBs 60 mg/kg

LM-S0029 (9/03)
TOTAL PCBs 16 mg/kg

LM-S0033 (9/03)
TOTAL PCBs 120 mg/kg

LM-S0030 (9/03)
TOTAL PCBs 14 mg/kg

LM-S0034 (9/03)
TOTAL PCBs 77 mg/kg

LM-S0031 (9/03)
TOTAL PCBs 41 mg/kg

LM-S0035 (9/03)
TOTAL PCBs 200 mg/kg

LM-S0032 (9/03)
TOTAL PCBs 100 mg/kg

LM-S0003 (9/03)
TOTAL PCBs 630 mg/kg

LM-S0001 (9/03)
TOTAL PCBs 1100 mg/kg

LM-S0002 (9/03)
TOTAL PCBs 59 mg/kg

PIPE SHOP

PRESS SHOP

DROP HAMMER BLDG. 109

M HANGER

SUBSTATION

AB POWER HOUSE

AB MAINT.

PLANT A

DOCK

SUBSTATION

P-1

P-2

P-3

P-5

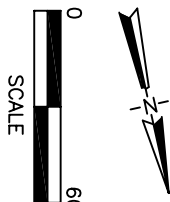
LM-NE&SS
ABSC

LM-NE&SS
ABSC

LM-NE&SS
ABSC

LEGEND

- SOIL SAMPLE RESULTS (MIXED MATRIX)



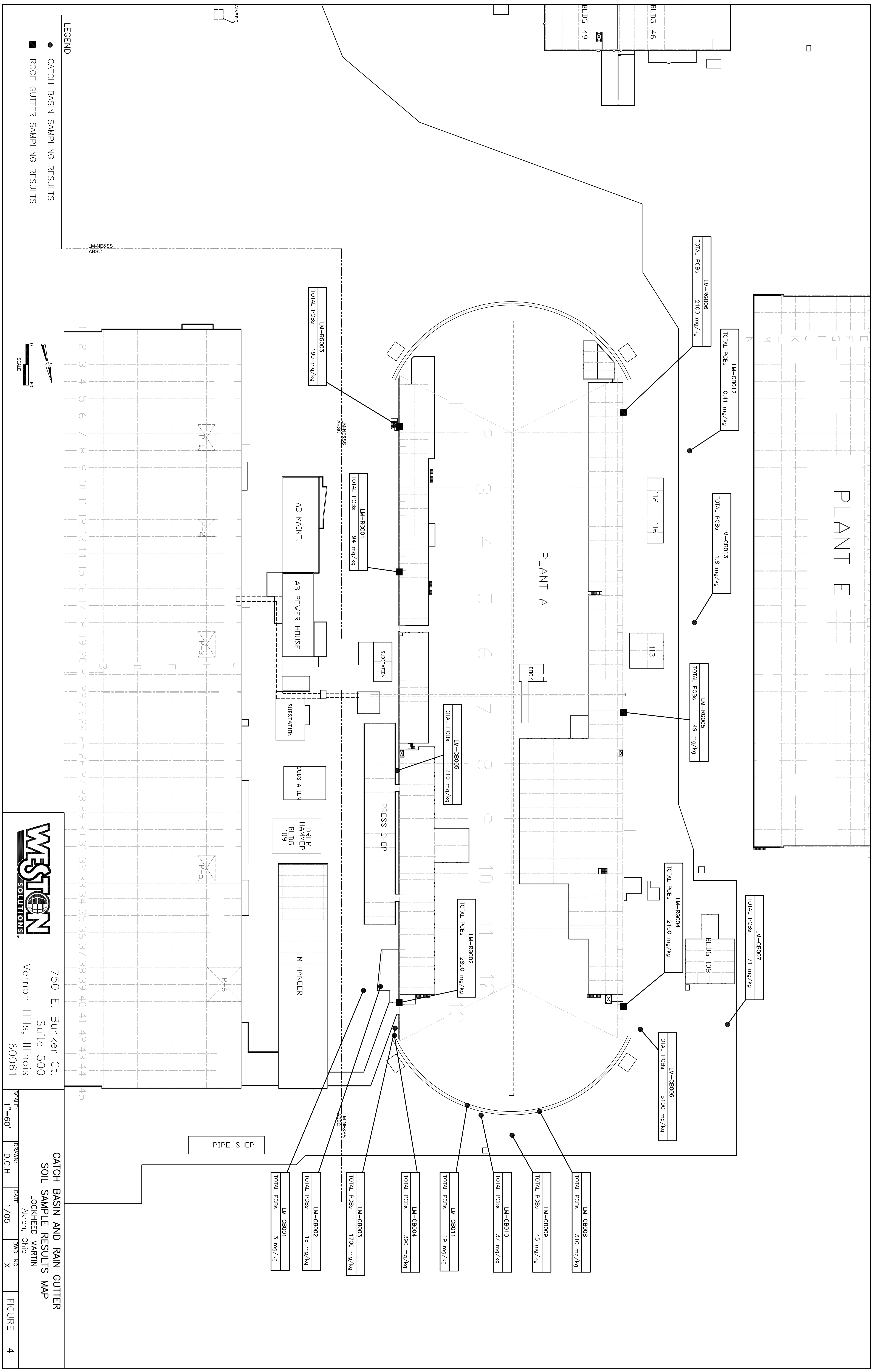
750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

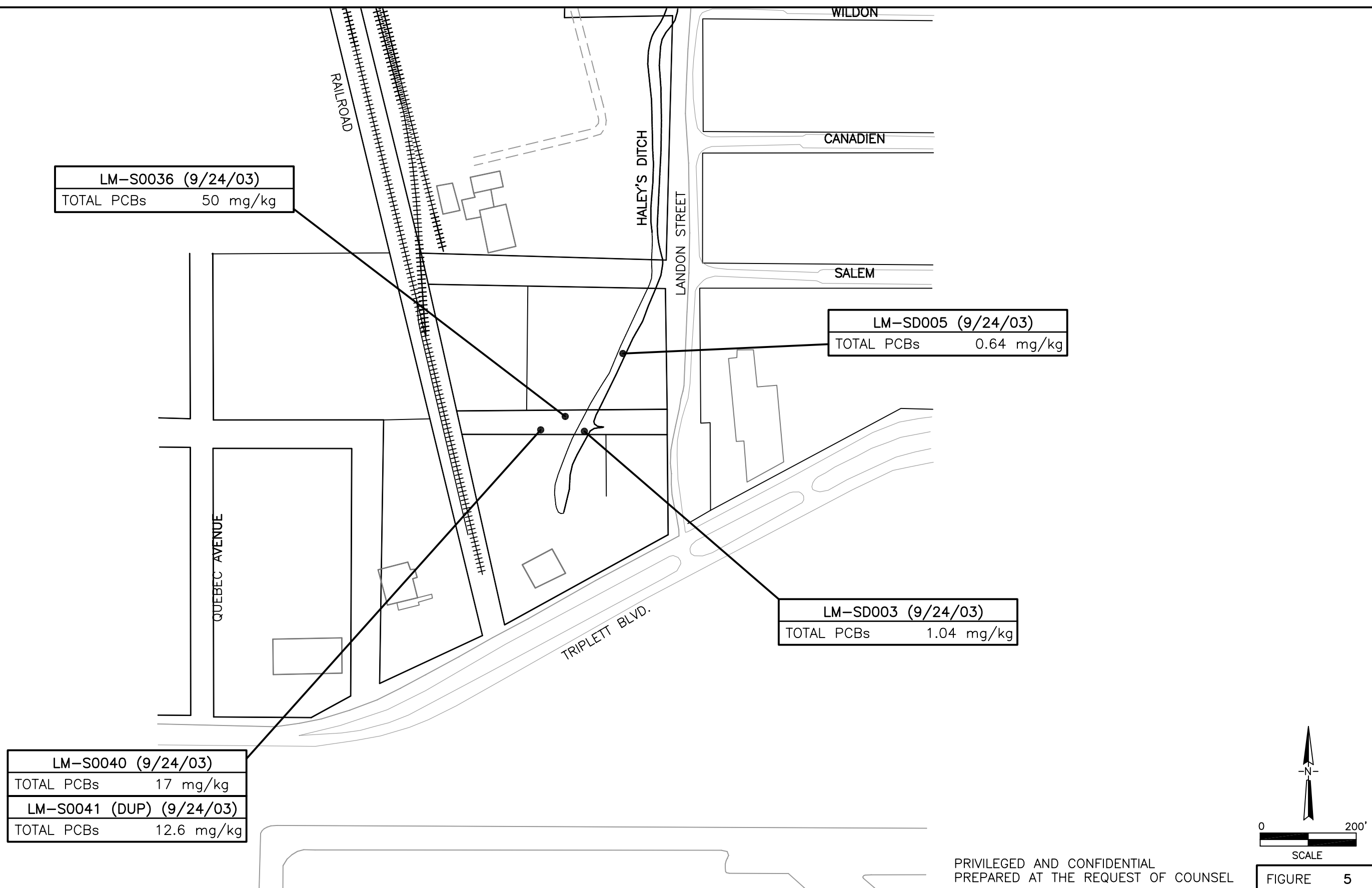
CONCRETE APRON SOIL SAMPLE LOCATION MAP

LOCKHEED MARTIN

Akron, Ohio

SCALE: 1"=60'	DRAWN: D.C.H.	DATE: 1/05	DWG. NO. X	FIGURE 3
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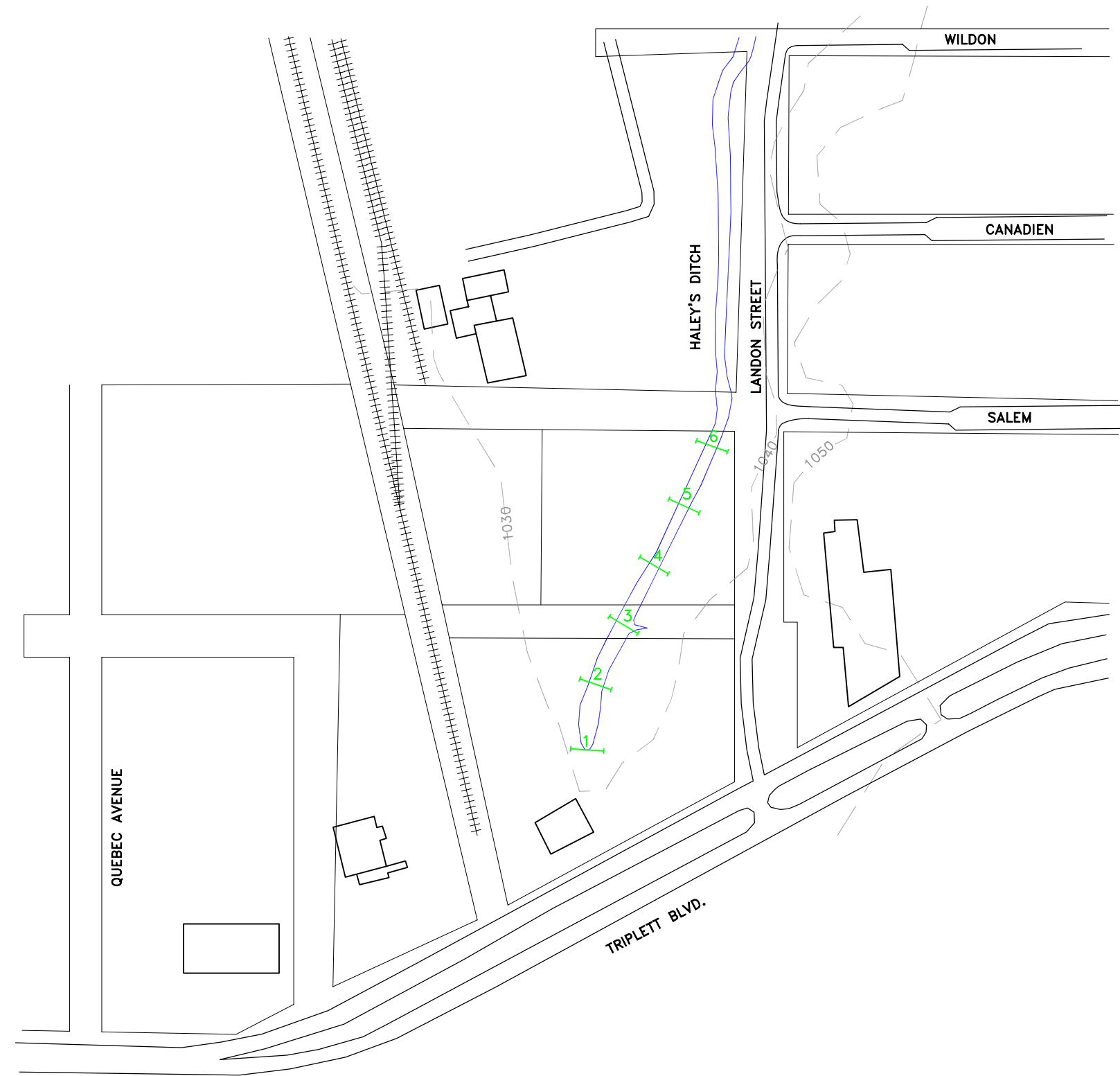
PRIVILEGED AND CONFIDENTIAL
PREPARED AT THE REQUEST OF COUNSEL

FIGURE 5



750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

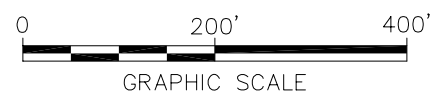
HALEY'S DITCH SOIL SAMPLE RESULTS MAP
LOCKHEED MARTIN
Akron, Ohio



LEGEND:

- PROPOSED TRANSECT LOCATION
- 1050 APPROXIMATE LOCATION USGS CONTOUR ELEVATION LINE
- RAILROAD TRACK

- NOTES:
1. BASE MAP IS DIGITIZED FROM A SCANNED IMAGE OF WESTON SOLUTIONS MAP, TITLED "HALEY'S DITCH SOIL SAMPLE RESULTS MAP", @ 1"=40', FIGURE 5, WITH NO KNOWN DATE.
 2. USGS CONTOUR LINES DIGITIZED FROM USGS 7.5 MINUTE QUAD., AKRON EAST, OHIO, 1967, PHOTOREVISED 1984.
 3. ALL LOCATIONS ARE ASSUMED APPROXIMATE ONLY.



LOCKHEED MARTIN CORPORATION
AKRON AIRDOCK FACILITY
AKRON, OHIO

HALEY'S DITCH SAMPLING
TRANSECT'S LAYOUT

FIGURE
2

X: NONE
L: ON=*, OFF=REF*
P: PAGESET/PLT-DL2B
5/20/05 SYR-85-RCB
38015002/38015807.DWG