



**Department of Energy**  
**Ohio Field Office**  
**Fernald Closure Project**  
**175 Tri-County Parkway**  
**Springdale, Ohio 45246**  
**(513) 648-3155**



NOV 18 2004

Mr. James A. Saric, Remedial Project Manager  
 United States Environmental Protection Agency  
 Region V, SR-6J  
 77 West Jackson Boulevard  
 Chicago, Illinois 60604-3590

DOE-0063-05

Mr. Tom Schneider, Project Manager  
 Ohio Environmental Protection Agency  
 401 East 5<sup>th</sup> Street  
 Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF ADDENDUM NO. 1 TO THE IMPLEMENTATION PLAN FOR  
 AREA 2, PHASE II – SUBAREA 3 (INFRASTRUCTURE) SUBCONTRACTOR  
 LAYDOWN AREA AND EQUIPMENT WASH FACILITY**

Reference: DOE-0469-03 letter, G. Griffiths to J. Saric and T. Schneider, "Transmittal of the Draft Final Implementation Plan for Area 2, Phase II, and the Responses to the Ohio Environmental Protection Agency Comments on the Draft Integrated Remedial Design Package for Area 2, Phase II," dated August 14, 2003

Enclosed for your review is the Area 2, Phase II (A2PII) Implementation Plan Addendum No. 1 for Subarea 3 (Infrastructure) Subcontractor Laydown Area and Equipment Wash Facility. A commitment was made in Section 1.4.2 of the A2PII Implementation Plan that the remedial design for Subarea 3 (Infrastructure) would be submitted to the United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) as an addendum to the Implementation Plan following completion of predesign investigations. Based on the remediation schedule, this addendum includes the predesign investigation, characterization, and remedial design for two Subarea 3 (Infrastructure) components: Subcontractor Laydown Area and Equipment Wash Facility. The addenda for the other Subarea 3 (Infrastructure) components will be submitted at a later date.

Remediation of the areas covered by this addendum will need to be completed by the end of 2004 in order to support the upcoming Silos Project transportation activities.

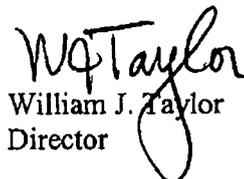
Mr. James A. Saric  
Mr. Tom Schneider.

-2-

DOE-0063-05

If you have any questions or require additional information, please contact Johnny Reising at (513) 648-3139.

Sincerely,

  
William J. Taylor  
Director

FCP:Reising

Enclosure: As Stated

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**FLUOR**

November 12, 2004

REARY: \_\_\_\_\_

Fernald Closure Project  
 Letter No. C:DSDP:2004-0132

Mr. Johnny W. Reising, Associate Director  
 U. S. Department of Energy  
 Ohio Field Office - Fernald Closure Project  
 175 Tri-County Parkway  
 Cincinnati, Ohio 45246

Dear Mr. Reising:

**CONTRACT DE-AC24-01OH20115, TRANSMITTAL OF ADDENDUM NO. 1 TO THE  
 IMPLEMENTATION PLAN FOR AREA 2, PHASE II - SUBAREA 3 (INFRASTRUCTURE)  
 SUBCONTRACTOR LAYDOWN AREA AND EQUIPMENT WASH FACILITY**

Reference: Letter DOE-0469-03, G. Griffiths to J. Saric and T. Schneider, "Transmittal of the Draft Final Implementation Plan for Area 2, Phase II, and the Responses to the Ohio Environmental Protection Agency Comments on the Draft Integrated Remedial Design Package for Area 2, Phase II," dated August 14, 2003

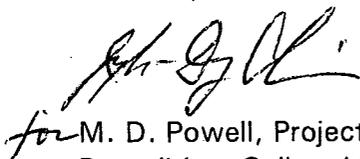
Enclosed for your review is the Area 2, Phase II (A2PII) Implementation Plan Addendum No. 1 for Subarea 3 (Infrastructure) Subcontractor Laydown Area and Equipment Wash Facility. A commitment was made in Section 1.4.2 of the A2PII Implementation Plan that the remedial design for Subarea 3 (Infrastructure) would be submitted to the U.S. Environmental Protection Agency (EPA) and Ohio Environmental Protection Agency (OEPA) as an addendum to the Implementation Plan following completion of predesign investigations. Based on the remediation schedule, this addendum includes the predesign investigation, characterization, and remedial design for two Subarea 3 (Infrastructure) components: Subcontractor Laydown Area and Equipment Wash Facility. The addenda for the other Subarea 3 (Infrastructure) components will be submitted at a later date.

Remediation of the areas covered by this addendum will need to be completed by the end of 2004 in order to support the upcoming Silos Project transportation activities.

Mr. Johnny W. Reising  
Letter No. C:DSDP:2004-0132  
Page 2

Upon your concurrence, please forward this document to EPA and OEPA. If you have any questions or require additional information, please contact Jyh-Dong Chiou at (513) 648-3726 or Frank Miller at (513) 648-5409.

Sincerely,



for M. D. Powell, Project Director  
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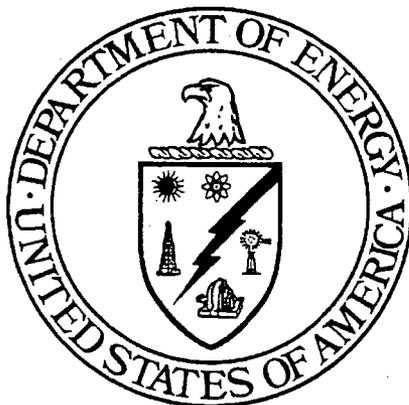
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Letter No. C:DSDP:2004-0132  
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**ADDENDUM NO. 1 TO THE  
IMPLEMENTATION PLAN FOR AREA 2, PHASE II -  
SUBAREA 3 (INFRASTRUCTURE)  
SUBCONTRACTOR LAYDOWN AREA  
AND EQUIPMENT WASH FACILITY**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**



**NOVEMBER 2004**

**U.S. DEPARTMENT OF ENERGY  
FERNALD AREA OFFICE**

**Attachment <sup>to:</sup> in Files**

F-00117

DOE-0063-05

**20450-PL-0001  
REVISION B  
ADDENDUM 1**

**REVISION SUMMARY**

<u>Revision</u>	<u>Date</u>	<u>Description of Revision</u>
B	8-5-03	Draft final version of plan submitted to agencies.
Addendum 1	11-12-04	Revised to include commitment made to the agencies in Section 1.4.2 of the plan to submit an addendum following completion of predesign investigations of Area 2, Phase II – Subarea 3 (Infrastructure) Subcontractor Laydown Area and Equipment Wash Facility

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FCP-A2PIIS3-SUB-EWF-ADD1  
 20450-PL-0001, Revision B, Addendum 1  
 November 2004

## LIST OF ACRONYMS AND ABBREVIATIONS

A2PII	Area 2, Phase II
ALARA	as low as reasonably achievable
ASCOC	area-specific constituent of concern
AWWT	Advanced Waste Water Treatment (Facility)
bcy	bank cubic yards
COC	constituent of concern
DOE	U.S. Department of Energy
EWF	Equipment Wash Facility
FCP	Fernald Closure Project
FRL	final remediation level
HDPE	high-density polyethylene
HPGe	high-purity germanium (detector)
μg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
NPDES	National Pollution Discharge Elimination System
OSDF	On-Site Disposal Facility
OU	operable unit
pCi/g	picoCuries per gram
PSP	Project Specific Plan
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RSS	Radiation Scanning System
RTRAK	Radiation Tracking System
SED	Sitewide Environmental Database
SEP	Sitewide Excavation Plan
SP	Soil Stockpile
SUB	Subcontractor Laydown Area
SWRB	Storm Water Retention Basin
WAC	waste acceptance criteria

## 1.0 INTRODUCTION

In August 2003, an Implementation Plan for Area 2, Phase II (A2PII) was submitted to the agencies (DOE 2003). A2PII was divided into four subareas: Subarea 1 (Arsenic Soil Contamination Area), Subarea 2 (Radium Hot Spot), Subarea 3 (Infrastructure), and Subarea 4 (Remaining Area). Due to incomplete characterization results and continued usage of Subarea 3 (Infrastructure) at the time of the August 2003 submittal, Subarea 3 (Infrastructure) was not addressed in the A2PII Implementation Plan; rather, a commitment was made in Section 1.4.2 of the Implementation Plan that the remedial design for Subarea 3 (Infrastructure) would be submitted to the agencies as an addendum to the Implementation Plan following completion of predesign investigations.

As defined in the A2PII Implementation Plan, the Subarea 3 (Infrastructure) components include:

- Trailer Complex Area
- Equipment Wash Pad (including Basin 5)
- Subcontractor Laydown Area
- Aquifer Project Laydown Area
- Ditch and bank north of the former Active Flyash Pile
- Portion of the Impacted Material Haul Road and nearby former footprint of debris pile MTL-HRD-012

In addition, the infrastructure subarea includes the water line that services both the Trailer Complex and the Equipment Wash Facility, a portion of the transfer line, and associated utilities. The removal of the at- and below-grade structures, roadways, and underground utilities, not related to groundwater remediation, is the primary scope of the remediation activities for Subarea 3 (Infrastructure).

This document addresses the predesign investigation, characterization data, and remedial design for the Equipment Wash Facility (including Basin 5), and the Subcontractor Laydown Area (see design drawing 99X-5500-G-00816 referenced in Appendix A) and is being submitted as an Addendum No. 1 to the A2PII Implementation Plan. This addendum does not address other Subarea 3 (Infrastructure) components. Therefore, A2PII – Subarea 3 (Infrastructure) components listed above other than the Subcontractor Laydown Area and the Equipment Wash Pad (including Basin 5) will be addressed in future addendums to the August 2003 A2PII Implementation Plan.

1 The remediation of the above-grade structures associated with the Equipment Wash Facility are addressed  
2 in the Operable Unit (OU) 3 Miscellaneous Small Structures Phase II Implementation Plan for  
3 Above-Grade Decontamination and Dismantlement (DOE 2002) as Component 21A (Haul Road Wheel  
4 Wash Facility) and therefore is not addressed in this addendum.

5  
6 The remedial actions addressed in this A2PII Implementation Plan Addendum No. 1 include an estimated  
7 1,800 bank cubic yards (bcy) of impacted soil, and 1,100 bcy of debris.

8  
9 The concrete pad associated with the Equipment Wash Facility was broken using a hoe ram and left in  
10 place during October 2004. The excavation and disposition of the impacted soil and debris (including the  
11 broken Equipment Wash Facility Pad) are scheduled to be performed during November 2004.

## 2.0 PREDESIGN INVESTIGATIONS AND CHARACTERIZATION DATA

### 2.1 SUMMARY OF THE RI/FS INVESTIGATION

Extensive soil sampling was performed at the Fernald Closure Project (FCP) in the late 1980s and early 1990s as part of the OU5 Remedial Investigation and Feasibility Study (RI/FS, DOE 1995a and 1995b) to characterize the nature and extent of contamination resulting from uranium-metal production activities at the site. Information regarding soil sampling in A2PII, overall, can be found in the A2PII Implementation Plan. No constituents of concern (COCs) were found at significant levels in the Subcontractor Laydown Area as results of RI/FS sampling. No RI/FS samples were collected in the Equipment Wash Facility.

#### 2.1.1 Preliminary Constituents of Concern

Based on results of the RI/FS investigation, the Sitewide Excavation Plan (SEP, DOE 1998) presented a preliminary list of area-specific constituents of concern (ASCOCs) for Remediation Area 2 and stated that a more thorough screening of ASCOCs would be performed for each remediation area during the design phase.

#### 2.1.2 On-Site Disposal Facility Waste Acceptance Criteria

The On-Site Disposal Facility (OSDF) waste acceptance criteria (WAC) were established in the OU2 and OU5 Records of Decision (RODs, DOE 1996a and 1996b). Soil excavated from A2PII – Subarea 3 must meet these concentration-based WAC in OU5 ROD to be eligible for disposal in the OSDF. If soil exceeds the OSDF radiological WAC, it will have to be segregated for off-site disposal. For the special case of soil with above-WAC organic COCs, disposal at the OSDF is permitted if the soil treatment results in the COC levels fall below the established WAC. RI/FS data collected for all of A2PII were compared to the OSDF WAC to identify areas that exceed the OSDF WAC. This comparison confirmed that there are no known areas within A2PII exceeding the OSDF WAC. However, through excavation control the possibility of finding above-WAC material still exists.

#### 2.1.3 Final Remediation Levels for Soil

Like the OSDF WAC, the OU5 ROD established the final remediation levels (FRLs) for soil remediation. The FRLs for the revised list of COCs associated with the A2PII – Subarea 3 can be found in Table 2-2. FRLs are the cleanup goals for the FCP site and are defined as the average concentration of a contaminant that can remain in the soil and be considered protective of human health and the environment.

1 Remediation in the Equipment Wash Facility and Subcontractor Laydown Areas of A2PII – Subarea 3 will  
2 remove contaminated soil until the residual contaminant concentrations are at or below the respective FRL.  
3 The FRL for total uranium is 82 milligrams per kilogram (mg/kg) and a goal driven by the as low as  
4 reasonably achievable (ALARA) philosophy has been set to meet 50 mg/kg. The ALARA goal of  
5 50 mg/kg will be reached if soil exceeding 50 mg/kg is within one lift thickness (i.e., 3 feet + or - 1 foot) of  
6 soil exceeding the uranium FRL of 82 mg/kg. Given that no RI/FS data exists for the Equipment Wash  
7 Facility and data is limited in the Subcontractor Laydown Area, predesign sampling performed to further  
8 delineate the above-FRL contamination is discussed in Section 2.3.

#### 10 2.1.4 Hazardous Waste Management Units

11 There are no hazardous waste management units associated with this area.

#### 13 2.1.5 Underground Storage Tanks

14 There are no underground storage tanks associated with this area.

#### 16 2.1.6 Identification of Potentially Characteristic Areas

17 There are no potentially characteristic areas associated with this area.

#### 19 2.1.7 High Leachability Zones.

20 The OU5 FS Report did not identify any contamination zones in the A2PII boundary with the potential for  
21 leaching.

## 23 2.2 SUMMARY OF SURFACE AND SUBSURFACE PHYSICAL CONDITIONS

24 The Equipment Wash Facility Area is a flat, roughly football shaped area immediately south of the Silos  
25 area. The area is largely pavement. However, included in this area is a basin to the southwest of the  
26 facility itself and various above and below-surface utilities. A2PII – Subarea 4 bounds this area on the  
27 east, west, and south (see Figure 2-1). The area is bound by the Impacted Material Haul Road on the  
28 north.

30 The Subcontractor Laydown Area is a flat, irregularly shaped area (see Figure 2-2) to the west and south of  
31 the Storm Water Retention Basin (SWRB west). The area contains unimproved (gravel) and paved road  
32 and parking areas as well as grassy areas along the sides of the road and around the former Soil Pile (SP) 3.

33 Because the area has been used in the past and continues to be used for subcontractor trailers, various

1 above and below-surface utilities are present. The west access road bounds part of this area on the north.  
2 The SWRB (west) borders it to the east and the north. A2PII – Subarea 4 is directly to the west and the  
3 Trailer Complex Area of A2PII – Subarea 3 is to the south (see Figure 2-2).

## 4 5 2.3 SUMMARY OF PREDESIGN INVESTIGATIONS

6 A predesign investigation has been completed to provide information on the nature and extent of  
7 contamination in the Equipment Wash Facility and Subcontractor Laydown Areas per the Project Specific  
8 Plan (PSP) for the Predesign of A2PII – Subarea 3 (Supplement to 20300-PSP-0011, DOE 2004). The  
9 specific goal of the predesign investigation was to identify and/or delineate constituents of concern that  
10 exhibited concentrations greater than the OSDF WAC or the FRL. All sampling associated with this  
11 investigation was physical sampling.

12  
13 Sections 2.3.1 and 2.3.2 summarize and discuss the sampling and analysis performed under this  
14 investigation. Appendix B includes analytical results from the predesign investigation.

### 15 16 2.3.1 Surface Investigation

17 The Real-Time Radiation Tracking System (RTRAK) is utilized for larger flat areas that are readily  
18 accessible. The Radiation Scanning System (RSS) is utilized for smaller areas, gradual slopes, or areas not  
19 accessible by the RTRAK. The high-purity germanium (HPGe) detector is utilized for areas that are  
20 inaccessible to both the RTRAK and the RSS.

21  
22 Because overburden is present in a large portion of these areas, Real Time Measurement Systems were  
23 utilized on a limited basis. For available scanning information see Appendix C. All surface investigation  
24 was in the form of physical sampling. Sample points A2P2-SUB1 and A2P2-SUB2 indicate that  
25 above-FRL aroclor-1254 concentrations were found on the road along the eastern border of the  
26 Subcontractor Laydown Area.

### 27 28 2.3.2 Subsurface Investigations

#### 29 2.3.2.1 Extent of Above-WAC Contamination

30 A search of the Sitewide Environmental Database (SED) for data from all borings in the Equipment Wash  
31 Facility and Subcontractor Laydown Areas of A2PII – Subarea 3 indicated that no constituents exceeded  
32 OSDF WAC.

### 2.3.2.2 Extent of Above-FRL Contamination

The predesign approach was to establish an elevation that exhibited below-FRL conditions for all ASCOCs. All subsurface predesign samples within the Equipment Wash Facility and Subcontractor Laydown Areas of A2PII – Subarea 3 were collected under the A2PII – Subarea 3 Predesign PSP. The predesign data demonstrated below-FRL conditions for all ASCOC except aroclor-1254 and arsenic.

The above-FRL results for arsenic occur at depth along the portion of road adjacent to (on the west) the former SP-3. This COC was found at depths up to 3.5 feet. Because no surface contamination was found and the results and their corresponding depths display characteristics found in several adjacent areas, it is concluded that these levels are consistent with background conditions. No further investigation for this COC is planned.

Above-FRL conditions were found for aroclor-1254 at depths up to 2.5 feet in the Subcontractor Laydown Area (A2P2-SUB1, A2P2-SUB2, and A2P2-SUB4, see Figure 2-1). These samples are bound at a maximum depth of 2.5 feet. A2P2-SUB4 is vertically bound at 1.5 feet. Horizontal bounding was accomplished to the north, south, east and west by further sampling 5 feet in each of those directions (A2P2-SUB4N, A2P2-SUB4S, A2P2-SUB4E, and A2P2-SUB4W).

## 2.4 IDENTIFICATION OF AREA-SPECIFIC COCs

Table 2-1 identifies the preliminary list of COCs for Area 2 that was based on the results of sampling and analysis performed during the RI/FS investigation. Based on the results of predesign sampling and analysis, a revised list of COCs was developed (Table 2-1). The list of primary COCs is unchanged and the secondary COC list is reduced to arsenic and aroclor-1254. The predesign sampling identified above-FRL conditions along the road to the east of the Subcontractor Laydown Area and also roughly in the center of that area. There were no other COCs found in the predesign data with concentrations greater than the respective FRL.

## 2.5 ANTICIPATED EXCAVATION BOUNDARIES

### 2.5.1 Above-WAC Material

No above-WAC areas were found within the Equipment Wash Facility and Subcontractor Laydown Areas of A2PII – Subarea 3.

1    2.5.2 Above-FRL Material

2    No above-FRL areas were found within the Equipment Wash Facility area of A2PII – Subarea 3.

3

4    Above-FRL values for aroclor-1254 within the Subcontractor Laydown Area (A2P2-SUB1, A2P2-SUB2  
5    and A2P2-SUB4) are on the surface and at depth. The above-FRL conditions found along the road are  
6    bound at a maximum of 2.5 feet. A2P2-SUB-1 and A2P2-SUB2 are bound on the east by the SWRB  
7    (west), which offers limited options for further bounding at this point due to the continued usage of the  
8    basin. Samples within the Subcontractor Laydown Area and adjacent to the samples from the road indicate  
9    that the contamination does not extend to the areas along the side of the road. Based on this information,  
10   excavation should occur to a depth of 2.5 feet along the entire length of the road adjacent to the  
11   Subcontractor Laydown Area.

12

13   Excavation associated with A2P2-SUB4, which is located approximately in the center of the Subcontractor  
14   Laydown Area (parking lot), should be modeled to reach a depth of 3.5 feet at this point. Bounding  
15   samples (A2P2-SUB4N, A2P2-SUB4S, A2P2-SUB4E, and A2P2-SUB4W) were collected offset at  
16   approximately 5 feet.

**TABLE 2-1  
REVISED AREA-SPECIFIC CONSTITUENTS OF CONCERN**

<b>Primary COCs</b>	<b>Secondary COCs</b>
Radium-226	Arsenic
Radium-228	Aroclor-1254
Thorium-228	
Thorium-232	
Total Uranium	

**TABLE 2-2  
SOIL FINAL REMEDIATION LEVELS**

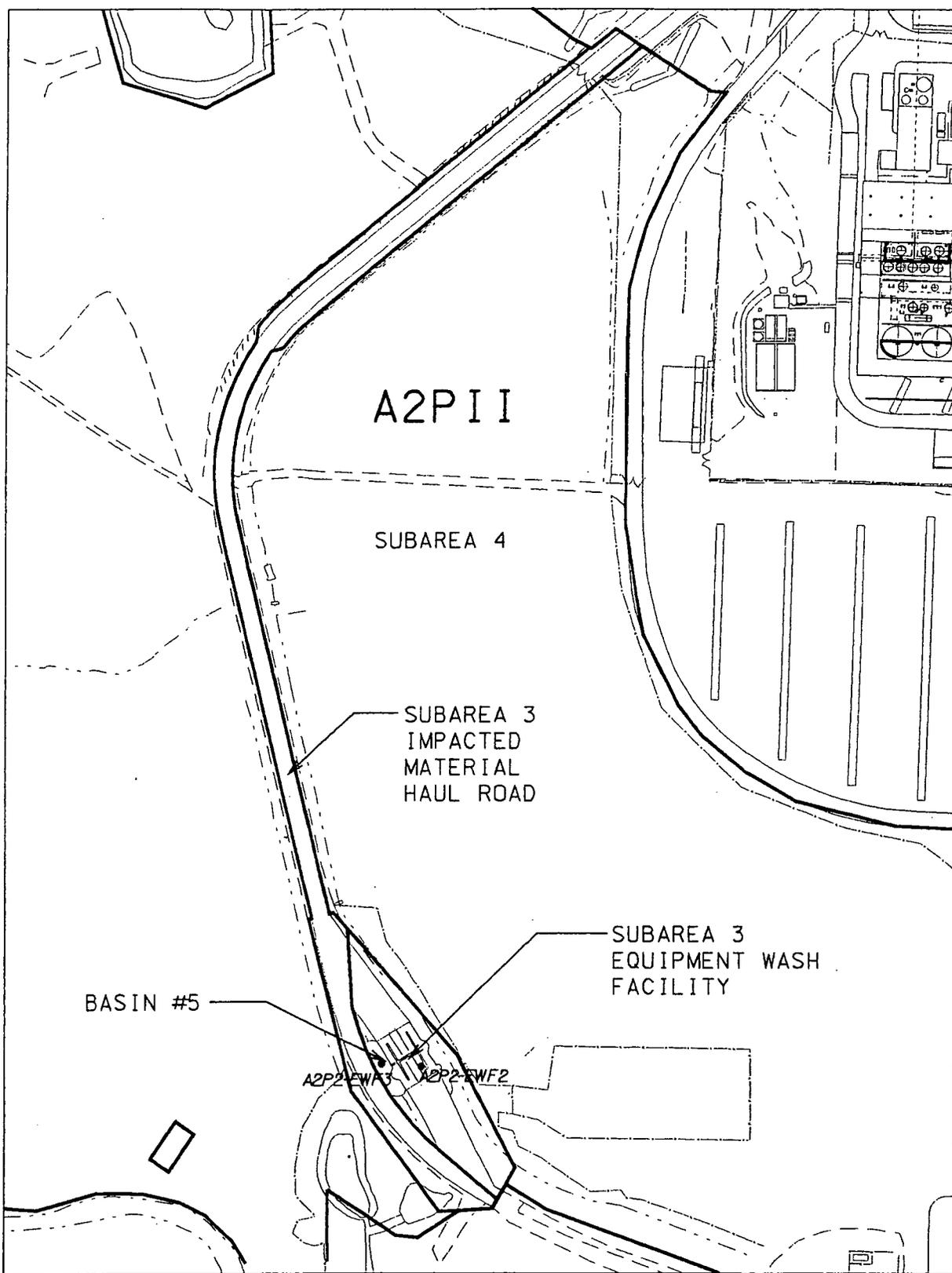
<b>Constituent</b>	<b>Final Remediation Level</b>
<b>Radionuclides</b>	
Radium-226	1.7 pCi/g
Radium-228	1.8 pCi/g
Thorium-228	1.7 pCi/g
Thorium-232	1.5 pCi/g
Total Uranium	82 mg/kg
<b>Inorganics</b>	
Arsenic	12 mg/kg

pCi/g – picoCuries per gram

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STATE PLANAR COORDINATE SYSTEM 1983

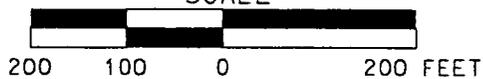
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• SAMPLE LOCATION

SCALE



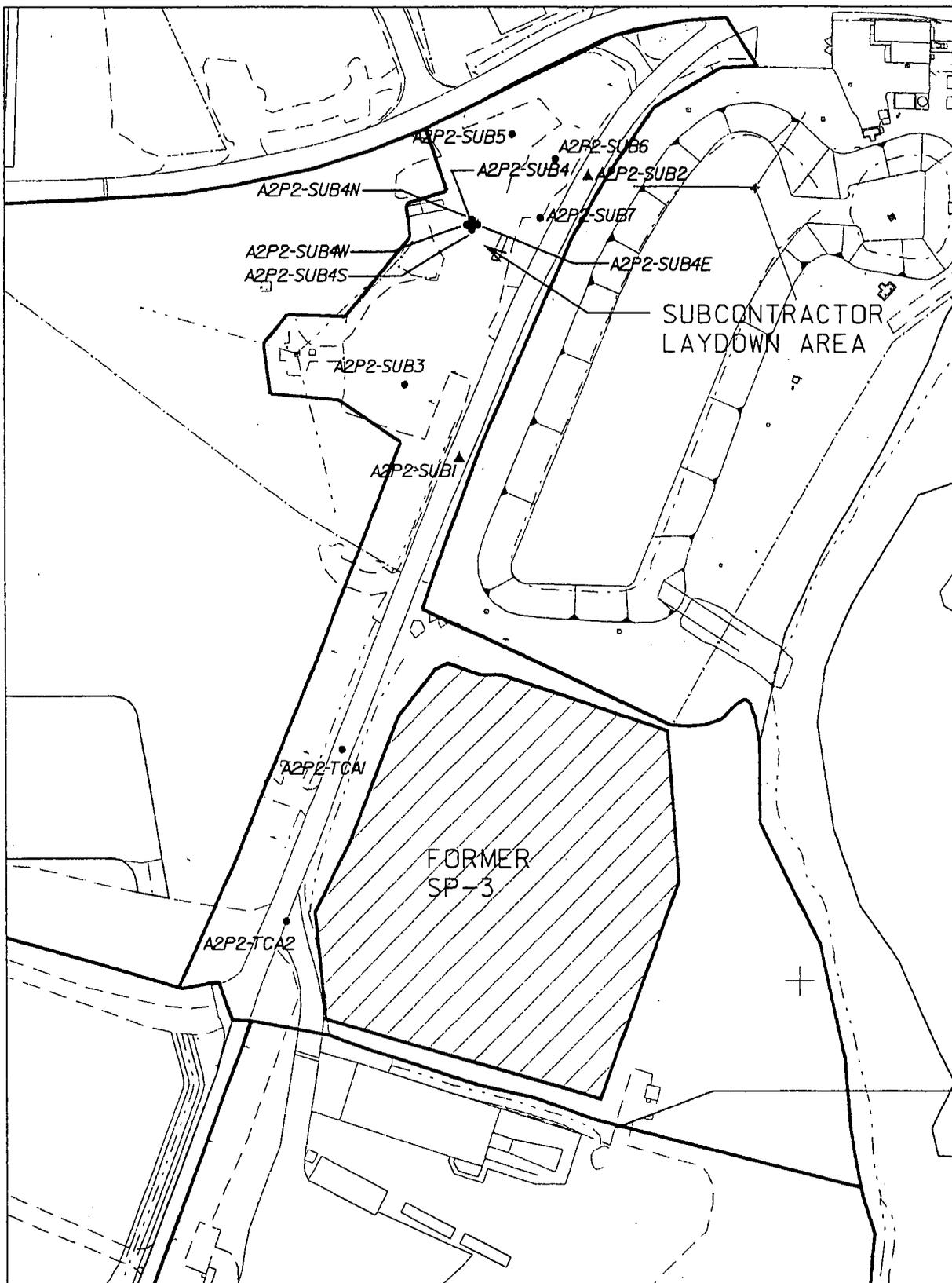
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FIGURE 2-1. MAP OF THE PREDESIGN SAMPLE LOCATIONS FOR THE EQUIPMENT WASH FACILITY AREA

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STATE PLANAR COORDINATE SYSTEM 1983

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LEGEND:

- ▲ ABOVE-FRL LOCATION
- SAMPLE LOCATION

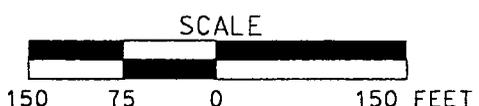


FIGURE 2-2. MAP OF PREDESIGN SAMPLE LOCATIONS FOR THE SUBCONTRACTOR LAYDOWN AREA

### 3.0 REMEDIAL ACTION APPROACH

This section describes the technical approach to the remedial action for Addendum No. 1, A2PII – Subarea 3 (Infrastructure) Equipment Wash Facility and Subcontractor Laydown Area. The remedial action approach discussed in this addendum follows the general guidance provided in Sections 3.0 and 4.0 and Appendix F of the SEP.

#### 3.1 SITE PREPARATION

Site preparation activities associated with remediation include site boundaries and controls, surveying and site layout, and surface water management. Additional details are provided in the following text and in the referenced construction drawings and technical specifications (see Appendix A).

##### 3.1.1 Site Boundaries and Controls

Construction safety fence will be installed around the perimeter of the work area. Fencing will not be installed over the roadway. Instead, rope gates will be strung over the roadway.

##### 3.1.2 Surveying and Site Layout

The excavation area will be surveyed and staked to determine the limit of site work including limits of excavation, and surface water control. After remedial excavation, the area will be surveyed to determine final excavated volumes and to allow as-built drawings to be prepared.

##### 3.1.3 Surface Water Management

###### 3.1.3.1 Surface Water Management Equipment Wash Facility

Surface water will be collected in Basin 5 immediately adjacent to the Equipment Wash Facility and within the excavation during the remediation of the Equipment Wash Facility. An existing above-grade 3-inch high-density polyethylene (HDPE) pipeline routed from Basin 5 to the SWRB will be used to dewater the excavation area (see design drawing 99X-5500-G-00815). Water collected in Basin 5 will be pumped directly to the SWRB through the existing above-grade 3-inch HDPE pipeline for subsequent Advanced Waste Water Treatment (AWWT) Facility Phase I treatment. Power to an existing sump pumps located in Basin 5 will be taking out of service as part of the area utility isolations being performed to assure worker protection. However, temporary power source will be established to operate an alternate pump.

1 Water collected in depressions within the excavation of the Equipment Wash Facility will be pumped or  
2 drained to Basin 5, as needed. Backflow from the above-grade 3-inch HDPE pipeline will reenter Basin 5  
3 when the pump is shut off.

4  
5 Vegetation is well established in the ditches near the Equipment Wash Facility work area and will naturally  
6 trap some sediments released inadvertently from the work area. Runoff from this general area discharges  
7 to Paddys Run primarily via a Permitted National Pollution Discharge Elimination System (NPDES) Storm  
8 Water Outfall (STRM 4004) located southwest of the work area (see Figure 3-1). Silt fence will be  
9 installed at the inlet of a culvert that drains the ditch adjacent to the Equipment Wash Facility.

#### 10 11 3.1.3.2 Surface Water Management Subcontractor Laydown Area

12 Surface water will be collected within the excavation during the remediation of the Subcontractor  
13 Laydown Area. Since the SWRB is located immediately adjacent to the work area, water collected within  
14 the Subcontractor Laydown Area will be pumped or drained directly to the SWRB for subsequent AWWT  
15 Phase I treatment.

#### 16 17 3.1.4 Utility Isolation

18 Due to the limited number of utilities in this area, reduced or minimal risk of unknown utilities, and remote  
19 excavation locations, the isolation of utilities through trenching is not necessary for excavation. However,  
20 the waters lines and electrical power lines that serviced the Equipment Wash Facility will be physically  
21 isolated to deactivate the few utilities within the work area. There are a number of overhead power and  
22 communication lines within and near the work area/haul route. Safe work practices will be used when  
23 working near overhead utilities.

#### 24 25 3.2 SOIL EXCAVATION AND IMPACTED MATERIAL REMOVAL

26 Excavation will be performed using an excavator, hoe-ram, bulldozer, and articulated haul trucks. The  
27 hoe-ram will be used to break the reinforced concrete pad of the Equipment Wash Facility so that the  
28 material can be loaded onto haul trucks for disposal in the OSDF. A bulldozer will push the asphalt  
29 pavement and underlying gravel to a load-out pile for the excavator to load the material into the haul trucks  
30 to be hauled for disposal in the OSDF. The excavator will perform surgical excavations where required.  
31 Real-time monitoring will be performed on newly exposed soil lying below gravel, asphalt, and concrete  
32 surfaces. Real-time monitoring is required to identify above-WAC zones prior to general excavation  
33 operations; although, no above-WAC materials are anticipated under this scope of work. If above-WAC

1 material is discovered within the excavation area, it will be excavated and hauled to stockpile SP-7 for  
2 subsequent shipment to an off-site permitted disposal facility. A water truck will be used to support dust  
3 control during loading and excavation.

4  
5 The haul route for this excavation will go around the perimeter of the West Construction Parking Lot (89E)  
6 (see design drawing 99X-5500-G-00816) to a temporary staging area in the Area 4B work area. Spotters  
7 will be utilized in the parking lot area to control traffic in the haul route to assure personnel safety.  
8 Material will be reloaded at the temporary staging area for direct hauled to either the OSDF for on-site  
9 disposition or SP-7 for subsequent off-site disposition.

### 11 3.3 PRECERTIFICATION/CERTIFICATION

12 After removal of at-and below-grade debris and impacted soil, precertification and real-time monitoring  
13 will be performed. A Certification Design Letter and associated Certification Sampling PSP will be  
14 submitted at a future date, where certification samples will be collected for chemical and radiological  
15 analysis from the excavation.

16  
17 After the certification samples have been taken and real-time monitoring confirms that no more soil needs  
18 to be removed, the excavation will be backfill and a gravel roadway will be reestablished where the  
19 previous paved roadway was removed. The new roadway is needed to support access to the Silos and  
20 Waste Pits Projects work area during Silo operations when the current access way will be closed to  
21 non-production traffic.

22  
23 Upon approval of the Certification Report, Basin 5 will be filled in and contoured to drain to the ditch east  
24 of the Equipment Wash Facility that subsequently drains through a culvert under the roadway to Paddys  
25 Run via the Permitted NPDES Storm Water Outfall STRM 4004 (see Figure 3-1). Sufficient fill will be  
26 placed in the Basin 5 excavation to allow for the construction of a shoulder for the adjacent roadway.

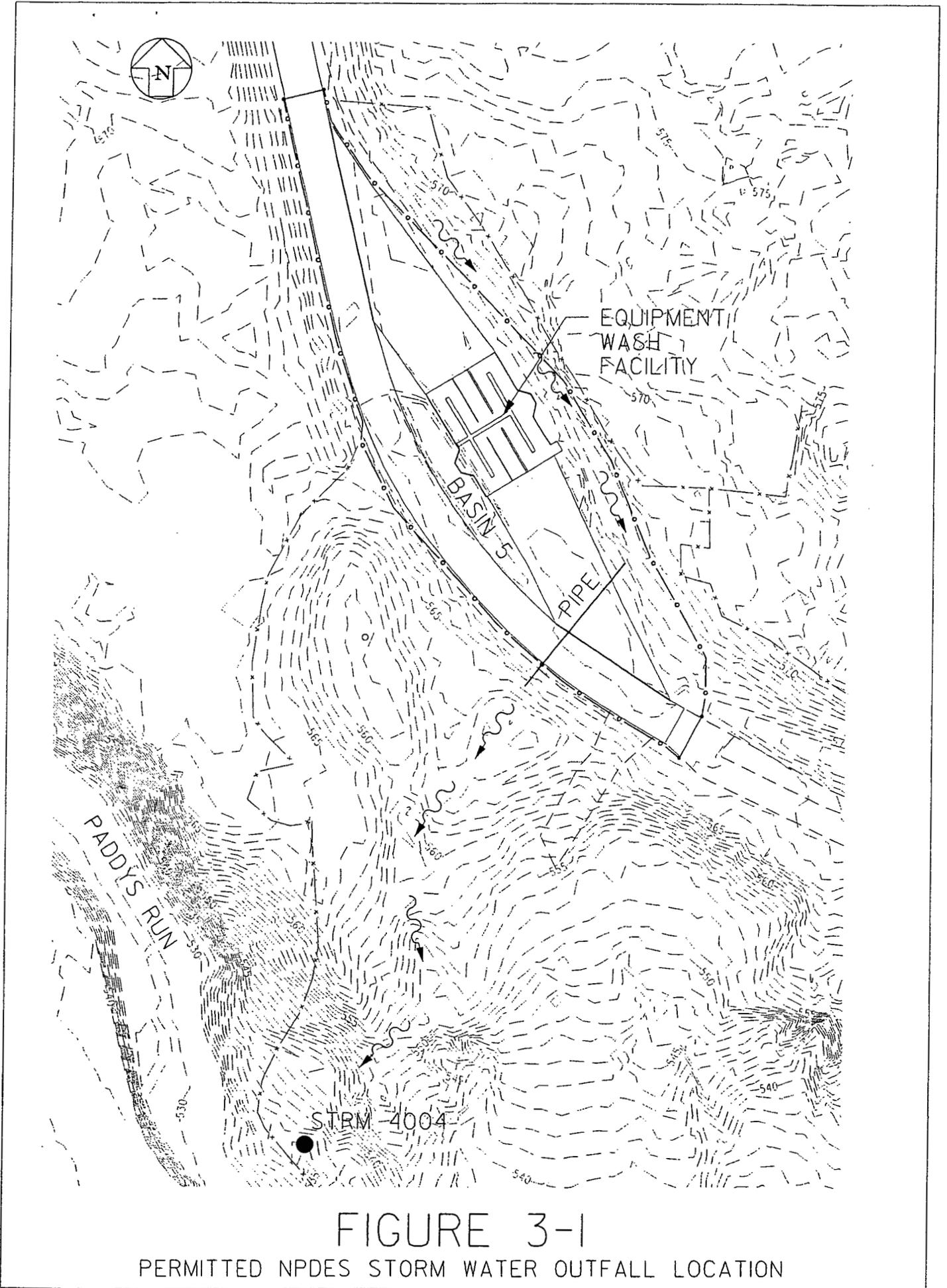


FIGURE 3-1

PERMITTED NPDES STORM WATER OUTFALL LOCATION

**REFERENCES**

- 1  
2  
3  
4 U.S. Department of Energy, 1995a, "Remedial Investigation Report for Operable Unit 5," Final, Fernald  
5 Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.  
6  
7 U.S. Department of Energy, 1995b, "Feasibility Study Report for Operable Unit 5," Final, Fernald  
8 Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.  
9  
10 U.S. Department of Energy, 1996a, "Record of Decision for Remedial Action at Operable Unit 2," Final,  
11 Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.  
12  
13 U.S. Department of Energy, 1996b, "Record of Decision for Remedial Action at Operable Unit 5," Final,  
14 Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.  
15  
16 U.S. Department of Energy, 1998, "Sitewide Excavation Plan," Final, Fernald Environmental Management  
17 Project, DOE, Fernald Area Office, Cincinnati, Ohio.  
18  
19 U.S. Department of Energy, 2002, "Operable Unit 3 Miscellaneous Small Structures Phase II  
20 Implementation Plan for Above-Grade Decontamination and Dismantlement," Final, Fernald  
21 Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.  
22  
23 U.S. Department of Energy, 2003, "Implementation Plan for Area 2, Phase II," Draft Final, Revision B,  
24 Fernald Closure Project, DOE, Fernald Area Office, Cincinnati, Ohio.  
25  
26 U.S. Department of Energy, 2004, "Project Specific Plan for the Predesign of Area 2, Phase II – Subarea 3  
27 (Supplement to 20300-PSP-0011)" Revision 1, Fernald Closure Project, DOE, Fernald Area Office,  
28 Cincinnati, Ohio.

**APPENDIX A**

**LIST OF TECHNICAL SPECIFICATIONS AND DRAWINGS**

FCP-A2PIIS3-SUB-EWF-ADD1  
 20450-PL-0001, Revision B, Addendum 1  
 November 2004

**APPENDIX A**  
**LIST OF TECHNICAL SPECIFICATIONS AND DRAWINGS**

**Drawings**

<b>Drawing Number</b>	<b>Sheet</b>	<b>Title</b>
99X-5500-G-00814	0	Area 2 Phase II Subcontractor Laydown Excavation Plan
99X-5500-G-00815	0	Area 2 Phase II Equipment Wash Facility Excavation Plan
99X-5500-G-00816	0	Area 2 Phase II Disposal Haul Route

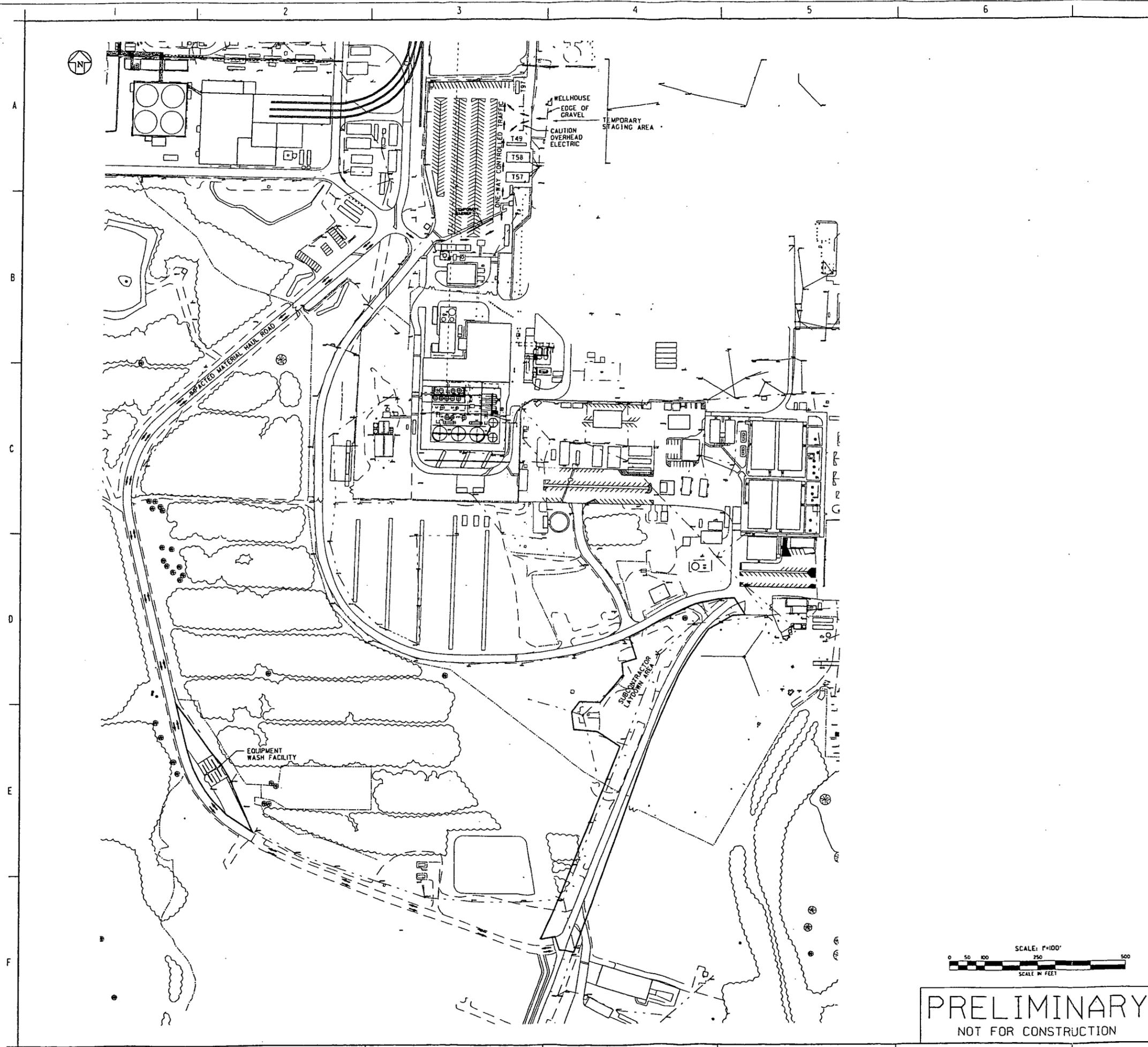
**Technical Specifications for SDFP Excavation for Remediation, Document 20300-TS-0001**

<b>Section</b>	<b>Title</b>
02150	Traffic Control
02205	Impacted Material Excavation
02206	Earthwork for Remediation
02207	Area Isolation Trenching
02275	Surface Water Management and Erosion Control for Remediation

**Specifications Referenced from OSDF Design:**  
**OSDF Technical Specifications, Document 20104-TS-0002**

<b>Section</b>	<b>Title</b>
02100	Surveying
02200	Earthwork
02215	Trenching and Backfilling
02230	Road Construction
02270	Surface Water Management and Erosion Control
02714	Geotextiles
02930	Vegetation

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GENERAL NOTES

1. UTILIZE SPOTTERS IN PARKING LOT FOR TRAFFIC CONTROL.
2. CONTROL HAUL ROUTE SHOWN FROM EXCAVATION AREA TO TEMPORARY STAGING AREA AS CLEAN HAUL ROUTE.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPV.

UNITED STATES  
DEPARTMENT OF ENERGY  
FERNALD CLOSURE PROJECT

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**FLUOR FERNALD, INC.**

PROJECT NAME  
  
DRAWING TITLE  
AREA 2 PHASE II  
DISPOSAL HAUL ROUTE

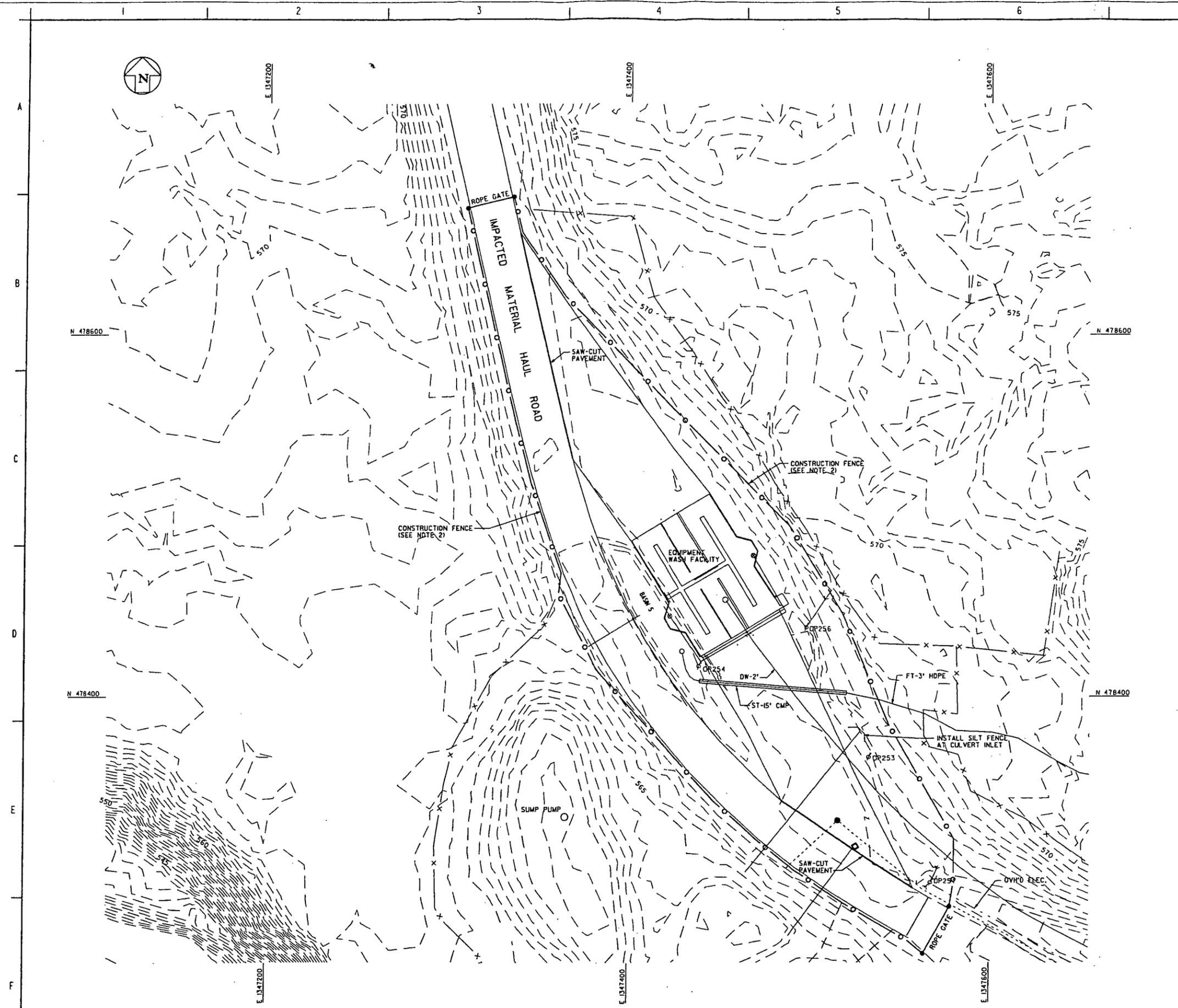
APPROVALS	
COORDINANT ENGR. CIVIL & STR.	SAFETY ENGR. MAINTENANCE
ELECTRICAL ENGINEER	FIRE PROTECT. WASTE MANAGE.
INSTRUMENT MECHANICAL	SECURITY QA
	CONSTRUCTION



**PRELIMINARY**  
NOT FOR CONSTRUCTION

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			20450		G-1	A
REV. PROJECT NO.	FILENAME	99X-5500-G-00816				

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**GENERAL NOTES**

- SITE PREPARATION**
1. PRIOR TO BEGINNING REMEDIATION, UNDERGROUND WATER AND ELECTRICAL UTILITIES TO BE PHYSICALLY ISOLATED (BY OTHERS).
  2. PRIOR TO REMEDIATION, ESTABLISH CONSTRUCTION SAFETY FENCE AND ROPE GATES AROUND PERIMETER OF WORK ZONE. USE EXISTING CERTIFICATION FENCING AS NEEDED.
- REMEDICATION**
3. BREAK EQUIPMENT WASH FACILITY PAD.
  4. EXCAVATE ASPHALT PAVEMENT DRIVEWAYS AND SUBGRADE GRAVEL FROM SAW-CUT PAVEMENT LINES TO EQUIPMENT WASH FACILITY.
  5. REMOVE DEBRIS FROM BASIN 5.
  6. DISPOSE DEBRIS AND IMPACTED SOIL IN OSDF.
  7. PERFORM REAL-TIME MONITORING (BY OTHERS) ON NEWLY EXPOSED SOIL LYING BELOW GRAVEL, ASPHALT, AND CONCRETE SURFACES.
  8. AWAC MATERIAL DISCOVERED WITHIN THE EXCAVATION AREA TO BE EXCAVATED AND HAULED TO SP-7.
- DEWATERING PLAN**
9. SURFACE WATER TO BE COLLECTED IN BASIN 5 AND PUMPED TO STORMWATER RETENTION BASIN THROUGH THE EXISTING ABOVE GRADE 3 INCH HDPE PIPELINE.
  10. WATER COLLECTED WITHIN THE EXCAVATION TO BE DRAINED OR PUMPED TO BASIN 5 AS NEEDED.
- RESTORATION**
11. AFTER CERTIFICATION SAMPLES HAVE BEEN TAKEN AND REAL-TIME MONITORING CONFIRMS THAT NO MORE EXCAVATION IS REQUIRED, BACKFILL THE EXCAVATION WITH REJECT MATERIAL FROM DSDP BORROW AREA.
  12. FILL AND SLOPE BASIN 5 TO DRAIN TO DITCH EAST OF THE EQUIPMENT WASH FACILITY.

ISSUED FOR AGENCY REVIEW	1/22/04	RML
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**UNITED STATES DEPARTMENT OF ENERGY  
FERNALD CLOSURE PROJECT**

THIS DRAWING PREPARED BY  
**FLUOR FERNALD, INC.**

PROJECT NAME  
DRAWING TITLE  
**AREA 2 PHASE II  
EQUIPMENT WASH FACILITY EXCAVATION PLAN**

**APPROVALS**

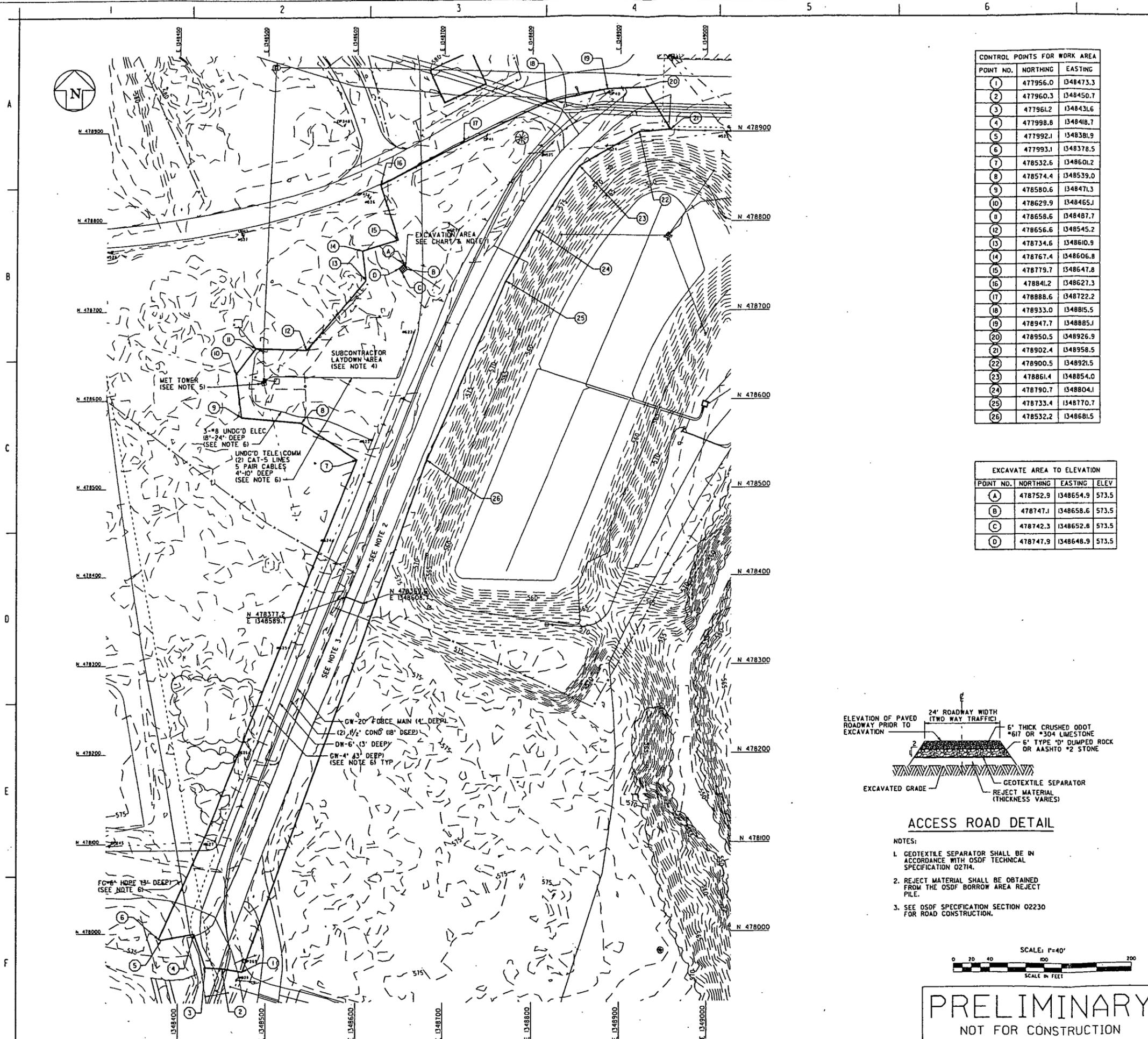
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CIVIL & STR.	MAINTENANCE
ELECTRICAL	FIRE PROTECT.
ENGINEER	WASTE MANAGE.
INSTRUMENT	SECURITY
MECHANICAL	QA
WAD	CONSTRUCTION
CHECKED	CHARACTERIZATION
APPROVED	



**PRELIMINARY**  
NOT FOR CONSTRUCTION

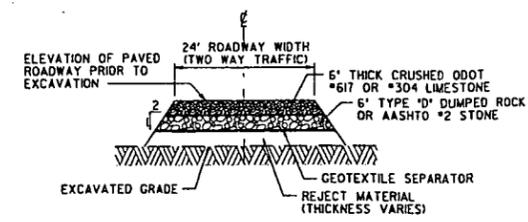
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POINT NO.	NORTHING	EASTING
1	477956.0	1348473.3
2	477960.3	1348450.7
3	477961.2	1348431.6
4	477998.8	1348418.7
5	477992.1	1348381.9
6	477993.1	1348378.5
7	478532.6	1348601.2
8	478574.4	1348539.0
9	478580.6	1348471.3
10	478629.9	1348465.1
11	478658.6	1348487.7
12	478656.6	1348545.2
13	478734.6	1348610.9
14	478767.4	1348606.8
15	478779.7	1348647.8
16	478841.2	1348627.3
17	478888.6	1348722.2
18	478933.0	1348815.5
19	478947.7	1348885.1
20	478950.5	1348926.9
21	478902.4	1348958.5
22	478900.5	1348921.5
23	478861.4	1348854.0
24	478790.7	1348804.1
25	478733.4	1348770.7
26	478532.2	1348681.5

POINT NO.	NORTHING	EASTING	ELEV.
A	478752.9	1348654.9	573.5
B	478747.1	1348658.6	573.5
C	478742.3	1348652.8	573.5
D	478747.9	1348648.9	573.5



**ACCESS ROAD DETAIL**

- NOTES:
1. GEOTEXTILE SEPARATOR SHALL BE IN ACCORDANCE WITH OSDF TECHNICAL SPECIFICATION 02714.
  2. REJECT MATERIAL SHALL BE OBTAINED FROM THE OSDF BORROW AREA REJECT PILE.
  3. SEE OSDF SPECIFICATION SECTION 02230 FOR ROAD CONSTRUCTION.



**PRELIMINARY**  
NOT FOR CONSTRUCTION

**GENERAL NOTES**

1. PRIOR TO REMEDIATION, ESTABLISH CONSTRUCTION SAFETY FENCE AND ROPE GATES AROUND PERIMETER OF WORK ZONE. USE EXISTING CERTIFICATION FENCING AS NEEDED.
2. FOR EXCAVATIONS DEEPER THAN 4 FEET, EXCAVATE SIDE SLOPES AS DETERMINED BY AN OSHA COMPETENT PERSON.
3. REMOVE PAVEMENT FROM ROADWAY AND PERFORM A 3D-INCH EXCAVATION OF SUBSURFACE GRAVEL AND SOIL UNDER PAVEMENT.
4. REMOVE PAVEMENT AND SUBSURFACE GRAVEL FROM ROADWAY.
5. REMOVE SURFACE GRAVEL AND DEBRIS FROM THE SUBCONTRACTOR LAYDOWN AREA.
6. PROTECT THE MET-TOWER AND ASSOCIATED GUY WIRES AND ANCHORS.
7. PROTECT UNDERGROUND DW, GW, TELE, AND ELEC. UTILITIES.
8. REMEDIAL EXCAVATION ACTIVITIES GOVERNED BY THIS DRAWING ARE LIMITED TO THE EXCAVATION LIMITS, SHOWN ON THIS DRAWING.
9. AFTER CERTIFICATION SAMPLES HAVE BEEN TAKEN AND REAL-TIME MONITORING CONFIRMS THAT NO MORE EXCAVATION IS REQUIRED, RE-ESTABLISH ROADWAY PER ACCESS ROAD DETAIL.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR AGENCY REVIEW	1/2/04	RML	

**UNITED STATES DEPARTMENT OF ENERGY**  
**FERNALD CLOSURE PROJECT**  
THIS DRAWING PREPARED BY  
**FLUOR FERNALD, INC.**

PROJECT NAME  
**AREA 2 PHASE II**  
**SUBCONTRACTOR LAYDOWN AREA EXCAVATION PLAN**

APPROVALS	
COGNIZANT ENG.	SAFETY ENG.
CIVIL & STR.	MAINTENANCE
ELECTRICAL	FIRE PROTECT.
ENGINEER	WASTE MANAGE.
INSTRUMENT	SECURITY
MECHANICAL	QA
WAO	CONSTRUCTION
CHECKED	CHARACTERIZATION
APPROVED	

DRAWN BY: R.M. LINDGREN    PROJECT NO. 720550    DRAWING NO. CODE NO. 99X-5500-G-00814    SHEET NO. G-3    REV. NO. A  
RES. PROJECT NO. 99x00814

**APPENDIX B**

**PREDESIGN CHARACTERIZATION DATA**

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A2P2-EWF2	A2P2-EWF2^1-L	09/22/2004	0.0	0.5	1,1-Dichloroethene	0.454	ug/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-L	09/22/2004	0.0	0.5	Bromodichloromethane	0.894	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Aroclor-1254	1.6	ug/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Aroclor-1260	1.4	ug/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Arsenic	7.87	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Benzo(a)pyrene	40	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Beryllium	0.729	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Cesium-137	0.0762	pCi/g	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Dibenzo(a,h)anthracene	20	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Dieldrin	1.6	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Lead	9.79	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Radium-226	1.07	pCi/g	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Technetium-99	0.0702	pCi/g	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Thorium-230	1.3	pCi/g	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^1-MPRS	09/22/2004	0.0	0.5	Uranium, Total	6.35	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-L	09/22/2004	1.0	1.5	1,1-Dichloroethene	5.01	ug/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-L	09/22/2004	1.0	1.5	Bromodichloromethane	0.903	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Aroclor-1254	4.45	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Aroclor-1260	4.45	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Arsenic	11	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Benzo(a)pyrene	252	ug/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Beryllium	1.14	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Cesium-137	0.0534	pCi/g	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Dibenzo(a,h)anthracene	22.2	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Dieldrin	0.639	ug/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Lead	17.6	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Radium-226	1.17	pCi/g	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Technetium-99	-0.0159	pCi/g	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Thorium-230	1.87	pCi/g	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^3-MPRS	09/22/2004	1.0	1.5	Uranium, Total	4.07	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^5-L	09/22/2004	2.0	2.5	1,1-Dichloroethene	1.57	ug/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^5-L	09/22/2004	2.0	2.5	Bromodichloromethane	1.01	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Aroclor-1254	4.16	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Aroclor-1260	4.16	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Arsenic	3.52	mg/kg	NV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Benzo(a)pyrene	41.6	ug/kg	UNV	478453.432	1347460.694
A2P2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Beryllium	1.05	mg/kg	NV	478453.432	1347460.694

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Cesium-137	0.0676	pCi/g	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Dibenzo(a,h)anthracene	20.8	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Dieldrin	1.66	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Lead	15.1	mg/kg	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Radium-226	1.55	pCi/g	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Technetium-99	-0.0897	pCi/g	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Thorium-230	2.04	pCi/g	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^5-MPRS	09/22/2004	2.0	2.5	Uranium, Total	6.04	mg/kg	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-L	09/22/2004	3.0	3.5	1,1-Dichloroethene	0.954	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-L	09/22/2004	3.0	3.5	Bromodichloromethane	0.954	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Aroclor-1254	4.03	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Aroclor-1260	4.03	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Arsenic	5.34	mg/kg	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Benzo(a)pyrene	40.3	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Beryllium	1	mg/kg	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Cesium-137	0.033	pCi/g	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Dibenzo(a,h)anthracene	20.1	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Dieldrin	2.42	ug/kg	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Lead	14.1	mg/kg	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Radium-226	1.07	pCi/g	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Technetium-99	0.14	pCi/g	UNV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Thorium-230	1.45	pCi/g	NV	478453.432	1347460.694
2-EWF2	A2P2-EWF2^7-MPRS	09/22/2004	3.0	3.5	Uranium, Total	2.53	mg/kg	NV	478453.432	1347460.694
2-EWF3	A2P2-EWF3^1-L	08/02/2004	0.0	0.5	1,1-Dichloroethene	1.31	ug/kg	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-L	08/02/2004	0.0	0.5	Bromodichloromethane	1.31	ug/kg	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1254	43.4	ug/kg	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1260	43.4	ug/kg	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Arsenic	5.88	mg/kg	NV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Benzo(a)pyrene	43.4	ug/kg	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Beryllium	0.595	mg/kg	NV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Cesium-137	0.0337	pCi/g	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Dibenzo(a,h)anthracene	43.4	ug/kg	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Dieldrin	17.3	ug/kg	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Lead	13.5	mg/kg	NV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Radium-226	0.726	pCi/g	NV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Technetium-99	-0.109	pCi/g	UNV	478456.82	1347397.246
2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Thorium-230	3.07	pCi/g	NV	478456.82	1347397.246

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A2P2-EWF3	A2P2-EWF3^1-MPRS	08/02/2004	0.0	0.5	Uranium, Total	4.65	mg/kg	NV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-L	08/02/2004	1.0	1.5	1,1-Dichloroethene	1.05	ug/kg	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-L	08/02/2004	1.0	1.5	Bromodichloromethane	1.05	ug/kg	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Aroclor-1254	4.24	ug/kg	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Aroclor-1260	4.24	ug/kg	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Arsenic	11.4	mg/kg	NV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Benzo(a)pyrene	42.4	ug/kg	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Beryllium	0.969	mg/kg	NV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Cesium-137	0.0409	pCi/g	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Dibenzo(a,h)anthracene	42.4	ug/kg	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Dieldrin	1.7	ug/kg	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Lead	13.9	mg/kg	NV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Radium-226	1.66	pCi/g	NV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Technetium-99	1.01	pCi/g	UNV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Thorium-230	3.13	pCi/g	NV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	Uranium, Total	5.56	mg/kg	NV	478456.82	1347397.246
A2P2-EWF3	A2P2-EWF3^3-MPRS	08/02/2004	1.0	1.5	1,1-Dichloroethene	1.06	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-L	07/07/2004	0.0	0.5	Bromodichloromethane	1.06	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-L	07/07/2004	0.0	0.5	Aroclor-1254	1180	ug/kg	-	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Aroclor-1260	177	ug/kg	U	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Arsenic	1.9	mg/kg	U	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Benzo(a)pyrene	70.4	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Beryllium	0.653	mg/kg	J	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Dibenzo(a,h)anthracene	70.4	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Dieldrin	0.709	ug/kg	U	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Lead	4.31	mg/kg	U	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^1-MPRS	07/07/2004	0.0	0.5	Uranium, Total	5.83	mg/kg	NV	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-L	07/07/2004	1.0	1.5	1,1-Dichloroethene	1.01	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-L	07/07/2004	1.0	1.5	Bromodichloromethane	1.01	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Aroclor-1254	681	ug/kg	-	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Aroclor-1260	88.2	ug/kg	U	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Arsenic	3.06	mg/kg	U	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Benzo(a)pyrene	70.1	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Beryllium	0.276	mg/kg	J	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Dibenzo(a,h)anthracene	70.1	ug/kg	UJ	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Dieldrin	0.705	ug/kg	U	478516.215	1348659.361
A2P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Lead	6.81	mg/kg	J	478516.215	1348659.361

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
P2-SUB1	A2P2-SUB1^3-MPRS	07/07/2004	1.0	1.5	Uranium, Total	2.06	mg/kg	UNV	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-L	07/07/2004	2.0	2.5	1,1-Dichloroethene	1.17	ug/kg	UJ	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-L	07/07/2004	2.0	2.5	Bromodichloromethane	1.17	ug/kg	UJ	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Aroclor-1254	9.84	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Aroclor-1260	9.84	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Arsenic	0.97	mg/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Benzo(a)pyrene	78.5	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Beryllium	0.407	mg/kg	J	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Dibenzo(a,h)anthracene	78.5	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Dieldrin	0.788	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Lead	9.9	mg/kg	J	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^5-MPRS	07/07/2004	2.0	2.5	Uranium, Total	2.78	mg/kg	NV	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-L	07/07/2004	3.0	3.5	1,1-Dichloroethene	1.17	ug/kg	UJ	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-L	07/07/2004	3.0	3.5	Bromodichloromethane	1.17	ug/kg	UJ	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Aroclor-1254	10.3	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Aroclor-1260	10.3	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Arsenic	10.3	mg/kg	J	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Benzo(a)pyrene	82.4	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Beryllium	0.981	mg/kg	J	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Dibenzo(a,h)anthracene	82.4	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Dieldrin	0.823	ug/kg	U	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Lead	14.9	mg/kg	J	478516.215	1348659.361
P2-SUB1	A2P2-SUB1^7-MPRS	07/07/2004	3.0	3.5	Uranium, Total	3.82	mg/kg	UNV	478516.215	1348659.361
P2-SUB2	A2P2-SUB2^1-L	07/07/2004	0.0	0.5	1,1-Dichloroethene	1.07	ug/kg	UJ	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-L	07/07/2004	0.0	0.5	Bromodichloromethane	1.07	ug/kg	UJ	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Aroclor-1254	565	ug/kg	-	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Aroclor-1260	91.6	ug/kg	U	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Arsenic	1.78	mg/kg	U	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Benzo(a)pyrene	73.1	ug/kg	U	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Beryllium	1.2	mg/kg	J	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Dibenzo(a,h)anthracene	73.1	ug/kg	U	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Dieldrin	0.732	ug/kg	U	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Lead	12.2	mg/kg	J	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^1-MPRS	07/07/2004	0.0	0.5	Uranium, Total	9.52	mg/kg	NV	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^3-L	07/07/2004	1.0	1.5	1,1-Dichloroethene	1.16	ug/kg	UJ	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^3-L	07/07/2004	1.0	1.5	Bromodichloromethane	1.16	ug/kg	UJ	478794.674	1348787.356
P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Aroclor-1254	2.1	ug/kg	J	478794.674	1348787.356

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Aroclor-1260	9.58	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Arsenic	1.86	mg/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Benzo(a)pyrene	77.6	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Beryllium	0.464	mg/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Dibenzo(a,h)anthracene	77.6	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Dieldrin	0.766	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Lead	13.4	mg/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^3-MPRS	07/07/2004	1.0	1.5	Uranium, Total	2.81	mg/kg	NV	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-L	07/07/2004	2.0	2.5	1,1-Dichloroethene	1.18	ug/kg	UJ	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-L	07/07/2004	2.0	2.5	Bromodichloromethane	1.18	ug/kg	UJ	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Aroclor-1254	10.1	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Aroclor-1260	10.1	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Arsenic	2.55	mg/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Benzo(a)pyrene	80.4	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Beryllium	0.465	mg/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Dibenzo(a,h)anthracene	80.4	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Dieldrin	0.809	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Lead	13.5	mg/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^5-MPRS	07/07/2004	2.0	2.5	Uranium, Total	5.94	mg/kg	NV	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-L	07/07/2004	3.0	3.5	1,1-Dichloroethene	1.21	ug/kg	UJ	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-L	07/07/2004	3.0	3.5	Bromodichloromethane	1.21	ug/kg	UJ	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Aroclor-1254	10	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Aroclor-1260	10	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Arsenic	6.59	mg/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Benzo(a)pyrene	124	ug/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Beryllium	0.83	mg/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Dibenzo(a,h)anthracene	80	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Dieldrin	0.801	ug/kg	U	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Lead	12.7	mg/kg	J	478794.674	1348787.356
A2P2-SUB2	A2P2-SUB2^7-MPRS	07/07/2004	3.0	3.5	Uranium, Total	2.89	mg/kg	UNV	478794.674	1348787.356
A2P2-SUB3	A2P2-SUB3^1-L	07/08/2004	0.0	0.5	1,1-Dichloroethene	1.17	ug/kg	U	478589.671	1348605.000
A2P2-SUB3	A2P2-SUB3^1-L	07/08/2004	0.0	0.5	Bromodichloromethane	1.17	ug/kg	U	478589.671	1348605.000
A2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Aroclor-1254	9.93	ug/kg	UNV	478589.671	1348605.000
A2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Aroclor-1260	9.93	ug/kg	UNV	478589.671	1348605.000
A2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Arsenic	1.2	mg/kg	NV	478589.671	1348605.000
A2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Benzo(a)pyrene	230	ug/kg	NV	478589.671	1348605.000
A2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Beryllium	0.395	mg/kg	NV	478589.671	1348605.000

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Dibenzo(a,h)anthracene	30.8	ug/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Dieldrin	0.795	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Lead	11.8	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^1-MPRS	07/08/2004	0.0	0.5	Uranium, Total	12.7	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-L	07/08/2004	1.0	1.5	1,1-Dichloroethene	1.13	ug/kg	U	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-L	07/08/2004	1.0	1.5	Bromodichloromethane	1.13	ug/kg	U	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Aroclor-1254	10.3	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Aroclor-1260	10.3	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Arsenic	3.67	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Benzo(a)pyrene	82.3	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Beryllium	0.502	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Dibenzo(a,h)anthracene	82.3	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Dieldrin	0.823	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Lead	12.8	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^3-MPRS	07/08/2004	1.0	1.5	Uranium, Total	5.47	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-L	07/08/2004	2.0	2.5	1,1-Dichloroethene	1.15	ug/kg	UJ	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-L	07/08/2004	2.0	2.5	Bromodichloromethane	1.15	ug/kg	UJ	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Aroclor-1254	10.5	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Aroclor-1260	10.5	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Arsenic	4	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Benzo(a)pyrene	83.6	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Beryllium	0.988	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Dibenzo(a,h)anthracene	83.6	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Dieldrin	0.838	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Lead	14.9	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^5-MPRS	07/08/2004	2.0	2.5	Uranium, Total	4.09	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-L	07/08/2004	3.0	3.5	1,1-Dichloroethene	1.16	ug/kg	UJ	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-L	07/08/2004	3.0	3.5	Bromodichloromethane	1.16	ug/kg	UJ	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Aroclor-1254	10.1	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Aroclor-1260	10.1	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Arsenic	3.69	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Benzo(a)pyrene	81.3	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Beryllium	0.539	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Dibenzo(a,h)anthracene	81.3	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Dieldrin	0.808	ug/kg	UNV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Lead	11	mg/kg	NV	478589.671	1348605.001
2P2-SUB3	A2P2-SUB3^7-MPRS	07/08/2004	3.0	3.5	Uranium, Total	5.55	mg/kg	NV	478589.671	1348605.001

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A2P2-SUB4	A2P2-SUB4^1-L	07/30/2004	0.0	0.5	1,1-Dichloroethene	0.93	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-L	07/30/2004	0.0	0.5	Bromodichloromethane	0.93	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-MPRS	07/30/2004	0.0	0.5	Aroclor-1254	69.4	ug/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-MPRS	07/30/2004	0.0	0.5	Aroclor-1260	9.55	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-MPRS	07/30/2004	0.0	0.5	Dieldrin	0.764	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-MPRS	07/30/2004	0.0	0.5	Uranium, Total	6.94	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-SM	08/31/2004	0.0	0.5	Arsenic	5.97	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-SM	08/31/2004	0.0	0.5	Benzo(a)pyrene	38.1	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-SM	08/31/2004	0.0	0.5	Beryllium	0.567	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-SM	08/31/2004	0.0	0.5	Dibenzo(a,h)anthracene	19.1	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^1-SM	08/31/2004	0.0	0.5	Lead	18	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-L	07/30/2004	1.0	1.5	1,1-Dichloroethene	1.15	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-L	07/30/2004	1.0	1.5	Bromodichloromethane	1.15	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-MPRS	07/30/2004	1.0	1.5	Aroclor-1254	65.9	ug/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-MPRS	07/30/2004	1.0	1.5	Aroclor-1260	10.2	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-MPRS	07/30/2004	1.0	1.5	Dieldrin	0.818	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-MPRS	07/30/2004	1.0	1.5	Uranium, Total	10.5	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-SM	08/31/2004	1.0	1.5	Arsenic	8.36	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-SM	08/31/2004	1.0	1.5	Benzo(a)pyrene	159	ug/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-SM	08/31/2004	1.0	1.5	Beryllium	0.826	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-SM	08/31/2004	1.0	1.5	Dibenzo(a,h)anthracene	19	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^3-SM	08/31/2004	1.0	1.5	Lead	16.3	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-L	07/30/2004	2.0	2.5	1,1-Dichloroethene	1.25	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-L	07/30/2004	2.0	2.5	Bromodichloromethane	1.25	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-MPRS	07/30/2004	2.0	2.5	Aroclor-1254	147	ug/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-MPRS	07/30/2004	2.0	2.5	Aroclor-1260	10.2	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-MPRS	07/30/2004	2.0	2.5	Dieldrin	0.818	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-MPRS	07/30/2004	2.0	2.5	Uranium, Total	19	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-SM	08/31/2004	2.0	2.5	Arsenic	4.85	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-SM	08/31/2004	2.0	2.5	Benzo(a)pyrene	20	ug/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-SM	08/31/2004	2.0	2.5	Beryllium	0.65	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-SM	08/31/2004	2.0	2.5	Dibenzo(a,h)anthracene	19.8	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^5-SM	08/31/2004	2.0	2.5	Lead	12.9	mg/kg	NV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^7-L	07/30/2004	3.0	3.5	1,1-Dichloroethene	1.11	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^7-L	07/30/2004	3.0	3.5	Bromodichloromethane	1.11	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^7-MPRS	07/30/2004	3.0	3.5	Aroclor-1254	10.2	ug/kg	UNV	478747.476	1348654.046
A2P2-SUB4	A2P2-SUB4^7-MPRS	07/30/2004	3.0	3.5	Aroclor-1260	10.2	ug/kg	UNV	478747.476	1348654.046

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
P2-SUB4	A2P2-SUB4^7-MPRS	07/30/2004	3.0	3.5	Dieldrin	0.816	ug/kg	UNV	478747.476	1348654.046
P2-SUB4	A2P2-SUB4^7-MPRS	07/30/2004	3.0	3.5	Uranium, Total	5.66	mg/kg	NV	478747.476	1348654.046
P2-SUB4	A2P2-SUB4^7-SM	08/31/2004	3.0	3.5	Arsenic	6.82	mg/kg	NV	478747.476	1348654.046
P2-SUB4	A2P2-SUB4^7-SM	08/31/2004	3.0	3.5	Benzo(a)pyrene	40	ug/kg	UNV	478747.476	1348654.046
P2-SUB4	A2P2-SUB4^7-SM	08/31/2004	3.0	3.5	Beryllium	0.599	mg/kg	NV	478747.476	1348654.046
P2-SUB4	A2P2-SUB4^7-SM	08/31/2004	3.0	3.5	Dibenzo(a,h)anthracene	20	ug/kg	UNV	478747.476	1348654.046
P2-SUB4	A2P2-SUB4^7-SM	08/31/2004	3.0	3.5	Lead	16.9	mg/kg	NV	478747.476	1348654.046
P2-SUB5	A2P2-SUB5^1-L	07/08/2004	0.0	0.5	1,1-Dichloroethene	1.14	ug/kg	U	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-L	07/08/2004	0.0	0.5	Bromodichloromethane	1.14	ug/kg	U	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Aroclor-1254	10.1	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Aroclor-1260	10.1	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Arsenic	3.56	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Benzo(a)pyrene	115	ug/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Beryllium	0.872	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Dibenzo(a,h)anthracene	80.9	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Dieldrin	0.805	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Lead	17.6	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^1-MPRS	07/08/2004	0.0	0.5	Uranium, Total	28.4	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-L	07/08/2004	1.0	1.5	1,1-Dichloroethene	1.05	ug/kg	U	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-L	07/08/2004	1.0	1.5	Bromodichloromethane	1.05	ug/kg	U	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Aroclor-1254	9.64	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Aroclor-1260	9.64	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Arsenic	2.39	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Benzo(a)pyrene	78.1	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Beryllium	0.427	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Dibenzo(a,h)anthracene	78.1	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Dieldrin	0.771	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Lead	12	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^3-MPRS	07/08/2004	1.0	1.5	Uranium, Total	10	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-L	07/08/2004	2.0	2.5	1,1-Dichloroethene	1.18	ug/kg	U	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-L	07/08/2004	2.0	2.5	Bromodichloromethane	1.18	ug/kg	U	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Aroclor-1254	10.3	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Aroclor-1260	10.3	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Arsenic	6.77	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Benzo(a)pyrene	82.1	ug/kg	UNV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Beryllium	0.776	mg/kg	NV	478835.704	1348711.855
P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Dibenzo(a,h)anthracene	82.1	ug/kg	UNV	478835.704	1348711.855

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A2P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Dieldrin	0.822	ug/kg	UNV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Lead	14.8	mg/kg	NV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^5-MPRS	07/08/2004	2.0	2.5	Uranium, Total	10.3	mg/kg	NV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-L	07/08/2004	3.0	3.5	1,1-Dichloroethene	1.25	ug/kg	U	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-L	07/08/2004	3.0	3.5	Bromodichloromethane	1.25	ug/kg	U	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Aroclor-1254	10.1	ug/kg	UNV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Aroclor-1260	10.1	ug/kg	UNV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Arsenic	5.97	mg/kg	NV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Benzo(a)pyrene	81.2	ug/kg	UNV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Beryllium	0.725	mg/kg	NV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Dibenzo(a,h)anthracene	81.2	ug/kg	UNV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Dieldrin	0.808	ug/kg	UNV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Lead	15.7	mg/kg	NV	478835.704	1348711.855
A2P2-SUB5	A2P2-SUB5^7-MPRS	07/08/2004	3.0	3.5	Uranium, Total	5.08	mg/kg	NV	478835.704	1348711.855
A2P2-SUB6	A2P2-SUB6^1-L	08/02/2004	0.0	0.5	1,1-Dichloroethene	1.04	ug/kg	UNV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-L	08/02/2004	0.0	0.5	Bromodichloromethane	1.04	ug/kg	UNV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1254	6.4	ug/kg	NV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1260	11.6	ug/kg	UNV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Arsenic	8.5	mg/kg	NV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Benzo(a)pyrene	344	ug/kg	NV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Beryllium	0.681	mg/kg	NV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Dibenzo(a,h)anthracene	38.8	ug/kg	UNV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Dieldrin	15.5	ug/kg	UNV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Lead	14.6	mg/kg	NV	478811.73	1348754.334
A2P2-SUB6	A2P2-SUB6^1-MPRS	08/02/2004	0.0	0.5	Uranium, Total	8.03	mg/kg	NV	478811.73	1348754.334
A2P2-SUB7	A2P2-SUB7^1-L	08/02/2004	0.0	0.5	1,1-Dichloroethene	1.03	ug/kg	UNV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-L	08/02/2004	0.0	0.5	Bromodichloromethane	1.03	ug/kg	UNV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1254	12.8	ug/kg	NV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1260	7.6	ug/kg	NV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Arsenic	6.8	mg/kg	NV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Benzo(a)pyrene	262	ug/kg	NV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Beryllium	0.48	mg/kg	NV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Dibenzo(a,h)anthracene	36.7	ug/kg	UNV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Dieldrin	14.7	ug/kg	UNV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Lead	9.84	mg/kg	NV	478753.795	1348739.477
A2P2-SUB7	A2P2-SUB7^1-MPRS	08/02/2004	0.0	0.5	Uranium, Total	4.6	mg/kg	NV	478753.795	1348739.477
A2P2-SUB8	A2P2-SUB8^1-L	08/02/2004	0.0	0.5	1,1-Dichloroethene	1.01	ug/kg	UNV	478784.171	1348746.15

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
P2-SUB8	A2P2-SUB8^1-L	08/02/2004	0.0	0.5	Bromodichloromethane	1.01	ug/kg	UNV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1254	11.4	ug/kg	UNV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Aroclor-1260	34.1	ug/kg	NV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Arsenic	5.17	mg/kg	NV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Benzo(a)pyrene	326	ug/kg	NV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Beryllium	0.493	mg/kg	NV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Dibenzo(a,h)anthracene	37.9	ug/kg	UNV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Dieldrin	15.2	ug/kg	UNV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Lead	11.5	mg/kg	NV	478784.171	1348746.15
P2-SUB8	A2P2-SUB8^1-MPRS	08/02/2004	0.0	0.5	Uranium, Total	4.59	mg/kg	NV	478784.171	1348746.15
P2-TCA1	A2P2-TCA1^1-MRS	07/07/2004	0.0	0.5	Arsenic	1.89	mg/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^1-MRS	07/07/2004	0.0	0.5	Benzo(a)pyrene	71.4	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^1-MRS	07/07/2004	0.0	0.5	Beryllium	0.317	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^1-MRS	07/07/2004	0.0	0.5	Dibenzo(a,h)anthracene	71.4	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^1-MRS	07/07/2004	0.0	0.5	Lead	4.29	mg/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^1-MRS	07/07/2004	0.0	0.5	Uranium, Total	6.84	mg/kg	NV	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^3-MRS	07/07/2004	1.0	1.5	Arsenic	1.01	mg/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^3-MRS	07/07/2004	1.0	1.5	Benzo(a)pyrene	78.8	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^3-MRS	07/07/2004	1.0	1.5	Beryllium	0.544	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^3-MRS	07/07/2004	1.0	1.5	Dibenzo(a,h)anthracene	78.8	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^3-MRS	07/07/2004	1.0	1.5	Lead	11	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^3-MRS	07/07/2004	1.0	1.5	Uranium, Total	4.22	mg/kg	NV	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^5-MRS	07/07/2004	2.0	2.5	Arsenic	1.33	mg/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^5-MRS	07/07/2004	2.0	2.5	Benzo(a)pyrene	81.4	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^5-MRS	07/07/2004	2.0	2.5	Beryllium	0.522	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^5-MRS	07/07/2004	2.0	2.5	Dibenzo(a,h)anthracene	81.4	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^5-MRS	07/07/2004	2.0	2.5	Lead	7.84	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^5-MRS	07/07/2004	2.0	2.5	Uranium, Total	7.29	mg/kg	NV	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^7-MRS	07/07/2004	3.0	3.5	Arsenic	17	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^7-MRS	07/07/2004	3.0	3.5	Benzo(a)pyrene	83.5	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^7-MRS	07/07/2004	3.0	3.5	Beryllium	0.931	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^7-MRS	07/07/2004	3.0	3.5	Dibenzo(a,h)anthracene	83.5	ug/kg	U	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^7-MRS	07/07/2004	3.0	3.5	Lead	14.4	mg/kg	J	478228.196	1348544.718
P2-TCA1	A2P2-TCA1^7-MRS	07/07/2004	3.0	3.5	Uranium, Total	5.02	mg/kg	UNV	478228.196	1348544.718
P2-TCA2	A2P2-TCA2^1-MRS	07/07/2004	0.0	0.5	Arsenic	1.92	mg/kg	U	478058.69	1348484.702
P2-TCA2	A2P2-TCA2^1-MRS	07/07/2004	0.0	0.5	Benzo(a)pyrene	72.6	ug/kg	U	478058.69	1348484.702
P2-TCA2	A2P2-TCA2^1-MRS	07/07/2004	0.0	0.5	Beryllium	0.262	mg/kg	-	478058.69	1348484.702

**APPENDIX B**  
**EQUIPMENT WASH FACILITY/SUBCONTRACTOR LAYDOWN AREA**  
**PREDESIGN CHARACTERIZATION DATA**

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A2P2-TCA2	A2P2-TCA2^1-MRS	07/07/2004	0.0	0.5	Dibenzo(a,h)anthracene	72.6	ug/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^1-MRS	07/07/2004	0.0	0.5	Lead	7.34	mg/kg	J	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^1-MRS	07/07/2004	0.0	0.5	Uranium, Total	3.86	mg/kg	NV	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^3-MRS	07/07/2004	1.0	1.5	Arsenic	4.28	mg/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^3-MRS	07/07/2004	1.0	1.5	Benzo(a)pyrene	84.5	ug/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^3-MRS	07/07/2004	1.0	1.5	Beryllium	1.34	mg/kg	-	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^3-MRS	07/07/2004	1.0	1.5	Dibenzo(a,h)anthracene	84.5	ug/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^3-MRS	07/07/2004	1.0	1.5	Lead	16.6	mg/kg	J	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^3-MRS	07/07/2004	1.0	1.5	Uranium, Total	3	mg/kg	NV	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^5-MRS	07/07/2004	2.0	2.5	Arsenic	19.2	mg/kg	J	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^5-MRS	07/07/2004	2.0	2.5	Benzo(a)pyrene	84.8	ug/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^5-MRS	07/07/2004	2.0	2.5	Beryllium	1.02	mg/kg	-	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^5-MRS	07/07/2004	2.0	2.5	Dibenzo(a,h)anthracene	84.8	ug/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^5-MRS	07/07/2004	2.0	2.5	Lead	21.6	mg/kg	J	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^5-MRS	07/07/2004	2.0	2.5	Uranium, Total	6.93	mg/kg	NV	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^7-MRS	07/07/2004	3.0	3.5	Arsenic	2.32	mg/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^7-MRS	07/07/2004	3.0	3.5	Benzo(a)pyrene	83.7	ug/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^7-MRS	07/07/2004	3.0	3.5	Beryllium	1.03	mg/kg	-	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^7-MRS	07/07/2004	3.0	3.5	Dibenzo(a,h)anthracene	83.7	ug/kg	U	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^7-MRS	07/07/2004	3.0	3.5	Lead	12.2	mg/kg	J	478058.69	1348484.702
A2P2-TCA2	A2P2-TCA2^7-MRS	07/07/2004	3.0	3.5	Uranium, Total	8.29	mg/kg	NV	478058.69	1348484.702
A2P2-SUB4N	A2P2-SUB4N^1-P	10/12/2004	0.0	0.5	Aroclor-1254	37	ug/kg	NV	478752.91	1348654.899
A2P2-SUB4N	A2P2-SUB4N^5-P	10/12/2004	2.0	2.5	Aroclor-1254	6.7	ug/kg	NV	478752.91	1348654.899
A2P2-SUB4S	A2P2-SUB4S^1-P	10/12/2004	0.0	0.5	Aroclor-1254	45.1	ug/kg	NV	478742.332	1348652.799
A2P2-SUB4S	A2P2-SUB4S^5-P	10/12/2004	2.0	2.5	Aroclor-1254	29.7	ug/kg	NV	478742.332	1348652.799
A2P2-SUB4E	A2P2-SUB4E^1-P	10/19/2004	0.0	0.5	Aroclor-1254	16.1	ug/kg	NV	478747.13	1348658.615
A2P2-SUB4E	A2P2-SUB4E^5-P	10/19/2004	2.0	2.5	Aroclor-1254	5.3	ug/kg	NV	478747.13	1348658.615
A2P2-SUB4W	A2P2-SUB4W^1-P	10/19/2004	0.0	0.5	Aroclor-1254	15.3	ug/kg	NV	478747.904	1348648.858
A2P2-SUB4W	A2P2-SUB4W^5-P	10/19/2004	2.0	2.5	Aroclor-1254	2.83	ug/kg	NV	478747.904	1348648.858

**APPENDIX C**

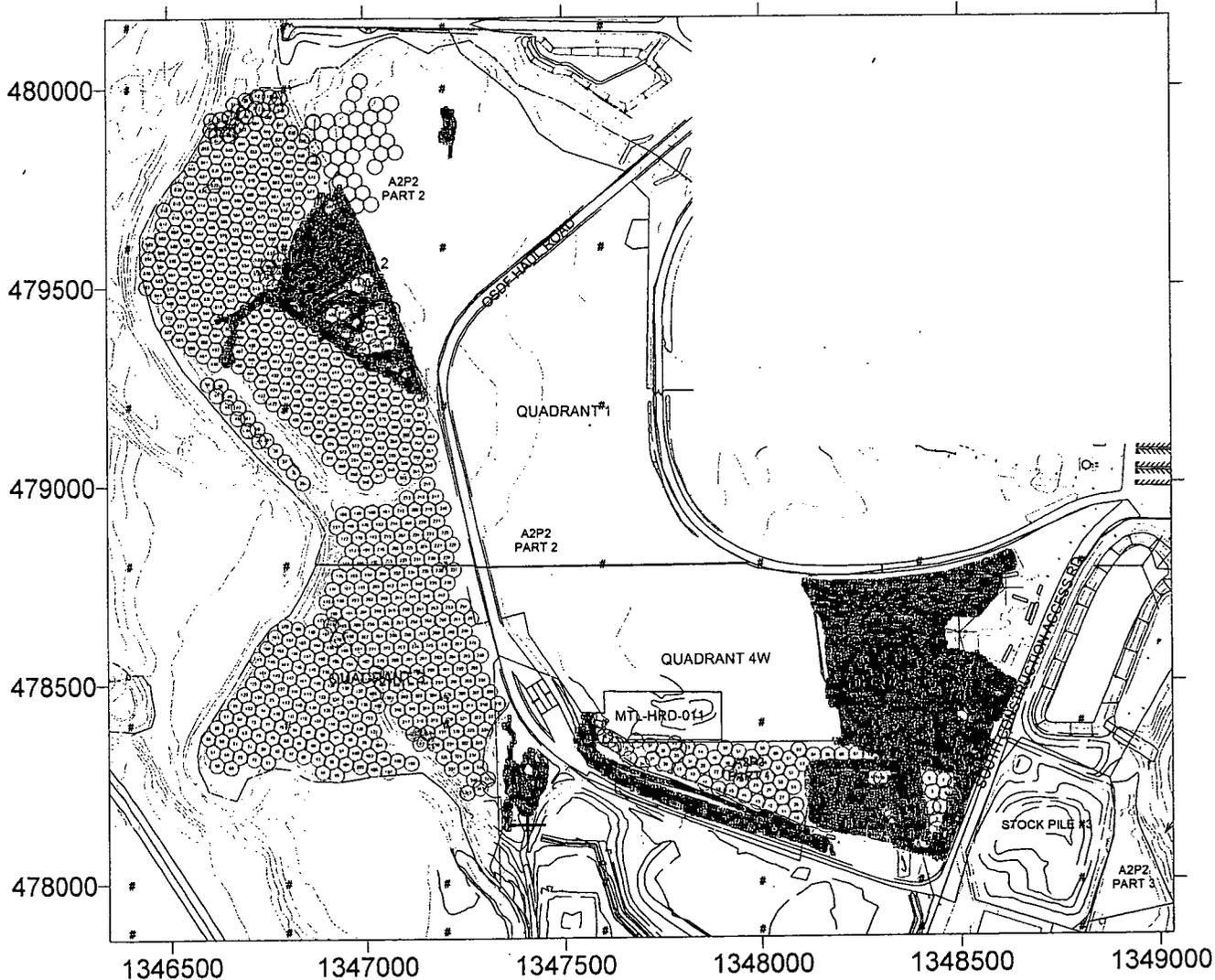
**PREDESIGN SCANNING DATA**

# Area 2 Phase 2 Parts 2&3

## Moisture Corrected Total Uranium



RSS Batch #: 634  
 RTRK Batch #: 787, & 846-848  
 Measurement Dates: 12/07/1999 - 03/22/2001  
 Field of View to scale

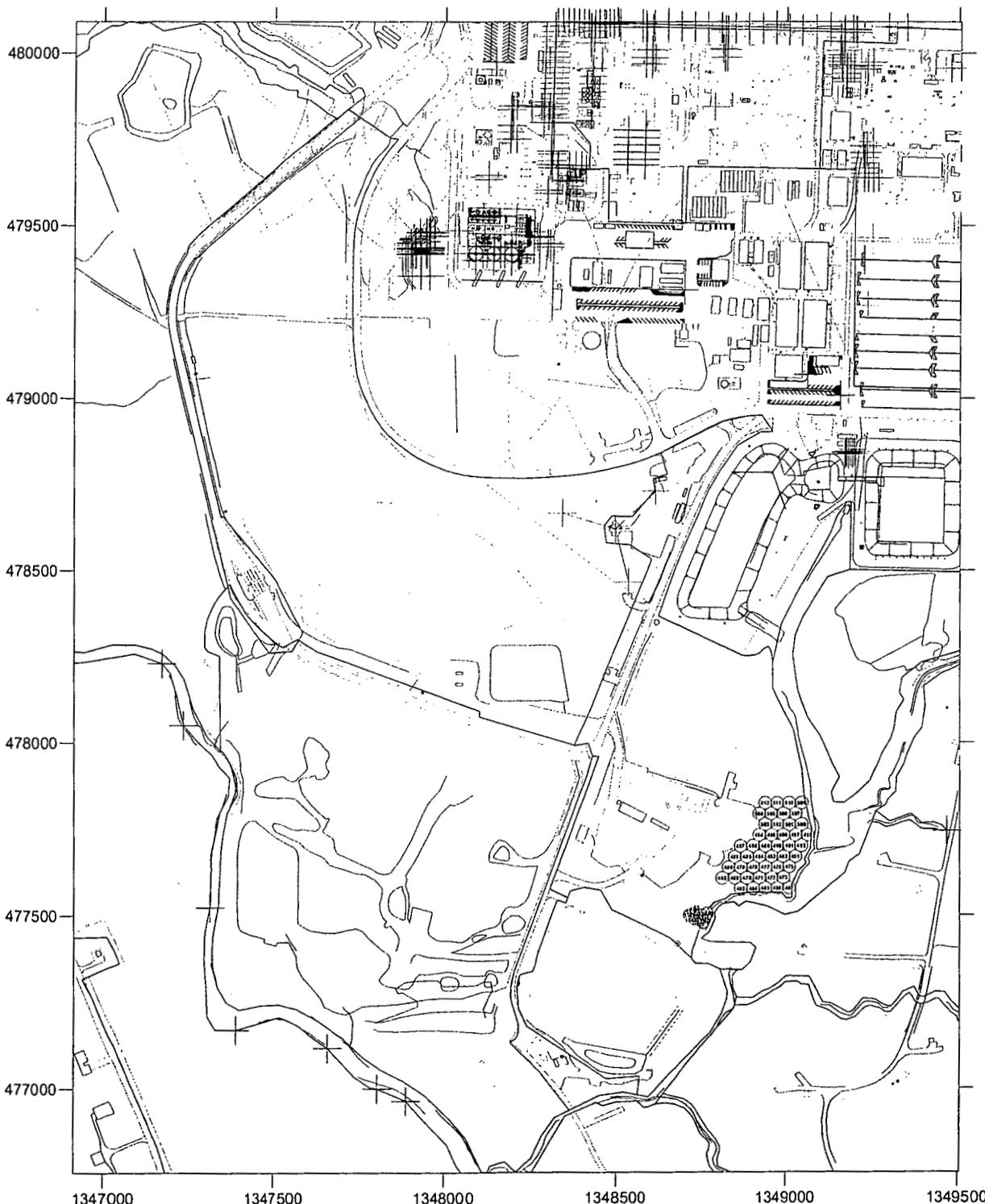


RMS Total Uranium (ppm)	HPGe Total Uranium (ppm)
-1000.00 to 41.00	0.00 to 41.00
41.00 to 82.00	41.00 to 82.00
82.00 to 164.00	82.00 to 164.00
164.00 to 246.00	164.00 to 246.00
246.00 to 10000.00	246.00 to 10000.00

RTIMP DWG Title: A2P2-PT2&3-TU-2PT-MC.srf  
 Project #: 20450-PSP-0001  
 Project Name: PreDesign Sampling in A2P2 Pt 2&3  
 Prepared By: David Allen  
 File name: A2P2\_PT2&3\_TU\_2PT\_MC.srf  
 Date Prepared: 03/22/01

# A2P2, SUBAREA 3, Surface Scan

Moisture Corrected Total Uranium  
 Field of View to Scale  
 HPGe DET#: 30687, 31204, 31265, 40743  
 Measurement Dates: 10/02/03 - 07/01/04



HPGe @ 100cm Total U (ppm)	
○	0 to 246
○	246 to 400
○	400 to 9999

HPGe @ 31cm Total U (ppm)	
○	0 to 246
○	246 to 928
○	928 to 9999

RTIMP DWG Title: A2P2\_SA3\_SF\_TU.srf  
 Project Name: Predesign & Exc. Ctrl. of A2P2, SA3  
 Project #: 20450-PSP-0005  
 Verified By: Brian McDaniel/11058  
 Date Verified: 07/09/04  
 Support Data: A2P2\_SA3\_SF\_HPGe\_31cm\_V3.xls;  
 A2P2\_SA3\_SF\_HPGe\_100cm.xls;  
 A2P2\_SA3\_SF\_HPGe\_100cm\_V3.xls

# A2P1 NWU & A2P2 PART ONE

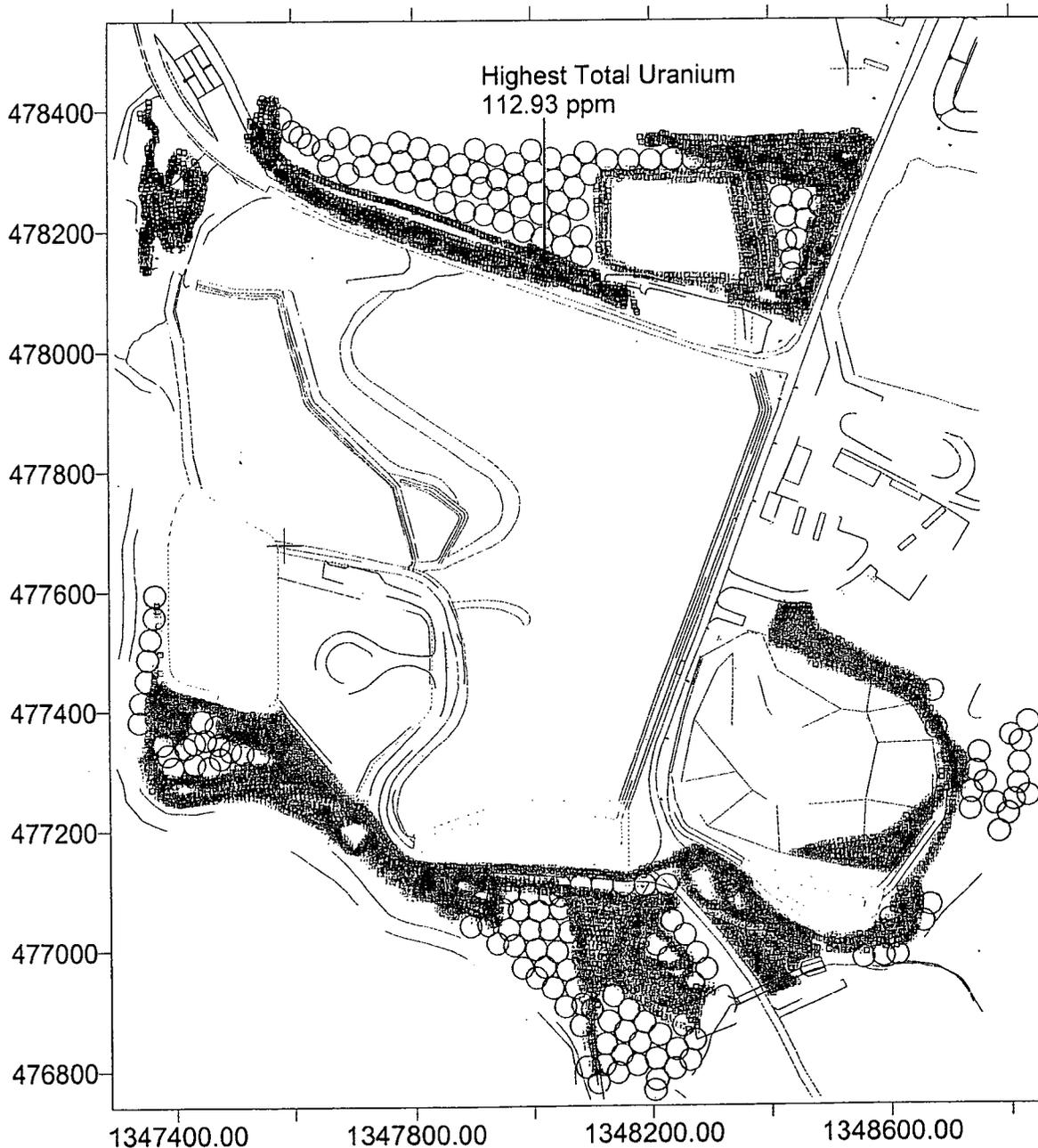
## Moisture Corrected Total Uranium

RTRK batch#: 764,766,767,768,776,786

RSS batch#: 486,487,496,501,512,516,517

Measurement dates from 10/14/99 to 03/07/00

Field of View to scale



RMS Total Uranium in ppm	
	-54.00 to 41.00
	41.00 to 82.00
	82.00 to 164.00
	164.00 to 246.00
	246.00 to 10000.00

HPGe Total Uranium in ppm	
	0.00 to 41.00
	41.00 to 82.00
	82.00 to 164.00
	164.00 to 246.00
	246.00 to 10000.00

RTIMP DWG Title: A2P1-NWU-TU-2PT-MC.srf  
 Project #: 20400-PSP-0002  
 Project Name: A2P1 NWU & A2P2 PT1 PreDesign Sampling  
 Prepared By: Brian McDaniel  
 File: A2P1\_NWU\_TU\_2PT\_MC.srf  
 Date Prepared: 03/16/00