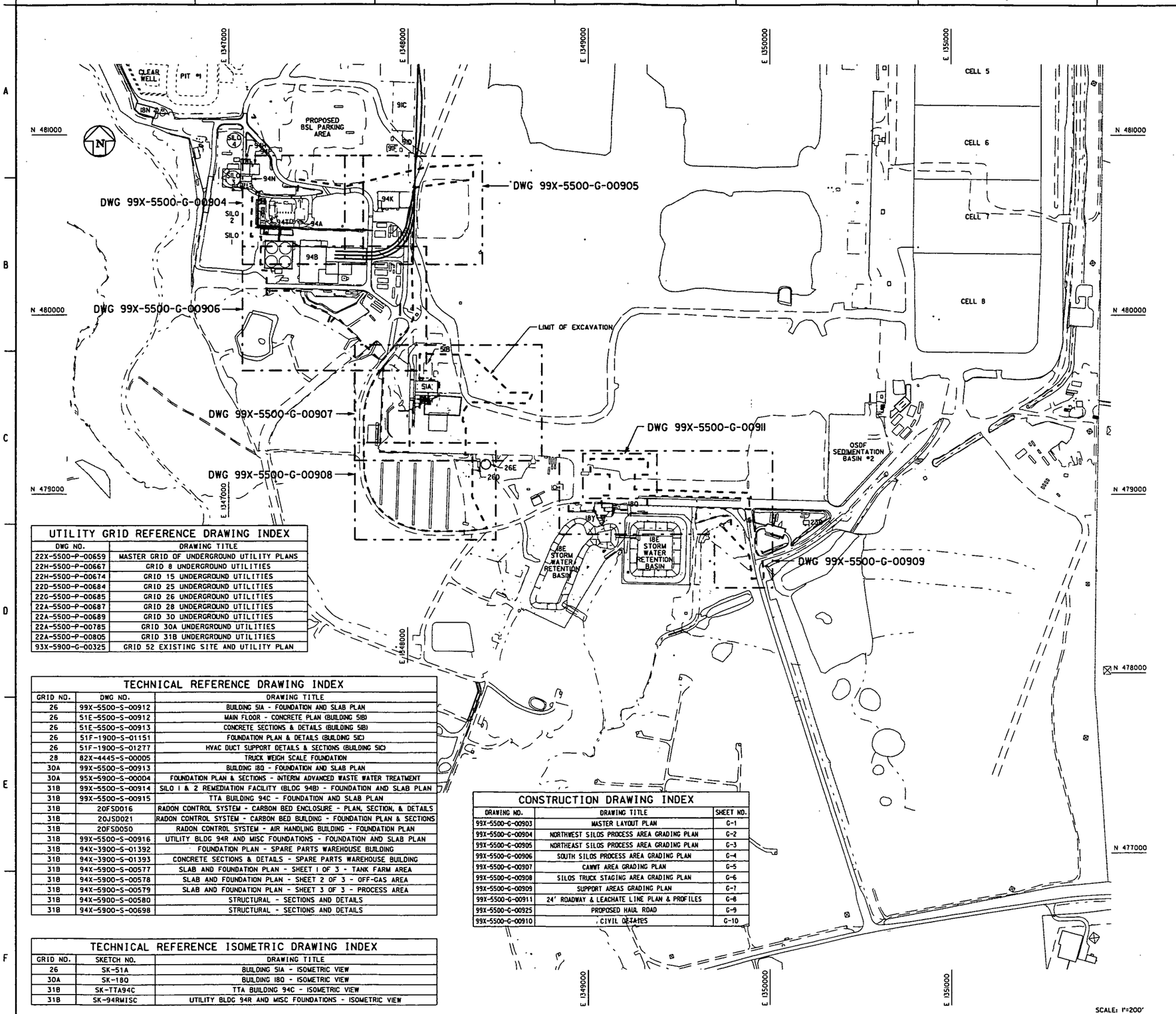
AREA 7 SUPPORT AND SILOS PROCESS AREAS

EXCAVATION PLAN DRAWING PACKAGE

FOR 20500

99xg0903 OSDF3 lind8392 03/02/2006 08:35:12 AM

006241



UTILITY GRID REFERENCE DRAWING INDEX

DWG NO.	DRAWING TITLE
22X-5500-P-00659	MASTER GRID OF UNDERGROUND UTILITY PLANS
22H-5500-P-00667	GRID 8 UNDERGROUND UTILITIES
22H-5500-P-00674	GRID 15 UNDERGROUND UTILITIES
22D-5500-P-00684	GRID 25 UNDERGROUND UTILITIES
22G-5500-P-00685	GRID 26 UNDERGROUND UTILITIES
22A-5500-P-00687	GRID 28 UNDERGROUND UTILITIES
22A-5500-P-00689	GRID 30 UNDERGROUND UTILITIES
22A-5500-P-00785	GRID 30A UNDERGROUND UTILITIES
22A-5500-P-00805	GRID 31B UNDERGROUND UTILITIES
93X-5900-G-00325	GRID 52 EXISTING SITE AND UTILITY PLAN

TECHNICAL REFERENCE DRAWING INDEX

GRID NO.	DWG NO.	DRAWING TITLE
26	99X-5500-S-00912	BUILDING 51A - FOUNDATION AND SLAB PLAN
26	51E-5500-S-00912	MAIN FLOOR - CONCRETE PLAN (BUILDING 51B)
26	51E-5500-S-00913	CONCRETE SECTIONS & DETAILS (BUILDING 51B)
26	51F-1900-S-01151	FOUNDATION PLAN & DETAILS (BUILDING 51C)
26	51F-1900-S-01277	HVAC DUCT SUPPORT DETAILS & SECTIONS (BUILDING 51C)
28	82X-4445-S-00005	TRUCK WEIGH SCALE FOUNDATION
30A	99X-5500-S-00913	BUILDING 18Q - FOUNDATION AND SLAB PLAN
30A	95X-5900-S-00004	FOUNDATION PLAN & SECTIONS - INTERIM ADVANCED WASTE WATER TREATMENT
31B	99X-5500-S-00914	SILO 1 & 2 REMEDIATION FACILITY (BLDG 94B) - FOUNDATION AND SLAB PLAN
31B	99X-5500-S-00915	TTA BUILDING 94C - FOUNDATION AND SLAB PLAN
31B	20FS0016	RADON CONTROL SYSTEM - CARBON BED ENCLOSURE - PLAN, SECTION, & DETAILS
31B	20JS0021	RADON CONTROL SYSTEM - CARBON BED BUILDING - FOUNDATION PLAN & SECTIONS
31B	20FS0050	RADON CONTROL SYSTEM - AIR HANDLING BUILDING - FOUNDATION PLAN
31B	99X-5500-S-00916	UTILITY BLDG 94R AND MISC FOUNDATIONS - FOUNDATION AND SLAB PLAN
31B	94X-3900-S-01392	FOUNDATION PLAN - SPARE PARTS WAREHOUSE BUILDING
31B	94X-3900-S-01393	CONCRETE SECTIONS & DETAILS - SPARE PARTS WAREHOUSE BUILDING
31B	94X-5900-S-00577	SLAB AND FOUNDATION PLAN - SHEET 1 OF 3 - TANK FARM AREA
31B	94X-5900-S-00578	SLAB AND FOUNDATION PLAN - SHEET 2 OF 3 - OFF-GAS AREA
31B	94X-5900-S-00579	SLAB AND FOUNDATION PLAN - SHEET 3 OF 3 - PROCESS AREA
31B	94X-5900-S-00580	STRUCTURAL - SECTIONS AND DETAILS
31B	94X-5900-S-00698	STRUCTURAL - SECTIONS AND DETAILS

TECHNICAL REFERENCE ISOMETRIC DRAWING INDEX

GRID NO.	SKETCH NO.	DRAWING TITLE
26	SK-51A	BUILDING 51A - ISOMETRIC VIEW
30A	SK-18Q	BUILDING 18Q - ISOMETRIC VIEW
31B	SK-TTA94C	TTA BUILDING 94C - ISOMETRIC VIEW
31B	SK-94RMISC	UTILITY BLDG 94R AND MISC FOUNDATIONS - ISOMETRIC VIEW

CONSTRUCTION DRAWING INDEX

DRAWING NO.	DRAWING TITLE	SHEET NO.
99X-5500-G-00903	MASTER LAYOUT PLAN	G-1
99X-5500-G-00904	NORTHWEST SILOS PROCESS AREA GRADING PLAN	G-2
99X-5500-G-00905	NORTHEAST SILOS PROCESS AREA GRADING PLAN	G-3
99X-5500-G-00906	SOUTH SILOS PROCESS AREA GRADING PLAN	G-4
99X-5500-G-00907	CAWWT AREA GRADING PLAN	G-5
99X-5500-G-00908	SILOS TRUCK STAGING AREA GRADING PLAN	G-6
99X-5500-G-00909	SUPPORT AREAS GRADING PLAN	G-7
99X-5500-G-00911	24' ROADWAY & LEACHATE LINE PLAN & PROFILES	G-8
99X-5500-G-00925	PROPOSED HAUL ROAD	G-9
99X-5500-G-00910	CIVIL DETAILS	G-10

GENERAL NOTES

1. HORIZONTAL CONTROL SHOWN ON THE DRAWINGS IS BASED UPON NORTH AMERICAN DATUM 1983 (NAD 83).
2. VERTICAL CONTROL SHOWN ON THE DRAWINGS IS BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD 29).
3. DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
4. FIGURED DIMENSIONS AND/OR ELEVATIONS MARKED THUS (+/-) SHALL BE VERIFIED IN THE FIELD BEFORE START OF REMEDIATION.
5. MAINTAIN AND PROTECT UTILITIES OUTSIDE THE LIMIT OF EXCAVATION AND/OR LIMIT OF WORK.
6. VERIFY ISOLATION OF UTILITIES WITHIN THE LIMIT OF EXCAVATION, UNLESS SPECIFICALLY IDENTIFIED FOR PROTECTION BY THE CONSTRUCTION MANAGER.
7. REFER TO APPROPRIATE UNDERGROUND UTILITY GRID DRAWING FOR THE AREA BEING EXCAVATED IN ACCORDANCE WITH DRAWING 22X-5500-P-00659, MASTER GRID OF UNDERGROUND UTILITY PLAN.
8. TECHNICAL SPECIFICATIONS GOVERNING THIS PROJECT ARE THE LATEST REVISIONS OF EXCAVATION FOR REMEDIATION TECHNICAL SPECIFICATIONS (DOCUMENT NO. 20000-TS-0001 AND ON-SITE DISPOSAL FACILITY (OSDF) PHASE V TECHNICAL SPECIFICATIONS (DOCUMENT NO. 20105-TS-0000). TECHNICAL SPECIFICATION SECTION 02205, ITEM 3.2 AND SECTION 02206, ITEM 3.2.B, C, AND D DO NOT APPLY TO WORK PERFORMED UNDER THESE DRAWINGS.
9. REQUIREMENTS CONTAINED IN REFERENCED TECHNICAL SPECIFICATIONS ARE APPLICABLE WHERE PERTINENT TO REMEDIAL ACTIVITY SCOPE ILLUSTRATED ON CONSTRUCTION DRAWINGS.
10. FIELD LOCATE SUPPORT FACILITIES AS DIRECTED BY THE CONSTRUCTION MANAGER.
11. REMOVE SURFACE PADS AND PAVEMENTS WITHIN LIMIT OF CONSTRUCTION SHOWN ON DRAWINGS, UNLESS STATED OTHERWISE AND DISPOSE OF IN OSDF IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 02205.
12. WITHIN LIMIT OF EXCAVATION REMOVE UNDERGROUND UTILITIES, PER UNDERGROUND UTILITY GRID DRAWINGS, UNLESS STATED OTHERWISE.
13. EXCAVATE UTILITIES THAT REMAIN BELOW THE DESIGN GRADE USING TRENCHING METHODS IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 02205, AND THE EXCAVATION OF UTILITIES BELOW DESIGN GRADE DETAIL ON DRAWING 99X-5500-G-00910.
14. FOR SILT FENCE DETAIL SEE DRAWING 99X-5500-G-00910.

KEYED NOTES

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	9/30/05	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME
SOIL REMEDIATION

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
MASTER LAYOUT PLAN

APPROVALS

COGNIZANT ENG.			SAFETY ENG.	S. MILLER FOR G. JOHNSON	9/30/05
CIVIL & STR.	A.C. SHEER	9/29/05	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO	L. BARLOW	9/29/05
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. FRISKE	9/30/05
			CONSTRUCTION	M. STARBO	9/30/05
CHECKED	GEP	9/30/05	CHARACTERIZATION	D. ARCO	9/29/05
APPROVED	C.E. PAUL	9/30/05			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00903	G-1	0
RES PROJECT NO.	FILENAME 99xg0903.dgn			

FCP5AE.DGN 5/30/03

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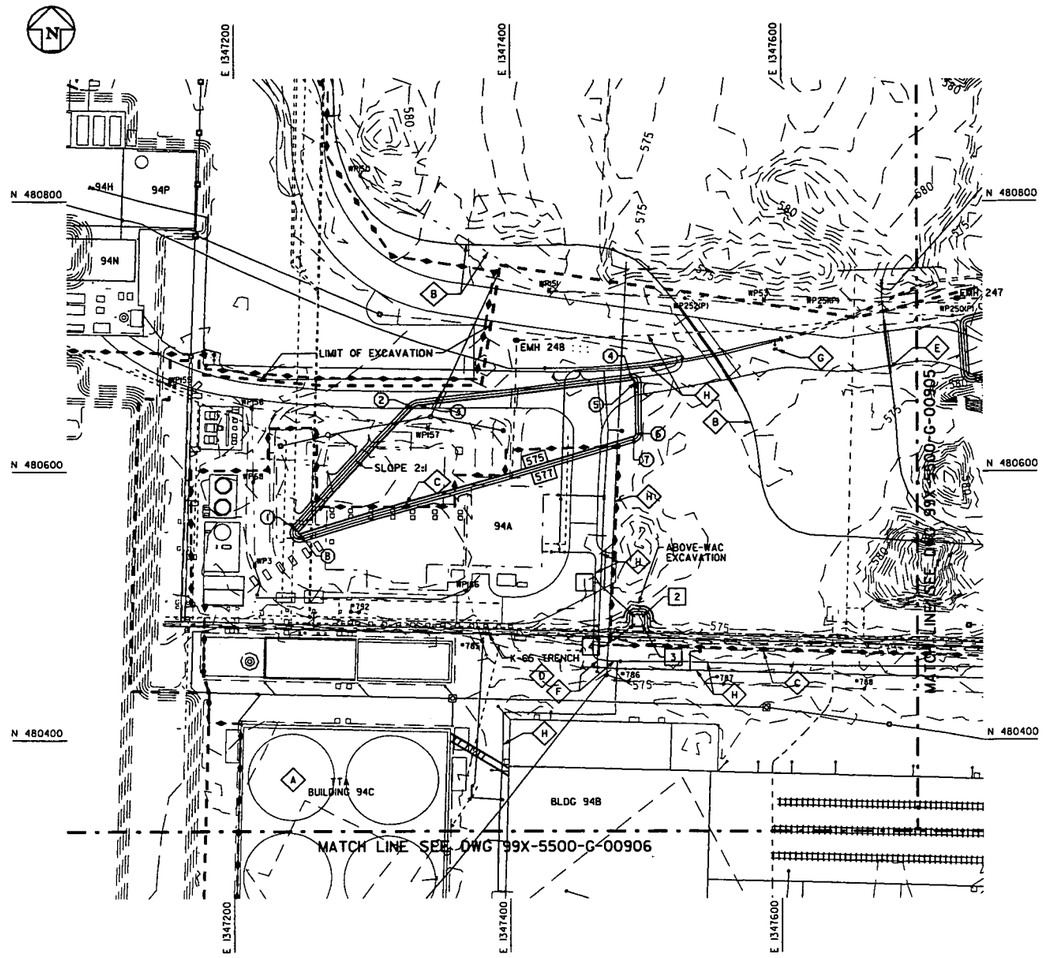

GRADING CONTROL POINTS			
PT NO.	NORTHING	EASTING	ELEV.
1	480555.35	1347247.76	575.0
2	480647.08	1347332.32	575.0
3	480648.97	1347336.01	575.0
4	480667.63	1347489.49	575.0
5	480665.66	1347491.73	575.0
6	480627.53	1347492.02	575.0
7	480625.60	1347490.59	575.0
8	480553.71	1347248.78	575.0

AWAC CONTROL POINTS (POINTS AT C/L 2' RADIUS)			
PT NO.	NORTHING	EASTING	ELEV.
1	480491.48	1347491.29	572.0
2	480491.48	1347496.36	572.0
3	480486.40	1347496.36	572.0
4	480486.40	1347491.29	572.0

SCALE: 1"=40'

0 20 40 100 200

SCALE IN FEET

GENERAL NOTES

1. FOR GENERAL NOTES SEE DRAWING 99X-5500-G-00903.
2. DESIGN CONTOURS AND GRADES SHOWN REPRESENT THE MINIMUM LIMITS OF EXCAVATION REQUIRED TO CAPTURE CONTAMINATION AND FOUNDATIONS, WHILE MAINTAINING SAFE SLOPE REQUIREMENTS. FIELD CHANGES SHALL BE REPORTED TO THE CONSTRUCTION MANAGER AND APPROVED BY THE ENGINEER.
3. COMPLETE ABOVE-WAC AREA EXCAVATION IN ACCORDANCE WITH SPECIFICATION SECTION 02205 PRIOR TO PERFORMING ADJACENT BELOW-WAC EXCAVATION.
4. CONSTRUCTION WATER COLLECTED WITHIN GENERAL EXCAVATIONS TO BE DISCHARGED INTO OU4 STORM SEWER SYSTEM VIA SILT FENCE.
5. CONSTRUCTION WATER COLLECTED WITHIN ABOVE-WAC EXCAVATION TO BE PUMPED EITHER TO SWRB VIA THE SITE STORM SEWER SYSTEM (NOT TO BE CONFUSED WITH OU4 STORM SEWER SYSTEM), OR TO CAWWT BACKWASH BASIN. (SEE DRAWING 99X-5500-G-00907 FOR PROPOSED LOCATION) ONCE OPERATIONAL.
6. UTILITY POLES WITH DESIGNATIONS ENDING WITH (P) ARE PROPOSED.

KEYED NOTES

A. AN ANALYSIS (PERFORMED BY OTHERS) WILL DETERMINE IF AT AND BELOW GRADE CONCRETE FROM BUILDING 94B AND 94C CAN REMAIN IN PLACE OR BE EXCAVATED FOR PROPER DISPOSAL. EXCAVATE, AND TRANSPORT IMPACTED AT AND BELOW GRADE CONCRETE USING APPROPRIATE SHIPPING METHODS BY EITHER TRUCK OR RAIL TO AN APPROPRIATE OFF-SITE DISPOSAL FACILITY. NON-IMPACTED AT AND BELOW GRADE CONCRETE CAN EITHER BE LEFT IN PLACE OR EXCAVATED AND KEPT ON-SITE FOR BENEFICAL USE.

B. PROTECT THE FOLLOWING FOR POST CLOSURE ACTIVITIES:

UTILITY POLES WP150, WP151, WP250(P), WP251(P), AND WP252(P), AND ASSOCIATED OVERHEAD ELECTRICAL POWER LINES. FT-12" HDPE LINE.

C. NO EXCAVATION ALLOWED IN THIS AREA UNTIL OU4 REMEDIAL OPERATIONS ARE COMPLETED.

D. REMAINING PORTIONS OF K-65 TRENCH AND SEDIMENT WITHIN TRENCH TO BE REMOVED AND DISPOSED OF AS ABOVE-WAC MATERIAL CHARACTERIZATION OF UNDERLYING AND ADJACENT SOIL VIA SAMPLING AND ANALYSIS TO BE PERFORMED ONCE TRENCH CONCRETE HAS BEEN REMOVED.

E. UNTIL CEMENT POND (18N) AND SWM POND ARE TAKEN OUT OF SERVICE, PROTECT CE-6" LINE.

F. AFTER SILO 3 REMEDIATION IS COMPLETE, AIR-GAP FQ1-8" AND DW-4" LINES. REMOVE PORTION OF LINES NORTH OF AIR-GAPS.

G. AFTER TRAILERS T-89, T-90, T-91, T-203, AND T-407 HAVE BEEN REMOVED FROM NORTH OF K-65 TRENCH, AIR-GAP DW-2" LINE. REMOVE LINES DOWNSTREAM OF AIR-GAP.

H. PRIOR TO COMPLETION OF OU4 REMEDIATION, PROTECT THE FOLLOWING:

1. HIGH PRESSURE FIRE LINES (FQ1), AND ASSOCIATED HYDRANTS, EXCEPT, THOSE GOVERNED BY KEYED NOTE F.
2. DW-2" AND DW-4" LINES.
3. UTILITY POLES WP53, #785, #786, #787, #788, #789, AND #792, AND ASSOCIATED OVERHEAD ELECTRICAL POWER LINES.
4. UNDERGROUND CONCRETE ELECTRICAL DUCTBANK LOCATED BETWEEN UTILITY POLE #785 AND BUILDING 94B.
5. ST-30" RCP.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	2/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

SOIL REMEDIATION

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
NORTHWEST SILOS PROCESS AREA GRADING PLAN

APPROVALS

COGNIZANT ENG.			SAFETY ENG.	J. MCDANIEL /FOR C. JOHNSON	2/23/06
CIVIL & STR.	A.C. SNIDER	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO		
INSTRUMENT			SECURITY		
MECHANICAL			OA	R. SOUTER	2/23/06
			CONSTRUCTION	R. BIRCH	2/23/06
CHECKED	G.E.P.	2/23/06	CHARACTERIZATION	D. BRUMM /FOR F. MILLER	2/23/06
APPROVED	C. PAUL	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00904	G-2	0
RES PROJECT NO.	FILENAME 99xg0904.dgn			

FCP5AE.DGN 5/30/03

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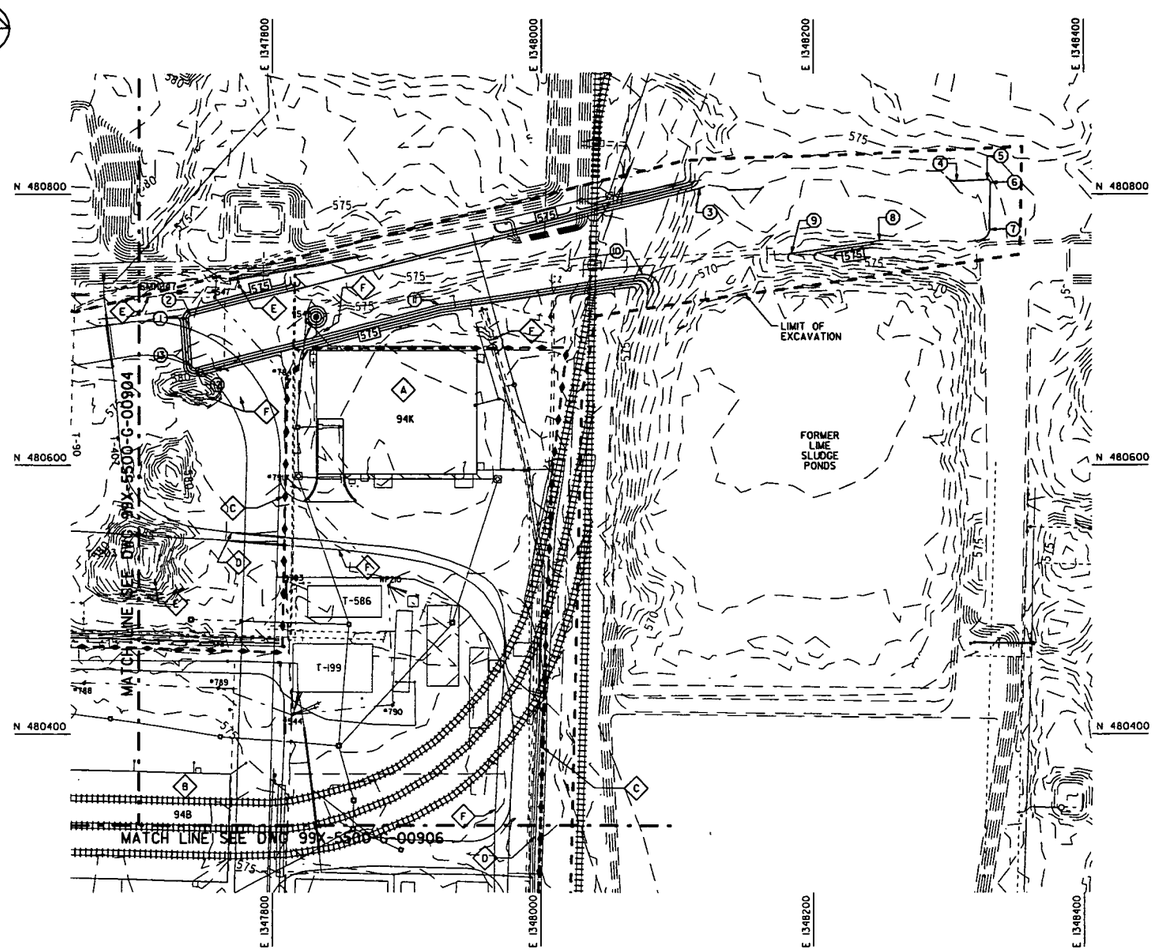

CONTROL POINTS			
PT NO.	NORTHING	EASTING	ELEV.
1	480708.72	1347737.81	573.0
2	480710.80	1347739.33	573.0
3	480804.42	134808.71	573.0
4	480810.09	1348306.87	573.0
5	480811.05	1348329.13	573.0
6	480809.02	1348331.21	573.0
7	480774.40	1348330.54	573.0
8	480766.41	1348249.63	573.0
9	480756.78	1348184.03	573.0
10	480740.83	1348075.37	573.0
11	480718.72	1347924.71	573.0
12	480671.98	1347742.81	573.0
13	480673.78	1347740.31	573.0
14			

SCALE: 1"=40'

0 20 40 100 200

SCALE IN FEET

GENERAL NOTES

1. FOR GENERAL NOTES SEE DRAWING 99X-5500-G-00904.
2. DRAIN OR PUMP CONSTRUCTION WATER COLLECTED WITHIN CONTROL POINTS 1 THROUGH 12 INTO FORMER LIME SLUDGE POND FOR SUBSEQUENT DISCHARGE TO PADDY'S RUN OR CAWWT TREATMENT BASED ON PERIODICAL SAMPLING OF POND WATER.
3. CONSTRUCTION WATER COLLECTED WITHIN GENERAL EXCAVATIONS TO BE DISCHARGED INTO OU4 STORM SEWER SYSTEM VIA SILT FENCE.

006201

KEYED NOTES

A. BUILDING 94K TO REMAIN POST CLOSURE. DO NOT DAMAGE BUILDING.

B. AN ANALYSIS (PERFORMED BY OTHERS) WILL DETERMINE IF AT AND BELOW GRADE CONCRETE FROM BUILDING 94B CAN REMAIN IN PLACE OR BE EXCAVATED FOR PROPER DISPOSAL. EXCAVATE, AND TRANSPORT IMPACTED AT AND BELOW GRADE CONCRETE USING APPROPRIATE SHIPPING METHODS BY EITHER TRUCK OR RAIL TO AN APPROPRIATE OFF-SITE DISPOSAL FACILITY. NON-IMPACTED AT AND BELOW GRADE CONCRETE CAN EITHER BE LEFT IN PLACE OR EXCAVATED AND KEPT ON-SITE FOR BENEFICAL USE.

C. NO EXCAVATION ALLOWED IN THIS AREA UNTIL OU4 REMEDIAL OPERATIONS ARE COMPLETED.

D. UNTIL CEMENT POND (18N) AND SWM POND ARE TAKEN OUT OF SERVICE, PROTECT CE-6" LINE NORTH OF 6 INCH CHECK VALVE AS DETAILED ON DRAWING 22A-5500-P-00985.

E. PRIOR TO COMPLETION OF OU4 REMEDIATION, PROTECT THE FOLLOWING:

1. HIGH PRESSURE FIRE LINES (FOI) AND ASSOCIATED HYDRANTS.
2. UTILITY POLES #547, #788, #789, #790, WP53, AND WP210, AND ASSOCIATED OVERHEAD ELECTRICAL AND COMMUNICATION LINES.

F. PROTECT THE FOLLOWING FOR POST CLOSURE ACTIVITIES:

1. UTILITY POLES #543 (SEE DRAWING 99X-5500-G-00906), 544, 549, #783, #791, #784, AND WP250(P) (SEE DRAWING 99X-5500-G-00904), AND ASSOCIATED OVERHEAD ELECTRICAL POWER LINES.
2. OVERHEAD ELECTRICAL LINE LOCATED BETWEEN UTILITY POLE #549 AND BUILDING 94K.
3. FT-12" HDPE LINE.
4. CE-6" LINE SOUTH OF 6" GATE VALVE AS DETAILED ON DRAWING 22A-5500-P-00985.
5. DW-6" LINE.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	2/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

SOIL REMEDIATION

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
NORTHEAST SILOS PROCESS AREA GRADING PLAN

APPROVALS

COGNIZANT ENG.			SAFETY ENG.	J. MEDAUGH /FOR G. JOHNSON	2/23/06
CIVIL & STR.	A.C. SHEER	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO		
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. SCHEYER	2/23/06
			CONSTRUCTION	R. JESKI	2/23/06
CHECKED	G.E.P.	2/23/06	CHARACTERIZATION	D. BROWNING /FOR F. MILLER	2/23/06
APPROVED	G. PAUL	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00905	G-3	0
RES PROJECT NO.	FILENAME 99xg0905.dgn			

FCPSAE.DGN 5/30/03

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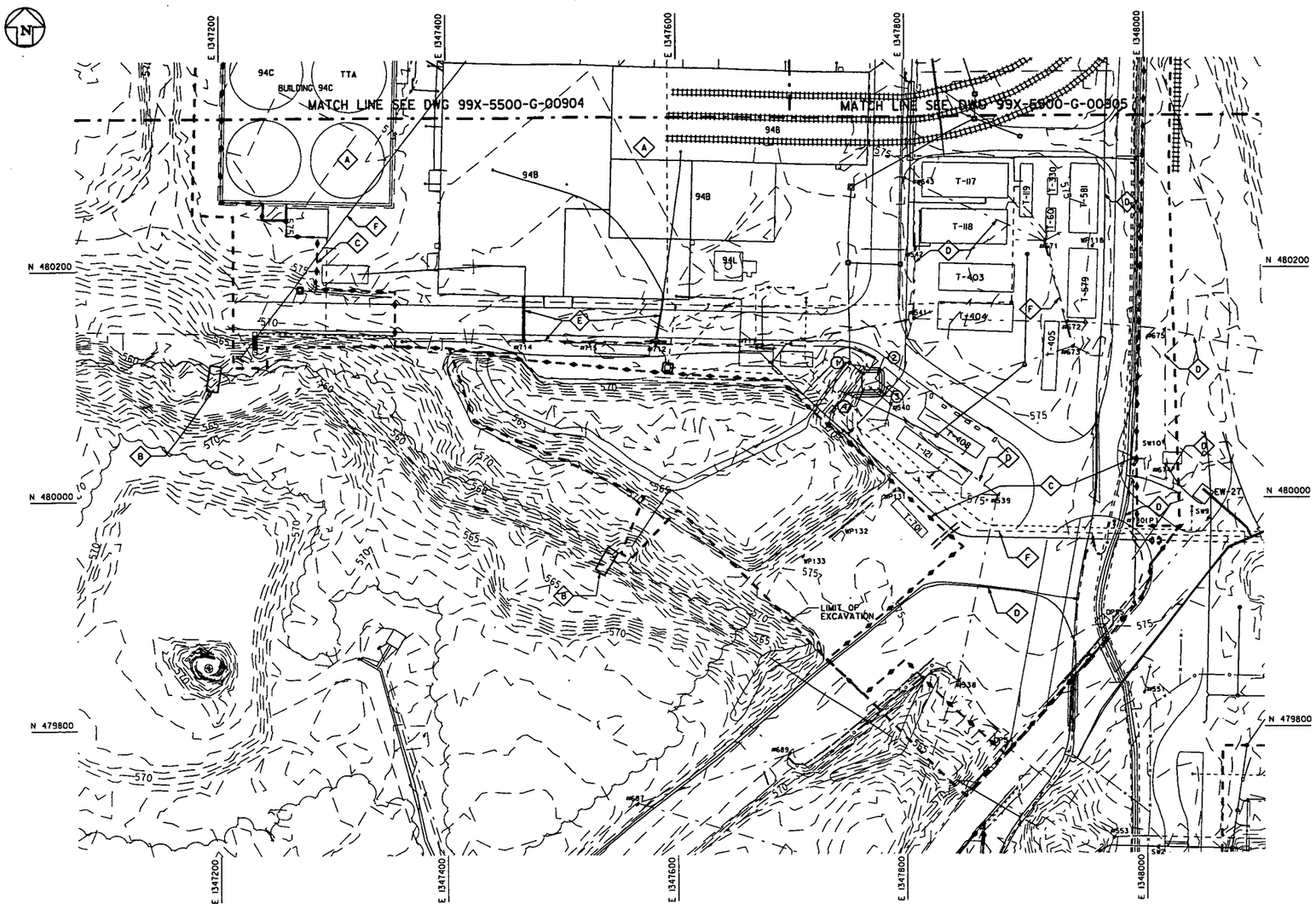

CONTROL POINTS (AT C/L 2' RADIUS)			
PT NO.	NORTHING	EASTING	ELEV.
1	480108.30	1347763.76	571.0
2	480108.30	1347775.00	571.0
3	480097.09	1347775.00	571.0
4	480097.09	1347763.76	571.0
5			

SCALE: 1"=40'

0 20 40 100 200

SCALE IN FEET

GENERAL NOTES

1. FOR GENERAL NOTES SEE DRAWING 99X-5500-G-00904.
2. INSTALL SILT FENCE AROUND CATCH BASINS AND IN FRONT OF OTHER INLET STRUCTURES THAT DRAIN INTO THE OU4 STORM SEWER SYSTEM.
3. CONSTRUCTION WATER COLLECTED WITHIN GENERAL EXCAVATIONS TO BE DISCHARGED INTO OU4 STORM SEWER SYSTEM VIA SILT FENCE.

006201

KEYED NOTES

(A) AN ANALYSIS (PERFORMED BY OTHERS) WILL DETERMINE IF AT AND BELOW GRADE CONCRETE FROM BUILDING 94B AND 94C CAN REMAIN IN PLACE OR BE EXCAVATED FOR PROPER DISPOSAL. EXCAVATE, AND TRANSPORT IMPACTED AT AND BELOW GRADE CONCRETE USING APPROPRIATE SHIPPING METHODS BY EITHER TRUCK OR RAIL TO AN APPROPRIATE OFF-SITE DISPOSAL FACILITY. NON-IMPACTED AT AND BELOW GRADE CONCRETE CAN EITHER BE LEFT IN PLACE OR EXCAVATED AND KEPT ON-SITE FOR BENEFICAL USE.

(B) CONSTRUCT CHECK DAM PER CHECK DAM DETAIL ON DRAWING 99X-5500-G-00910.

(C) NO EXCAVATION ALLOWED IN THIS AREA UNTIL OU4 REMEDIAL OPERATIONS ARE COMPLETED

(D) PROTECT THE FOLLOWING FOR POST CLOSURE ACTIVITIES:

1. UTILITY POLES #537 (NOT SHOWN), 538, 539, 540, 541, 542, 543, 544 (SEE DRAWING 99X-5500-G-00905), 674, 675, 676 (NOT SHOWN), 711, 712, 714, 715, AND 780(P) AND ASSOCIATED OVERHEAD ELECTRICAL POWER LINES.
2. UNDERGROUND CONCRETE ELECTRICAL DUCTBANK LOCATED BETWEEN UTILITY POLE #674 AND EXTRACTION WELLHOUSE EW-27.
3. FT-12" HDPE LINE.
4. CE-6" HDPE.
5. GW-10" HDPE DISCHARGE AND TREATMENT LINES.

(E) PRIOR TO THE COMPLETION OF OU4 REMEDIATION, PROTECT THE FOLLOWING:

1. UNDERGROUND CONCRETE ELECTRICAL DUCTBANKS LOCATED BETWEEN UTILITY POLES #711, 712, AND 714, AND BUILDING 94B.

(F) UNTIL ABOVE GRADE D&D OF BUILDINGS 94B AND 94C ARE COMPLETE, PROTECT THE FOLLOWING:

1. ST-30" RCP.
2. SN-4" HDPE.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	2/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

SOIL REMEDIATION

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
SOUTH SILOS PROCESS AREA GRADING PLAN

APPROVALS

COGNIZANT ENG.			SAFETY ENG.	J. MEDLICH /FOR E. JOHNSON	2/23/06
CIVIL & STR.	A.C. SNIDER	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO		
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. SCHUTZ	2/23/06
			CONSTRUCTION	R. ZIRKS	2/23/06
CHECKED	G.E.P.	2/23/06	CHARACTERIZATION	D. BRENNAN /FOR F. MILLER	2/23/06
APPROVED	E. PAUL	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00906	G-4	0
RES PROJECT NO.	FILENAME 99xg0906.dgn			

FCPSAE.DGN 5/30/03

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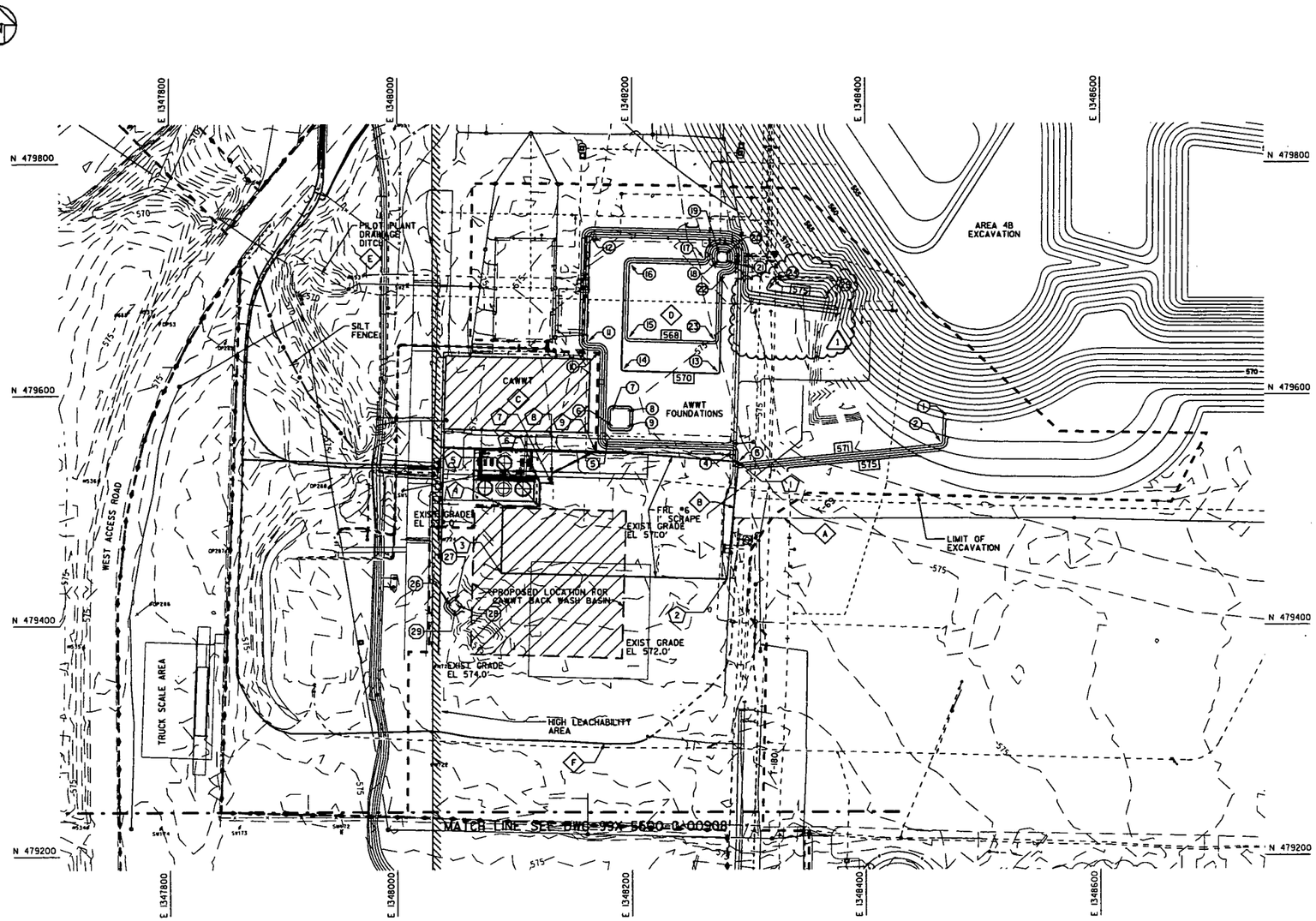


CONTROL POINTS (ALL POINTS ARE AT C/L 2' RADIUS)							
PT NO.	NORTHING	EASTING	ELEV.	PT NO.	NORTHING	EASTING	ELEV.
1	479581.97	1348468.00	571.0	15	479650.24	1348198.07	568.0
2	479559.21	1348463.15	571.0	16	479712.21	1348199.76	568.0
3	479543.20	1348291.99	571.0	17	479718.55	1348260.54	570.0
4	479550.58	1348284.52	573.0	18	479716.50	1348274.49	565.0
5	479561.46	1348179.38	571.0	19	479721.83	1348274.64	565.0
6	479573.35	1348183.71	569.0	20	479721.69	1348279.97	565.0
7	479586.47	1348184.07	569.0	21	479716.36	1348279.82	565.0
8	479586.13	1348196.56	569.0	22	479702.37	1348279.02	570.0
9	479573.01	1348196.20	569.0	23	479648.28	1348269.54	568.0
10	479636.52	1348171.43	574.0	24	479692.44	1348318.25	575.0
11	479646.74	1348163.71	571.0	25	479685.90	1348366.19	575.0
12	479736.81	1348166.17	571.0	26	479417.00	1348046.46	569.0
13	479620.43	1348272.78	570.0	27	479420.75	1348050.15	569.0
14	479622.61	1348193.31	570.0	28	479417.22	1348053.74	569.0
				29	479413.47	1348050.05	569.0

CONTROL POINTS FOR FRL #6		
PT NO.	NORTHING	EASTING
1	479542.09	1348290.90
2	479440.37	1348280.71
3	479445.52	1348090.31
4	479504.06	1348091.89
5	479503.24	1348121.71
6	479523.72	1348122.27
7	479523.46	1348131.80
8	479532.03	1348132.04
9	479551.74	1348169.11

SCALE: 1"=40'

0 20 40 100 200

SCALE IN FEET

GENERAL NOTES

1. FOR GENERAL NOTES SEE DRAWING 99X-5500-G-00903.
2. SEE TECHNICAL REFERENCE DRAWING 99X-5500-S-00912 FOR AWWT FOUNDATION REMOVAL. SAW-CUT FOUNDATION WALL, GRADE BEAM, AND SLAB (INCLUDING REBAR) APPROXIMATELY 8 FOOT FROM EXISTING COLUMN CENTERLINE BEFORE REMOVING FOUNDATIONS.
3. CONSTRUCTION WATER COLLECTED AROUND THE VICINITY OF CAWWT WILL BE PUMPED TO EITHER SWRB VIA SITE STORMWATER SYSTEM OR TO CAWWT BACKWASH BASIN ONCE OPERATIONAL.
4. CONSTRUCTION WATER COLLECTED WITHIN THE SILOS TRUCK STAGING AREA WILL BE PUMPED TO PILOT PLANT DRAINAGE DITCH OR HELD WITHIN EXCAVATION AREA.
5. IN HIGH LEACHABILITY AREAS, OBTAIN FILL MATERIAL, AS NEEDED MEETING THE REQUIREMENTS OF TECHNICAL SPECIFICATION SECTION 02206.

006201

KEYED NOTES

- (A) PROTECT ST-30" STORM SEWER LINE UNTIL AFTER CEMENT POND AND SWM POND ARE TAKEN OUT OF SERVICE.
- (B) PROTECT ST-24" STORM SEWER LINE UNTIL AFTER CEMENT POND AND SWM POND ARE TAKEN OUT OF SERVICE.
- (C) DO NOT DAMAGE CAWWT FACILITY.
- (D) CUT AND REMOVE CAISSONS AND CAPS ABOVE EL 568'-0". CAISSONS BELOW EL 568'-0" TO REMAIN IN-PLACE. (SEE TECHNICAL REFERENCE DRAWING 99X-5500-S-00912). INSTALL MINIMUM 24-INCH CLAY CAP OVER EACH CAISSON AFTER CAISSONS ARE BELOW EL 568'-0" AND SURROUNDING SOIL VERIFIED TO BE BELOW-FRL.
- (E) CONSTRUCTION WATER COLLECTED WITHIN THE SILOS TRUCK SCALE AREA WILL BE PUMPED TO PILOT PLANT DRAINAGE DITCH (PPDD) OR HELD WITHIN EXCAVATION AREA.
- (F) PROTECT EXISTING FT-12" HDPE.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
1	REVISED PER DCN #20500-001	1/25/06	WJO	
0	ISSUED CERTIFIED FOR CONSTRUCTION	9/30/05	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME
SOIL REMEDIATION

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
CAWWT AREA GRADING PLAN

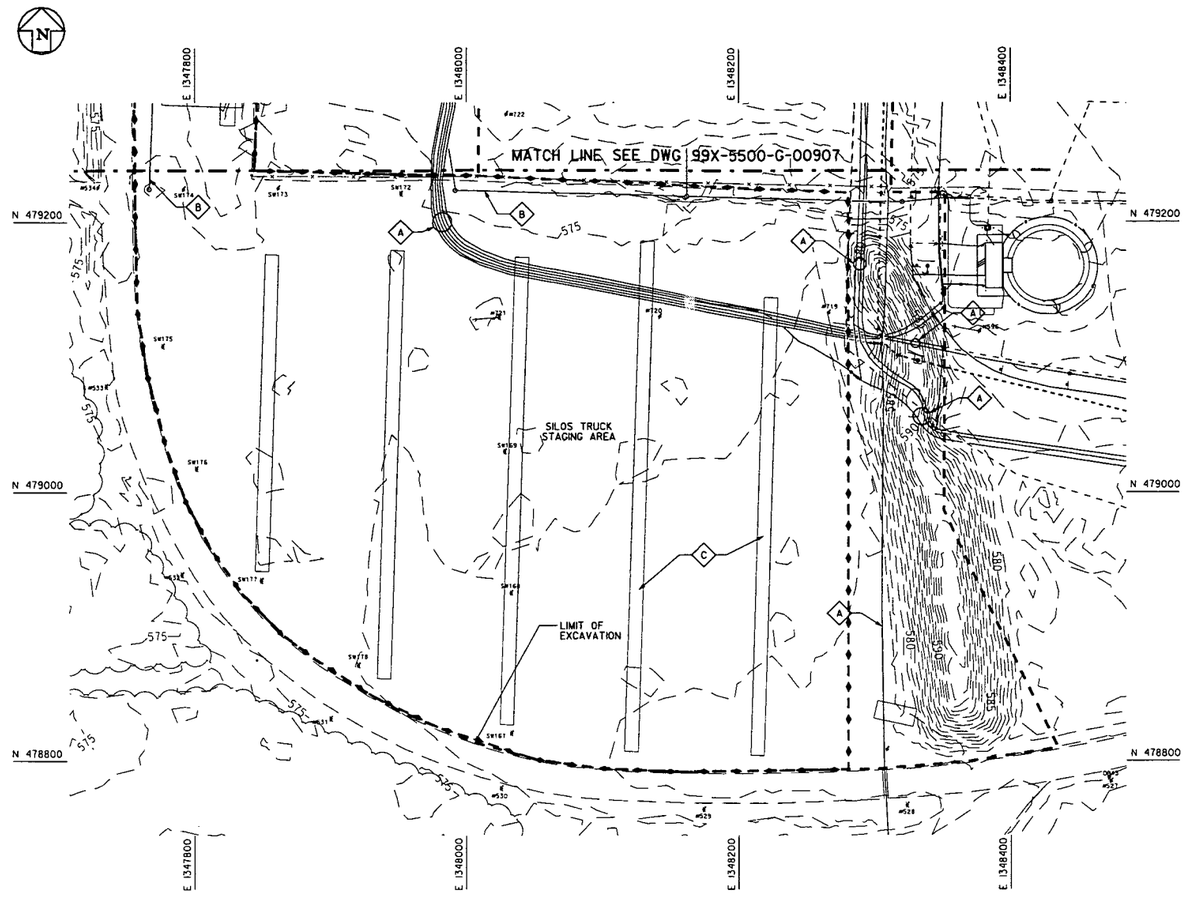
APPROVALS

COGNIZANT ENG.	A.C. SNIDER	9/29/05	SAFETY ENG.	S. MILLER FOR G. JOHNSON	9/29/05
CIVIL & STR.			MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO	L. DARLOW	9/29/05
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. FRIESE	9/29/05
			CONSTRUCTION	M. STARKO	9/29/05
CHECKED	GEP	9/29/05	CHARACTERIZATION	D. MACO	9/29/05
APPROVED	G.E. PAUL	9/29/05			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00907	G-5	1
RES PROJECT NO.	FILENAME 99xg0907.dgn			

FCP5AE.DGN 5/30/03

99xg0908 OSDF3 lind8392 03/02/2006 08:37:57 AM



SCALE: 1"=40'

0 20 40 100 200

SCALE IN FEET

GENERAL NOTES

1. FOR GENERAL NOTES SEE DRAWING 99X-5500-G-00904.
2. CONSTRUCTION WATER COLLECTED WITHIN THE SILOS TRUCK STAGING AREA WILL BE PUMPED TO PPDD (SEE DRAWING 99X-5500-G-00907) OR HELD WITHIN EXCAVATION AREA.

006201

KEYED NOTES

A. PROTECT ALL UTILITIES FOR POST CLOSURE, EXCEPT STORM SEWER LINES.

B. PROTECT STORM SEWER LINES UNTIL SILOS TRUCKING OPERATIONS ARE COMPLETE.

C. EXCAVATE CONCRETE TRAILER PADS AND KEEP ON-SITE FOR BENEFICIAL USE.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	2/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

SOIL REMEDIATION

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
SILOS TRUCK STAGING AREA GRADING PLAN

APPROVALS

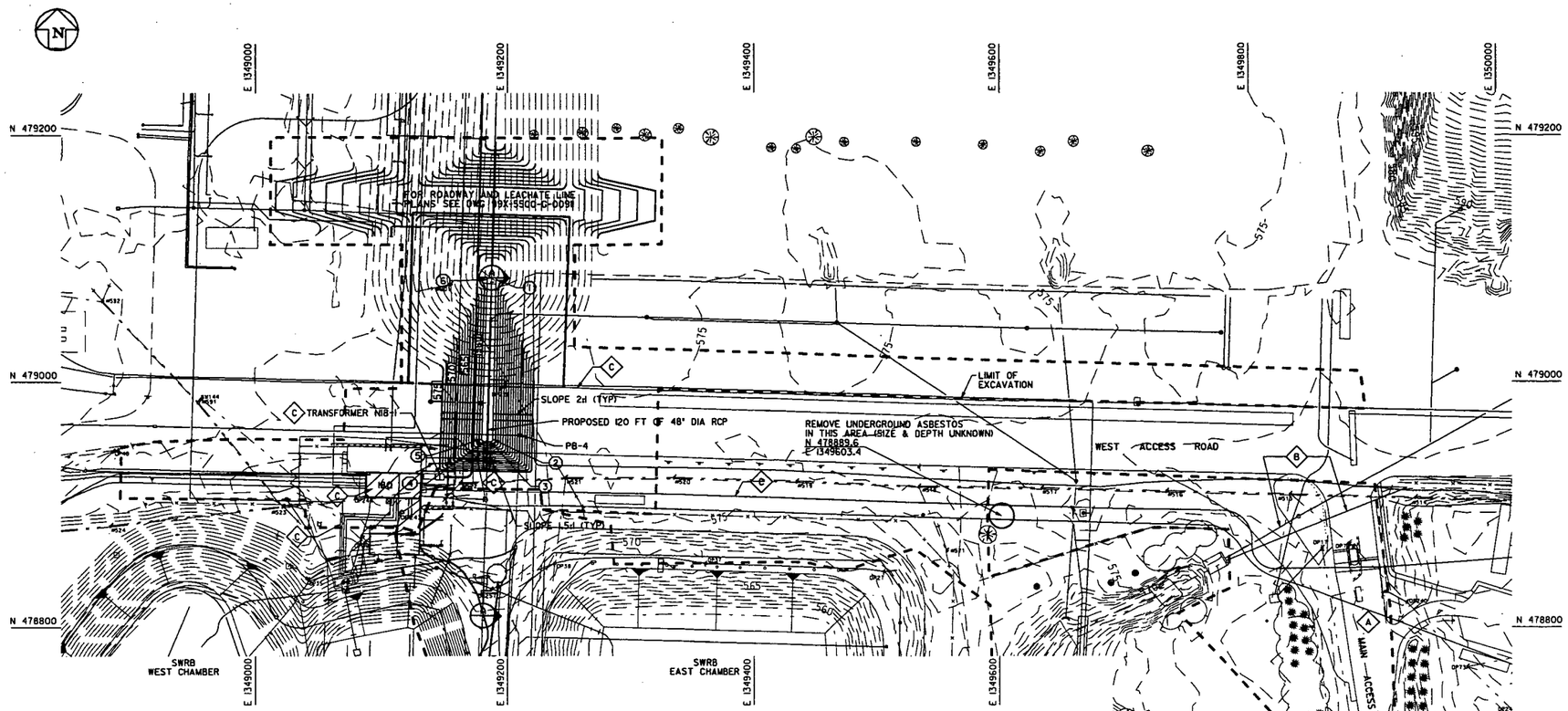
COGNIZANT ENG.			SAFETY ENG.	J. MCDANIEL /FOR C. JOHNSON	2/23/06
CIVIL & STR.	A.C. SNOOT	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAQ		
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. SCHEPER	2/23/06
			CONSTRUCTION	W. ZEBICH	2/23/06
CHECKED	C.E.P.	2/23/06	CHARACTERIZATION	D. BRUNNER /FOR F. MILLER	2/23/06
APPROVED	C. PAIR	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00908	G-6	0
RES PROJECT NO.	FILENAME 99xg0908.dgn			

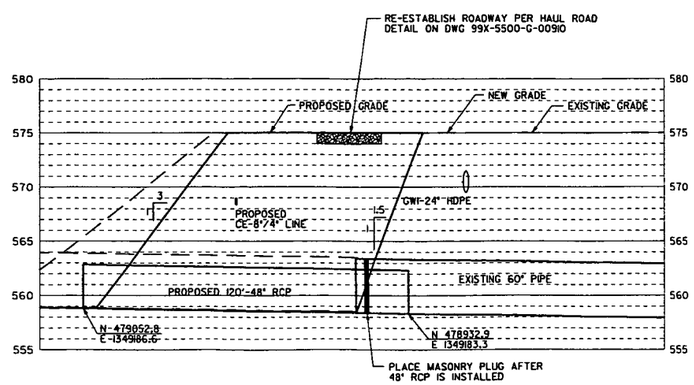
FCP5AE.DGN 5/30/03

99xg0909 OSDF3 lind8392 03/02/2006 08:38:22 AM

006201



CONTROL POINTS			
PT NO.	NORTHING	EASTING	ELEV.
1	479083.16	1349190.76	559.0
2	478953.56	1349188.32	559.0
3	478951.60	1349186.28	559.0
4	478951.69	1349181.35	559.0
5	478953.76	1349179.39	559.0
6	479083.36	1349183.85	559.0
7			
8			



USE 'CLEAN' SIZE-REDUCED CONCRETE AS GENERAL SUBGRADE FILL

CHOCK SUBGRADE FILL PER CHOCK STONE DETAIL ON DWG 99X-5500-G-00910

48" PIPE PROFILE "A-A"

SCALE: HOR 1"=20'
VER 1"=5'

SCALE: 1"=40'

0 20 40 100 200
SCALE IN FEET

GENERAL NOTES

1. FOR GENERAL NOTES SEE DRAWING 99X-5500-G-00904.
2. PRIOR TO REMOVING THE 60" STORM SEWER:
   - A. REROUTE LEACHATE LINE PER DRAWING 99X-5500-G-00911.
   - B. CONSTRUCT TEMPORARY BYPASS ROADWAY PER DRAWING 99X-5500-G-00911.
   - C. REROUTE THE WEST ACCESS ROAD NORTHWARD ACROSS THE TEMPORARY BYPASS ROAD.
   - D. DISCONNECT UNDERGROUND ELECTRICAL LINES COMING FROM TRANSFORMER N18-1 INTO THE EXCAVATION AREA, CONSTRUCT A TEMPORARY BYPASS ROADWAY PER DRAWING 99X-5500-G-00911.
   - E. DISCONNECT UNDERGROUND ELECTRICAL LINES WITHIN THE EXCAVATION AREA COMING FROM PULL BOX P8-4.
3. UNTIL THE SWRB IS REMOVED FROM SERVICE, DISCHARGE CONSTRUCTION WATER CONTAINED IN 60" STORM SEWER LINE EXCAVATION TO THE SWRB. AFTERWARDS, PUMP WATER TO CAWWT BACKWASH BASIN.
4. INSTALL SILT FENCE DOWN GRADIENT OF EXCAVATIONS REQUIRED TO REMOVE UNDERGROUND UTILITIES AND PAVEMENT AROUND NORTH END OF MAIN ACCESS ROAD.

KEYED NOTES

- (A) DO NOT REMOVE MAIN ACCESS ROAD PAVEMENT SOUTH OF OSDF SEDIMENT BASIN #2 STORM SEWER.
- (B) PROTECT 12" AND 36" CMP FOR POST CLOSURE ACTIVITIES.
- (C) PROTECT THE FOLLOWING FOR POST CLOSURE ACTIVITIES:
  1. TRANSFORMER N18-1.
  2. SOUTHERN PORTION OF BUILDING 18Q.
  3. GW-8" AND CE-10" LINES.
  4. GWI-24".
  5. CEI-10", TWXI-24", AND (2) GWI-20".
  6. NON-REROUTED PORTION OF CE-4"/8".
  7. PORTION OF 60-INCH STORM SEWER LINE TO REMAIN POST-CLOSURE (SEE 48" PIPE PROFILE).

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	2/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME
SOIL REMEDIATION

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
SUPPORT AREAS GRADING PLAN

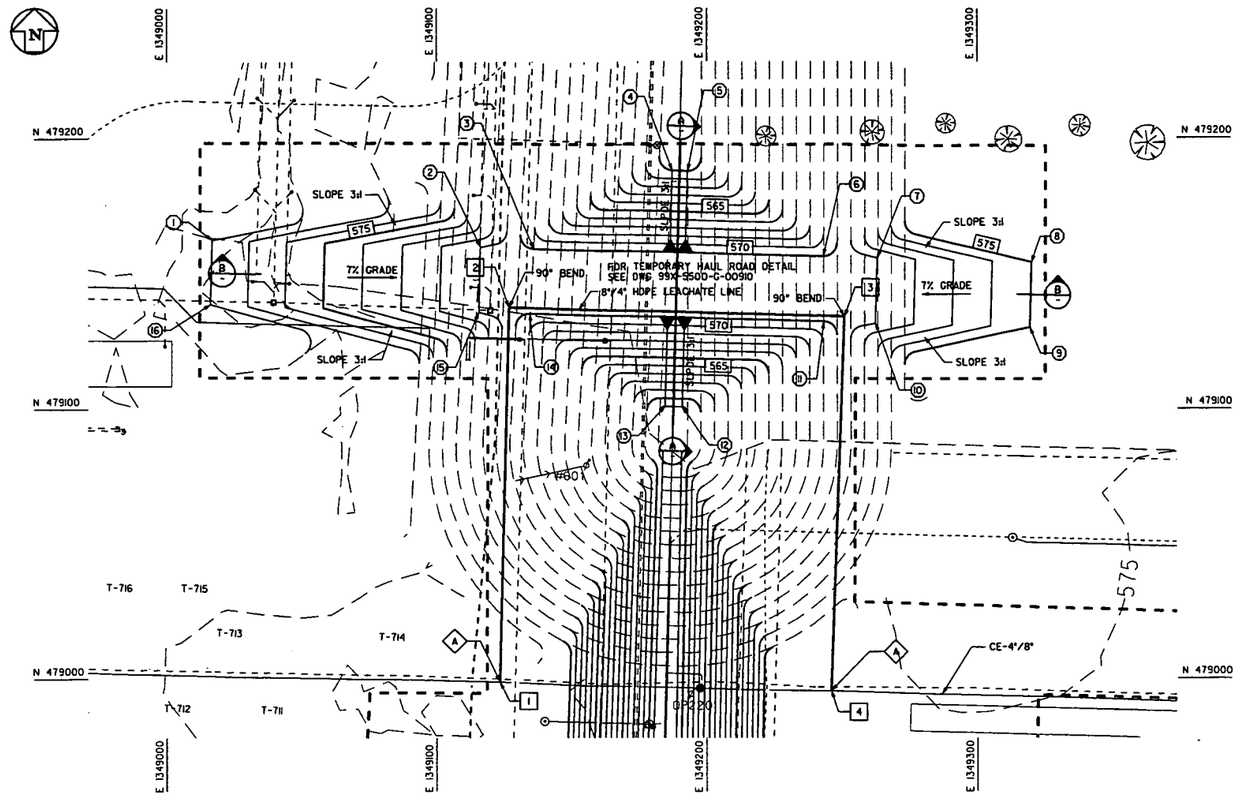
APPROVALS

COGNIZANT ENG.			SAFETY ENG.	J. MEDAUGH /FOR G. JOHNSON	2/23/06
CIVIL & STR.	A.C. SHOER	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO		
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. SCHEFER	2/23/06
			CONSTRUCTION	R. ZENCK	2/23/06
CHECKED	G.E.P.	2/23/06	CHARACTERZATION	D. BRENNAN /FOR F. MILLER	2/23/06
APPROVED	G. PAUL	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00909	G-7	0
RES PROJECT NO.	FILENAME 99xg0909.dgn			

FCP5AE.DGN 5/30/03

99xg0911 OSDF3 lind8392 03/02/2006 08:38:50 AM



PLAN
SCALE: 1"=20'

ROADWAY CONTROL POINTS			
PT NO.	NORTHING	EASTING	ELEV.
1	479162.68	1349016.32	578.0
2	479159.91	1349116.00	571.0
3	479159.38	1349135.82	570.0
4	479187.99	1349187.38	560.0
5	479187.84	1349192.92	560.0
6	479156.47	1349242.85	570.0
7	479155.93	1349262.67	571.0
8	479154.38	1349319.79	575.0
9	479130.38	1349319.14	575.0
10	479131.94	1349262.02	571.0
11	479132.45	1349243.05	570.0
12	479100.86	1349190.91	559.0
13	479101.03	1349184.66	559.0
14	479135.41	1349134.32	570.0
15	479135.93	1349115.35	571.0
16	479138.93	1349015.68	578.0
17			
18			

LEACHATE LINE CONTROL POINTS		
PT NO.	NORTHING	EASTING
1	478998.88	1349123.40
2	479137.62	1349126.69
3	479134.25	1349250.59
4	478995.58	1349245.73

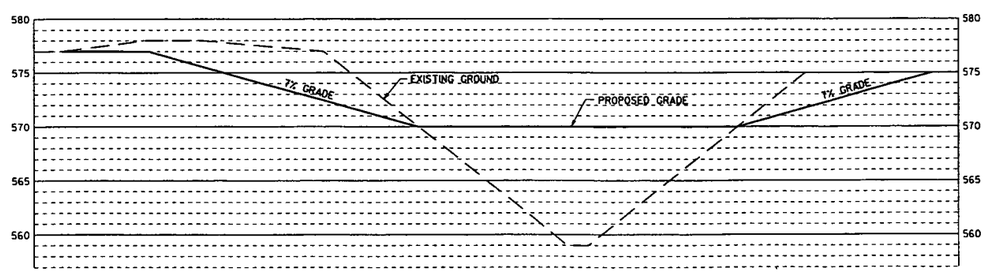
GENERAL NOTES

1. FOR GENERAL NOTES SEE DRAWING 99X-5500-G-00904.

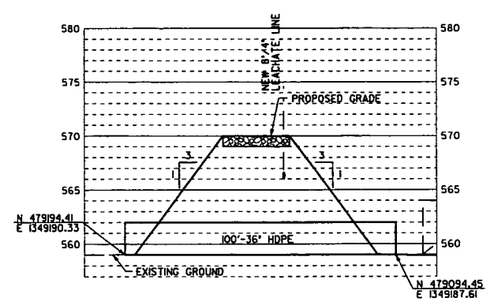
006201

KEYED NOTES

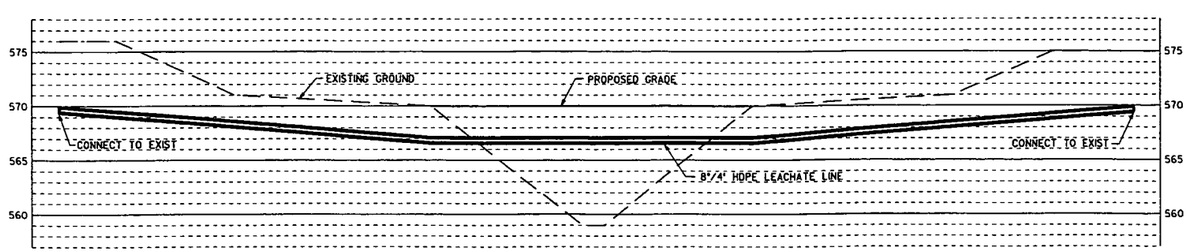
(A) TIE-IN IS NOT TO BE MADE UNTIL THE PUMPING OF LEACHATE FROM THE OSDF HAS BEEN HALTED AND THE ENTIRE LENGTH OF 8 INCH/4 INCH HDPE DOUBLE WALL TEMPORARY LEACHATE FORCE MAIN LINE HAS BEEN ASSEMBLED, JOIN SECTIONS OF HDPE DOUBLE CONTAINMENT PIPE USING THERMAL BUTT FUSION WELDS PER TECHNICAL SPECIFICATIONS ON-SITE DISPOSAL FACILITY ENHANCED PERMANENT LEACHATE TRANSMISSION SYSTEM VALVE HOUSE 7 AND 8 (DOCUMENT NO. 20112-001 REV. B) SECTION 02605.



ROAD PROFILE "B-B"
SCALE: HOR 1"=20'
VER 1"=5'



36" PIPE PROFILE "A-A"
SCALE: HOR 1"=20'
VER 1"=5'



8"/4" PIPE PROFILE
SCALE: HOR 1"=20'
VER 1"=5'

SCALE: 1"=20'
0 10 20 50 100
SCALE IN FEET

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	2/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME
SOIL REMEDIATION

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
24' ROADWAY PLAN & PROFILE
LEACHATE LINE PLAN & PROFILE

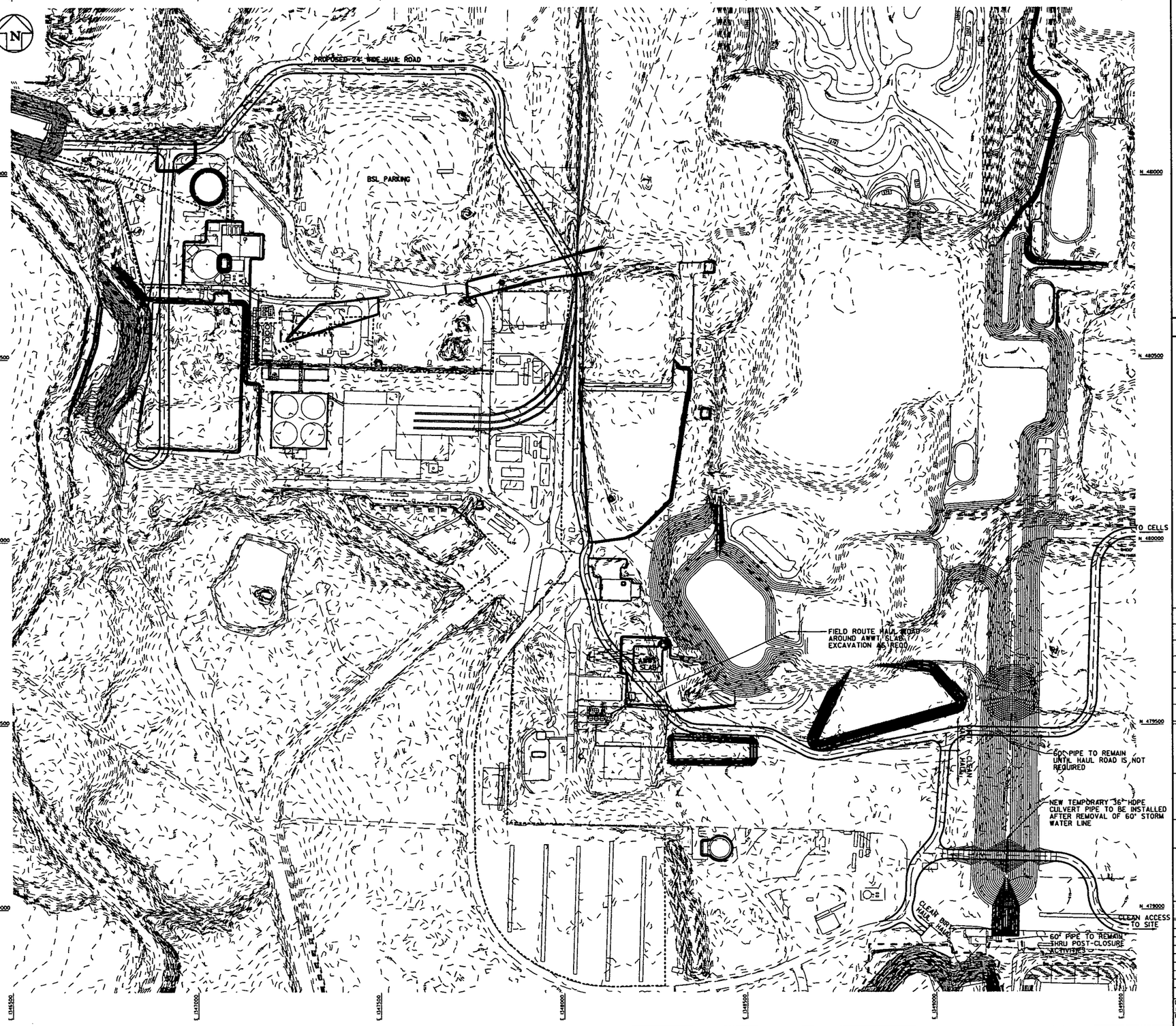
APPROVALS

COGNIZANT ENG.			SAFETY ENG.	J. MCDANIEL /FOR C. JOHNSON	2/23/06
CIVIL & STR.	A.C. SNIDER	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO		
INSTRUMENT			SECURITY		
MECHANICAL			QA	G. SCHEYER	2/23/06
			CONSTRUCTION	G. ZEBICK	2/23/06
CHECKED	G.E.P.	2/23/06	CHARACTERIZATION	D. GRUNNAN /FOR F. MILLER	2/23/06
APPROVED	G. PAUL	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00911	G-8	0
RES PROJECT NO.	FILENAME 99xg0911.dgn			

FCPSAE.DGN 5/30/03

99xg0925 OSDF3 lind8392 03/02/2006 08:39:22 AM



FCPSAE.DGN 5/30/03

GENERAL NOTES

006201

KEYED NOTES

SCALE: 1" = 100'

0 50 100 250 500

SCALE IN FEET

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	02/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

SOIL REMEDIATION

DRAWING TITLE

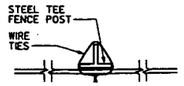
AREA 7 SUPPORT AND SILOS PROCESS AREAS
PROPOSED HAUL ROAD

APPROVALS

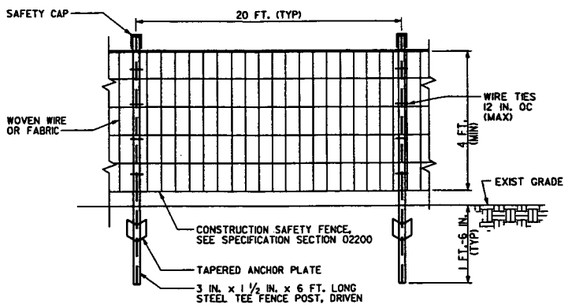
COGNIZANT ENG.			SAFETY ENG.	J. MEDANICH FOR S. JOHNSON	2/23/06
CIVIL & STR.	A.C. SHOER	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WASTE MANAGE		
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. SCHEPER	2/23/06
			CONSTRUCTION	R. ZIRICK	2/23/06
CHECKED	G.E.P.	2/23/06	SILOS PROJ. ENG.	D. BROWNING FOR F. MILLER	2/23/06
APPROVED	G. PAUL	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
K.L. RABBITT	20600	99X-5500-G-00925	G-9	0
RES PROJECT NO.	FILENAME 99xg0925.dgn			

99xg0910 OSDF3 lind8392 03/02/2006 08:40:28 AM



PLAN



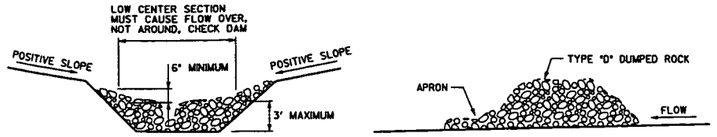
ELEVATION

NOTE:

INSTALL SAFETY CAPS ON T-POSTS THAT ARE LESS THAN 4 FEET IN HEIGHT ABOVE-GRADE.

CONSTRUCTION SAFETY FENCE DETAIL

NTS



CROSS SECTION

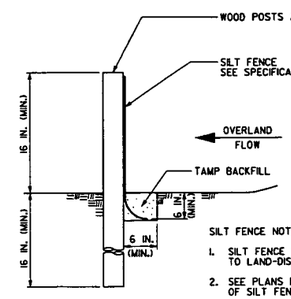
PROFILE

GENERAL NOTES:

1. THE CHECK DAM SHALL BE CONSTRUCTED OF TYPE "D" DUMPED ROCK FILL, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL.
2. THE TOP OF THE CHECK DAM SHALL BE CONSTRUCTED SO THAT THE CENTER IS APPROXIMATELY 6 INCHES LOWER THAN THE OUTER EDGES, SO WATER WILL FLOW ACROSS THE CENTER AND NOT AROUND THE ENDS.
3. THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER OF THE WEIR SHALL NOT EXCEED 3 FEET.
4. PLACE CHECK DAMS AS SHOWN ON THE PLANS.

CHECK DAM DETAIL

NTS

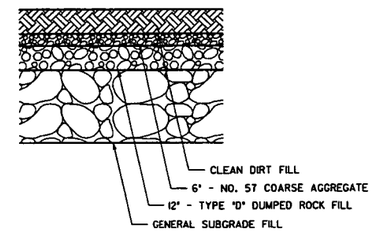


SILT FENCE NOTES:

1. SILT FENCE TO BE INSTALLED PRIOR TO LAND-DISTURBING ACTIVITIES.
2. SEE PLANS FOR LOCATION AND LENGTH OF SILT FENCE.
3. WOOD POSTS SHALL BE 2 IN. X 2 IN. (MIN.) OF OAK OR SIMILAR HARDWOOD.
4. BACKFILL MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION 02200.

SILT FENCE DETAIL

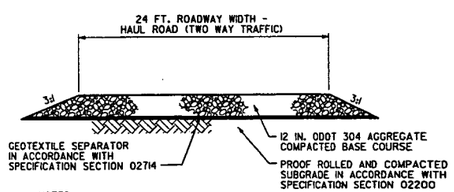
NTS



1. PLACE TYPE "D" DUMPED ROCK FILL AS A SEPARATE LAYER. INITIALLY WORK TYPE "D" DUMPED ROCK FILL INTO GENERAL SUBGRADE FILL BY MULTIPLE PASSES OF THE COMPACTION EQUIPMENT. WORK TYPE "D" DUMPED ROCK FILL INTO AT LEAST THE TOP 12" OF GENERAL SUBGRADE FILL
2. PLACE NO. 57 COARSE AGGREGATE AS A SAPARATE LAYER. INITIALLY WORK NO. 57 COARSE AGGREGATE INTO THE TYPE "D" DUMPED ROCK FILL BY MULTIPLE PASSES OF COMPACTION EQUIPMENT. WORK NO. 57 COARSE AGGREGATE INTO AT LEAST THE TOP 6" OF TYPE "D" DUMPED ROCK FILL.

CHOCK STONE DETAIL

NTS

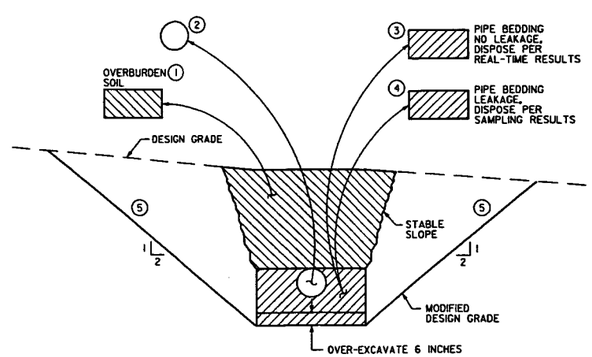


NOTES:

1. SEE SPECIFICATION SECTION 02230 FOR ROAD CONSTRUCTION.
2. SMTA DIMENSIONS AS DIRECTED BY THE CONSTRUCTION MANAGER.

TEMPORARY HAUL ROAD DETAIL

NTS



1. EXCAVATE OVERBURDEN SOIL FROM ABOVE THE PIPE (SEE NOTE D AND DISPOSE OF IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 02205. SEE LATEST REVISION OF UNDERGROUND UTILITY GRID DRAWINGS FOR LOCATIONS AND ELEVATIONS OF UTILITIES.
2. EXCAVATE THE PIPE AND PERFORM A VISUAL INSPECTION OF THE PIPE. PIPE FREE OF VISIBLE PROCESS RESIDUE SHALL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 02205. DISPOSE OF PROCESS PIPE THAT IS DEFORMED, CLOSED OR OTHERWISE HINDERS VISUAL INSPECTION, OR CANNOT BE CLEANED OF VISIBLE PROCESS RESIDUE, AS ABOVE-WAC DEBRIS IN ACCORDANCE WITH SPECIFICATION SECTION 02205.
3. IF PIPE BEDDING SHOWS NO VISIBLE SIGNS OF PIPE LEAKAGE:
   1. PERFORM REAL-TIME MONITORING OF THE PIPE BEDDING IN THE TRENCH USING EMS OR ADJACENT TO THE TRENCH USING THE HPGE TRI-POD ON CIRCULAR SOIL PADS.
   2. EXCAVATE PIPE BEDDING, AND OVER-EXCAVATE 6 INCHES BELOW THE PIPE BEDDING.
   3. MANAGE MATERIAL BASED ON THE RESULTS OF REAL-TIME MONITORING, IN ACCORDANCE WITH SPECIFICATION SECTION 02205.
4. IF PIPE BEDDING SHOWS VISIBLE SIGNS OF PIPE LEAKAGE:
   1. PERFORM PHYSICAL SAMPLING OF THE PIPE BEDDING.
   2. EXCAVATE PIPE BEDDING, AND OVER-EXCAVATE 6 INCHES BELOW THE PIPE BEDDING, OR AS NECESSARY TO REMOVE VISIBLE SIGNS OF PIPE LEAKAGE.
   3. MANAGE MATERIAL BASED ON SAMPLING RESULTS, IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTION 02205.
5. EXCAVATE SIDE SLOPES NO STEEPER THAN 2H:1V TO STABILIZE EXCAVATED UTILITY TRENCHES AND TO PROVIDE A MODIFIED DESIGN GRADE. DISPOSE OF EXCAVATED MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION 02205.

NOTES:

1. THE TERM "PIPE" IS USED AS A GENERIC REFERENCE TO UNDERGROUND UTILITIES.

EXCAVATION OF UTILITIES BELOW DESIGN GRADE

NTS

GENERAL NOTES

006201

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
0	ISSUED CERTIFIED FOR CONSTRUCTION	2/23/06	RML	GEP

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

SOIL REMEDIATION

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
CIVIL DETAILS

APPROVALS

COGNIZANT ENG.			SAFETY ENG.	J. MEDAGER /FOR C. JOHNSON	2/23/06
CIVIL & STR.	A.C. SHEER	2/23/06	MAINTENANCE		
ELECTRICAL			FIRE PROTECT.		
ENGINEER			WAO		
INSTRUMENT			SECURITY		
MECHANICAL			QA	R. SCHEYER	2/23/06
			CONSTRUCTION	K. ZEIGER	2/23/06
CHECKED	G.E.P.	2/23/06	CHARACTERIZATION	D. BROWNING /FOR F. MILLER	2/23/06
APPROVED	G. PAUL	2/23/06			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.M. LINDGREN	20500	99X-5500-G-00910	G-10	0
RES PROJECT NO.	FILENAME 99xg0910.dgn			

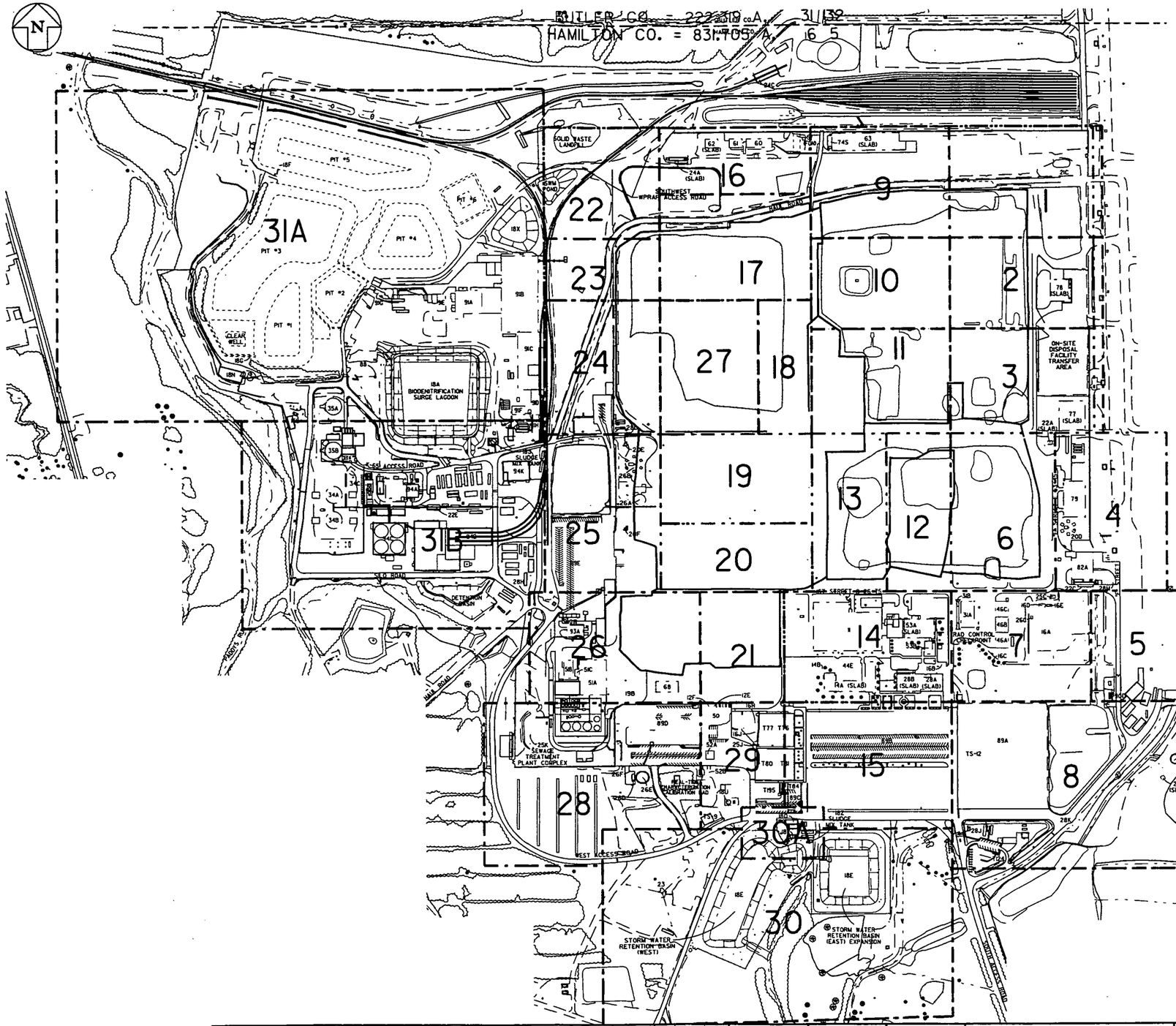
FCP5AE.DGN 5/30/03

AREA 7 SUPPORT AND SILOS PROCESS AREAS

UTILITY GRID AND TECHNICAL REFERENCE DRAWING PACKAGE

FOR 20500

22xp0659 CADD11 rabb7064 09/01/2005 10:11:59 AM



BALLOON LEGEND	
PIV	POST INDICATOR VALVE
VLV	GATE VALVE
SMH	SANITARY MANHOLE
EMH	ELECTRICAL MANHOLE
TMH	TELEPHONE MANHOLE
CB	STORM SEWER CATCH BASIN
MH	STORM SEWER OR ACCESS MANHOLE
HFH	HIGH PRESSURE FIRE HYDRANT
LFH	LOW PRESSURE FIRE HYDRANT
PB	PULL BOX

ABBREVIATION LEGEND	
ST	STORM SEWERS
SD	SUB-SURFACE DRAINAGE
SN	SANITARY SEWERS
FQI	HIGH PRESSURE FIRE LINES
DW	LOW PRESSURE FIRE LINE/ POTABLE WATER
LS	LIVE STEAM
CN	STEAM CONDENSATE
WS	COOLING WATER SUPPLY
WR	COOLING WATER RETURN
CE	CONTAMINATED SEWER
FT	FILTRATE OR EFFLUENT
TW	TREATED WATER
DF	DEIONIZED FEED
PW	DEIONIZED WATER
BR	BRINE
RW	RAW WATER
VE	VENT LINES
SL	SUMP LIQUOR
FG	FUEL GAS
G	ELECTRIC GROUND
VCP	VIT. CLAY PIPE
RCP	REINF. CONC. PIPE
AW	ACID WASTEWATER
——	ACTIVE LINE
- - -	ABANDONED LINE
— —	PROPOSED LINE

GRID	DRAWING NUMBER
1	22C-5500-P-00660
2	22C-5500-P-00661
3	22C-5500-P-00662
4	22F-5500-P-00663
5	22A-5500-P-00664
6	22F-5500-P-00665
7	22H-5500-P-00666
8	22H-5500-P-00667
9	22C-5500-P-00668
10	22C-5500-P-00669
11	22C-5500-P-00670
12	22E-5500-P-00671
13	22E-5500-P-00672
14	22H-5500-P-00673
15	22H-5500-P-00674
16	22B-5500-P-00675
17	22B-5500-P-00676
18	22B-5500-P-00677
19	22D-5500-P-00678
20	22D-5500-P-00679
21	22G-5500-P-00680
22	22B-5500-P-00681
23	22B-5500-P-00682
24	22B-5500-P-00683
25	22D-5500-P-00684
26	22G-5500-P-00685
27	22B-5500-P-00686
28	22A-5500-P-00687
28	22A-5500-P-00744
29	22A-5500-P-00688
30	22A-5500-P-00689
30A	22A-5500-P-00785
31A	22A-5500-P-00804
31B	22A-5500-P-00805
32	22A-5500-P-00707

LEGEND

- POST INDICATOR VALVE (P.I.V.)
- FIRE HYDRANT (F.H.)
- MANHOLE (MH)
- CATCH BASIN (CB)
- LIGHT POLE
- PIPE SUPPORT
- ELECTRICAL MANHOLE
- TELEPHONE MANHOLE
- STREET WASHERS
- VALVE BOX
- MONITORING WELL

GRID DETAIL DRAWINGS

GRID NO.	DETAIL DWG NO.
10	22C-5500-P-00706
13,14,20,21	22H-5500-P-00963
28	22A-5500-P-00744
31A	22A-5500-P-00961
31B	22A-5500-P-00930
31B	22A-5500-P-00961

FUEL GAS (FG) NOTE:

THE ONLY ACTIVE FUEL GAS LINES ARE FROM NEW GAS METER AT WILLEY ROAD TO HIGHLINE (EAST OF BLDG. 51A), THEN TO NEW BOILER HOUSE (BLDG. 93A) AND TO WPRAP AREA.

FERNALD UNDERGROUND UTILITES

THIS COMPOSITE DRAWING CONTAINS INFORMATION TAKEN FROM ENGINEERING DRAWINGS FROM 1951 TO THE PRESENT WHICH ARE PRESENTLY ON FILE IN THE FERNALD SITE ENGINEERING DEPARTMENT. NOTE: UNDERGROUND UTILITES WHICH ARE NOT OF RECORD IN THE FERNALD SITE ENGINEERING DEPARTMENT ARE NOT DISPLAYED IN THESE COMPOSITE DRAWINGS.

POST INDICATOR COLORS AT THE F.E.M.P.
(PER FRED BRAUN, UTILITY ENG. 5/18/95)

COLOR	SERVICE
WHITE	(DW) POTABLE WATER LOW PRESSURE FIRE HYDRANT
ORANGE/GREEN	HIGH PRESSURE FIRE HYDRANT
YELLOW	(TW) TREATED WATER PROCESS WATER
BLACK	(FT) EFFLUENT
GREEN	(WS) COOLING WATER SUPPLY
BLUE	(WR) COOLING WATER RETURN
PINK	(RW) RAW WATER
PINK/WHITE	(UN-USED (RW) & (DW) CROSS CONNECTION
RED	PROPANE AREA SUMP PIT
PINK/GREEN	(RW) & FIRE PUMP HOUSE (26A)
GRAY	(FT) LIME SLURRY POND LINE
YELLOW/GREEN	(TW) TREATED WATER
WHITE/GREEN	(DW) FEED TO GROUNDWATER STORAGE TANK

FIRE HYDRANT COLORS AT THE F.E.M.P.

ORANGE	LOW PRESSURE HYDRANTS
ORANGE/GREEN	HIGH PRESSURE HYDRANTS

INTERIOR PIPING COLORS (PRELIMINARY)

BLUE	AIR
GREEN	WATER
RED	FIRE PROTECTION

PRELIMINARY

CONTACT CADD SERVICES FOR PIPE SPECIFICATIONS OF OLD AND MOST OF THE NEW PIPING INSTALLATIONS.

NOTE:
1. THIS DRAWING ISSUED PERIODICALLY, FOR THE MOST RECENT VERSION OF THIS DRAWING, ACCESS THE FILENAME BELOW THE TITLE BLOCK.
2. COORDINATES SHOWN ON THIS DRAWING ARE TAKEN FROM EXISTING FEMP DRAWINGS AND ARE NOT VERIFIED TO BE 'AS-BUILT'. IT IS HIGHLY RECOMMENDED THAT A FIELD SURVEY BE PERFORMED PRIOR TO SITE DESIGN WORK.

NO.	REVISIONS	DATE	DWN. BY	APPD.
16	GENERAL UPDATE	1-1-01	GEP	
15	GENERAL UPDATE	6/1/00	GEP	GEP
14	ADDED GRID DETAIL DRAWING INDEX	1/12/00	RML	GEP
13	REVISED PER MARK-UP	1/14/00	SJS	GEP

NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
12	REMOVE GRID 10A REF. GENERAL UPDATE	2-23-00	RML	GEP	
11	MODIFIED GRID 26 & GRID 31B OUTLINES. ADD GRID 10A	1-03-98	RML	GEP	
10	MODIFIED GRID 28 OUTLINE, ADDED DWG NO..	3-2-98	RML	GEP	
	DELETED GRID 33				
9	UPDATED	3-4-97	GEP	GEP	
8	UPDATED	1-20-95	JSW	GEP	93X-5900-G-00273
7	UPDATED	12-4-95	GES	GEP	93X-5900-G-00272

FORMAT REVISED 8/7/95

NOTE:
FERMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

PERFORMANCE GRADE
1 2 3 4 5
BY: DATE:

APPROVALS			
CIVIL & STR.		SAFETY ENG.	
ELECTRICAL		MAINTENANCE	
ENGINEER		Q.A.	
INSTRUMENT		FIRE PROTECT.	
MECHANICAL		WASTE MANAGE	
		SECURITY	
		CRU	
CHECKED	GEP		
APPROVED	C.E. PAUL		

FERNALD ENVIRONMENTAL RESTORATION MANAGEMENT CORPORATION
FERMCO
Fernald
Environmental Management Project
U.S. DEPARTMENT OF ENERGY

SITE MAP

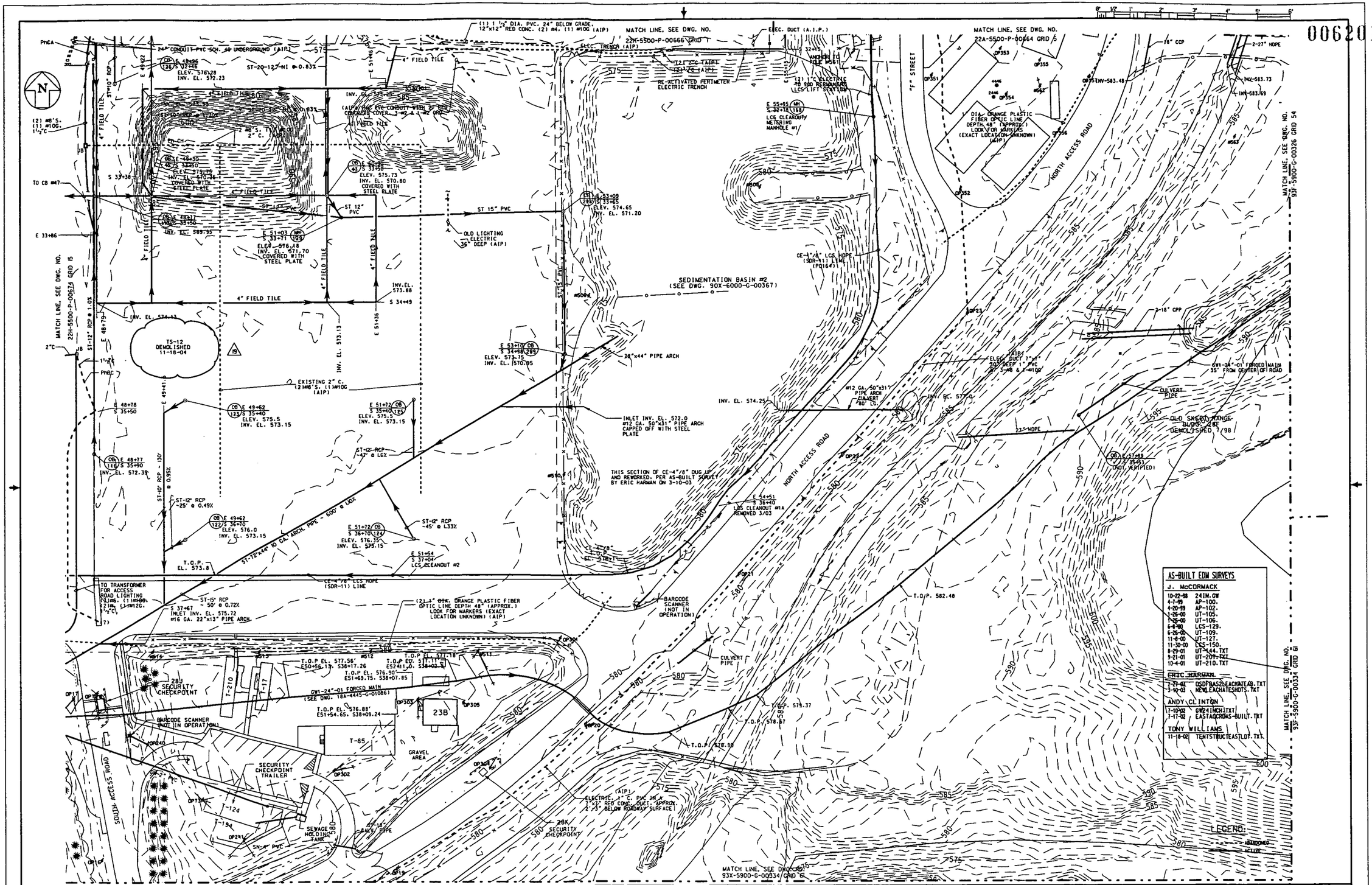
MASTER GRID OF UNDERGROUND UTILITY PLANS

DATE 5/1/01
DRAWN G.E.S.

22X-5500-P-00659 | 16

FILE NAME: /UNDER/22XP0659.DGN

22hp0667 CADD11 rabb7064 09/01/2005 10:13:24 AM



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3. FOR ADDITIONAL INFO. ON STORM SEWER LINES AND CATCH BASINS SEE REF. #2898. FOR AS-BUILT FIELD SURVEY OF THE 4"/8" LCS LINE, SEE B.L. PAYNE SURVEY REF. DRAWING - LCS2032.DGN0

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
					19	EAST PARKING LIGHTS AIP PER COMP. W.O. TK013907,	7/1/05	GEP	GEP	
						EAST PARKING LOT ASPHALT SURFACE REMOVED				
						8/04, TS-12 DEMOLISHED 11/18/04, GENERAL UPDATES				
					18	AIP UNDERGROUND ELECTRIC FOR ROADWAY LIGHTING	6/9/04	GEP	GEP	
						PER COMP. W.O. RT003957 & DCN: 4519-001, CALLED				92X-5900-E-00323
						OUT OSDF GRAVEL STAGING AREA				22X-5500-P-00659

NOTE:
WEMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS ± 1/8
ANGLES ± 0° - 30'
DECIMALS
.X ± .1
.XX ± .03
.XXX ± .010
.XXXX ± .0005
DWG. RELEASE DATE

APPROVALS				
CIVIL & STR.			SAFETY ENG.	
ELECTRICAL			MAINTENANCE	
ENGINEER			Q.A.	
INSTRUMENT				
MECHANICAL			FIRE PROTECT.	
			WASTE MANAGE.	
CHECKED	RF		D.O.E.	
APPROVED	G.L. PAIL	2-20-90	SECURITY	

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

EAST PARKING LOT — YARD AREA
GRID 8
UNDERGROUND UTILITIES
SCALE 1"=30'

DATE 2-20-90
DRAWN DEL TURPIN

22H-5500-P-00667 | 19

FILE NAME: /UNDER/22HP0667.DGN

22hp0674 CADD11 rabb7064 09/01/2005 10:14:35 AM

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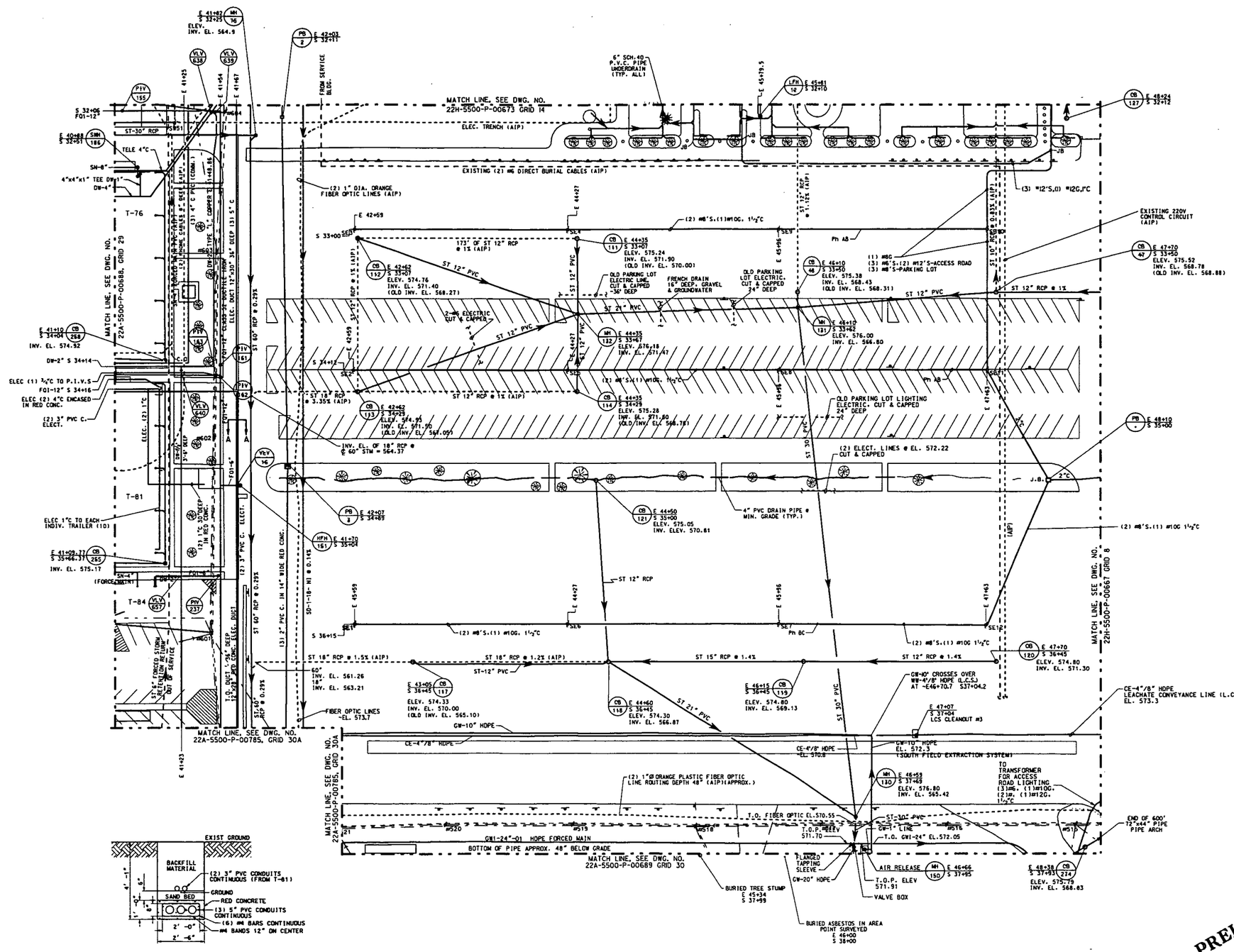

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3. FOR ADDITIONAL INFO. ON STORM SEWER LINES AND CATCH BASINS SEE RES #2899. FOR AS-BUILT FIELD SURVEY OF THE 4"/8" LCS LINE, SEE B.L. PAYNE SURVEY (REF. DRAWING - LCS2032.DGN).

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
					18	GENERAL UPDATE.	1/21/05	GEP		
					17	ADDED T-84. NUMBERED DW, FOI PIV'S & VLV'S NOT PREVIOUSLY NUMBERED. DW VLV'S 638, 639, 640, 657. FOI PIV 237. SN-4' PVC (FORCED) A.I.P. PER RES 4401	1/5/03	SJS/RML	GEP	22X-5500-P-00659

NOTE: WEMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS ± 1/8
ANGLES ± 0° - 30'
DECIMALS
.X ± .10
.XX ± .030
.XXX ± .0050
.XXXX ± .0005
DWG. RELEASE DATE

APPROVALS				
CIVIL & STR.			SAFETY ENG.	
ELECTRICAL			MAINTENANCE	
ENGINEER			Q.A.	
INSTRUMENT				
MECHANICAL			FIRE PROTECT. WASTE MANAGE.	
CHECKED	GP	1/25/05	D.O.E.	
APPROVED	LC. PAIL	1/25/05	SECURITY	

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

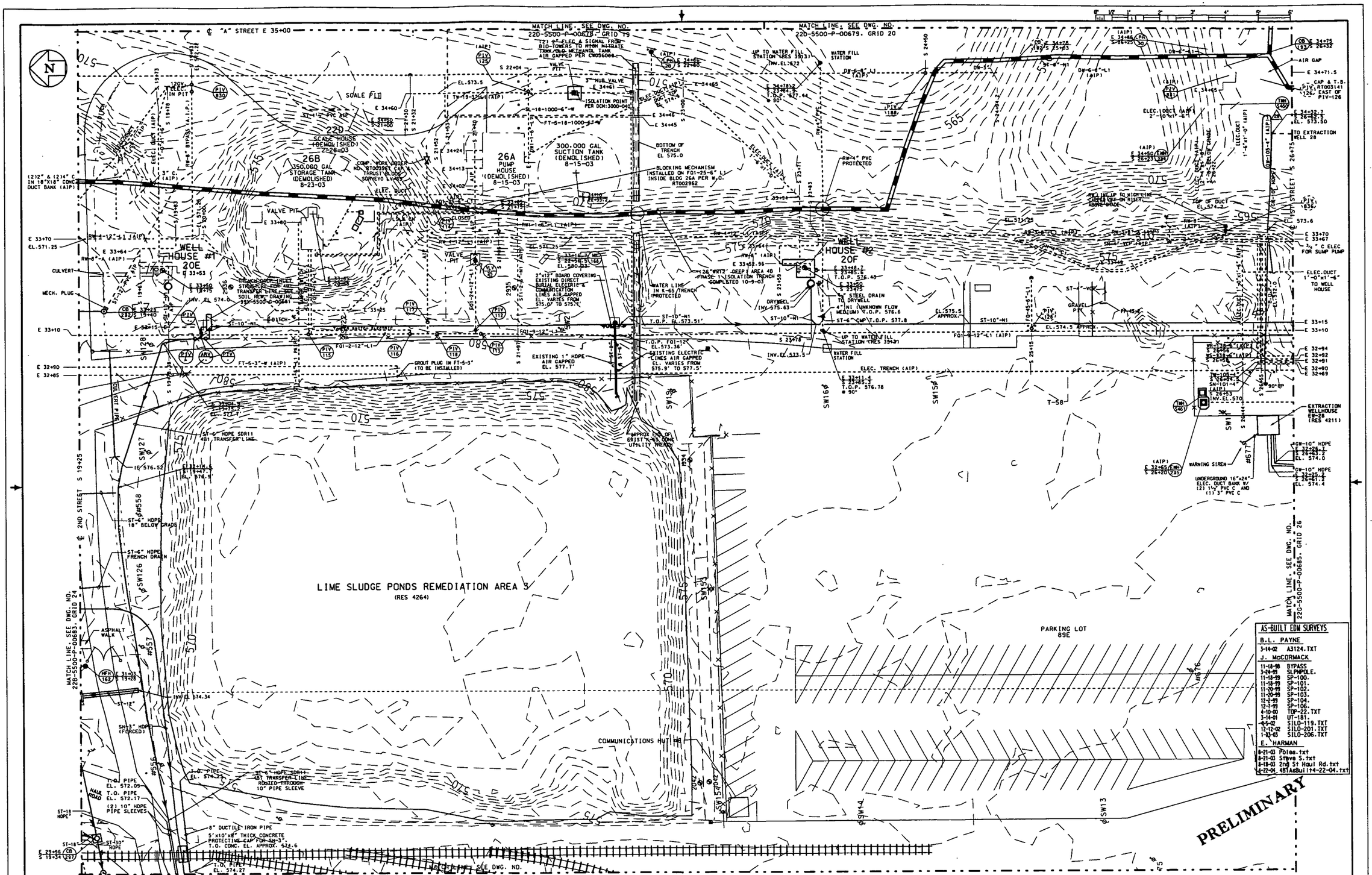
WEST PARKING LOT — YARD AREA
GRID 15
UNDERGROUND UTILITIES
SCALE 1"=30'

DATE 5-21-90
DRAWN DEL TURPIN

22H-5500-P-00674 | 18

FILE NAME: /UNDER/22HP0674.DGN

22dp0684 CADD11 rabb7064 09/01/2005 10:16:32 AM



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NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
					29	RELOCATED RALLY POINT #4 TO GRID 3B, T-199	5-8-05	GEP		
					28	DEEP WELL #1 (20E) ELECTRIC ISOLATED PER W.O. TK013491	7-1-05	GEP	GEP	
						TRAILER T-100 ELECTRIC ISOLATED PER W.O. TK013975				SIX-1910-G-00006
						TRAILER T-221 ELECTRIC ISOLATED PER W.O. TKP14530				22X-5500-P-00659
						DW-4" AIP PER W.O. RT004481				26A-4445-P-00040

NOTE: WEMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS ± 1/16
ANGLES ± 0° - 30'
DECIMALS
.X ± 0.1
.XX ± 0.03
.XXX ± 0.005
.XXXX ± 0.0050
ISSUE RELEASE DATE

APPROVALS					
			SAFETY ENG.		
CIVIL & STR.			MAINTENANCE		
ELECTRICAL					
ENGINEER			Q.A.		
INSTRUMENT					
MECHANICAL			FIRE PROTECT.		
			WASTE MANAGE		
CHECKED	GEP		O.O.E.		
APPROVED	G.E. PAUL	4/29/99	SECURITY		

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

BLDG 45, SLUDGE PITS — YARD AREA

GRID 25
UNDERGROUND UTILITIES
SCALE 1"=20'

DATE 9-7-90
DRAWN J. KING

22D-5500-P-00684 | 29

FILE NAME: /UNDER/22DP0684.DGN

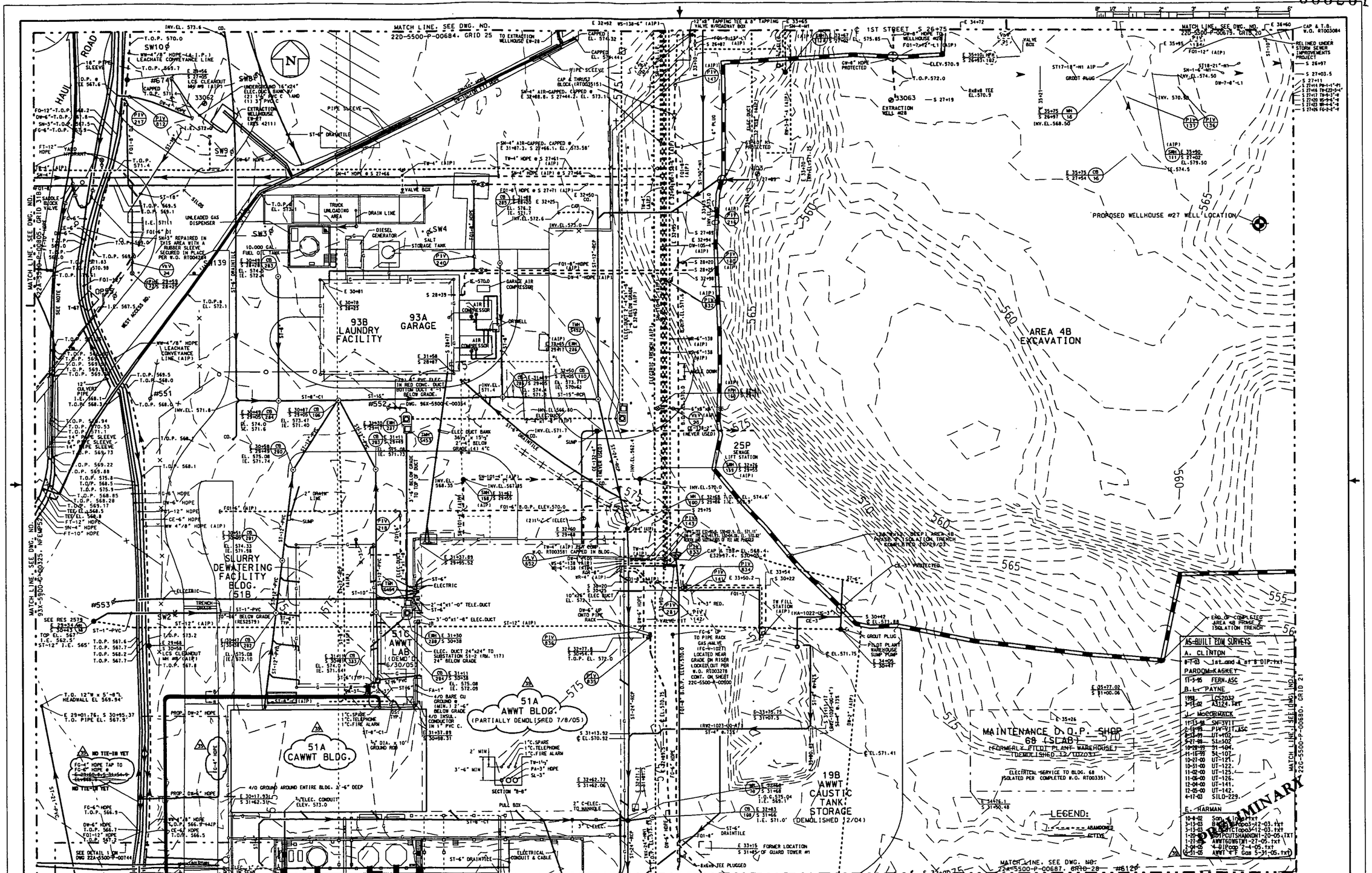
AS-BUILT EDM SURVEYS

B.L. PAYNE
3-14-02 A3124.TXT

J. McCORMACK
11-18-98 BYPASS
3-24-99 SLMPOLE.
11-18-99 SP-100.
11-18-99 SP-101.
11-20-99 SP-102.
11-20-99 SP-103.
12-2-99 SP-104.
12-7-99 SP-106.
4-10-00 TOP-22.TXT
3-14-01 UT-181.
4-5-02 SILO-119.TXT
12-12-02 SILO-201.TXT
1-13-03 SILO-206.TXT

E. HARMAN
8-21-03 Poles.txt
8-21-03 Stove S.txt
8-19-03 2nd St Haul Rd.txt
4-22-04 451AsBuilt4-22-04.txt

22gp0685 CADD11 rabb7064 09/01/2005 10:17:21 AM



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3. GW-10" AND WW-4"/8" LINES LOCATED PER B.L. PAYNE AS-BUILT SURVEY. SEE /PAYNE/LCS/LCS2032.DGN.
4. SEE PARSONS TOP-046 DWG 95X-5900-G-00009 FOR CONSTRUCTION DETAILS.

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.
35	ADDED PARTIAL FG-4" HDPE INSTALLATION PER SURVEY AWWT4FGASS-3-05.TXT, ADDED FG-4" TAP ONTO FG-6" PER SURVEY AWWT 4 FGAS 5-3-05.TXT	6-23-05	GEP		32	A.T.F. - TRAILER T-135 ELECTRIC ISOLATED PER W.O. RT003974. 19B DEMOLISHED, ADDED DW & TW TEE LOCATIONS PER SURVEY AWWTGDWSTW1-27-05 & W.O. RT004481, ADDED CAP AND THRUST BLOCK LOCATIONS ON FG-8" DIP LINE PER SURVEY ON 1-20-05 AND W.O. RT004482	7-1-05	GEP	GEP
34	CAP INSTALLED ON SN-4" HDPE TO AIP PER SURVEY 4DPCAP2-4-05.TXT & TK005291	3-1-05	GEP	GEP	31	ADDED CALLOUT TO REPAIR SN-3" AT ENTRANCE TO SILOS AREA	1-3-04	GEP	GEP
33	WW 4"/8" HDPE AIP PER SURVEY SH-19.TXT	2-23-05	GEP	GEP		PER COMPLETED W.O. RT004264, GENERAL UPDATES			

REF. DWG. NO.
22X-4445-G-00737
95X-5900-P-00430
96X-5900-E-00354
93X-5900-G-00688
13X-5500-P-00619
22X-5500-P-00659

NOTE: WEMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS ± 1/16
ANGLES ± 0° - 30'
DECIMALS
.X ± .1
.XX ± .03
.XXX ± .005
.XXXX ± .0005
ORIG. RELEASE DATE

APPROVALS					
CIVIL & STR.				SAFETY ENG.	
ELECTRICAL				MAINTENANCE	
ENGINEER				Q.A.	
INSTRUMENT				FIRE PROTECT.	
MECHANICAL				WASTE MANAGE	
CHECKED	GEP			R.O.E.	
APPROVED	C.E. PAUL		6/29/9	SECURITY	

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

AWWT — YARD AREA

GRID 26
UNDERGROUND UTILITIES
SCALE 1"=20'

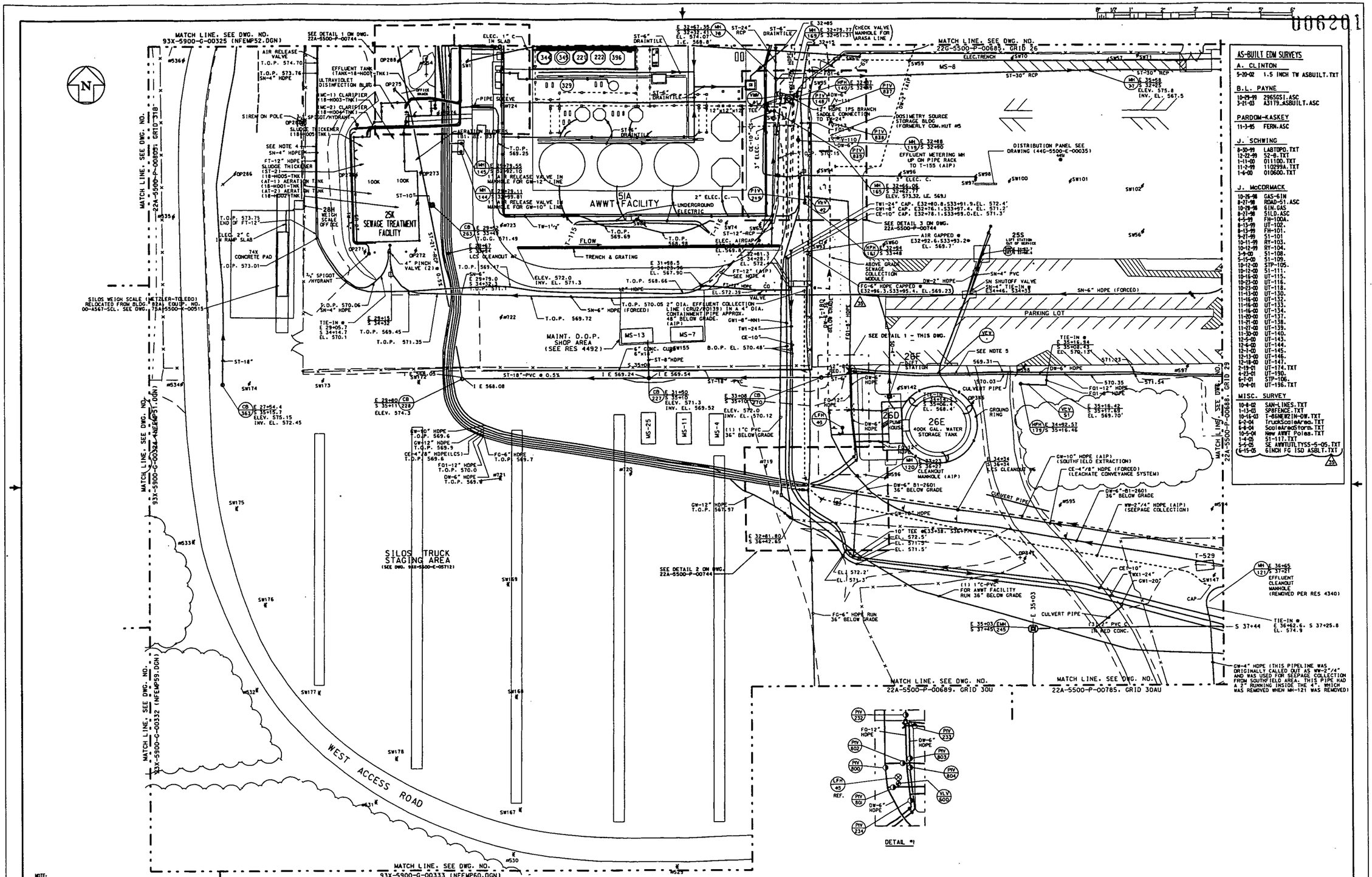
DATE 9-5-90
DRAWN J. ERIC

22G-5500-P-00685 | 35

FILE NAME: /UNDER/22GP0685.DGN

22ap0687 CADD11 rabb7064 09/01/2005 10:18:28 AM

006201



AS-BUILT EDM SURVEYS

A. CLINTON
5-20-02 1.5 INCH TW ASBUILT.TXT

B.L. PAYNE
10-29-99 2965GS1.ASC
3-21-03 A3179_ASBUILT.ASC

PARDOM-KASKEY
11-3-95 FERN.ASC

J. SCHWING
8-30-99 LABTOPO.TXT
12-22-99 52-8.TXT
1-11-00 011100.TXT
11-2-99 110299A.TXT
1-6-00 010600.TXT

J. McCORMACK
10-25-98 GAS-61N
8-27-98 RDAD-51.ASC
10-29-98 61N.DAS
8-27-98 51LD.ASC
4-5-99 FH-100A.
8-13-99 UT-102.
8-13-99 FH-101.
9-27-99 51-101
10-11-99 RY-103.
10-12-99 RY-104.
3-4-00 51-108.
5-15-00 51-109.
10-12-00 STP-105.
10-12-00 51-111.
10-16-00 UT-115.
10-23-00 UT-116.
10-23-00 UT-118.
11-13-00 UT-130.
11-16-00 UT-132.
11-16-00 UT-133.
11-16-00 UT-134.
11-20-00 UT-137.
11-21-00 UT-138.
11-21-00 UT-139.
11-30-00 UT-140.
12-5-00 UT-143.
12-6-00 UT-144.
12-7-00 UT-145.
12-13-00 UT-146.
12-18-00 UT-147.
2-19-01 UT-174.TXT
4-23-01 UT-190.
6-1-01 STP-106.
10-4-01 UT-196.TXT

MISC. SURVEY
10-8-02 SAN-LINES.TXT
1-13-03 SP8FENCE.TXT
10-16-03 T-86NEW2IN-OW.TXT
6-2-04 TruckScalArea.TXT
6-8-04 ScalArealStorm.TXT
10-5-04 New AWWT Poles.TXT
1-4-05 51-117.TXT
5-3-05 SE AWWTUTLTYSS-5-05.TXT
6-15-05 6INCH FG ISO ASBLT.TXT

NOTE:
1. THIS DRAWING ISSUED PERIODICALLY. FOR THE MOST RECENT VERSION OF THIS DRAWING, ACCESS THE FILENAME BELOW THE TITLE BLOCK.
2. COORDINATES SHOWN ON THIS DRAWING ARE TAKEN FROM EXISTING FEMP DRAWINGS AND ARE NOT VERIFIED TO BE "AS-BUILT". IT IS HIGHLY RECOMMENDED THAT A FIELD SURVEY BE PERFORMED PRIOR TO SITE DESIGN WORK.
3. GW-10" AND WW-4"/8" LINES LOCATED PER B.L. PAYNE AS-BUILT SURVEY. SEE /PAYNE/LDS/LDS2032.DGN.
4. SEE PARSONS TOP-046 DWG 93X-5900-G-00009 FOR CONSTRUCTION DETAILS.
5. SEE AS-BUILT DWG 26A-5500-G-00296 (FILENAME: 2965.DGN) BY B.L. PAYNE 03/25/99 AND ASCII FILE 2965GS1.ASC

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
					36	ADDED SURVEY PREH0006GWCAPS.TXT T-14-05	1/3/05	GEP		
					35	ADDED SURVEY 6INCH FG ISO ASBLT.TXT 6-15-05 TO ADD CAPPED	6/23/05	GEP	GEP	
						LOCATION TO FG-6" AT EAST SIDE OF AWWT				22X-4445-G-00737
						ADDED SURVEY SE AWWT UTLTYSS-5-05.TXT TO ADD CAPS TO				22A-5500-G-00296
					34	ADDED SURVEY SE AWWT UTLTYSS-5-05.TXT TO ADD CAPS TO	5/10/05	GEP	GEP	22A-5500-P-00744
						TW1-24",GW1-8",CE-10", AIRGAPS TO WW-2"/4" & 1" ELEC.				22X-5500-P-00659

NOTE:
WEMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS ± 1/16
ANGLES ± 0°- 30'
DECIMALS
.X ± 0.4
.XX ± 0.03
.XXX ± 0.005
.XXXX ± 0.0005
FINAL RELEASE DATE

APPROVALS				
CIVIL & STR.			SAFETY ENG.	
ELECTRICAL			MAINTENANCE	
ENGINEER			Q.A.	
INSTRUMENT				
MECHANICAL			FIRE PROTECT.	
			WASTE MANAGE	
CHECKED	GEP		D.O.E.	
APPROVED	G.E. PAUL	1/3/3	SECURITY	

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

SOUTH OF PILOT PLANT
GRID 28
UNDERGROUND UTILITIES
SCALE: 1" = 30'

DATE 2-9-98
DRAWN C. SCHWARZMAN
22A-5500-P-00687 | 36

FILE NAME: /UNDER/22AP0687.DGN

22ap0689 CADD11 rabb7064 09/01/2005 10:19:19 AM

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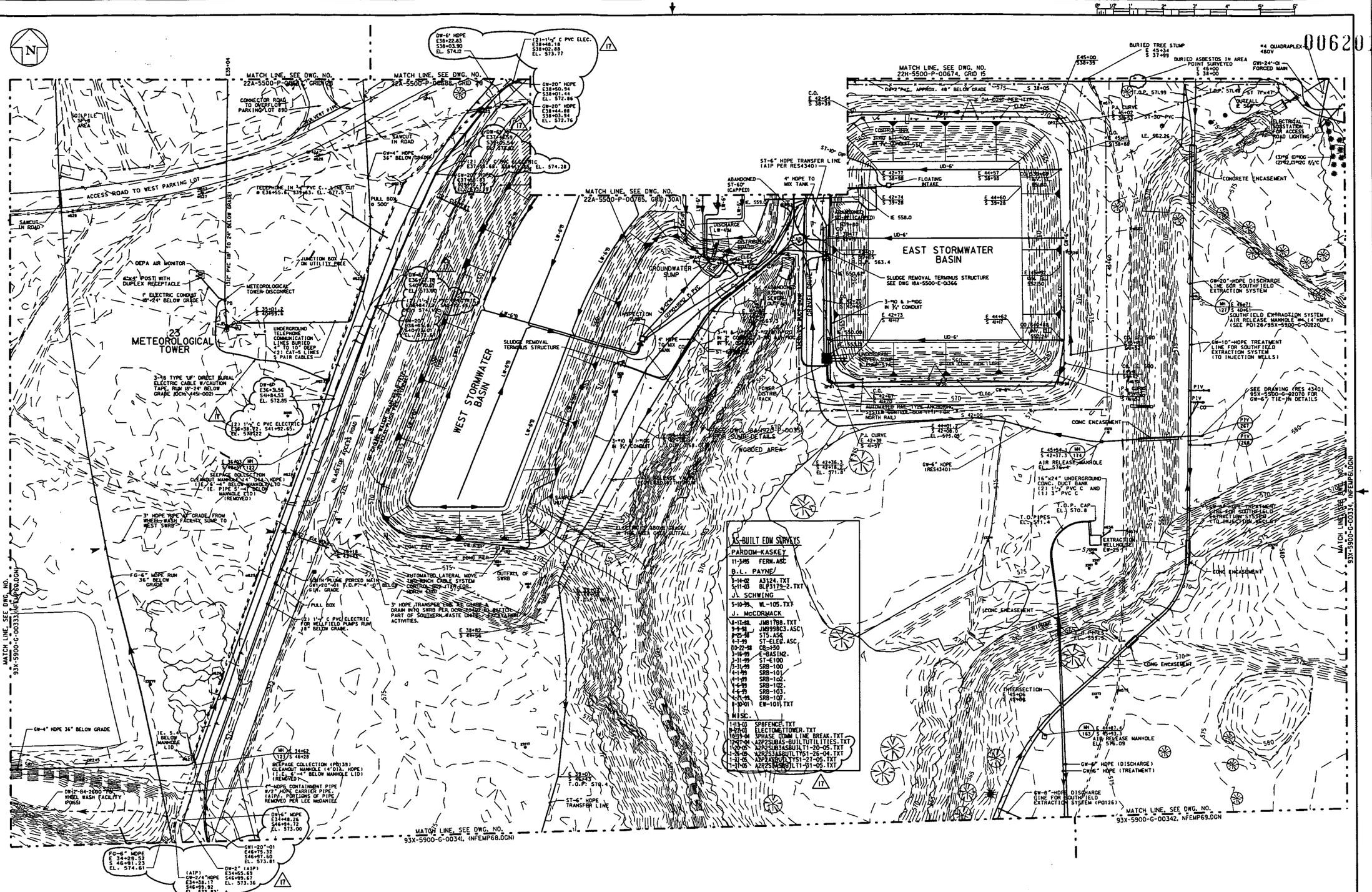

NOTE:
1. THIS DRAWING ISSUED PERIODICALLY, FOR THE MOST RECENT VERSION OF THIS DRAWING, ACCESS THE FILENAME BELOW THE TITLE BLOCK.
2. COORDINATES SHOWN ON THIS DRAWING ARE TAKEN FROM EXISTING FEMP DRAWINGS AND ARE NOT VERIFIED TO BE "AS-BUILT". IT IS HIGHLY RECOMMENDED THAT A FIELD SURVEY BE PERFORMED PRIOR TO SITE DESIGN WORK.

NO.	REVISIONS	DATE	DWN.	BY	APPD.	NO.	REVISIONS	DATE	DWN.	BY	APPD.
						16	ADDED COMM. LINE BREAK TO T-557 PER E. HARMAN SURVEY	10-20-04	GEP		GEP
							3 PHASE COMM. LINE BREAK.TXT				
						15	AS-BUILT PER RES 4340 AND B.L. PAYNE SURVEY BLP3179-2.TXT	4-6-04	GEP		GEP
						14	AS-BUILT PER WORK COMPLETED DCN: 4451-002 AND MAG.	1-3-03	GEP		GEP
							SURVEY 'ELECTOMETTOWER.TXT 9/22/03'				
17	ADD AS-BUILT SURVEYS BY E. HARMAN DATED	2-4-15	GEP		GEP	13	A.A.P. FT-2"/4" HDPE AND EAST/WEST SEEPAGE COLLECTION	3-8-03	RML		GEP
	12/17/04, 1/26/05 & 1/31/05, GENERAL REV.						SYSTEMS PER LEE McDANIEL, GENERAL UPDATE				

22X-5500-P-00659
REF. DWG. NO.

NOTE:
WEMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS ± 1/8
ANGLES ± 0°-30'
DECIMALS
.X ± 0.1
.XX ± 0.03
.XXX ± 0.005
.XXXX ± 0.0005
SHAL RELEASE DATE

APPROVALS				
CIVIL & STR.			SAFETY ENG.	
ELECTRICAL			MAINTENANCE	
ENGINEER			Q.A.	
INSTRUMENT				
MECHANICAL			FIRE PROTECT.	
			WASTE MANAGE	
CHECKED	GP		D.O.E.	
APPROVED	G.E. PAL	1/25/15	SECURITY	

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

STORMWATER BASINS — YARD AREA

GRID 30
UNDERGROUND UTILITIES
SCALE 1"=40'

DATE 7/28/78
DRAWN M.E. TILLMAN

22A-5500-P-00689 | 17

FILE NAME: /UNDER/22AP0689.DGN

22ap0785 CADD11 rabb7064 09/01/2005 10:20:26 AM

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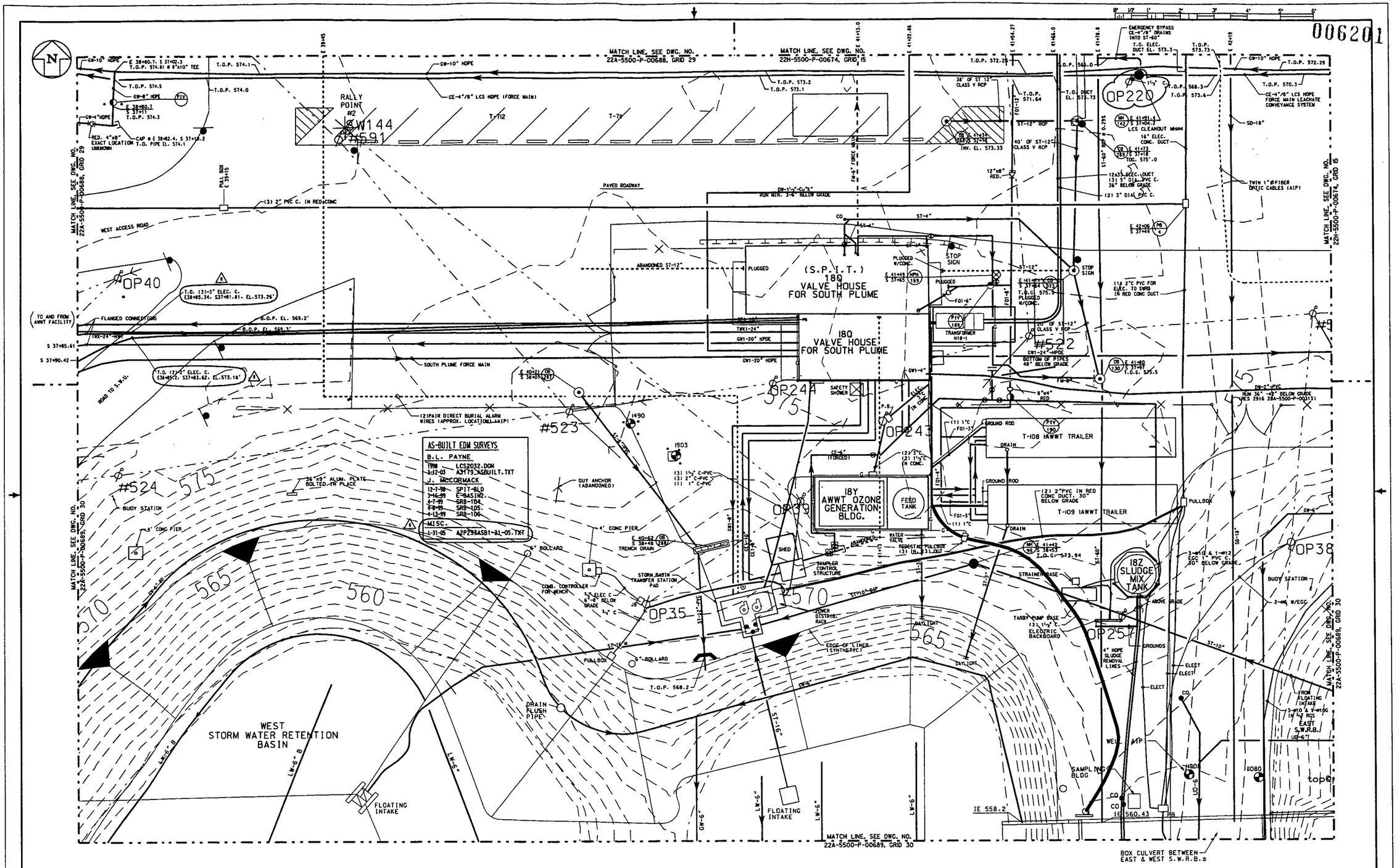

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3. FOR AS-BUILT FIELD SURVEY OF THE 4"/8" LCS LINE, AND GW-10" LINE, SEE B.L. PAYNE SURVEY (REF. DRAWING - LCS2032.DGN).

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
					11	AS-BUILT CONDUIT LOCATIONS PER SURVEY 1-31-05	2/1/05	GEP	GEP	95X-5500-G-02067
					10	ADDED AS-BUILT SURVEY "A3179 ASBUILT.ASC"	4/4/03	GEP	GEP	18A-4445-P-00114
						ADDED GW-4" HDPE LINE PER RES 4340				18A-1900-G-00869
					9	ADD (2) 3"PVC CONDUITS PER R.E. SCHWEITZER CONST. CO. DWG	3/04/02	RML	GEP	18A-1920-E-00355
						ES-L GENERAL UPDATE				18A-1920-E-00356

NOTE:
FERMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

PERFORMANCE GRADE
1 2 3 4 5
BY: DATE:

APPROVALS			
			SAFETY ENG.
CIVIL & STR.			MAINTENANCE
ELECTRICAL			O.A.
ENGINEER			FIRE PROTECT.
INSTRUMENT			WASTE MANAGE
MECHANICAL			SECURITY
			CRU
CHECKED	GEP		
APPROVED	G.E. PAUL	12-7-94	

FERNALD ENVIRONMENTAL RESTORATION MANAGEMENT CORPORATION
FERMCO
Fernald
Environmental Management Project
U.S. DEPARTMENT OF ENERGY

BLDG. 18Q
GRID 30A
UNDERGROUND UTILITIES
SCALE 1"=10'

DATE 10/12/93
DRAWN JBW

22A-5500-P-00785 | 11

FORMAT REVISED 8/7/95

FILE NAME: /UNDER/75AP0785.DGN

22ap0805 CADD11 rabb7064 09/01/2005 10:21:07 AM

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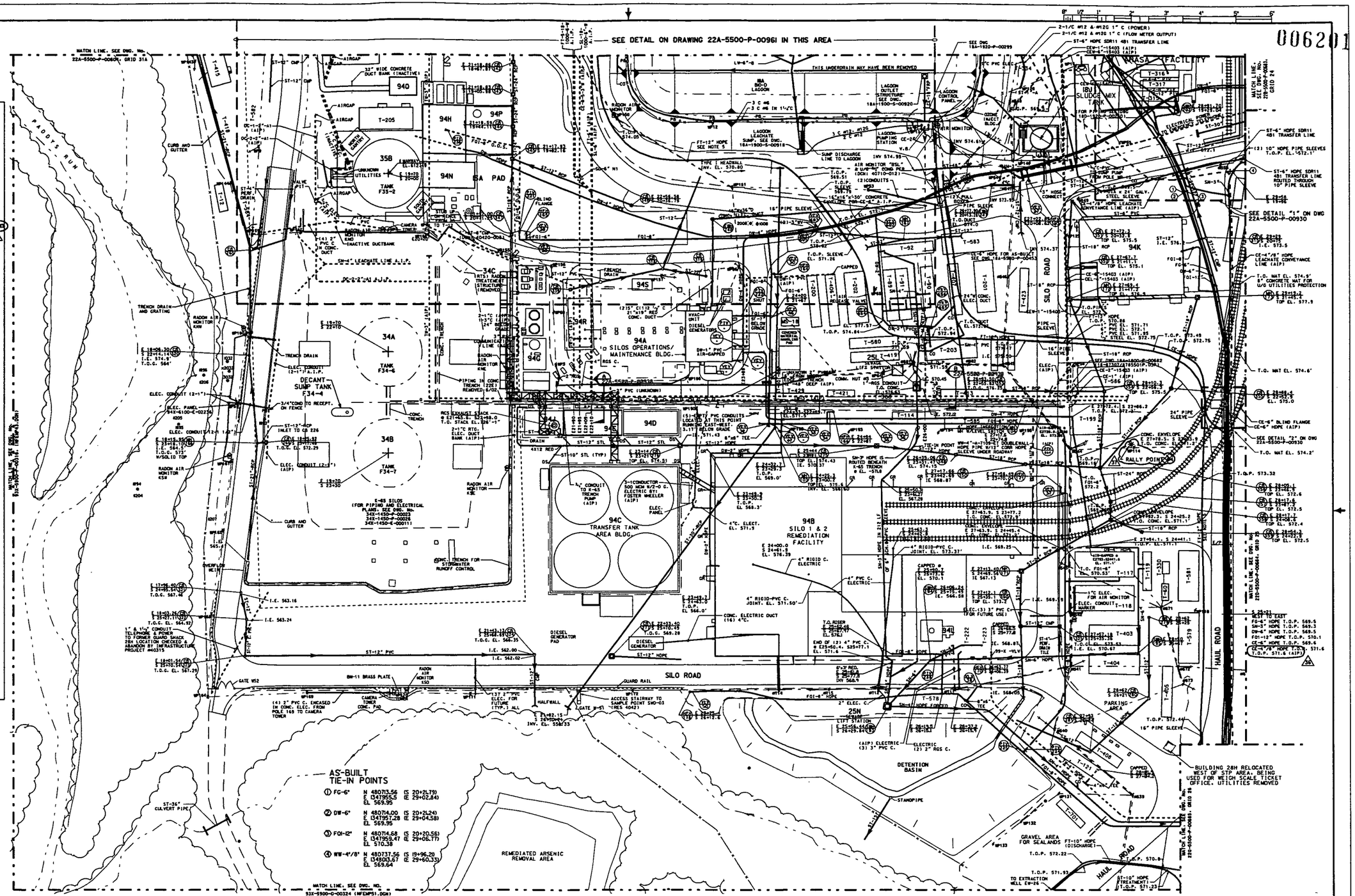

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3. THE BEST UTILITIES CORRIDOR TRENCH IS THE RESULT OF AN AS-BUILT SURVEY BY B.L.L.PAYNE & ASSOC. THIS INCLUDES THE LCS LINE (POSEAL FOR B.L.L.PAYNE SURVEY SEE FILE: /PAYNE/LCS2032.DGN.
4. FOR INFORMATION ON HAUL ROAD SEE PO8JL
5. SEE PARSONS TOP-046 DWG 95X-5500-C-00009 FOR CONSTRUCTION DETAILS.
6. SEE REVISION 32 FOR PAST JACK McCORMACK SURVEYS

FORMAT REVISED 8/7/95

NO.	REVISIONS	DATE	DWN. BY	APPD.
37	ADDED RALLY POINT #4 LOCATION EAST OF T-199	5/18/05	GEP	

NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
36	CE-4"/8" LCS LINE AIP PER SURVEY 51-119.TXT 2-5-05	2/18/05	GEP	GEP	
35	ADDED AS-BUILT ST-6" HDPE 481 TRANSFER LINE PER	6/1/04	GEP	GEP	
	SURVEY 4BIASBUILT4-22-04.TXT, MOVED BLDG. 28H,				
	RE-ADDED AIP DW-4" HDPE PER SURVEY SILO-188				6IFCD002 (F.WHEELER)
34	AS-BUILT DCN:4316-001 FOR CE-6" HDPE LINE, INCORP.	7/18/04	GEP	GEP	30FE0001 (F.WHEELER)
	FIELD SKETCH FROM J. McCORMACK (2/18/04) FOR				51FCD003 (F.WHEELER)
	TOILET TRAILERS T-222 & 223 LOCATION & UTILITIES				94X-5900-G-00898

NOTE:
FERMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

PERFORMANCE GRADE
1 2 3 4 5
BY: DATE:

APPROVALS				
CIVIL & STR.			SAFETY ENG.	
ELECTRICAL			MAINTENANCE	
ENGINEER			Q.A.	
INSTRUMENT			FIRE PROTECT.	
MECHANICAL			WASTE MANAGE	
			SECURITY	
CHECKED	GEP		CRU	
APPROVED	G.E. PAUL	2/5/95		

FERNALD ENVIRONMENTAL RESTORATION MANAGEMENT CORPORATION
FERMCO
Fernald
Environmental Management Project
U.S. DEPARTMENT OF ENERGY

SOUTHERN K-65 AREA — FIELD AREA

GRID 31B
UNDERGROUND UTILITIES
SCALE 1"=40'-0"

DATE Oct. 27,1994
DRAWN JWP

22A-5500-P-00805 | 37

FILE NAME: /UNDER/22AP0805.DGN

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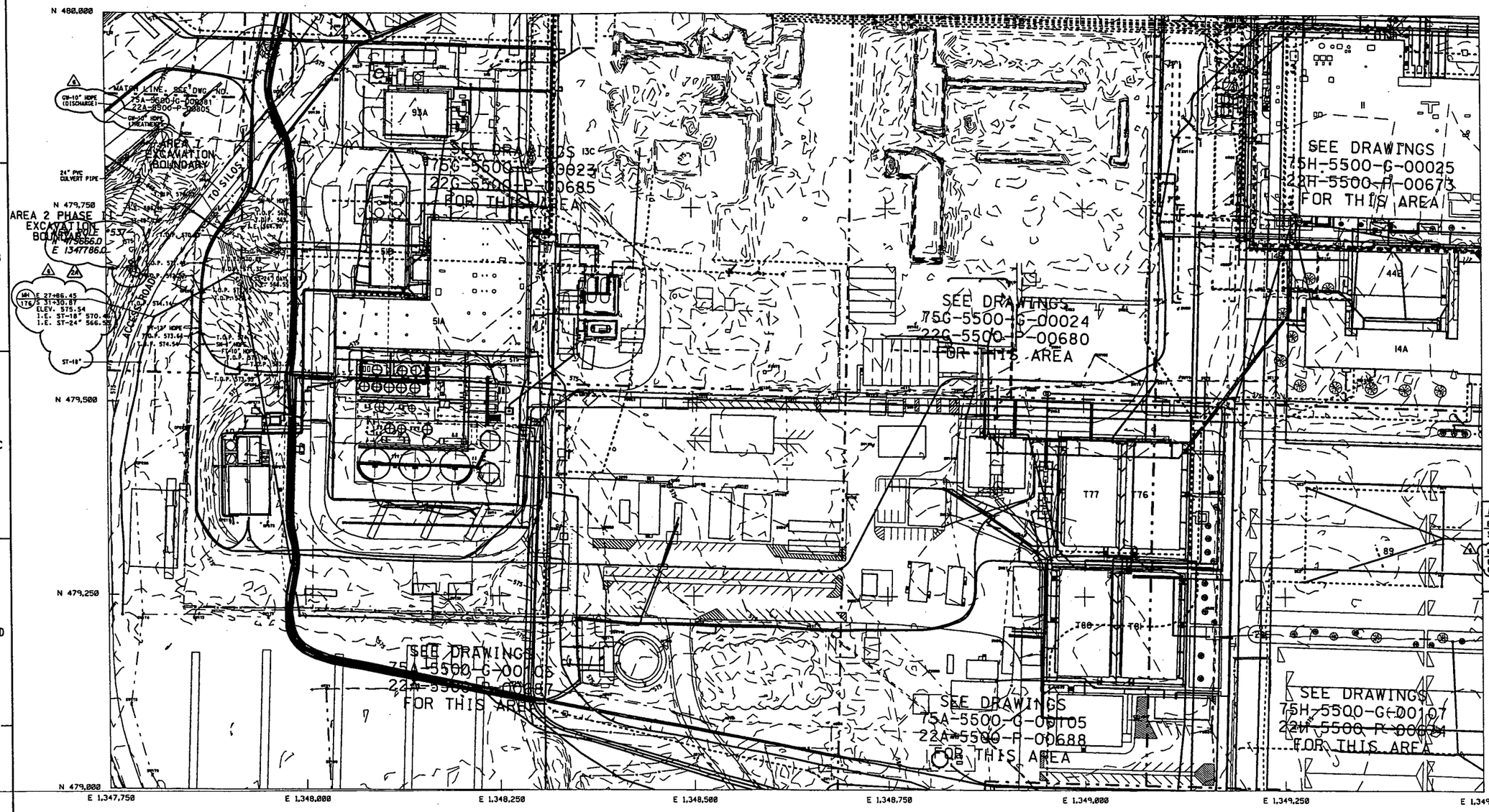

SHEET INDEX

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STATE OF OHIO NORTH (NAD 83)

FEMP NORTH ∠+1.5672°

LEGEND

	HYDRANT		UNKNOWN UTILITY	—X—	FENCE
	MANHOLE		VALVE BOX		RAILROAD
	CATCH BASIN		BUILDING		TREE LINE
	AIR MONITOR STATION (AMS)		HEADWALL		SHRUB LINE
2134	MONITORING WELL		SURVEY CONTROL POINT		GUARD RAIL
	TRANSMISSION TOWER		GATE		RETAINING WALL
	ELECTRICAL TRANSFORMER		GRID TICK		RIVER, STREAM
	POST INDICATOR VALVE		PROPANE TANK	580	MAJOR CONTOUR
	POWER POLE		SWAMP		MINOR CONTOUR
	LIGHT POLE	RIPRAP	RIPRAP AREA	580	MAJOR DEP CONTOUR
	SIGN	PILE	PILE OUTLINE		MINOR DEP CONTOUR
	POST	X 579.1	SPOT ELEVATION		PAVED ROADWAY
	DECIDUOUS TREE	W.E. X 567.7	WATER ELEVATION		UNPAVED ROADWAY
	CONIFEROUS TREE	575.8, 575.8	ROOF STACK OR VENT		ABOVEGROUND PIPE
	SHRUB				FEMP BOUNDARY
	DRAINAGE FLOW			OE	OVERHEAD ELECTRIC

50 0 50 100 150

SCALE IN FEET
1 FOOT CONTOUR INTERVAL

DIGITAL MAPPING BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY DATED 04/09/92.

REF: 95X-5900-G-01009

THIS FILE IS ENCOMPASSED BY THE 22/75 SERIES CADD FILES. THIS FILE CONTAINS GENERAL CALLOUTS ONLY. NO UTILITIES ARE SHOWN OR CALLED OUT. THE GRID SPECIFIC INFORMATION, ON FEATURES AND UTILITIES, RESIDE ON THE DRAWINGS NOTED WITHIN EACH PARTICULAR GRID AREA. SEE THESE DRAWINGS FOR FURTHER INFORMATION.

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	A-E	OPERATOR	DOE
6	ADD EDM SURVEY TABLE 'MISC' TO ADD MH-176 PER COMPLETED W.O. RT004085	GEP 6/8/04	GEP 6/9/04	
5	ADD EDM SURVEY TABLE, AS-BUILT SURVEY BY B.L. PAYNE DATED 3/14/02, (RES 4211) GENERAL UPDATE	GEP 4/11/02	RML 4/11/02	
4	AS-BUILT UTILITIES PER J. McCORMACK SURVEYS UT-116., UT-120. & UT-122., INCORP DCN: 54910-003	GEP 11/13/00	RML 11/13/00	
3	ADDED PROP. 12" ARASA BASIN REROUTE LINE	GEP 7/28/98	RML 7/28/98	

DETAILS AND DATE

INDEX CODE				CAD FILE NAME
PLANT	CODE	G	SER. NO.	
75X	5900	G	00264	NFEMP52.DGN

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
PARSONS
THE RALPH M. PARSONS CO. - CHAS. T. MAIN, INC. - ENGINEERING-SCIENCE, INC.
CINCINNATI, OHIO

PROJECT NAME
PHOTOGRAMMETRIC MAPPING
OU3/P034

DRAWING TITLE
CIVIL
EXISTING SITE AND UTILITY PLAN
GRID 52

DRAWN BY	DATE	DESIGNED, CHECKED BY	DATE	CHECKED BY	DATE
B. FUGATE, R. BELL	10-12-92	S. SLIJEPCEVIC	12-15-92	M. DONOHOO	10-26-92

PLANT/BLDG. NO.	FLOOR	SCALE	CLASS
		1"=50'	

SUBMITTED FOR APPROVAL: SUKOMAL K. TALUKDER 12-18-92 (A-E DATE)
APPROVAL RECOMMENDED (OPERATING CONTRACTOR DATE)
DRAWING APPROVED (DOE DATE)

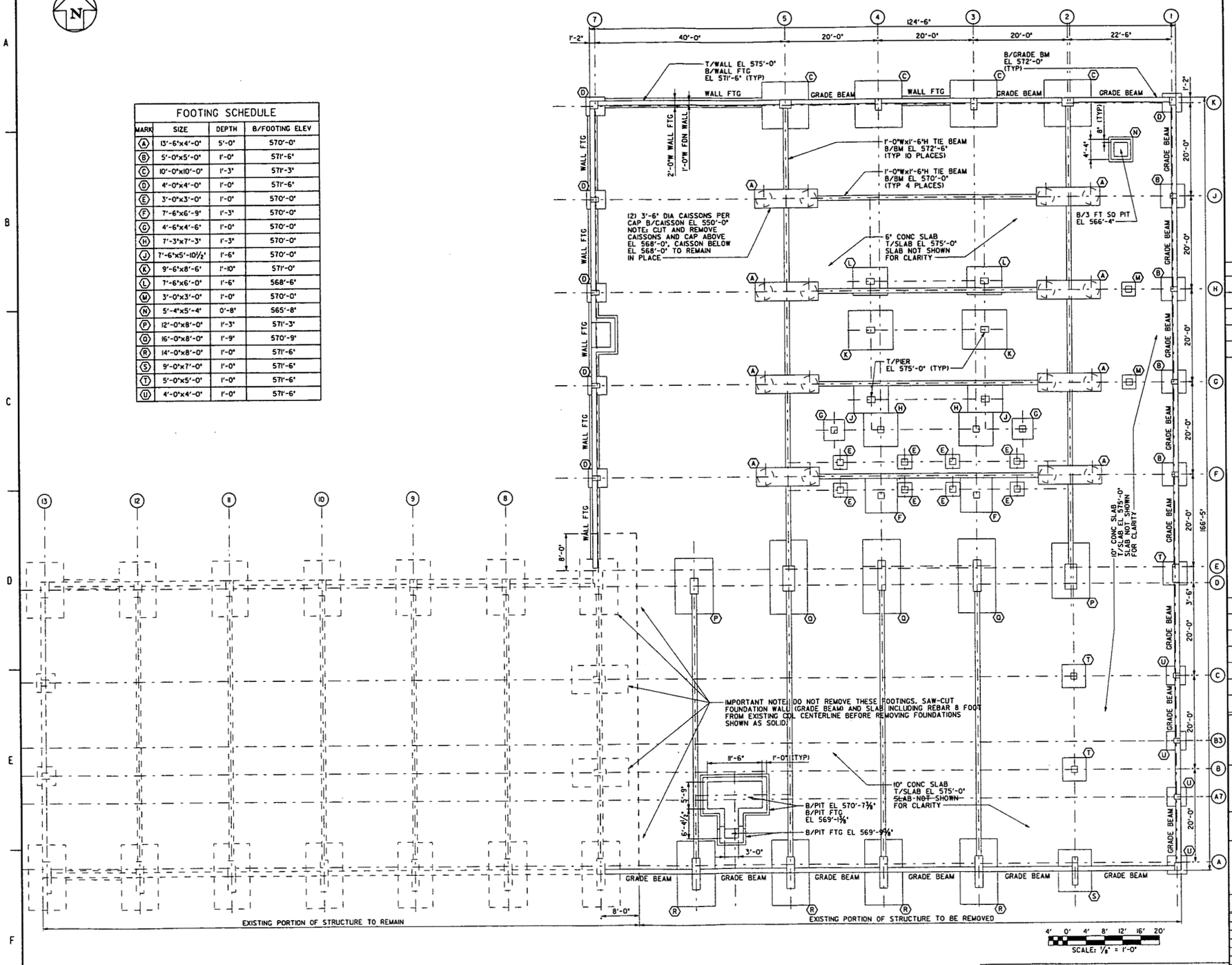
DOE PROJECT NO.	OPER. CONTR. PROJ. NO.	DRAWING NO.	SHEET NO.	REV. NO.
	WBS 1.1.1.1.3.1.1 00-90701	93X-5900-G-00325	G0052	6

nfemp52 CADD10 paul7461 09/22/2004 02:07:34 PM

99xs0912 CADD11 rabb7064 08/01/2005 12:03:08 PM

006201

FOOTING SCHEDULE			
MARK	SIZE	DEPTH	B/FOOTING ELEV
A	13'-6"x4'-0"	5'-0"	570'-0"
B	5'-0"x5'-0"	1'-0"	571'-6"
C	10'-0"x10'-0"	1'-3"	571'-3"
D	4'-0"x4'-0"	1'-0"	571'-6"
E	3'-0"x3'-0"	1'-0"	570'-0"
F	7'-6"x6'-9"	1'-3"	570'-0"
G	4'-6"x4'-6"	1'-0"	570'-0"
H	7'-3"x7'-3"	1'-3"	570'-0"
J	7'-6"x5'-10½"	1'-6"	570'-0"
K	9'-6"x8'-6"	1'-10"	571'-0"
L	7'-6"x6'-0"	1'-6"	568'-6"
M	3'-0"x3'-0"	1'-0"	570'-0"
N	5'-4"x5'-4"	0'-8"	565'-8"
P	12'-0"x8'-0"	1'-3"	571'-3"
Q	16'-0"x8'-0"	1'-9"	570'-9"
R	14'-0"x8'-0"	1'-0"	571'-6"
S	9'-0"x7'-0"	1'-0"	571'-6"
T	5'-0"x5'-0"	1'-0"	571'-6"
U	4'-0"x4'-0"	1'-0"	571'-6"



PRELIMINARY
NOT FOR CONSTRUCTION

REF DWG NO.	DRAWING TITLE
51X-1910-A-00012	ARCHITECTURAL GROUND FLOOR PLAN
51X-1910-S-00025	FOUNDATION PLAN
51X-1910-S-00026	FOUNDATION, SECTIONS AND DETAILS
51X-1910-S-00031	COLUMN SCHEDULE AND DETAILS
51X-1910-S-00033	GROUND FLOOR PLAN & DETAILS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
BUILDING 51A
FOUNDATION PLAN

APPROVALS

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

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.L. RABBITT	20500	99X-5500-S-00912	S-1	A
RFS PROJECT NO.	FILENAME 99xs0912.dgn			

FCPSAE.DGN 5/30/03

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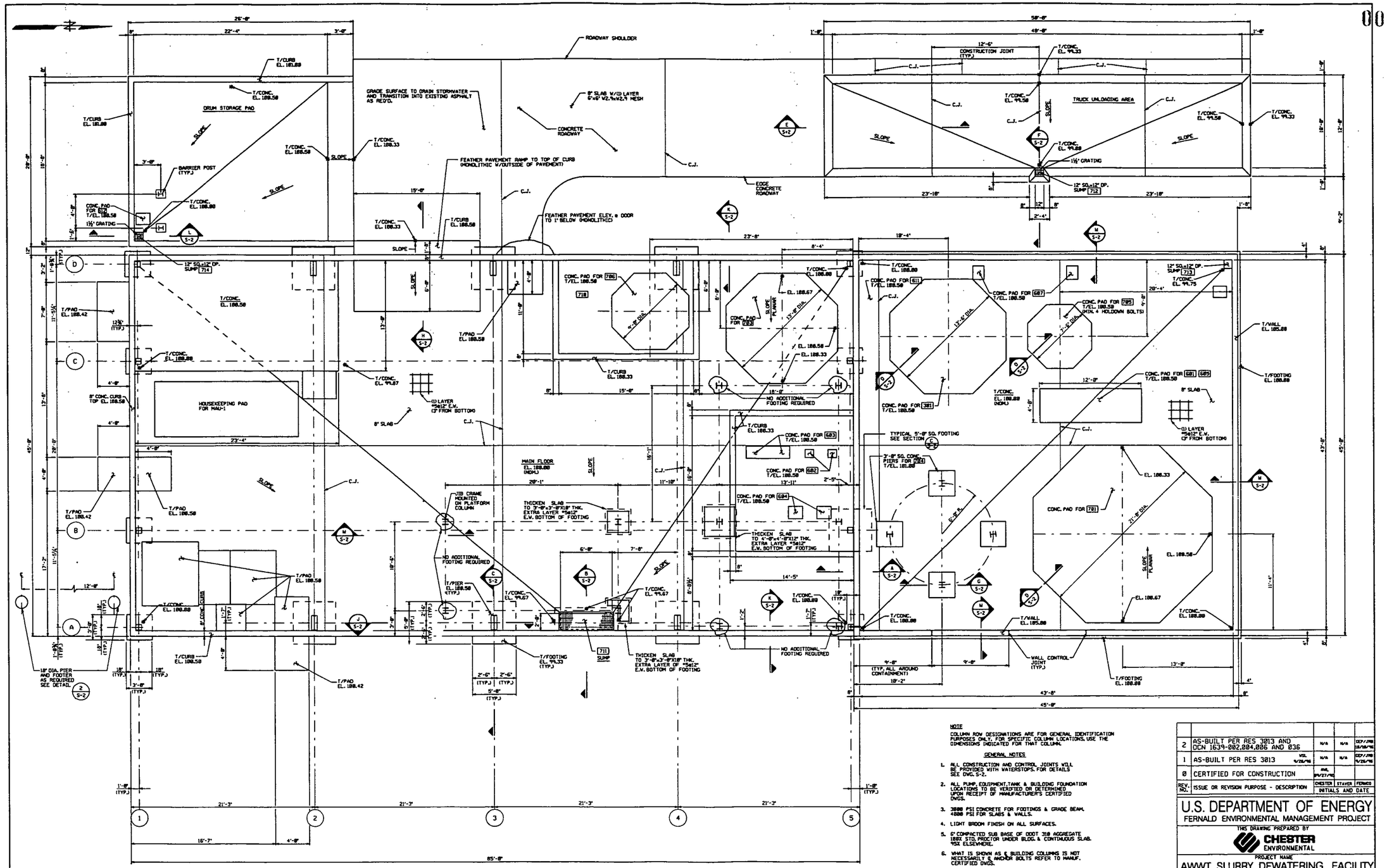


MAIN FLOOR PLAN (A/S-1)
SCALE: 1/4"=1'-0"

NOTE

COLUMN ROW DESIGNATIONS ARE FOR GENERAL IDENTIFICATION PURPOSES ONLY. FOR SPECIFIC COLUMN LOCATIONS, USE THE DIMENSIONS INDICATED FOR THAT COLUMN.

GENERAL NOTES

1. ALL CONSTRUCTION AND CONTROL JOINTS WILL BE PROVIDED WITH WATERSTOPS. FOR DETAILS SEE DWG. S-2.
2. ALL PUMP, EQUIPMENT, TANK & BUILDING FOUNDATION LOCATIONS TO BE VERIFIED OR DETERMINED UPON RECEIPT OF MANUFACTURER'S CERTIFIED DWGS.
3. 3000 PSI CONCRETE FOR FOOTINGS & GRADE BEAM. 4000 PSI FOR SLABS & WALLS.
4. LIGHT BROOM FINISH ON ALL SURFACES.
5. 6" COMPACTED SUB BASE OF ODOT 310 AGGREGATE 100% STD. PROCTOR UNDER BLDG. & CONTINUOUS SLAB. 95% ELSEWHERE.
6. WHAT IS SHOWN AS ℄ BUILDING COLUMNS IS NOT NECESSARILY ℄ ANCHOR BOLTS REFER TO MANUF. CERTIFIED DWGS.
7. FLY ASH CAN BE USED IN THE CONCRETE MIX.
8. TANK PADS FOR T-701, 785, 381, 783, AND 786 CHANGED TO OCTAGONAL SHAPE PER DCN-684.
9. CHESTER ELEVATION OF 188.00' EQUALS FEMP EL. 575.00'

GRAPHIC SCALE 0' 2' 4' 8' 12'

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	CHESTER INITIALS AND DATE	STAYER INITIALS AND DATE	FERNCO INITIALS AND DATE
2	AS-BUILT PER RES 3013 AND DCN 1639-002,004,006 AND 036	N/A	N/A	CEP/JRB 10/30/96
1	AS-BUILT PER RES 3013	VCL 9/25/96	N/A	CEP/JRB 9/25/96
0	CERTIFIED FOR CONSTRUCTION	AVL 09/27/95		

U.S. DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
CHESTER ENVIRONMENTAL

PROJECT NAME
AWWT SLURRY DEWATERING FACILITY

DRAWING TITLE
MAIN FLOOR
CONCRETE PLAN

DRAWN BY	DATE	LEAD ENGINEER	DATE	CHECKED BY	DATE
GRS	8/95	DEM	8/95	EJV	8/95

PLANT/BLDG NO.	FLOOR	SCALE	CLASS
		AS SHOWN	

SUBMITTED FOR APPROVAL		SUBMITTED FOR APPROVAL		FERNCO CRU APPROVAL
AVL CHESTER	09/27/95 DATE	SLM STAYER	06/11/96 DATE	DATE

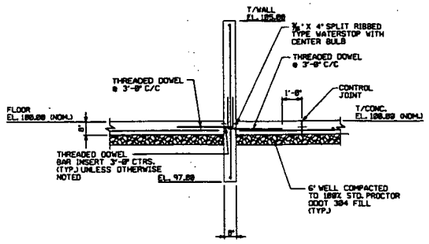
CHESTER ENVIRONMENTAL
DWG. NO. 526201\5262-18 .CON
DATE 27 SEPT. 1995/15:00
CPU REF.

CODE PROJECT NO.	FCMP PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
	54600 (FSC566)	51E-5500-S-00912	S-1	2

FILE NAME: /USR7/CHESTER/SLURRY/5262-18.CON

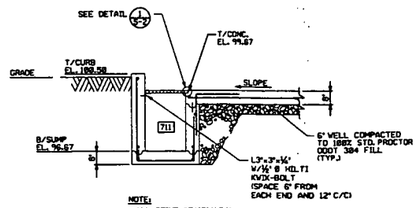
5262-10 CADD9 paul7461 07/22/2005 08:22:46 AM

51B



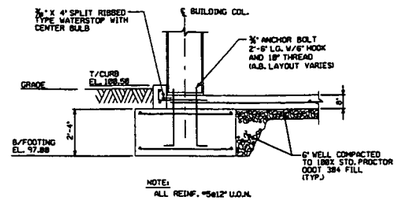
NOTE: ALL REINF. #5@12" U.O.N.

SECTION A
SCALE: 3/4"=1'-0"



NOTE: ALL REINF. #5@12" U.O.N.

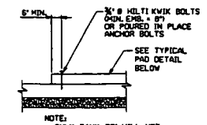
SECTION B
SCALE: 3/4"=1'-0"



NOTE: ALL REINF. #5@12" U.O.N.

TYPICAL BUILDING FOOTING

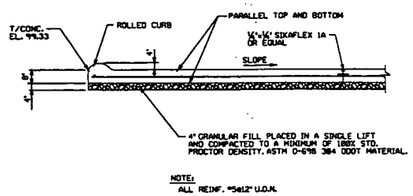
SECTION C
SCALE: 3/4"=1'-0"



NOTE: ONLY TANK 701 WILL NOT REQUIRE ANCHORING PER DCN-036

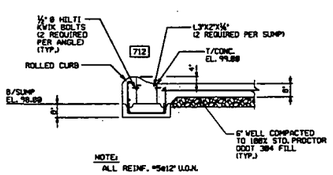
TYPICAL TANK FOUNDATION

SECTION D
SCALE: 3/4"=1'-0"



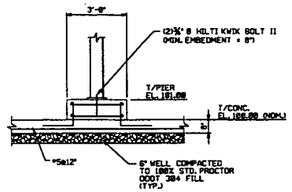
NOTE: ALL REINF. #5@12" U.O.N.

SECTION E
SCALE: 3/4"=1'-0"



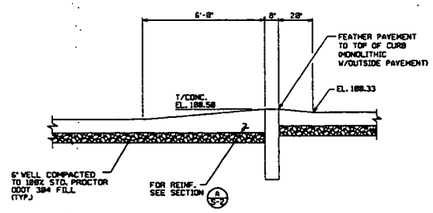
NOTE: ALL REINF. #5@12" U.O.N.

SECTION F
SCALE: 3/4"=1'-0"

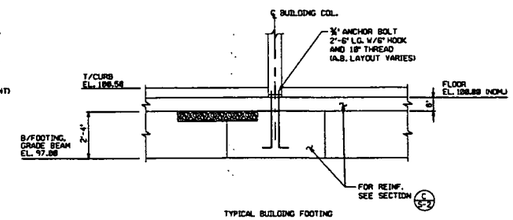


NOTE: ALL REINF. #5@8" U.O.N.

SECTION G
SCALE: 3/4"=1'-0"

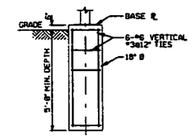


SECTION H
SCALE: 3/4"=1'-0"

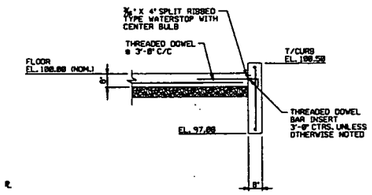


TYPICAL BUILDING FOOTING

SECTION J
SCALE: 3/4"=1'-0"

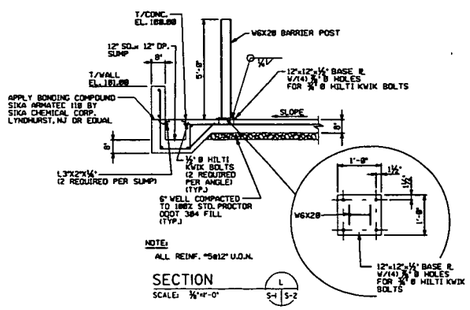


DETAIL 2
SCALE: 3/4"=1'-0"



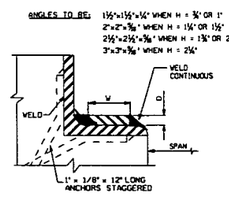
NOTE: ALL REINF. #5@12" U.O.N.

SECTION K
SCALE: 3/4"=1'-0"

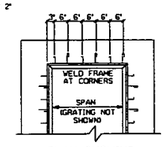


NOTE: ALL REINF. #5@12" U.O.N.

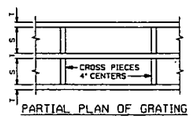
SECTION L
SCALE: 3/4"=1'-0"



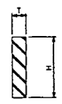
CURB FOR GRATING



PLAN SHOWING ANCHOR SPACING



PARTIAL PLAN OF GRATING



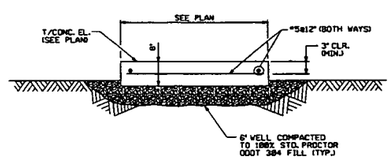
BAR SECTION

SPAN IN FEET	H	T	S	W	D
2'-0"	3/4"	3/16"	S = 1" FOR ALL	3/4"	1/2"
2'-6"	3/4"	3/16"		3/4"	1/2"
3'-0"	1"	3/16"		3/4"	1/2"
3'-6"	1"	3/16"		3/4"	1/2"
4'-0"	1 1/4"	3/16"		1 1/4"	3/16"
4'-6"	1 1/4"	3/16"		1 1/4"	3/16"
5'-0"	1 1/2"	3/16"		1 1/4"	3/16"
5'-6"	1 1/2"	3/16"		1 1/4"	3/16"
6'-0"	1 3/4"	3/16"		1 1/2"	3/16"
6'-6"	1 3/4"	3/16"		1 1/2"	3/16"
7'-0"	2"	3/16"		1 1/2"	3/16"
8'-0"	2 1/4"	3/16"		1 3/4"	3/16"

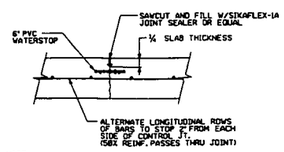
NOTE: BAR GRATING TO BE "BLAWKNOX ELECTROFORGED STEEL GRATING" OR EQUAL. MAXIMUM SAFE UNIFORM LOADING = 250# / FT²

ANGLE CURBING AND BAR GRATING (STEEL)

DETAIL 1
SCALE: NONE

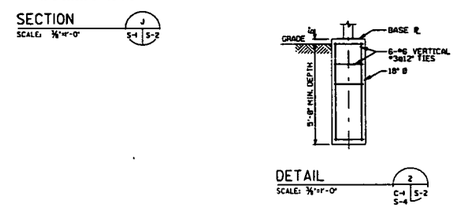


TYPICAL OUTSIDE PAD DETAIL



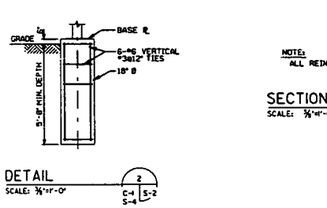
NOTE: WATERSTOP TO BE TIED W/WIRE TO REINF. TO PREVENT DISPLACEMENT DURING CONCRETE POUR.

TYPICAL SLAB CONTROL JOINT



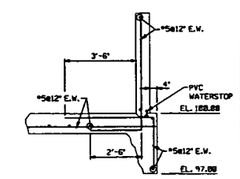
NOTE: WATERSTOP TO BE TIED W/WIRE TO REINF. TO PREVENT DISPLACEMENT DURING CONCRETE POUR.

TYPICAL CONSTRUCTION JOINT
(WALL OR SLAB)

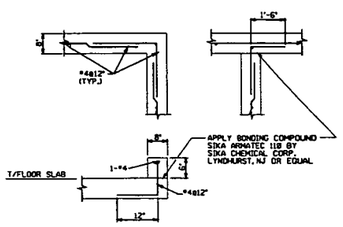


NOTE: WATERSTOP TO BE TIED W/WIRE TO REINF. TO PREVENT DISPLACEMENT DURING CONCRETE POUR.

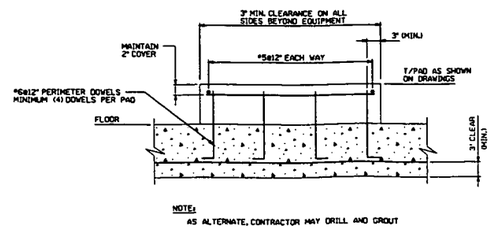
TYPICAL WALL CONTROL JOINT



SECTION M
SCALE: 3/4"=1'-0"

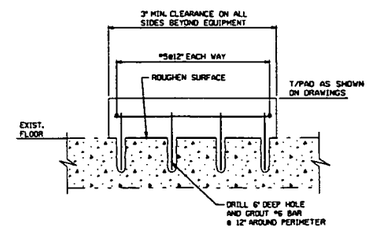


TYPICAL CURB REINFORCING DETAIL AND CORNER BAR DETAIL



NOTE: AS ALTERNATE, CONTRACTOR MAY DRILL AND GROUT

TYPICAL PAD DETAIL



NEW PAD ON EXISTING CONCRETE FLOOR
(ALTERNATE METHOD)

NOTE: CHESTER ELEVATION OF 188.00' EQUALS FEMP EL. 575.00'

0' 2' 4' 8'
GRAPHIC SCALE

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	CHESTER INITIALS AND DATE	STAVER INITIALS AND DATE	FEMPCO INITIALS AND DATE
2	AS-BUILT PER RES 3013 AND DCN 1639-002 AND 036	N/A	N/A	CEF/JRB 10/18/96
1	AS-BUILT PER RES 3013 VSL 9/26/96	N/A	N/A	CEF/JRB 9/26/96
0	CERTIFIED FOR CONSTRUCTION	AWL 09/27/95		

U.S. DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
CHESTER ENVIRONMENTAL

PROJECT NAME
AWWT SLURRY DEWATERING FACILITY

DRAWING TITLE
CONCRETE SECTIONS & DETAILS

DRAWN BY	DATE	LEAD ENGINEER	DATE	CHECKED BY	DATE
GRS	8/95	DEM	8/95	EJW	8/95
PLANT/BLDG NO.		FLOOR		SCALE AS SHOWN	CLASS

SUBMITTED FOR APPROVAL		SUBMITTED FOR APPROVAL		FEMPCO CRU APPROVAL	
AWL CHESTER	09/27/95 DATE	STAVER	DATE		DATE

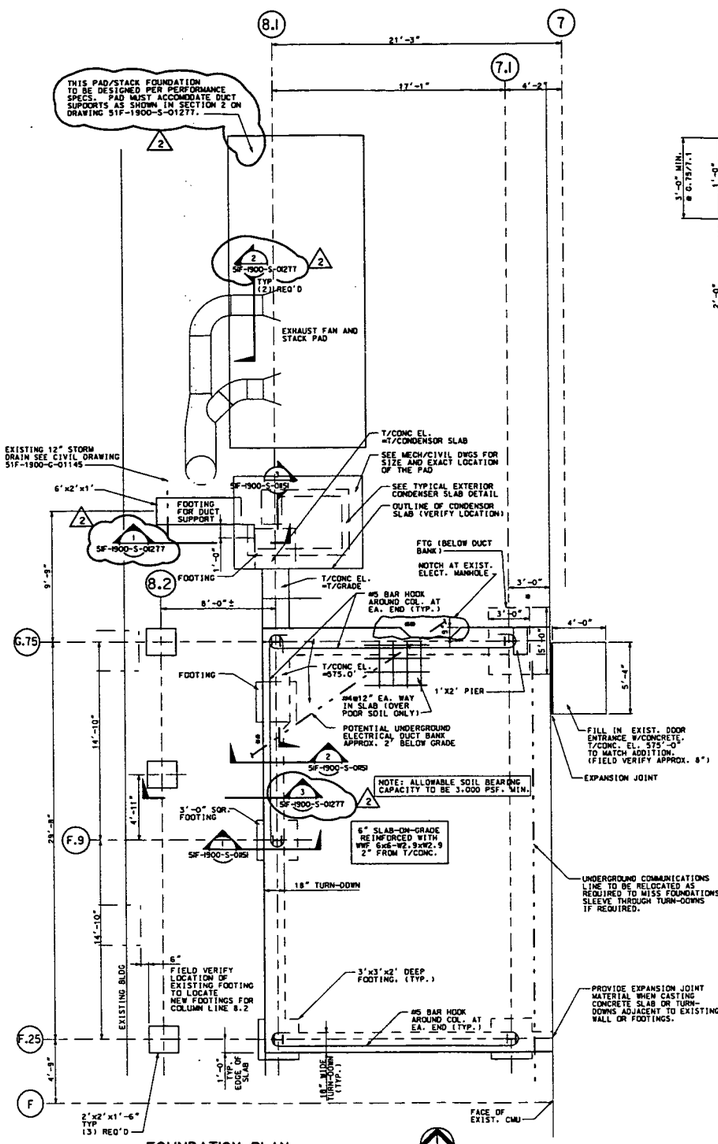
CHESTER ENVIRONMENTAL
DWG. NO. 5262B1\5262-11 .CON
DATE 27 SEP 1995/15:00
CPU REF.

SITE PROJECT NO.	FEMP PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
	54600 (FSC566)	51E-5500-S-00913	S-2	2

FILE NAME: /USR7/CHESTER/SLURRY/5262-11.CON

5262-11 CADD9 paul7461 07/22/2005 08:23:18 AM

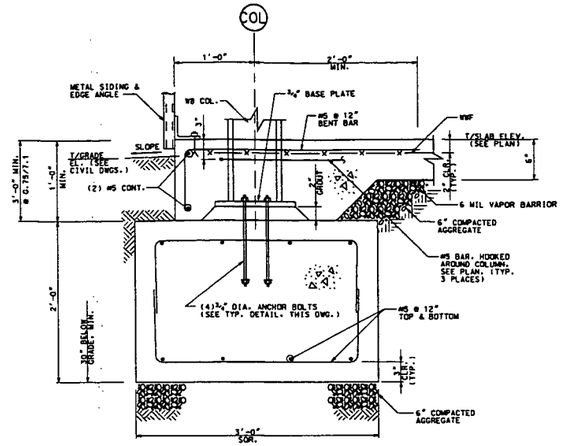
006201



FOUNDATION PLAN

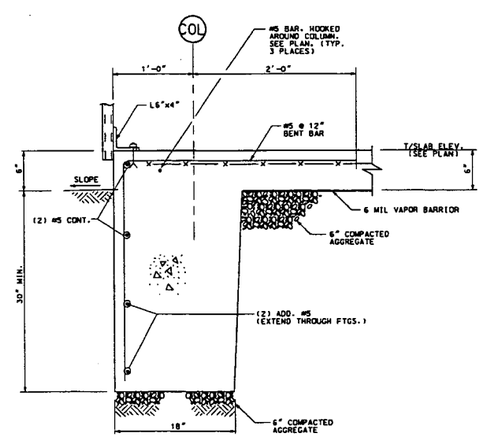
SCALE: 1/4"=1'-0" T/SLAB EL. 575'-0"

- FIELD VERIFY
- PROVIDE MIN. 3" SUREVOID COMPRESSIBLE MATERIAL (OR APPROVED SUBSTITUTE) BETWEEN EXISTING DUCT BANK AND NEW TURN-DOWN. SEE NOTES.



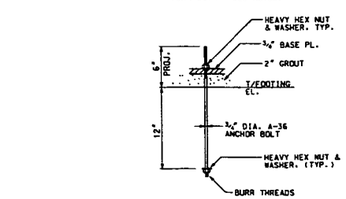
SECTION 1 / SF-1900-S-0151

SCALE: 1 1/2" =1'-0"



SECTION 2 / SF-1900-S-0151

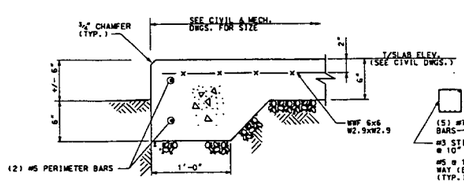
SCALE: 1 1/2" =1'-0"



TYP. ANCHOR BOLT DETAIL

SCALE: 1 1/2"=1'-0"

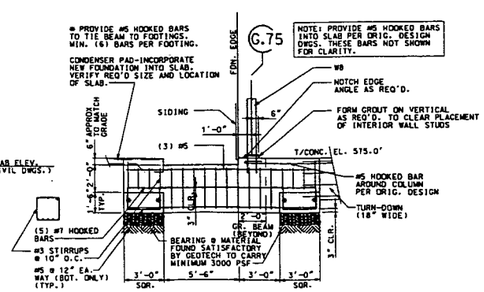
SEE STEEL FRAMING DRAWING S5P01 FOR BASE PLATE & ANCHOR LAYOUT



TYP. EXT. CONDENSER SLAB DETAIL

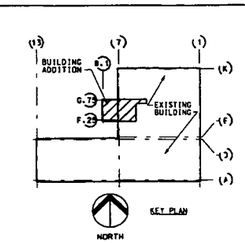
SCALE: 1 1/2"=1'-0"

NOTE: SEE CIVIL & MECH. DWGS. FOR LOCATION



SECTION 3 / SF-1900-S-0151

SCALE: 1/4" =1'-0"



GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND FINAL REMOVAL/CLEARANCE OF ANY REQUIRED SHORING OR BRACING OF STRUCTURES. PROVIDE ADEQUATE BRACING FOR STRUCTURES SO THAT THEY WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURES AND FOUNDATIONS ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND THEREFORE REQUIRE ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE THEIR COMPLETION.
2. INVESTIGATE ACTUAL LOCATIONS OF UNDERGROUND LINES AND UTILITIES BEFORE EXCAVATING. AND ADVISE THE ENGINEER OF ANY INTERFERENCES. EXISTING MANHOLE TO NORTH OF NEW STRUCTURE WILL BE CLOSE TO SLAB TURN-DOWN. SEE NOTES ON THE FOUNDATION PLAN REGARDING SLAB CONSTRUCTION AROUND THE MANHOLE. CONTRACTOR SHALL BE AWARE THAT AN UNDERGROUND ELECTRICAL LINE MAY BE LOCATED NEAR THE FOOTINGS ALONG COLUMN LINE 1.1. IF THIS LINE IS ENCOUNTERED. FIELD RE-ROUTE THE LINE. SEE DEMOLITION AND SITE LAYOUT PLAN FOR APPROXIMATE LOCATION OF KNOWN EXISTING UNDERGROUND LINE. ALL EXCAVATIONS NEAR EXISTING LINES SHALL BE PERFORMED WITH EXTREME CAUTION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION WHICH AFFECT NEW CONSTRUCTION PRIOR TO SUBMISSION OF SHOP DRAWINGS.
4. COORDINATE STRUCTURAL DRAWINGS WITH DRAWINGS OF OTHER DISCIPLINE AND SHOP/VENDOR DRAWINGS RELATED TO OTHER TRADES. CHECK AND COORDINATE DIMENSIONS. CLEARANCES AND OTHER REQUIREMENTS WITH WORK OF OTHER TRADES.
5. VERIFY DIMENSIONS, ANCHORAGE LAYOUT/DETAILS, AND WEIGHTS OF ACTUAL PURCHASED OR OWNER FURNISHED EQUIPMENT WITH STRUCTURAL DETAILS SHOWN ON THE DRAWINGS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO FABRICATION OR INSTALLATION.

FOUNDATION NOTES

1. DESIGN OF EXTERIOR FOUNDATIONS IS BASED ON A FROST DEPTH OF 30 INCHES BELOW FINISHED GRADE.
2. SPREAD FOOTINGS ARE DESIGNED TO BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 3000 PSF.
3. THE OWNERS GEOTECHNICAL ENGINEER SHALL MONITOR EXCAVATION AND BACKFILLING OPERATIONS TO VERIFY THAT THE DESIGN PARAMETERS LISTED HEREIN ARE OBTAINED DURING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF DEFICIENCIES PRIOR TO ANY SUBSEQUENT CONSTRUCTION.

CONCRETE NOTES

1. CONSTRUCTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-95) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301-89) AND IN ADDITION SHALL COMPLY WITH ALL LOCAL LAWS AND ORDINANCES. WHERE CONFLICTING REQUIREMENTS OCCUR, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
2. TOLERANCES FOR CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 117.
3. FORMWORK SHALL CONFORM TO ACI 347.
4. HOT WEATHER CONCRETING SHALL CONFORM TO ACI 305. COLD WEATHER CONCRETING SHALL CONFORM TO ACI 306.
5. CONCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
6. CONDUCT STRENGTH TEST IN ACCORDANCE WITH ASTM C39. CONCRETE SLUMP SHALL NOT EXCEED 5 INCHES NOR BE LESS THAN 3 INCH. CONDUCT SLUMP TEST IN ACCORDANCE WITH ASTM C 143.
7. ALL CONCRETE SHALL USE TYPE I CEMENT IN ACCORDANCE WITH ASTM C150 AND AGGREGATE CONFORMING TO ASTM C143 NUMBER 57 OR 67.
8. CONCRETE FOR EXTERIOR APPLICATIONS SHALL HAVE AIR ENTRAINMENT OF 4 TO 8% AS RECOMMENDED PER ACI 301. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260. CONDUCT AIR CONTENT TEST IN ACCORDANCE WITH ASTM C173 OR C231.
9. SUBMIT ALL TEST RESULTS TO OWNER. ANY CONCRETE NOT IN CONFORMANCE WITH THE REQUIREMENTS LISTED HEREIN SHALL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
10. SUBMIT CONCRETE MIX DESIGN TO ENGINEER FOR APPROVAL A MINIMUM OF SEVEN DAYS PRIOR TO PLACEMENT. MIX DESIGN SHALL INCLUDE PROPORTIONS OF ALL INGREDIENTS INCLUDING ADMIXTURES, AGGREGATE GRADATION AND TYPE, RESULTS OF STRENGTH, SLUMP AND AIR CONTENT TESTS, CERTIFICATES OF COMPLIANCE WITH ASTM STANDARDS FOR ADMIXTURES, WATER CEMENT RATIO AND UNIT WEIGHT OF CONCRETE. PROPORTION CONCRETE BY LABORATORY TRIAL BATCHES IN ACCORDANCE WITH ACI 318. READY MIX SUPPLIER MAY PROPORTION BY FIELD EXPERIENCE PER ACI 318. FLY ASH CONTENT SHALL NOT REPLACE MORE THAN 20% OF TOTAL WEIGHT OF CEMENT PLUS FLY ASH.
11. CONCRETE FINISHES SHALL CONFORM TO ACI 301 PART 5.3.4.2.
12. CURE CONCRETE A MINIMUM OF SEVEN DAYS IN ACCORDANCE WITH ONE OF THE METHODS LISTED IN ACI 301.
13. CLEAR CONCRETE COVER AT REINFORCING SHALL BE AS FOLLOWS:

CAST AGAINST EARTH	3"
EXPOSED TO EARTH OR WEATHER	2"
NOT EXPOSED TO EARTH OR WEATHER:	
WALLS, SLABS, AND JOISTS	3/4"
BEAMS AND COLUMNS	1 1/2"

14. REINFORCING STEEL SHALL BE GRADE 60, DEFORMED BARS, CONFORMING TO ASTM A615.
15. DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL CONFORM TO DETAILS AND DETAILING OF CONCRETE REINFORCING ACI 315-86, CRSI MANUAL OF STANDARD PRACTICE AND CRSI PLACING REINFORCING BARS.
16. SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL SHOWING ALL DETAILS OF REINFORCEMENT PRIOR TO FABRICATION.
17. BAR SPLICES SHALL BE CLASS "B" TENSION LAP SPLICES IN ACCORDANCE WITH ACI 318-95.
18. REINFORCING BAR HOOKS SHALL BE ACI STANDARD 90 DEGREE HOOKS IN ACCORDANCE WITH ACI 318-95.
19. WELDED WIRE FABRIC (WWF) SHALL LAP TWO FULL MESHES AND BE SECURELY WIRED AT EACH SIDE AND END. WWF SHALL CONFORM TO ASTM A185 AND HAVE A MINIMUM ULTIMATE STRENGTH OF 75,000 PSI.
20. EMBEDDED STRUCTURAL STEEL SHALL BE ASTM A36. ANCHOR BOLTS SHALL BE ASTM A36 THREADED RODS WITH CUT THREADS AND NUTS CONFORMING TO ASTM A563.
21. VERIFY SIZE AND LOCATION OF ALL MECHANICAL AND ELECTRICAL OPENINGS AND/OR SLEEVES AND EQUIPMENT PADS WITH THE MECHANICAL AND ELECTRICAL EQUIPMENT DETAILS AND SHOP DRAWINGS.
22. REFER TO DRAWINGS OF OTHER DISCIPLINES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON THE STRUCTURAL DRAWINGS.
23. GROUT UNDER COLUMN BASE PLATES SHALL CONSIST OF MASTERBUILDERS "SET GROUT" OR APPROVED SUBSTITUTE. GROUT SHALL BE USED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
24. SUREVOID COMPRESSIBLE MATERIAL IS MANUFACTURED BY SUREVOID PRODUCTS, INC. 1-800-458-5444.

GENERAL NOTES

STRUCTURAL SYSTEM DESCRIPTION

STRUCTURE IS A CONCENTRICALLY BRACED STEEL FRAME WITH THREE-SIDED DIAPHRAGM. SLIGHT SLOPE IS PROVIDED IN ROOF STEEL FOR DRAINAGE. SPREAD FOOTINGS AND TURNED-DOWN SLAB-ON-GRADE ARE PROVIDED FOR THE FOUNDATION SYSTEM.

MECHANICAL DUCTWORK, FANS, COMPRESSORS, STACK AND/OR OTHER ITEMS ARE TO BE SUPPORTED BY OTHERS IN ACCORDANCE WITH THE SPECIFICATIONS. THIS INCLUDES ALL EXTERIOR PADS, FOOTINGS, FOUNDATIONS, FRAMES, SUPPORTS, OR ANY OTHER STRUCTURE RELATED TO THE MECHANICAL OR ELECTRICAL SYSTEMS.

CODES AND SPECIFICATIONS

1. DOE STANDARD 1020-94, NATURAL PHENOMENA HAZARDS DESIGN AND EVALUATION CRITERIA FOR DEPARTMENT OF ENERGY FACILITIES.
2. UNIFORM BUILDING CODE - 1994 EDITION.
3. AMERICAN SOCIETY OF CIVIL ENGINEERS 7-95 (ASCE 7-95), MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
4. OHIO BASIC BUILDING CODE - 1998 EDITION.
5. ACI 318-95 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
6. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN, 1989.
7. AISC MANUAL OF STEEL CONSTRUCTION ALLOWABLE STRESS DESIGN, NINTH EDITION.
8. AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, 1985.
9. AISC MANUAL OF STEEL CONSTRUCTION, VOLUME II, CONNECTIONS, FIRST EDITION.
10. AWS-D1.1 STRUCTURAL WELDING CODE, LATEST EDITION.

DESIGN LOADS

DEAD LOADS:

BUILT-UP ROOFING	6 PSF
1.5B20 STEEL ROOF DECK	2 PSF
3" RIGID INSULATION	4.5 PSF
MEP	15 PSF
SUSPENDED CEILING	1.5 PSF
STEEL FRAMING	8 PSF (APPROX)

LIVE LOADS: ROOF LIVE LOAD 20 PSF

WIND LOADS PER ASCE 7-95:

EXPOSURE = C
WIND VELOCITY = 90 MPH
IMPORTANCE FACTOR = 1.0

SEISMIC LOADS PER DOE STD 1020-94 AND 1994 UBC:

ZONE FACTOR, Z = 0.13
IMPORTANCE FACTOR, I = 1.25
C = 2.75
R (EAST/WEST) = 8
R (NORTH/SOUTH) = 8

SNOW LOADS PER OBBC-98:

GROUND SNOW LOAD = 25 PSF
ROOF SNOW LOAD = 17.5 PSF
SNOW DRIFT = 44.3 PSF

OTHER LOADS:

HVAC ROOF MOUNTED UNIT	5000 POUNDS
MISC. LOAD AT MID-SPAN OF PURLINS	1000 POUNDS
MISC. LOAD AT MID-SPAN OF GIRDERS	2000 POUNDS

REF DWG NO.	DRAWING TITLE

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
2	REVISED SECTION DWG NUMBERS	15JAN00	RML	GEP
1	INCORPORATED CONTRACTOR RED-LINES (DCN #54900-004)	03DEC99	JGR	SLJ
0	CERTIFIED FOR CONSTRUCTION	29JAN99	MDR	SGC

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
LOCKWOOD GREENE TECHNOLOGIES

PROJECT NAME
AWWT LABORATORY EXPANSION

DRAWING TITLE
FOUNDATION PLAN & DETAILS

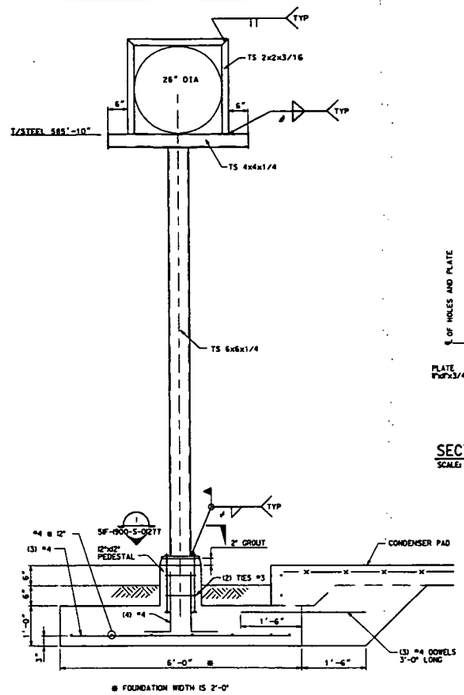
DRAWN BY	DATE	TECHNICAL LEAD	DATE	CHECKED BY	DATE
K. DAVIS	29DEC98	M. RITTER	29DEC98	S. G. CAMPBELL	01JAN99
PLANT/BLDG. NO.		FLOOR		SCALE	CLASS
FEMP/BLDG 51		FIRST		AS NOTED	U
SUBMITTED FOR 30% ISSUE		SUBMITTED FOR 60% ISSUE		SUBMITTED FOR 90% ISSUE	
TECH LEAD		TECH LEAD		TECH LEAD	
DATE		DATE		DATE	

T.A. NUMBER	FDF PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
L-006	54900	51F-1900-S-01151	12	2
LGT PROJECT NO.	FILENAME			
300-007238.01	SFD00001.DGN			

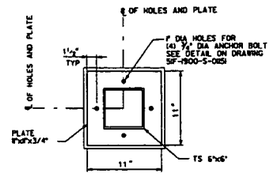
SFD00001 CADD9 paul7461 07/22/2005 08:28:07 AM

51C

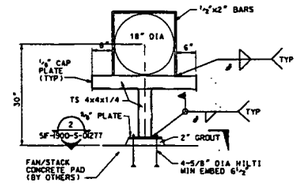
006201



SECTION 1 SCALE: 3/4"=1'-0" 5IF-1900-S-0151



SECTION 1 SCALE: 1 1/2"=1'-0" 5IF-1900-S-0277



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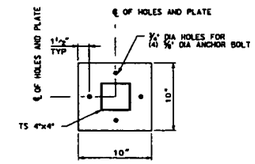
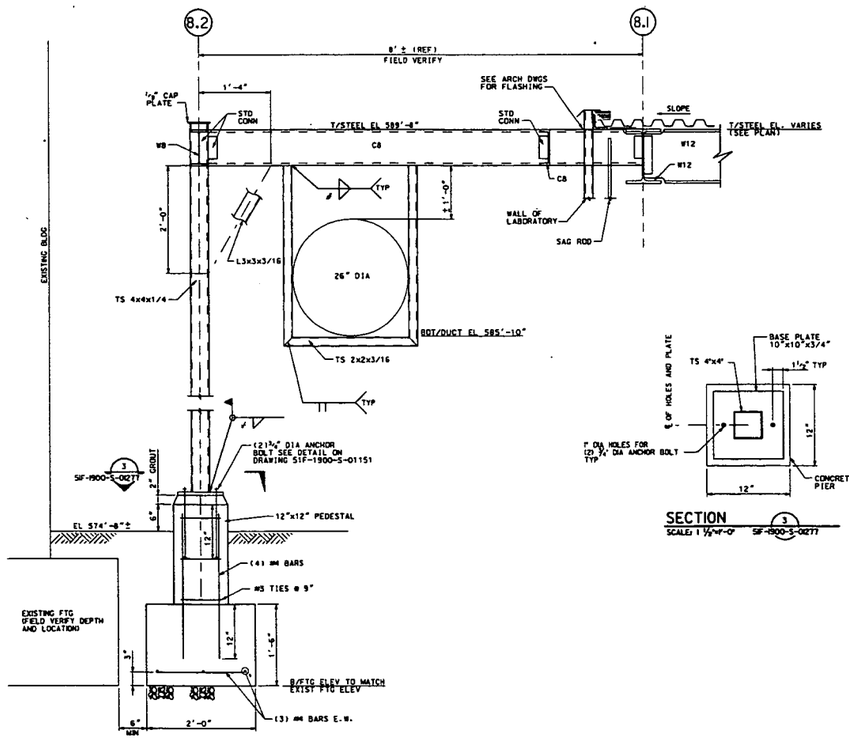


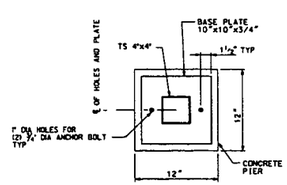
SECTION 2 SCALE: 1 1/2"=1'-0" 5IF-1900-S-0277

GENERAL NOTES

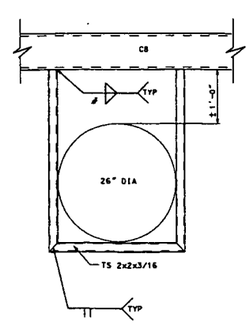
1. FOR GENERAL NOTES SEE DRAWINGS 5IF-1900-S-0151 AND 5IF-1900-S-0152.
2. FOR HVAC DUCT LAYOUT SEE MECHANICAL DRAWING 5IF-1900-H-0162.



SECTION 3 SCALE: 1"=1'-0" 5IF-1900-S-0152

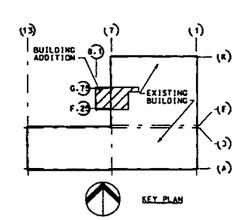


SECTION 3 SCALE: 1 1/2"=1'-0" 5IF-1900-S-0277



SECTION 4 SCALE: 1"=1'-0" 5IF-1900-S-0152

NOTE:
THIS SUPPORT IS 90° TO OTHER SUPPORTS AND ADJACENT TO MAIN BLDG.



KEY PLAN

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
1	RE-NUMBERED DRAWING NUMBER, WAS A DUPLICATE FROM A PREVIOUSLY SUBMITTED DWG. WAS NUMBER 5IF-1900-S-0168	09JAN00	GEP	GEP
0	CERTIFIED FOR CONSTRUCTION	03FEB99	GH	SGC

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY

PROJECT NAME

DRAWING TITLE

HVAC DUCT SUPPORT DETAILS & SECTIONS

DRAWN BY	DATE	TECHNICAL LEAD	DATE	CHECKED BY	DATE
K. DAVIS	26-JAN-99	G.MURJANI	28-JAN-99	M. RITTER	28-JAN-99
PLANT/BLDG. NO.		FLOOR: FIRST		SCALE: AS NOTED	CLASS: U
SUBMITTED FOR 30% ISSUE		SUBMITTED FOR 60% ISSUE		SUBMITTED FOR 90% ISSUE	
TECH LEAD		TECH LEAD		TECH LEAD	
DATE		DATE		DATE	
T.D. NUMBER	FDF PROJECT NO.	DRAWING INDEX CODE NO.		SHEET NO.	REV. NO.
LET PROJECT NO.	FILENAME: SSD00001.DGN	5IF-1900-S-01277		14	1

SSD00001 CADD9 paul7461 07/22/2005 08:28:49 AM

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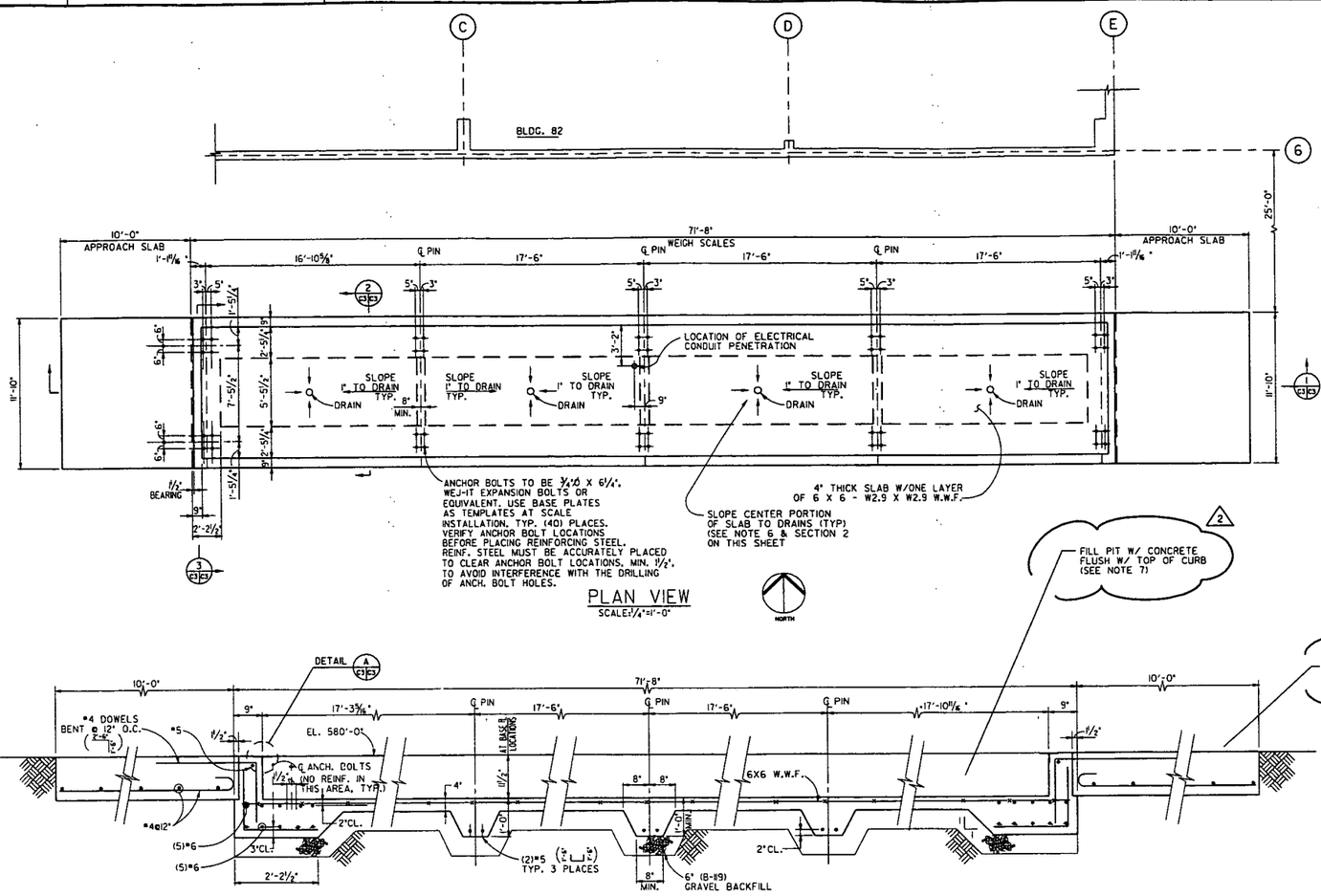
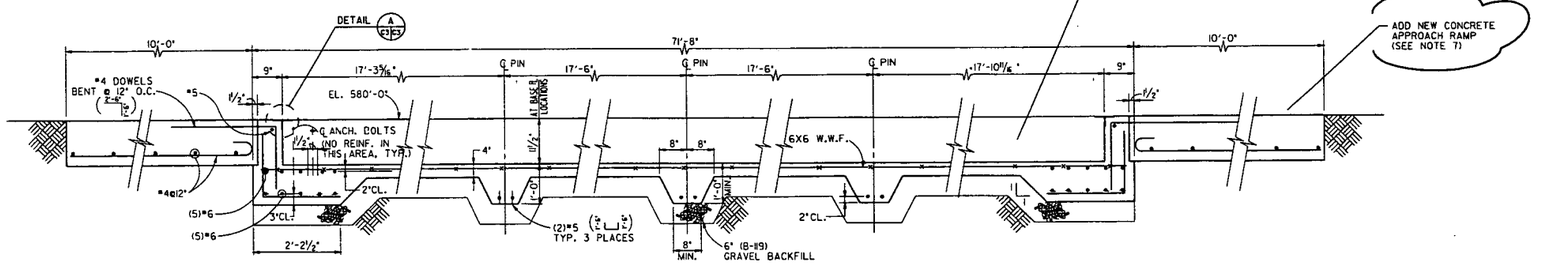
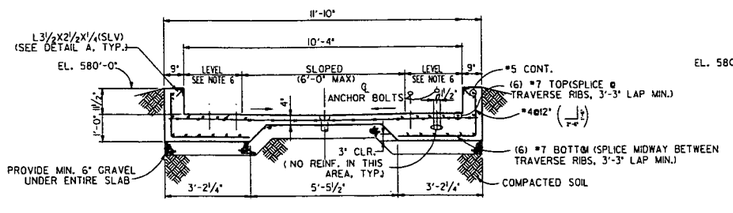


PLAN VIEW
SCALE: ¼"=1'-0"



SECTION 1
SCALE: ¾"=1'-0"



SECTION 2
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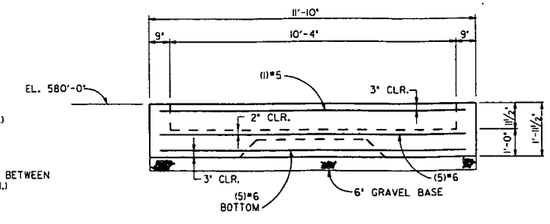
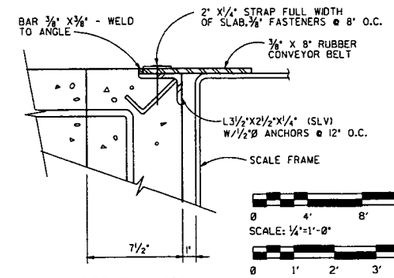
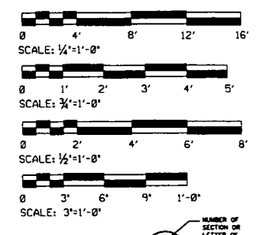
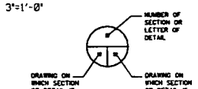


SECTION 3
SCALE: ½"=1'-0"



DETAIL A
SCALE: 3"=1'-0"





SECTION & DETAIL KEY

NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SIZES OF EQUIPMENT FOUNDATIONS INCLUDING ANCHOR BOLT SIZE, NO., AND LOCATION WITH THE EXISTING SCALE, PRESENTLY LOCATED ADJACENT TO BLDG. 31, AT THE CORNER OF 1ST STREET AND 'D' STREET.
2. ALL CONCRETE IS TO BE NORMAL WEIGHT CONCRETE WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI AND IS TO BE AIR ENTRAINED.
3. ALL REINFORCING STEEL TO BE ASTM A615, GRADE 60.
4. WELDED WIRE FABRIC SHALL BE ASTM 185 COLD DRAWN STEEL.
5. ENTIRE SLAB AND FOUNDATION SHALL BE CAST MONOLITHIC
6. TOP OF CONCRETE AT BASE PLATE LOCATIONS TO BE LEVEL AND IN ONE PLANE WITHIN ± ⅛".
7. EXISTING SCALE REPLACED WITH NEW ABOVE GRADE SCALE. SEE DWG. 82X-5500-S-00092 FOR NEW CONCRETE WORK. 2

LOCATION #2

TO CORRELATE REFERENCED 'AMK SHEET No's 'TO FMPC DRAWING NUMBERS, SEE FMPC DRAWING No.: 82X-4445-X-00001

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	A-E	OPERATOR	FMPC
			DETAILS AND DATE	
2	EXISTING SCALE TO BE REMOVED AND FILLED WITH CONCRETE PER RES. 4054	N/A	GEP 12-17-99	GEP 12-17-99
1	AS BUILT	LMP 9-12-89		

UNITED STATES DEPARTMENT OF ENERGY
FEED MATERIALS PRODUCTION CENTER

THIS DRAWING PREPARED BY
A. M. KINNEY, INC.
CONSULTING ENGINEERS
CINCINNATI, OHIO

WMCO SUBCONTRACT NO. N-77207 — A-E PROJECT NO. 02882

PROJECT NAME: ENVIRONMENTAL, HEALTH & SAFETY IMPROVEMENTS

DRAWING TITLE: RECEIVING & INCOMING MATERIALS INSPECTION AREA TRUCK WEIGH SCALE FOUNDATION

DRAWN BY	DATE	DESIGNED, CHECKED BY	DATE	CHECKED BY	DATE
JAM	3-21-88	JIK	3-21-88		

PLANT/BLDG. NO.: 82 — FLOOR: — SCALE: AS NOTED — CLASS:

SUBMITTED FOR APPROVAL — APPROVAL RECOMMENDED — DRAWING APPROVED

A-E — DATE — OPERATING CONTRACTOR — DATE — DOE — DATE

DOE PROJECT NO.	OPER. CONTR. PROJ. NO.	DRAWING NO.	SHEET NO.	REV. NO.
87-D-159	0087502 WBS 1.1.4.1.05	82X-4445-S-00005	C-3	2

FILE NAME: /amk/b1qg82/rimaOs01b.001

rimaOs01b CADD9 paul7461 07/22/2005 07:40:20 AM

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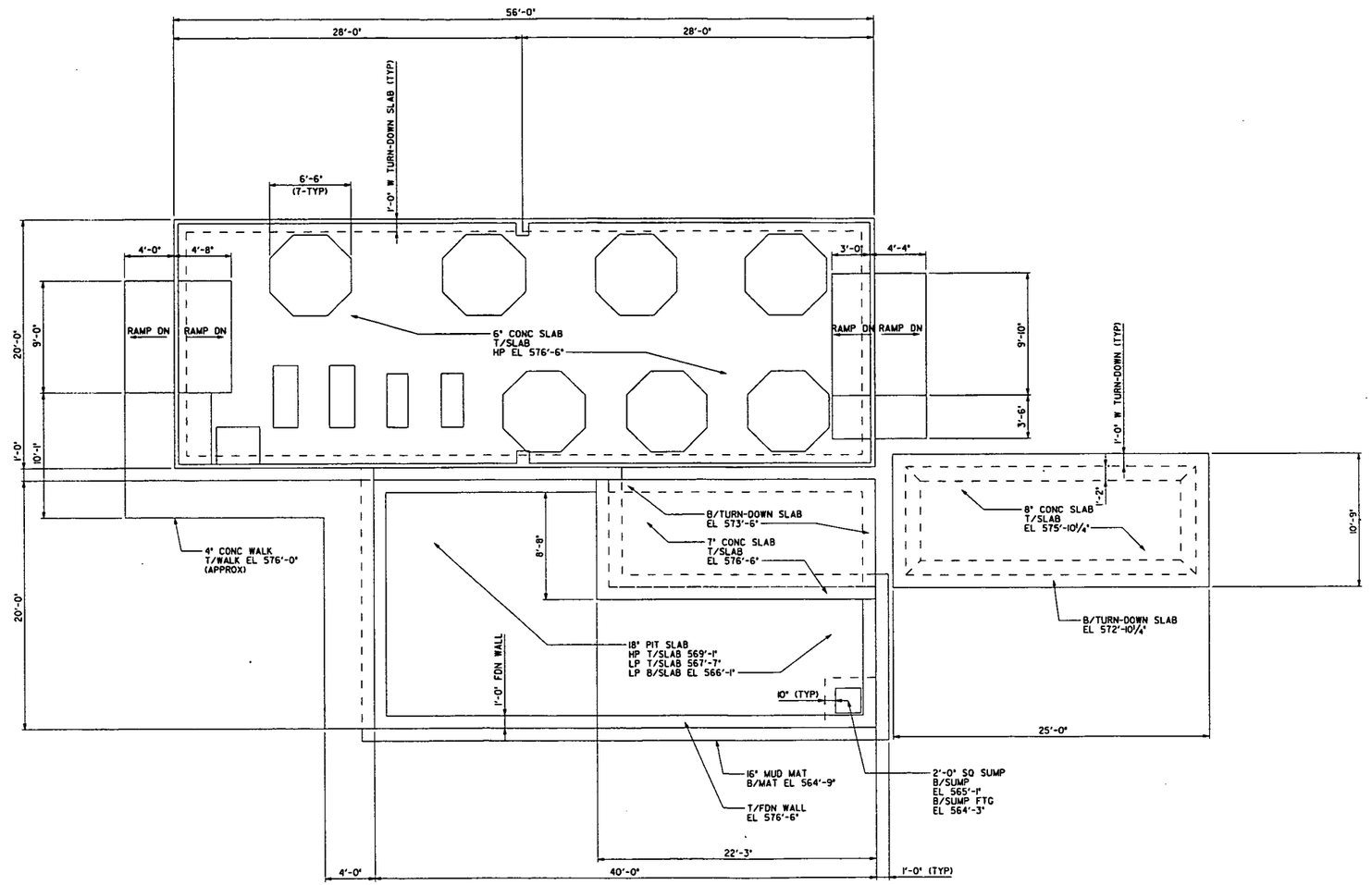


2' 0' 2' 4' 6' 8' 10'
SCALE: ¼" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REF DWG NO.	DRAWING TITLE
18A-4445-C-01092	SWRB VALVE HOUSE FOUNDATION PLAN AND DETAILS
95X-5900-A-00094	ARCHITECTURAL PLAN, ELEVATION, SECTION, AND DETAILS
95X-5900-S-00145	STRUCTURAL FOUNDATION PLAN, SECTIONS, AND DETAILS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREA
BUILDING 18Q
FOUNDATION AND SLAB PLAN

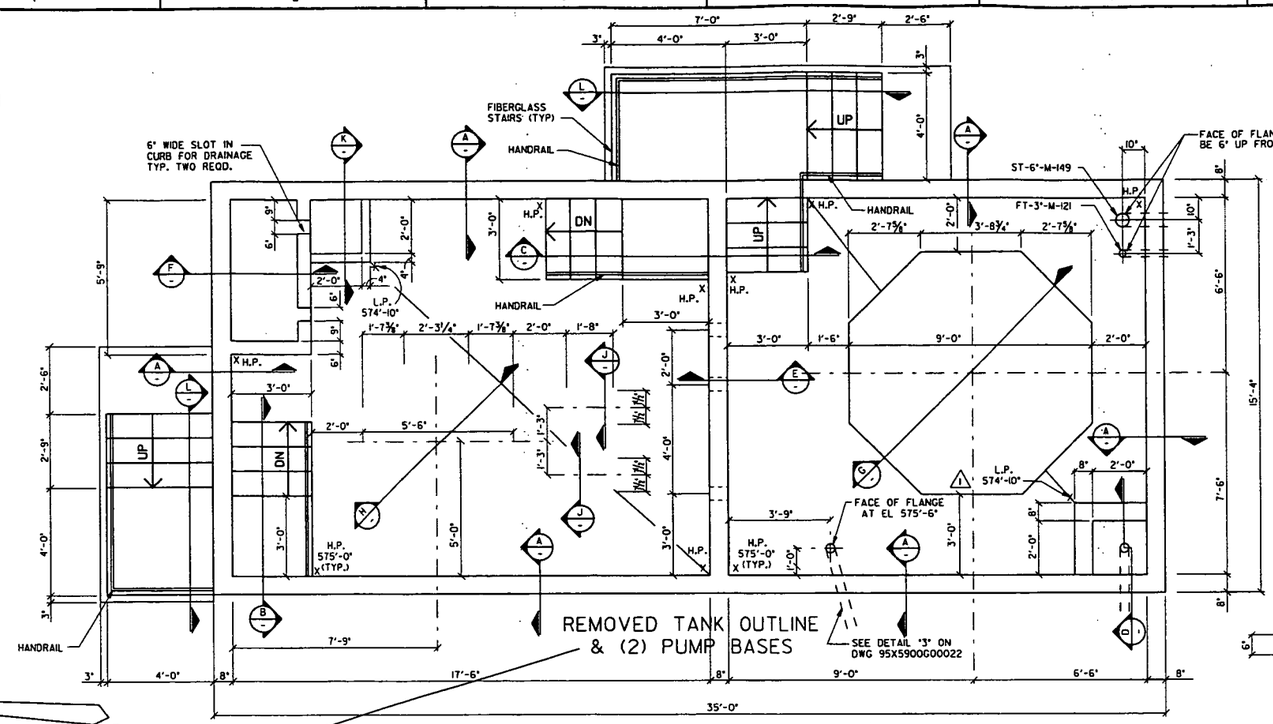
APPROVALS

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

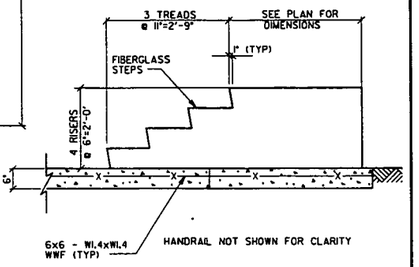
DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
K.L. RABBITT	20500	99X-5500-S-00913	S-3	A
RES PROJECT NO.	FILENAME 99xs0913.dgn			

FCPS4E.DGN 5/30/03

006201



INTERIM ADVANCED WASTE WATER TREATMENT
FOUNDATION PLAN
1/2"=1'-0"



SECTION L
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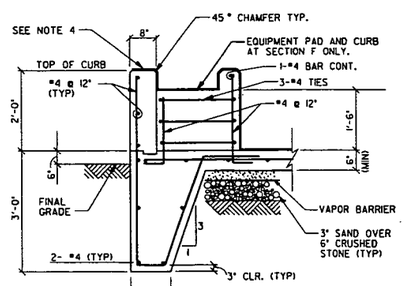
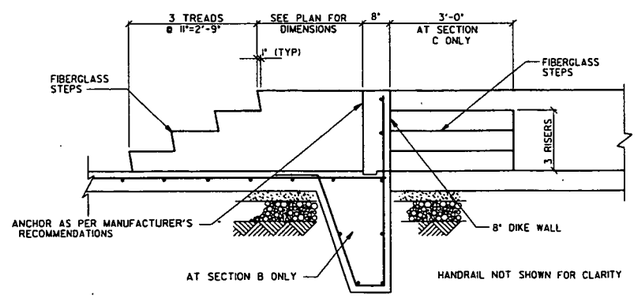


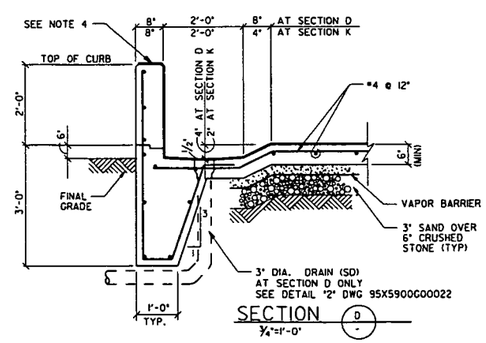
SECTION A
3/4"=1'-0"

SECTION F SIM
3/4"=1'-0"



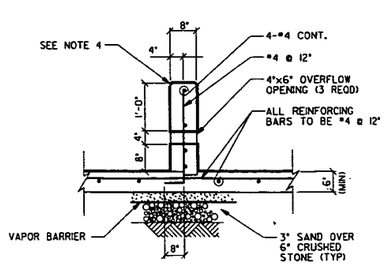
SECTION B
3/4"=1'-0"

SECTION C
3/4"=1'-0"



SECTION D
3/4"=1'-0"

SECTION K
3/4"=1'-0"



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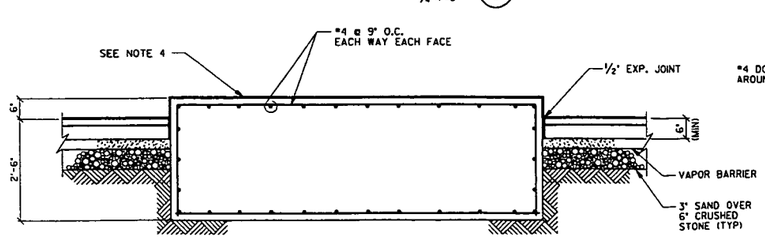
3/4"=1'-0"



SECTION G
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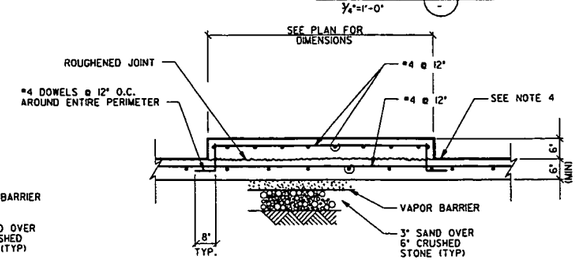


SECTION H
3/4"=1'-0"

SECTION J SIM
3/4"=1'-0"

NOTES

1. FOR GENERAL CONCRETE NOTES SEE DWG. NO. 95X5900X00023.
2. FOR EQUIPMENT ARRANGEMENT SEE DWG. NO. 95X5900M00017.
3. VERIFY SIZE OF TANKS AND PUMP BASE FROM APPROVED VENDOR DRAWINGS PRIOR TO PLACING CONCRETE FOUNDATIONS. USE EXPANSION ANCHORS TO ANCHOR TANKS & PUMP BASE PER VENDOR REQUIREMENTS.
4. COAT ALL CONCRETE SURFACES INSIDE TANK CONTAINMENT AREAS, INCLUDING TOP OF PUMP BASE, TANK FOUNDATIONS, BASE PLATES AND TOP OF CURB WALLS IN ACCORDANCE WITH SPECIFICATION SECTION 09900.
5. FOR FIBERGLASS STAIRWAY SPECIFICATIONS, SEE DWG. NO. 95X5900S00024
6. SILL SEALANT SHALL BE REQUIRED AT ALL JOINTS.
7. ALL PIPE SYSTEMS PENETRATING CONCRETE FLOORS OR WALLS SHALL UTILIZE MECHANICAL JOINT BY FLANGED WALL PIPE TO ENSURE WATERTIGHT PENETRATIONS BETWEEN THE CONCRETE AND CASTING.

PRELIMINARY

REFERENCE DWG.#	REFERENCE DWG. TITLE
95X5900X00023	GENERAL NOTES AND LEGEND
95X5900G00021	CIVIL SITE PLAN
95X5900S00004	FOUNDATION PLAN AND SECTION
95X5900M00017	EQUIPMENT ARRANGEMENT PLAN
95X5900E00007	POWER PLAN - IAWWT
	PUT BOTH ON HERE ????

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	A-E	OPERATOR	DOE
		INITIALS AND DATE		
3	REVISED PER (RES #3717) & (DCN NO.: 54700-005)		S.JS 2/17/99	
2	NO AS BUILT CHANGES	B.F.H. 1/22/93	D.J.B. 1/22/93	N/A
1	GENERAL REVISION PER ECP 2514-03	B.F.H. 1/22/91	D.M.G. 1/22/91	N/A 1/22/91
0	CERTIFIED FOR CONSTRUCTION	B.F.H. 6/20/91	D.J.B. 6/26/91	C.J.F. 6/26/91

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
PARSONS
THE RALPH M. PARSONS CO. - CHAS. T. MAIN, INC. - ENGINEERING-SCIENCE, INC.
CINCINNATI, OHIO

PROJECT NAME
FUSRAP ERA
OU5, IAWWT

DRAWING TITLE
FOUNDATION PLAN & SECTIONS
INTERIM ADVANCED WASTE WATER TREATMENT

DRAWN BY	DATE	DESIGNED, CHECKED BY	DATE	CHECKED BY	DATE
D. THOMPSON	4/8/91	R. JADHAV	6/20/91	M. TOENSMEYER	4/26/91

PLANT/BLDG. NO.	FLOOR	SCALE	CLASS
		1/2"=1'-0"	

SUBMITTED FOR APPROVAL	APPROVAL RECOMMENDED	DRAWING APPROVED
B.F. HARVEY 6/20/91	D.J.BRETTSCHNEIDER 6/26/91	C.J.FERMAINTT 6/20/91
A-E DATE	OPERATING CONTRACTOR DATE	DOE DATE

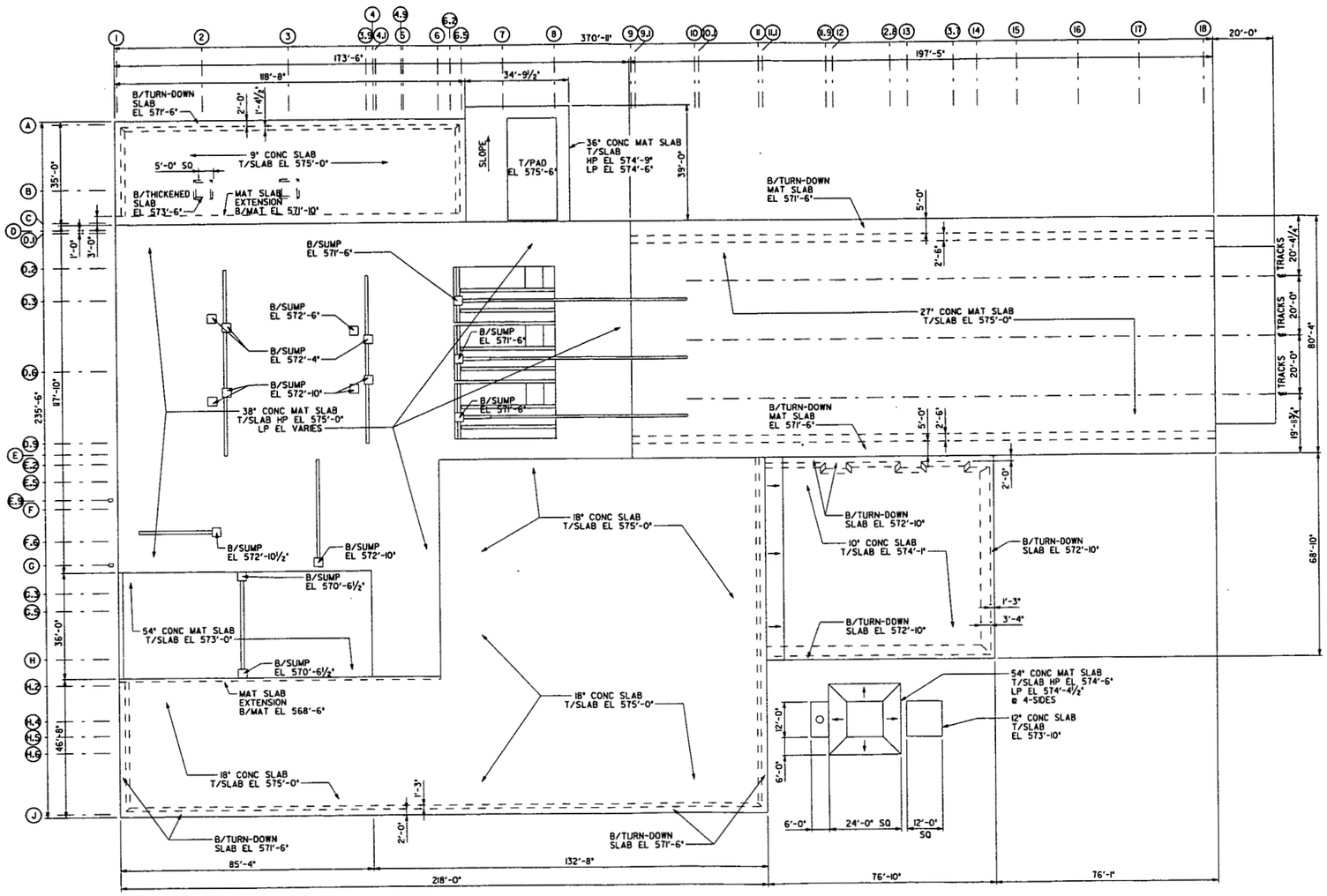
DOE PROJECT NO.	OPER. CONTR. PROJ. NO.	DRAWING NO.	SHEET NO.	REV. NO.
BY D.O.E. LATER	WBS 1.2.1.5.2.4.2 00-90701	95X-5900-S-00004	S0001	3

Mar. 24, 1992 06:49:40

95s00004 CADD9 paul7461 07/22/2005 07:26:07 AM

99xs0914 CADD11 rabb7064 08/01/2005 12:15:07 PM

006201



8' 0' 8' 16' 24' 32' 40'

SCALE: 1/16" = 1'-0"

PRELIMINARY

NOT FOR CONSTRUCTION

REF DWG NO.	DRAWING TITLE
94X-3900-S-01454	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01455	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01456	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01457	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01458	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01459	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01460	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01560	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01561	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01562	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01579	REMEDIATION BUILDING PARTIAL FOUNDATION PLAN
94X-3900-S-01563	REMEDIATION BUILDING BUILDING FOUNDATION SECTIONS
94X-3900-S-01576	REMEDIATION BUILDING CONCRETE SECTIONS AND DETAILS
94X-3900-S-01578	REMEDIATION BUILDING CONCRETE SECTIONS AND DETAILS
94X-3900-S-01564	REMEDIATION BUILDING CONCRETE SECTIONS AND DETAILS
94X-3900-S-03777	REMEDIATION BUILDING CONCRETE SECTIONS AND DETAILS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
SILO 1 & 2 REMEDIATION FACILITY (BLDG 94B)
FOUNDATION AND SLAB PLAN

APPROVALS

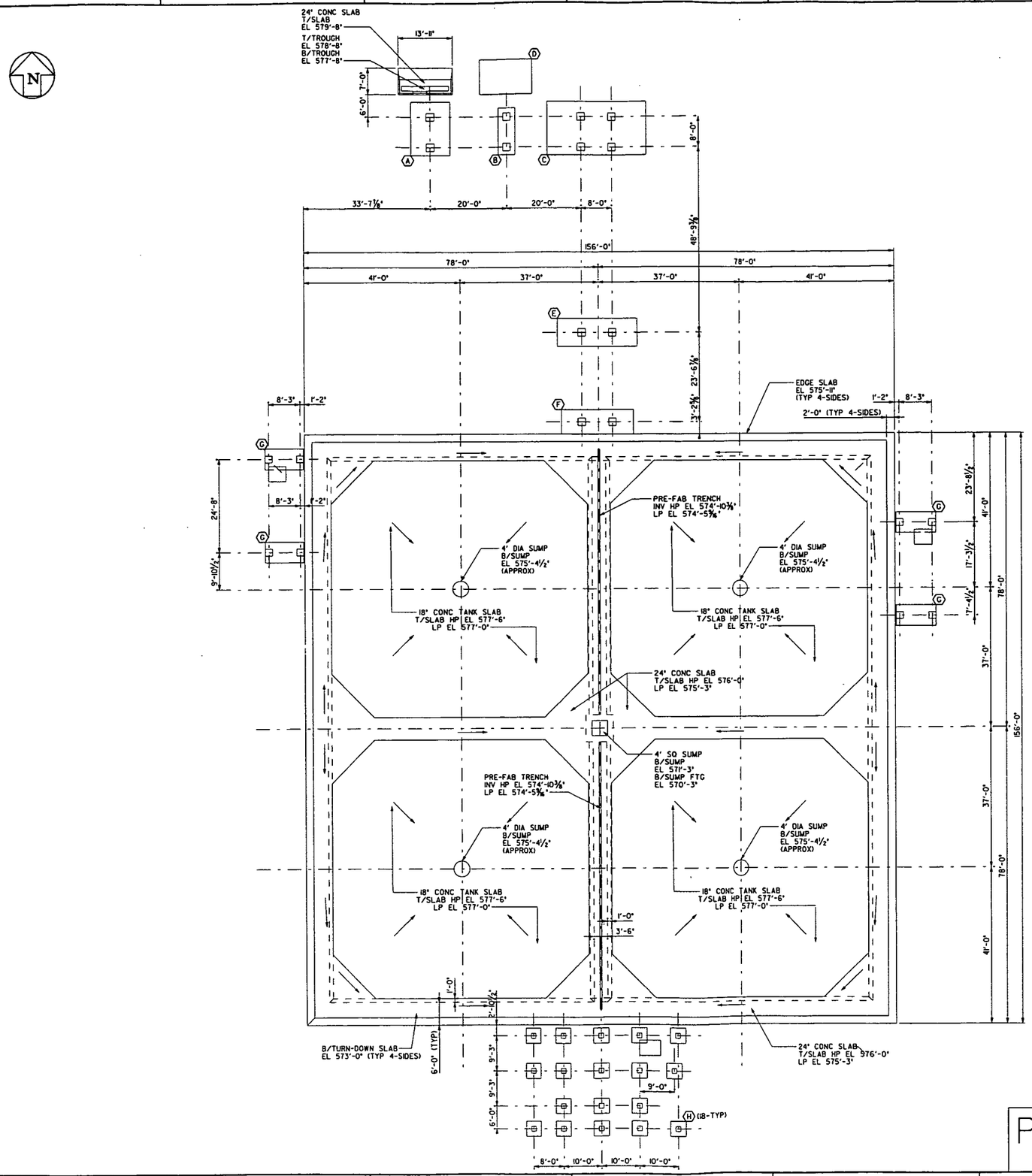
COGNIZANT ENG.		SAFETY ENG.	
CIVIL & STR.		MAINTENANCE	
ELECTRICAL		FIRE PROTECT.	
ENGINEER		WASTE MANAGE	
INSTRUMENT		SECURITY	
MECHANICAL		QA	
		CONSTRUCTION	
CHECKED		SILOS PROJ. ENG.	
APPROVED			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
K.L. RABBITT	20500	99X-5500-S-00914	S-5	A
RES PROJECT NO.	FILENAME 99xs0914.dgn			

FCPSAE.DGN 5/30/03

99xs0915 CADD11 rabb7064 08/01/2005 12:16:01 PM

006201



FOOTING SCHEDULE			
MARK	SIZE	DEPTH	B/FOOTING ELEV
A	14'-1"x10'-0"	4'-0"	570'-9"
B	12'-4"x4'-6"	1'-6"	574'-0"
C	26'-0"x14'-1"	4'-0"	571'-0"
D	14'-3"x9'-2"	1'-6"	577'-2"
E	21'-0"x7'-5¼"	4'-0"	572'-0"
F	19'-0"x6'-6"	3'-0"	573'-0"
G	10'-1"x5'-6"	2'-0"	573'-0"
H	4'-0"x4'-0"	1'-6"	571'-9"

PRELIMINARY
NOT FOR CONSTRUCTION

REF DWG NO.	DRAWING TITLE
12FC0001	TRANSFER TANK SYSTEM GRADING PLAN
12FC0005	CROSS SECTIONS SHEET 1
12FC0006	CROSS SECTIONS SHEET 2
12FC0007	CROSS SECTIONS SHEET 3
12FS0010	TTA BUILDING FOUNDATION PLAN & DETAILS (SHEET 1 OF 2)
12FS0011	TTA BUILDING FOUNDATION PLAN & DETAILS (SHEET 2 OF 2)
12FS0012	TTA BLDG TANK PADS PLAN & DETAILS (SHEET 1 OF 2)
12FS0013	TTA BLDG TANK PADS PLAN & DETAILS (SHEET 2 OF 2)
12FS0016	TTA BUILDING FOUNDATION SECTIONS
12FS0017	TTA BLDG TANK PAD FDNS SECTIONS
94X-3900-S-05351	CONCRETE PLAN, SECTIONS AND DETAILS ELECTRICAL EQUIPMENT PADS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
TTA BULDING 94C
FOUNDATION AND SLAB PLAN

APPROVALS

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

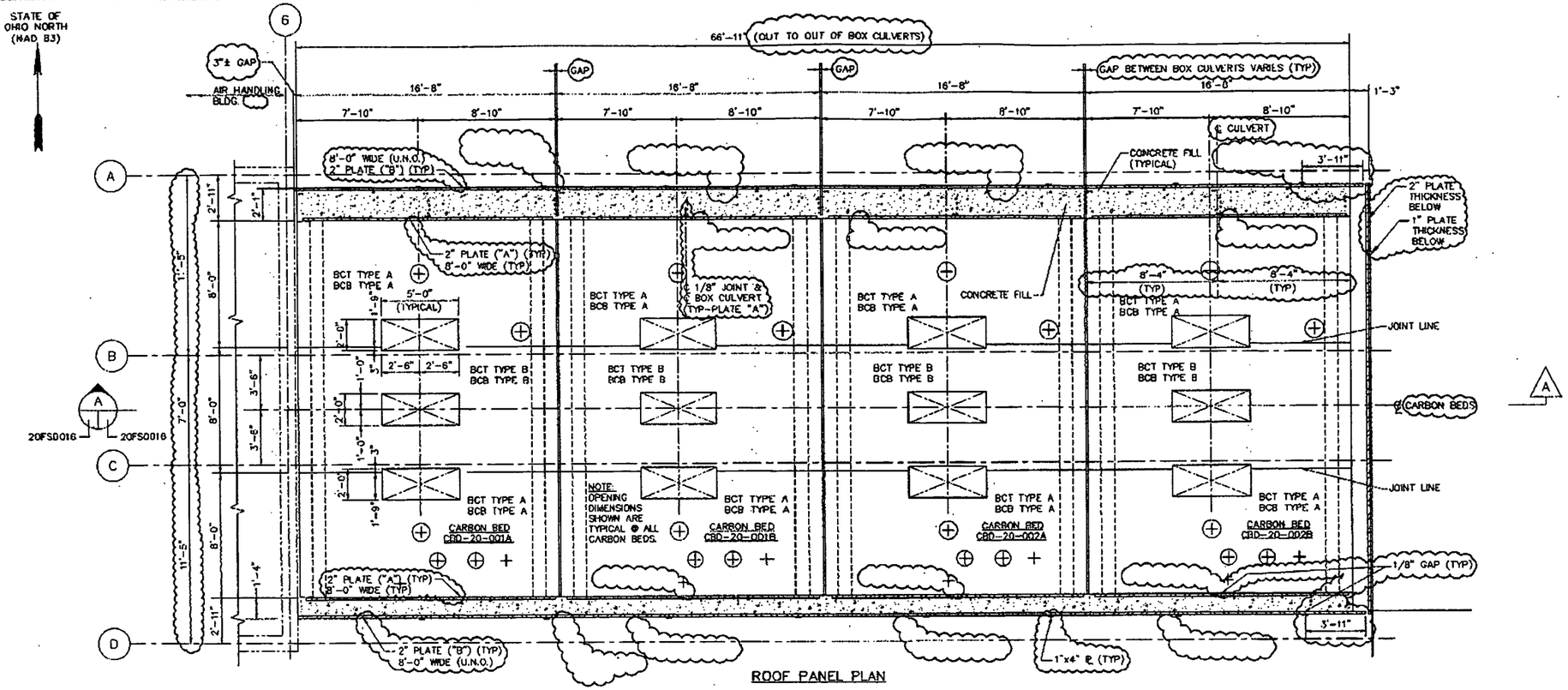
DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
K.L. RABBITT	20500	99X-5500-S-00915	S-6	A
RES PROJECT NO.	FILENAME 99xs0915.dgn			

FCPSAE.DGN 5/30/03

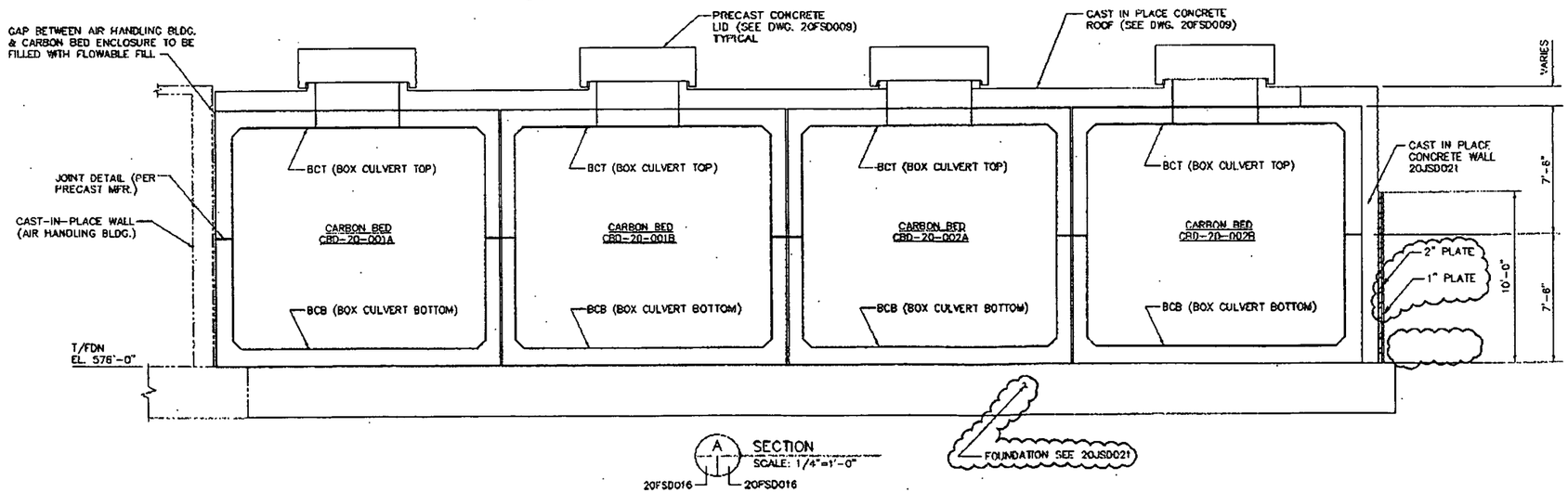
006201

NOTES:

1. FOR GENERAL NOTES SEE DRAWING 12FSD005.
2. FOR PLATE DETAILS NOT SHOWN SEE DRAWING 20FSD074.
3. FOR GROUNDING PLATES (NUMBER & LOCATION) SEE ELECTRICAL DRAWING 35FED015. (TYPICAL 4 PLACES)



ROOF PANEL PLAN



SECTION
SCALE: 1/4"=1'-0"

REV	DATE	BY	CHK'D	APR'VD	DESCRIPTION/ISSUE
3	3-12-03	RS	JDB	JDB	REVISED PER DCN 40710-JEG-221 & JEG-202
2	7/18/02	RS	TVM	JDB	REVISED PER DCN 40710-JEG-154
1	4/02/02	RS	JDB	SWH	REVISED PER DCN 40710-JEG-083 & DCN 40710-JEG-104
0	8/11/00	C.G.	R.G.	M.C.H.	CERTIFIED FOR CONSTRUCTION

RPE

DRAWN BY C. GUIGNARD	DATE 8/10/00	
DESIGNED BY V. BHATT	DATE 8/10/00	
CHECKED BY R. GOYAL	DATE 8/10/00	
APPROVED BY M. HSIEH	DATE 8/11/00	
APPROVED BY J. LAWSON	DATE 8/11/00	

DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
SILOS 1 AND 2 ACCELERATED WASTE RETRIEVAL PROJECT
FERNALD, OHIO
FDF CONTRACT NO. FSC 624

FOSTER WHEELER
FOSTER WHEELER ENVIRONMENTAL CORPORATION

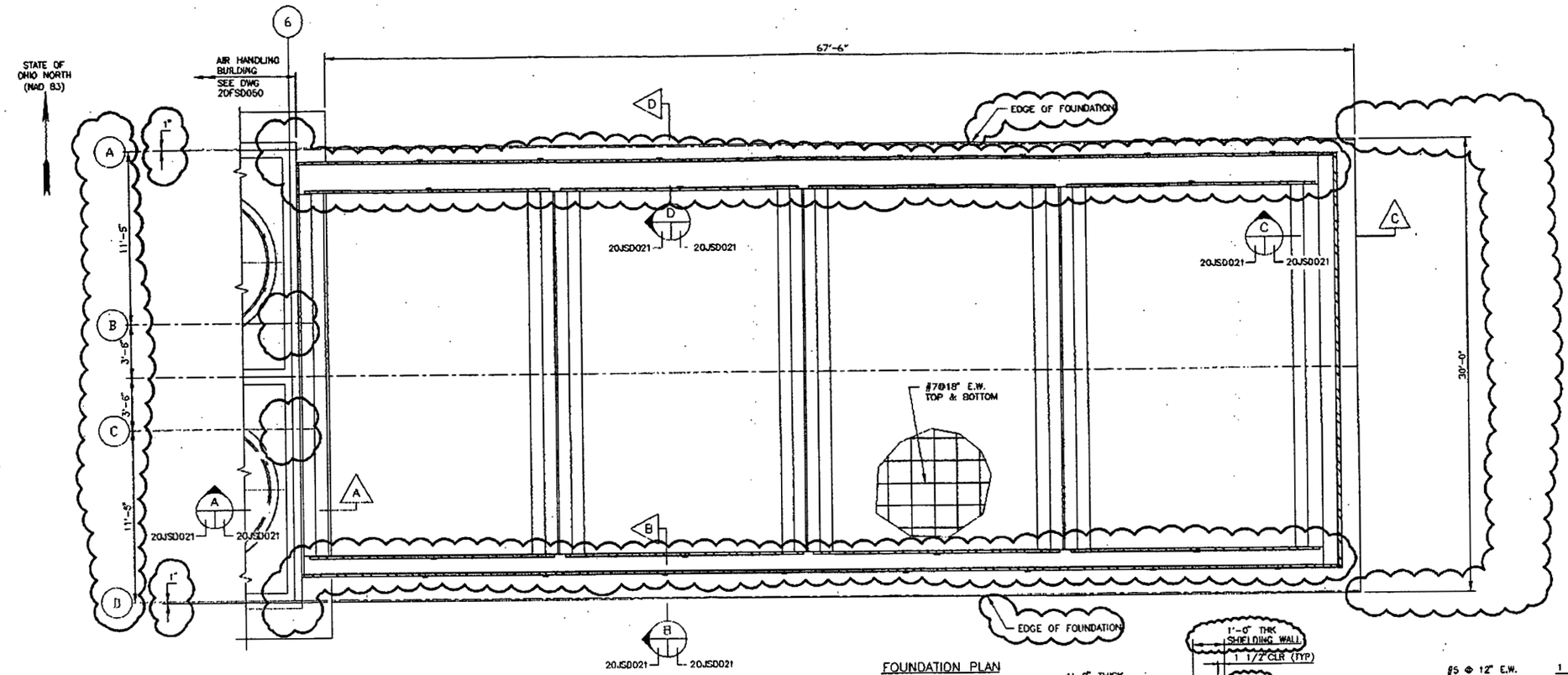
TITLE
RADON CONTROL SYSTEM
CARBON BED ENCLOSURE
PLAN, SECTION & DETAILS

SIZE D | SCALE: 1/4"=1'-0" | DWG. NO. 20FSD016 | REV 3

FILENAME: 20FSD016.DWG

940

006201



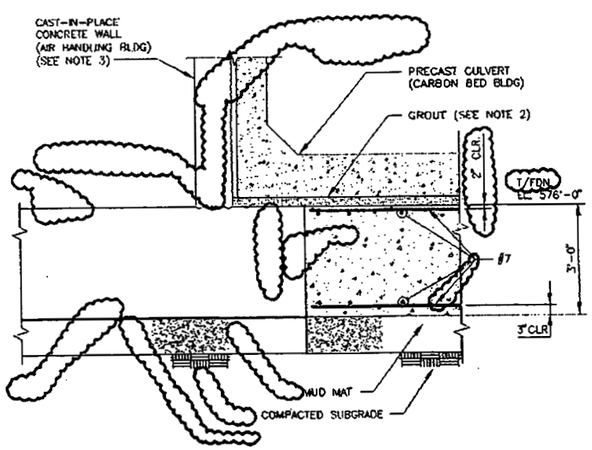
FOUNDATION PLAN
(T.O. CONCRETE EL. 576'-0")

NOTES:

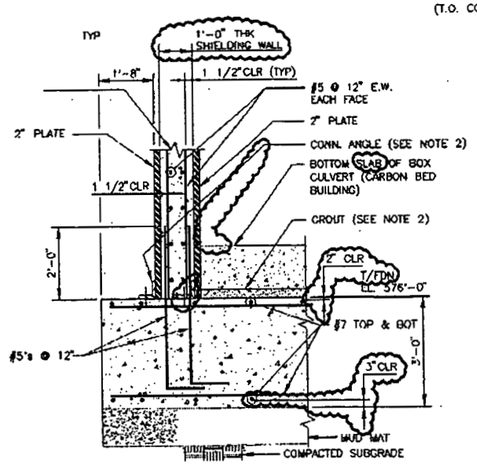
1. FOR GENERAL NOTES SEE DRAWING 12FSD005.
2. SAND BED WAS SPECIFIED PER DCN 40710-JEG-083, BUT REPLACED WITH GROUT BED PER DCN 40710-JEG-104. CONNECTION ANGLES SHOWN ARE AS SPECIFIED IN DCN 40710-JEG-104.
3. PRECAST WALL WAS SPECIFIED ON DRAWING 20FSD065, BUT CAST-IN-PLACE WALL WAS ACTUALLY INSTALLED PER DRAWING 20FSD071.

REFERENCE DRAWINGS

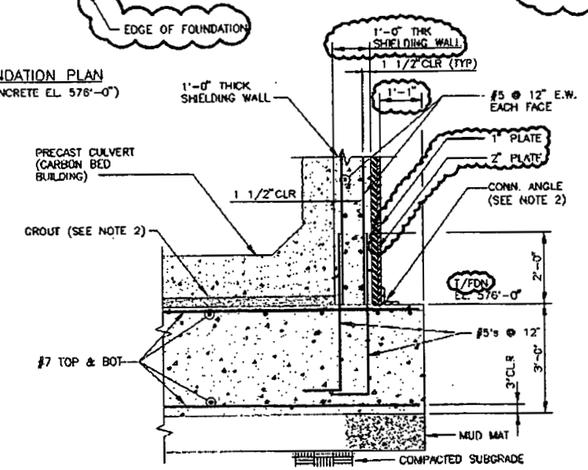
12FSD005	GENERAL NOTES
20FSD050	AIR HANDLING BLDG FDN PLAN
20FSD065	FOUNDATION SECTIONS
20FSD071	CAST-IN-PLACE WALL LAYOUT



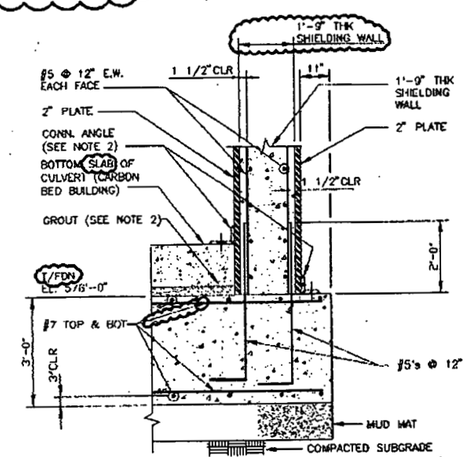
A SECTION
SCALE: 1/2"=1'-0"
20JSD021 20JSD021



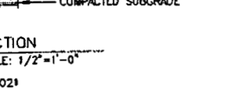
B SECTION
SCALE: 1/2"=1'-0"
20JSD021 20JSD021



C SECTION
SCALE: 1/2"=1'-0"
20JSD021 20JSD021



D SECTION
SCALE: 1/2"=1'-0"
20JSD021 20JSD021



SECTION & DETAIL KEY

REV	DATE	BY	CHK'D	APR'VD	DESCRIPTION/ISSUE
1	3-27-03	PS		JDB	REVISED PER DCN 40710-JEG-221 & JEG-262
0	6/24/02	JDB	TVM	JBD	ISSUED FOR CONSTRUCTION

RPE: RPE SEAL NOT REQUIRED FOR JACOBS GENERATED DRAWINGS

ORIGINATOR: J. BEINHORN
CHECKED: T. MARCUM
DISCIPLINE LEAD: J. BEINHORN
APPROVED: J. BEINHORN DATE: 6/25/02
JACOBS PROJECT NO.: 35H19606

DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
SILOS 1 AND 2 ACCELERATED WASTE RETRIEVAL PROJECT
FERNALD, OHIO
FLUOR FERNALD PROJECT 40710

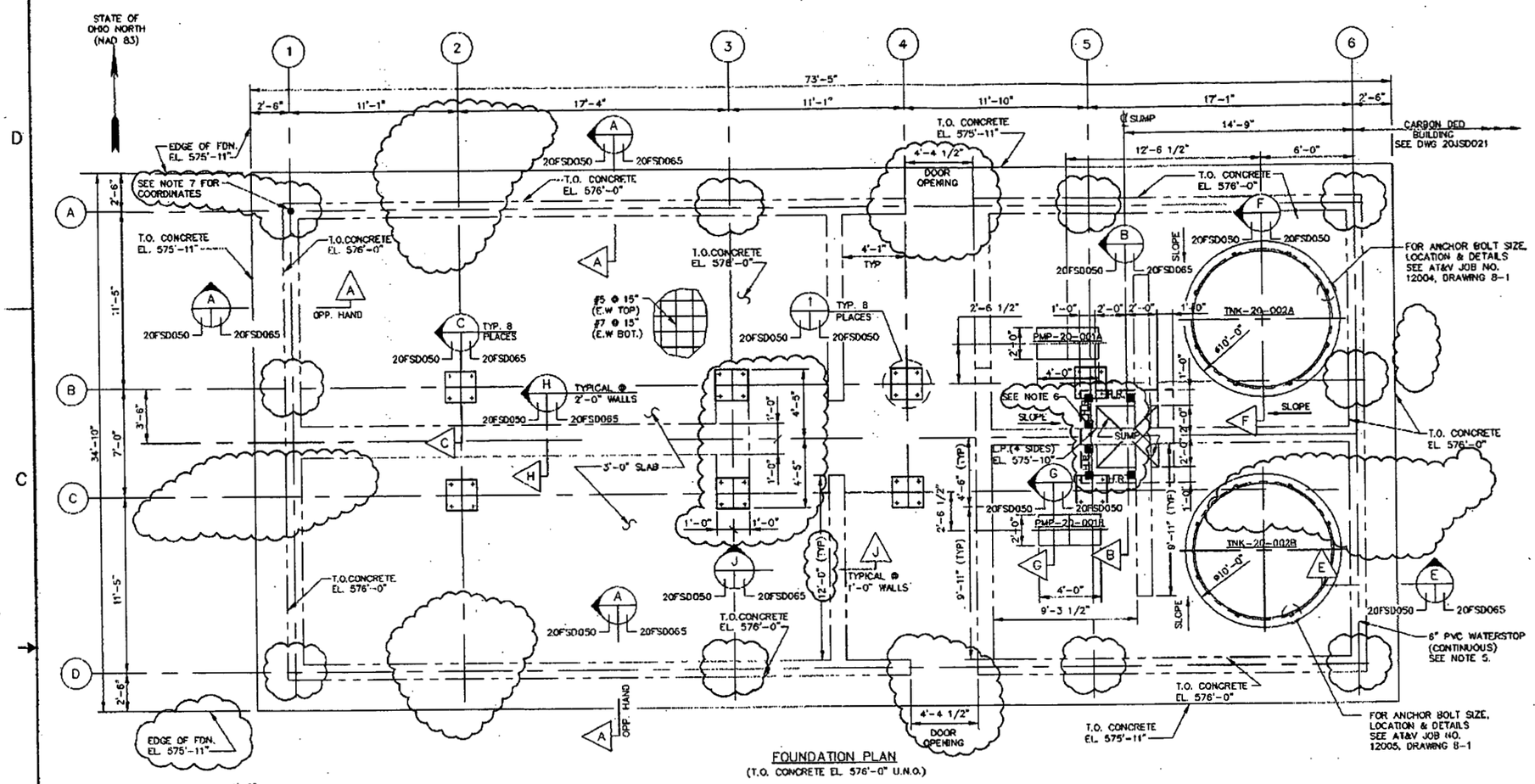
JACOBS 123 Boundary Ave. Oak Ridge, Tennessee 37830 Tel: 865-220-5005 Fax: 865-220-6170

TITLE
RADON CONTROL SYSTEM
CARBON BED BUILDING
FOUNDATION PLAN & SECTIONS

SIZE: D SCALE: 1/4"=1'-0" DWG. NO. 20JSD021 REV 1

20JSD021.DWG

006201



FOUNDATION PLAN
(T.O. CONCRETE EL. 576'-0" U.N.O.)

NOTES:

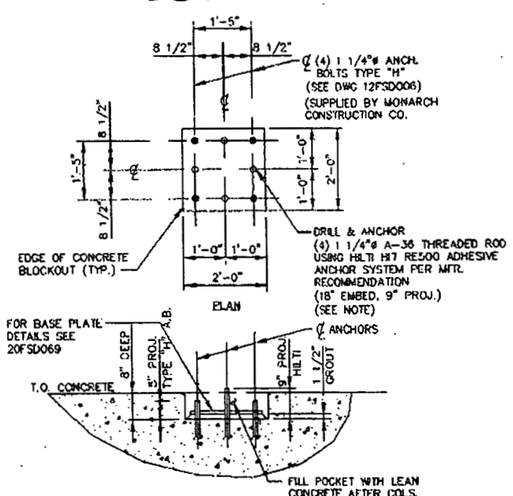
1. FOR GENERAL NOTES SEE DRAWING 12FSD005.
2. SUMP BASE TO BE PRECAST/PREMANUFACTURED PER DIMENSIONS AS SHOWN ON DESIGN DRAWINGS
3. TANK ANCHOR BOLTS TO BE SUPPLIED BY AMERICAN TANK AND VESSEL INC. (AT&V)
4. ALL WALLS SHOWN ARE 1'-0" WIDE UNLESS OTHERWISE NOTED.
5. CONTRACTOR HAS AN OPTION TO USE 25x20 MIN. TYPE C DURASEAL SWELLING GASKET OR EQUIVALENT WATERSTOP PRIOR TO PLACING CONCRETE FOR THE WALLS.
6. SEE DRAWING 20FSD071 FOR HANDRAILS AROUND SUMP.
7. COORDINATES OF COL A1

NAD 83
N-480475.81
E-1347223.56

PLANT
S-22+79.47
E-21+77.675

REFERENCE DRAWINGS

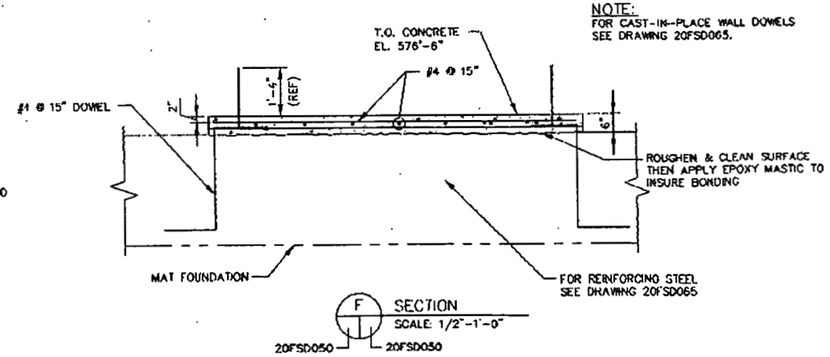
12FSD005	GENERAL NOTES
12FSD006	ANCHOR BOLT STANDARDS & SCHEDULE
12FSD007	CONCRETE STANDARD DETAILS
20FSD065	FOUNDATION SECTIONS
20JSD021	CARBON BED BLDG FDN PLAN & SECTIONS
20FSD071	CAST-IN-PLACE WALL LAYOUT



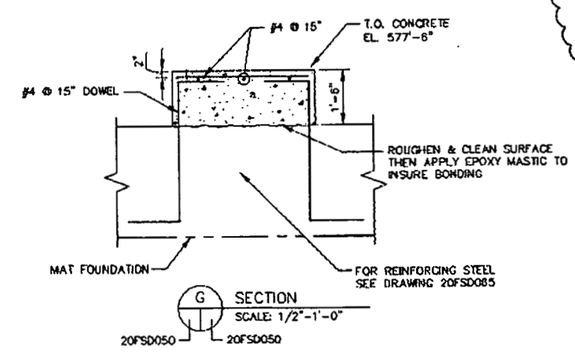
1 DETAIL (8 REQUIRED)
SCALE: NONE
20FSD050 — 20FSD050

NOTE:
USE 3"ø MAX. CORE DRILL FOR ANCHOR HOLES. FILL CORE HOLE WITH NON-SHRINK GROUT TO A DEPTH TO ACCOMMODATE 18" ANCHOR EMBEDMENT.

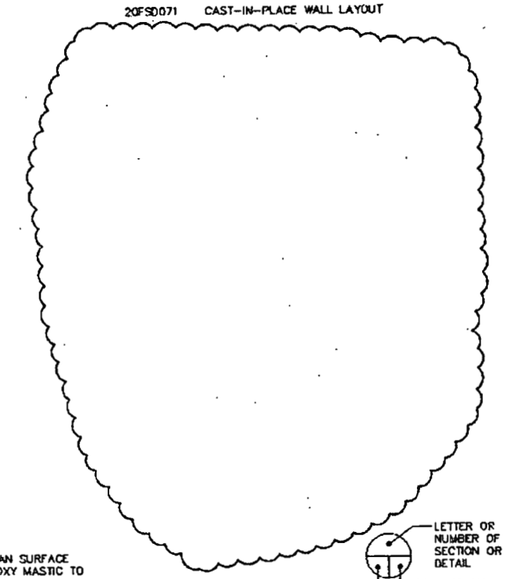
NOTE:
FOR CAST-IN-PLACE WALL DOWELS SEE DRAWING 20FSD065.



F SECTION
SCALE: 1/2"-1'-0"
20FSD050 — 20FSD050



G SECTION
SCALE: 1/2"-1'-0"
20FSD050 — 20FSD050



LETTER OR NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN
SECTION & DETAIL KEY

JACOBS PROJECT NO: 35H19606
PLANNING PROJECT NO: 40710
FIRST JACOBS REVISION NO: 3

JACOBS
120 Broadway Ave. Oak Ridge, Tennessee 37830 Tel: 865-220-4000 Fax: 865-220-0170

DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
SILOS 1 AND 2 ACCELERATED WASTE RETRIEVAL PROJECT
FERNALD, OHIO
FDF CONTRACT NO. FSC 624

FOSTER WHEELER
FOSTER WHEELER ENVIRONMENTAL CORPORATION

TITLE
RADON CONTROL SYSTEM
AIR HANDLING BUILDING
FOUNDATION PLAN

REV	DATE	BY	CHK'D	APR'VD	DESCRIPTION/ISSUE
4	3-2-00	RS	[illegible]	JDB	REVISED PER DCN 40710-JEG-242 & JEG-262
3	5/15/02	JDB	TVM	SWH	ISSUED PER DCN's 40710-JEG-005, JEG-083, 40710-JEG-113 & AWR-DCN-S-0005
2	5/29/00	R.S.	R.G.	M.C.H.	REVISED FOR ANCHOR BOLT INFORMATION
1	4/20/00	V.B.	R.G.	M.C.H.	GENERAL REV.
0	3/3/00	V.B.	R.G.	M.C.H.	CERTIFIED FOR CONSTRUCTION

RPE: RPE SEAL NOT REQUIRED FOR JACOBS GENERATED REVISIONS

		DATE
DRAWN BY	R. SPIRES	3/3/00
DESIGNED BY	V.BHATT	3/3/00
CHECKED BY	R. GOYAL	3/3/00
APPROVED BY	M. HSIEH	3/3/00
APPROVED BY	J. LAWSON	3/3/00

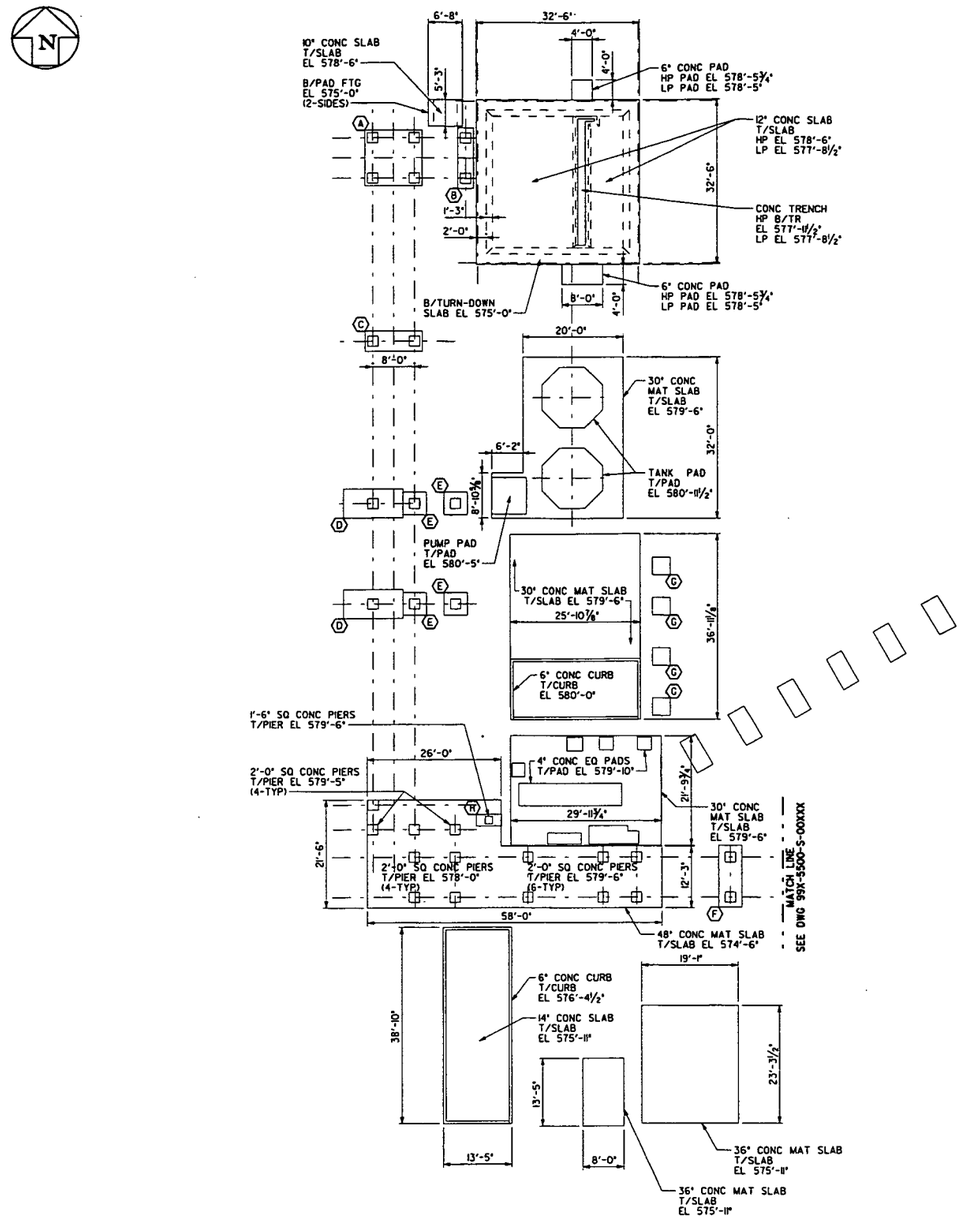
SIZE: D | SCALE: 1/4"=1'-0" | DWG. NO. 20FSD050 | REV 4

FILENAME: 20FSD050.DWG

94E

99xs0916 CADD11 rabb7064 08/01/2005 12:18:35 PM

006201



FOOTING SCHEDULE			
MARK	SIZE	DEPTH	B/FOOTING ELEV
A	11'-0"x11'-0"	2'-0"	574'-0"
B	12'-0"x3'-0"	2'-0"	575'-0"
C	11'-0"x4'-0"	2'-0"	574'-0"
D	11'-6"x5'-9"	1'-6"	574'-4"
E	4'-6"x4'-6"	1'-6"	574'-4"
F	12'-4"x4'-6"	1'-6"	574'-0"
G	3'-6"x3'-6"	3'-6"	576'-0"
H	5'-0"x2'-4"	1'-3"	576'-3"

8' 0' 8' 16' 24'
SCALE: 1/32" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REF DWG NO.	DRAWING TITLE
94X-3900-S-05178	FOUNDATION PLAN MAKE-UP WATER TANK AREA AND UTILTIY BUILDING
94X-3900-S-05179	SECTIONS AND DETAILS MAKE-UP WATER TANK AREA AND UTILITY BUILDING
94X-3900-S-05215	FOUNDATION PLAN & DETAILS CHILLED WATER STORAGE TANKS
94X-3900-S-05225	FOUNDATION PLAN HPP/BA SERVICE PIPE RACK
94X-3900-S-05226	FOUNDATION SECTIONS AND DETAILS HPP/BA SERVICE PIPE RACK
94X-3900-S-05351	CONCRETE PLAN, SECTIONS AND DETAILS ELECTRICAL EQUIPMENT PADS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
UTILITY BLDG 94R AND MISC FOUNDATIONS
FOUNDATION AND SLAB PLAN

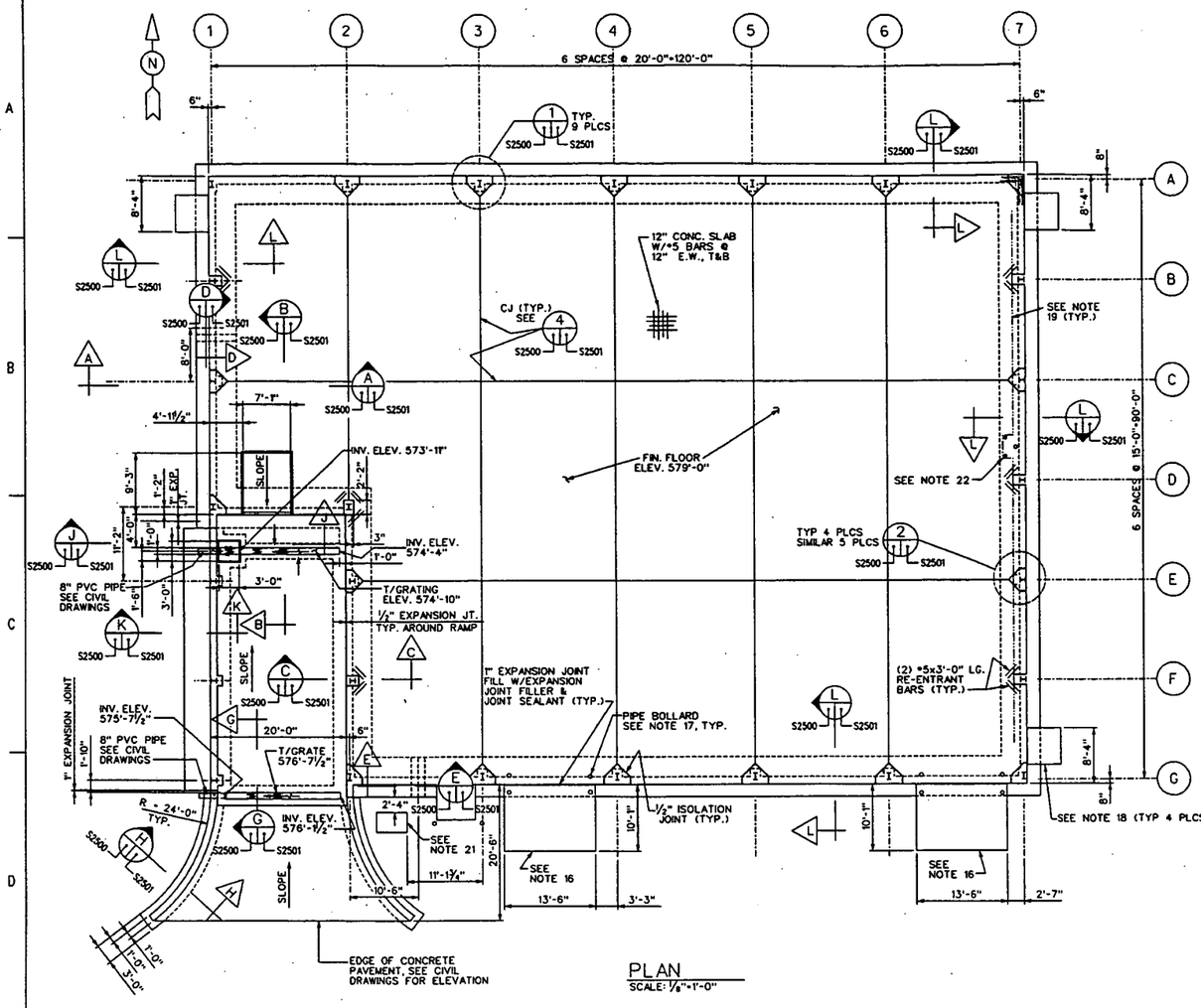
APPROVALS

COGNIZANT ENG.		SAFETY ENG.	
CIVIL & STR.		MAINTENANCE	
ELECTRICAL		FIRE PROTECT.	
ENGINEER		WASTE MANAGE	
INSTRUMENT		SECURITY	
MECHANICAL		OA	
		CONSTRUCTION	
CHECKED		SILOS PROJ. ENG.	
APPROVED			

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
K.L. RABBITT	20500	99X-5500-S-00916	S-8	A
RES PROJECT NO.	FILENAME 99xs0916.dgn			

FCPSAE.DGN 5/30/03

006201



PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES:

DESIGN

1. THE INFORMATION ON SHEET NOS. S2500, S2501 AND S2502 IS INTENDED FOR USE AS A GUIDE FOR THE PRE-ENGINEERED BUILDING MANUFACTURER IN IDENTIFYING BUILDING COLUMN LOCATIONS AND SUPPORT RESTRAINTS. THIS INFORMATION IS TO BE USED AS A GUIDE IN DEVELOPING STRUCTURAL CALCULATIONS AND SLAB PLANS AND DETAILS. AFTER COLUMN REACTIONS HAVE BEEN PROVIDED BY THE PRE-ENGINEERED METAL BUILDING MANUFACTURER, STRUCTURAL CALCULATIONS FOR FOUNDATION AND SLAB DESIGN, AND DESIGN DRAWINGS CONSISTING OF FOUNDATION AND SLAB PLANS AND DETAILS SHALL BE SUBMITTED TO FLUOR FERNALD, INC. FOR REVIEW AND APPROVAL PRIOR TO ISSUE FOR CONSTRUCTION.
2. REINFORCING STEEL PLACEMENT DRAWINGS BASED ON APPROVED CONSTRUCTION DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO FLUOR FERNALD, INC. FOR REVIEW AND APPROVAL.
3. GOVERNING BUILDING CODES:
   UNIFORM BUILDING CODE, 1997.
   OHIO BASIC BUILDING CODE, 1998 WITH SEPTEMBER, 1999 REVISIONS.
4. FLUOR FERNALD, INC. WILL MAKE UNDERGROUND GRID DRAWINGS AVAILABLE TO THE CONTRACTOR FOR LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE CONSTRUCTION LIMITS.
5. SEE DRAWING S2502 FOR EXCAVATION AND BACKFILL INFORMATION.
6. FOUNDATION AND SLAB DESIGN IS BASED ON THE FOLLOWING:
   SOILS DATA:
   - ALLOWABLE NET SOIL BEARING CAPACITY = 2000 PSF
   - MODULUS OF SUBGRADE REACTION = 100 PCI
   - AT REST EARTH PRESSURE COEFFICIENT, Ko = 0.45
   - ACTIVE EARTH PRESSURE COEFFICIENT, Ka = 0.3
   - PASSIVE EARTH PRESSURE 500 PSF + (40 x DEPTH IN FEET BELOW GROUND SURFACE) (IGNORE TOP 2.5 FEET WHEN COMPUTING PASSIVE RESISTANCE)
   - SOIL UNIT WEIGHT = 130 PCF WHEN USED FOR LATERAL LOADING, 120 PCF WHEN USED TO RESIST UPLIFT
   - COEFFICIENT OF FRICTION BETWEEN CONCRETE AND SOIL = 0.3
   - CBR (30" PLATE) = 3.0
   - UBC SOIL PROFILE TYPE = S^0

   FORKLIFT TRUCK:
   - SELLICK MODEL 4414-20C
   - GROSS VEHICLE WEIGHT = 31,640 LBS.
   - LOAD CAPACITY = 20,000 LBS.
   - TIRES: 17.5" WIDE X 25" DIA. RIM
   - WHEEL BASE: 110"
   - OVERALL WIDTH = 103"
   - OVERALL LENGTH = 200"
   - TIRE PRESSURE: 90 PSIFOR FRONT TIRES, 70 PSIFOR REAR TIRES
   - FRONT TIRE CONTACT AREA: 500 SQUARE INCHES/2 TIRES

   STORAGE RACK:
   - 300 PSF LOADING
   - 4'-0" POST SPACING
   - 10 SQUARE INCH BASE PLATE AT BASE OF POSTS
   - ROOF DEAD LOAD: 10 PSF
   - ROOF LIVE LOAD: 25 PSF
   - COLLATERAL LOAD: 10 PSF
   - SNOW LOAD: 17.5 PSF
   - WIND LOAD: CONFORM TO ASCE 7-98 REQUIREMENTS
   - SEISMIC: MORE STRINGENT OF UBC OR OBBC CODES
   - FLOOR LIVE LOAD: 250 PSF

GRATING

1. GRATING FOR TRENCHES AND SUMP PIT SHALL BE TYPE C12C GALVANIZED STEEL GRATING WITH 2 1/2"x3/8" BEARING BARS & 1"x1/4" CROSS BARS AND END BANDS BY IKG BORDEN OR APPROVED SUBSTITUTE.
2. GRATING FOR PLATFORM SHALL BE TYPE W/B GALVANIZED STEEL GRATING WITH 1"x3/16" BEARING BARS WITH SERRATED SURFACE AND END BAND OR APPROVED SUBSTITUTE.

GENERAL NOTES (CONTINUED):

CONCRETE

1. STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSIAT 28 DAYS, UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60.
3. REINFORCEMENT SHALL BE FABRICATED TO SHAPES AND DIMENSIONS SHOWN AND SHALL CONFORM TO THE REQUIREMENTS OF ACI318, EXCEPT WHERE OTHERWISE INDICATED OR NOTED ON THE DRAWINGS. SPLICES OF REINFORCEMENT SHALL CONFORM TO ACI318 CLASS B, BUT NOT LESS THAN 12 INCHES.
4. LOCATION OF ALL CONSTRUCTION JOINTS OR OTHER TYPES OF JOINTS, OTHER THAN SPECIFIED, SHALL BE APPROVED BY THE FLUOR FERNALD, INC. BEFORE PLACING.
5. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
   a) CONCRETE CAST AGAINST EARTH ---------- 3 INCHES
   b) FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 THRU #18 BARS ---------- 2 INCHES
   #5 BARS AND SMALLER ---------- 1 1/2 INCHES
   c) CONCRETE NOT EXPOSED TO WEATHER
   SLABS, WALLS, JOISTS (#11 AND SMALLER) ---------- 3/4 INCHES
   BEAMS, COLUMNS (INCLUDING PRIMARY REINFORCEMENT, TIES STIRRUPS AND SPIRALS ---------- 1 1/2 INCHES
6. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER INSERTS SHALL BE SECURED IN POSITION, INSPECTED & APPROVED PRIOR TO PLACING CONCRETE.
7. EXISTING FACILITIES SHALL BE PROTECTED DURING EXCAVATION AND FOUNDATION CONSTRUCTION. SPECIAL PRECAUTIONS SHALL BE EXERCISED TO PROTECT EXISTING FOUNDATIONS. EXCAVATION ADJACENT TO EXISTING FOOTINGS SHALL BE BY HAND.
8. EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" CHAMFER UNLESS NOTED OTHERWISE.
9. WHERE BAR AND ANCHOR BOLT LOCATIONS COINCIDE, OR NEARLY SO, BAR SHALL BE PLACED TO CLEAR ANCHOR BOLT BEFORE PLACING CONCRETE.
10. EMBEDDED ITEMS SUCH AS PIPES, SLEEVES, CONDUITS, AND OPENINGS OR RECESSES REQUIRED BY ARCHITECTURAL, MECHANICAL, UTILITIES, ELECTRICAL, PIPING AND OTHER DISCIPLINES SHALL BE COORDINATED WITH RESPECTIVE DISCIPLINE DRAWINGS BY THE CONTRACTOR PRIOR TO PLACEMENT.
11. ANCHOR BOLT MATERIAL SHALL BE ASTM A307, UNLESS OTHERWISE NOTED.
12. EMBEDDED HEADED WELD STUDS SHALL CONFORM TO ASTM A108.
13. ALL ANCHORS SHALL BE CAST-IN-PLACE TYPE, EXCEPT THAT DRILLED-IN ANCHORS MAY BE SUBSTITUTED FOR CAST-IN-PLACE TYPE WITH PRIOR APPROVAL OF THE CONTRACTING OFFICER AND SUBJECT TO THE FOLLOWING LIMITATIONS:
    a) EPOXY TYPE DRILLED-IN ANCHORS SHALL NOT BE USED IN CEILINGS, WALLS, OR OTHER APPLICATIONS WHERE CONSTANT LOAD MAY CAUSE CREEP UNLESS MANUFACTURER'S DATA DEMONSTRATES THEIR SUITABILITY FOR THIS PURPOSE. EPOXY TYPE DRILLED-IN ANCHORS SHALL BE USED IN ALL FLOOR APPLICATIONS WHERE OPERATING TEMPERATURES PERMIT.

CONCRETE (CONTINUED)

b) EFFORTS SHALL BE MADE TO AVOID CUTTING OR DAMAGING REINFORCING STEEL WHEN INSTALLING DRILLED-IN ANCHORS. NOTIFY FLUOR FERNALD, INC. IMMEDIATELY IF REINFORCING STEEL IS CUT OR DAMAGED.
c) TENSILE AND SHEAR CAPACITY AND EMBEDMENT LENGTH OF DRILLED-IN ANCHORS SHALL BE EQUIVALENT TO THE INDICATED CAST-IN-PLACE ANCHORS, AND SHALL BE SUBSTANTIATED BY DESIGN CALCULATIONS.
d) DESIGN CRITERIA FOR DRILLED-IN-ANCHORS SHALL BE SUBSTANTIATED BY MANUFACTURER'S DATA. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. ALL ANCHOR BOLTS SHALL BE CONSIDERED TO BE SUBJECT TO SEISMIC FORCES AND THE CAPACITY AND SUITABILITY OF THE ANCHORS FOR USE WITH SEISMIC FORCES SHALL BE SUBSTANTIATED BY THE MANUFACTURER'S DATA. THE CAPACITY AND SUITABILITY OF EXPANSION TYPE DRILLED-IN ANCHORS FOR VIBRATING EQUIPMENT SHALL BE SUBSTANTIATED BY THE MANUFACTURER'S DATA. EPOXY ANCHORS SHALL BE VERIFIED FOR SUITABILITY FOR USE AT THE TEMPERATURES TO WHICH THEY WILL BE SUBJECTED.
e) DRILLED-IN ANCHORS SHALL NOT BE PLACED IN JOINTS (CONSTRUCTION, CONTRACTION, ISOLATION, OR EXPANSION) OR IN ANY IRREGULARITIES IN THE CONCRETE WHICH WILL DIMINISH THE CAPACITY OF THE ANCHORS. MINIMUM EDGE DISTANCE AND BOLT SPACINGS ADJACENT TO SAID JOINTS SHALL BE IN ACCORDANCE WITH ANCHOR BOLT MANUFACTURER'S REQUIREMENTS.

14. ANCHOR BOLTS SHALL BE PROVIDED AS REQUIRED FOR ANCHORAGE OF ALL EQUIPMENT. ANCHOR BOLTS FOR STRUCTURAL MEMBERS ARE SHOWN ON THE PRE-ENGINEERED METAL BUILDING DRAWINGS. ANCHORAGE FOR ALL CONTRACTOR FURNISHED EQUIPMENT AND CONTRACTOR DESIGNED SUPPORTS SHALL BE DESIGNED, FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE ANCHOR BOLT PLACEMENT TOLERANCES ARE COMPATIBLE WITH EQUIPMENT INSTALLATION REQUIREMENTS. WHEN EQUIPMENT IS DELIVERED TO THE SITE PRIOR TO ANCHOR BOLT PLACEMENT, CONTRACTOR SHALL VERIFY THE AS-MANUFACTURED EQUIPMENT DIMENSIONS AND SHALL ADJUST ANCHOR BOLT LOCATIONS TO SUIT.
15. SPECIFICATIONS:
    03307 CONCRETE FOR MINOR STRUCTURES
    05500 MISCELLANEOUS METALS
    013121 PRE-ENGINEERED METAL BUILDINGS (ARCHITECTURAL SPECIFICATION)
16. REINFORCED CONCRETE PAD:
    12" THICK, EXCEPT THICKEN 12" WIDTH AROUND PERIMETER TO 3'-6". #5@12" REINFORCING STEEL EACH WAY, TOP AND BOTTOM WITH 90° HOOK EACH END. TOP OF CONCRETE ELEVATION 579'-0" AT BUILDING SLAB. SLOPE 1/4 INCH / FOOT TO DRAIN AWAY FROM BUILDING.
17. PIPE BOLLARDS SHALL BE (4'-0" HIGH) 6" DIAMETER SCHEDULE 40 STEEL PIPE FILLED WITH CONCRETE. PROVIDE CONED CONCRETE TOP SURFACE. PROVIDE 3'-0" MINIMUM EMBEDMENT BELOW TOP OF CONCRETE SLAB AND PAVEMENT (OR SET ON FOOTING). ENCASE WITH 6" OF CONCRETE ALL AROUND POST BELOW BOTTOM OF SLAB OR PAVEMENT.
18. CONCRETE PADS AT PEDESTRIAN DOORS:
    DIMENSIONS: 6" THICK x 5'-0" x 5'-0"
    REINFORCING STEEL: 6x6 - W2.9 x W2.9 WWF (2" CLEAR AT TOP)
    TOP OF CONCRETE: EL 578'-11 1/2" AT BUILDING SLAB
    SLOPE 1/4 INCH / FOOT TO DRAIN AWAY FROM BUILDING.
19. SEE ARCHITECTURAL DRAWING A1298 FOR GUARDRAIL LOCATIONS AND ANCHORING. SEE CIVIL SPECIFICATION 02851-STEEL GUARDRAIL AND GUARD POSTS FOR PRODUCT INFORMATION. 1
20. FOR TYPICAL EQUIPMENT PAD DETAIL SEE SECTION M, SHEET NO. S2501.
21. CONCRETE PAD FOR HVAC EQUIPMENT WITH BASE DIMENSIONS = LxW:
    DIMENSIONS: 6" THICK x (L-6") x (W-6")
    CENTER PAD BENEATH HVAC EQUIPMENT BASE
    REINFORCING STEEL: 6x6 - W2.9 x W2.9 WWF (2" CLEAR AT TOP)
    TOP OF CONCRETE : EL 579'-0" UNLESS OTHERWISE DIRECTED BY FLUOR FERNALD, INC.
22. PROVIDE PIPE BOLLARD PROTECTION AT FIRE RISER. PROVIDE (4) #5 x 3'-0" LONG RE-ENTRANT BARS (ONE EACH SIDE).

8 0 8 16 24 FT
SCALE: 1/8" = 1'-0"

NUMBER OF DETAIL OR LETTER OF SECTION
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN
SECTION AND DETAIL KEY

REF DWG NO.	DRAWING TITLE
S2501	CONCRETE SECTIONS AND DETAILS
S2502	BUILDING EXCAVATION AND BACKFILL LIMITS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
1	REVISED PER DCN 40750-JEG-029	12/06/02	GMW	BP
0	ISSUED FOR BID	02/15/02	AAH	WT

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
JE JACOBS
175 Broadway Ave. Oak Ridge, Tennessee 37830 Tel: 865-220-4000 Fax: 865-220-6170

PROJECT NAME
SILOS 1 AND 2

DRAWING TITLE
STRUCTURAL
FOUNDATION PLAN
SPARE PARTS WAREHOUSE BUILDING

DRAWN BY	DATE	TECHNICAL LEAD	DATE	CHECKED BY	DATE
G.M. WEESNER	02/14/02	G.T. BOBERS	02/14/02	A.A. HERGET	02/14/02

PLANT/BLDG. NO.	FLOOR	SCALE	CLASS
	GRADE	1/8"=1'-0"	

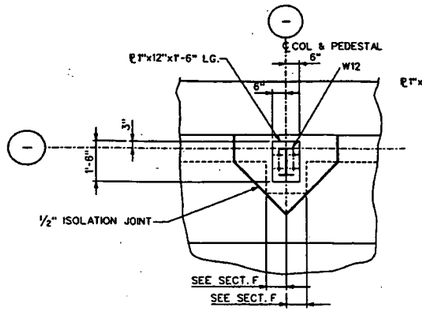
SUBMITTED FOR 30% ISSUE	SUBMITTED FOR 60% ISSUE	SUBMITTED FOR 90% ISSUE
TECH LEAD	TECH LEAD	TECH LEAD
DATE	DATE	DATE

T.O. NUMBER	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
N/A	40750	94X-3900-S-01392	S2500	1

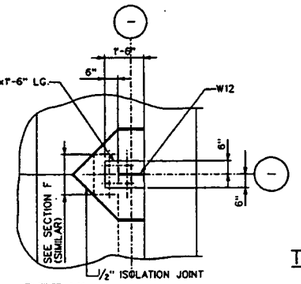
JEG PROJECT NO. 35H19603 FILENAME 94XS1392.DGN

DATE: 12/04/02 USER: SSchoate

006201



DETAIL 1
SCALE: 1/2" = 1'-0"
S2500 — S2501



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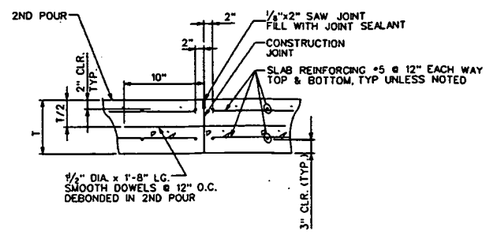
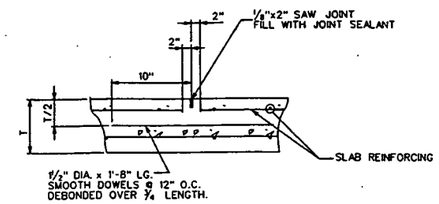
S2500 — S2501



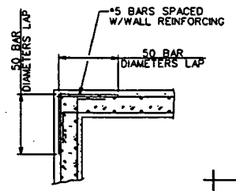
TYP. SLAB CONSTRUCTION JOINT (C.J.)



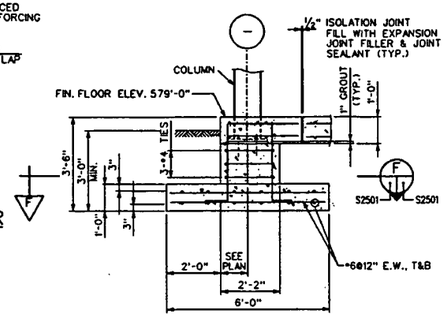
ALT. SLAB CONTRACTION JOINT

DETAIL 4
SCALE: 1"=1'-0"
S2500 — S2501

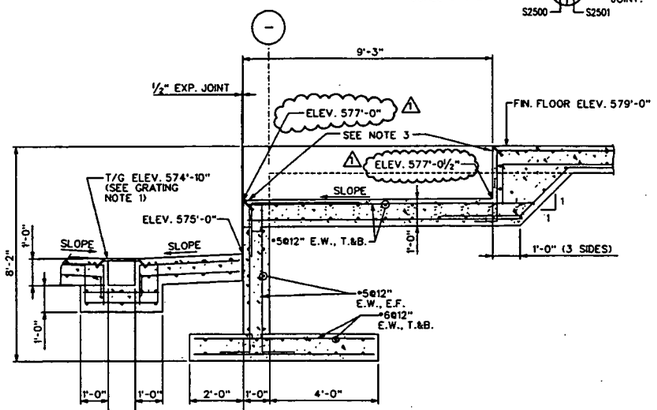
NOTE:
CONTRACTOR MAY SUBSTITUTE CONTRACTION JOINT FOR CONSTRUCTION JOINT.



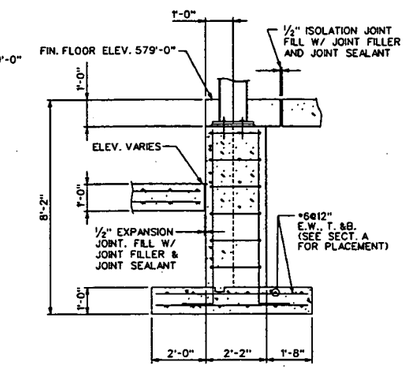
TYP. WALL CORNER REINFORCING



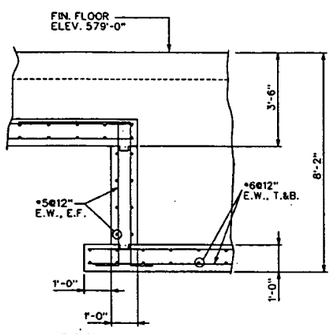
SECTION A
SCALE: 1/2" = 1'-0"
S2500 — S2501



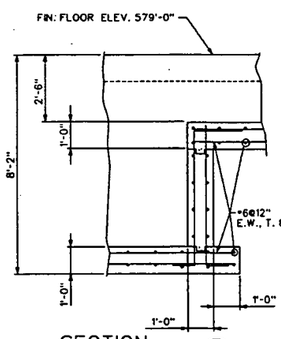
SECTION B
SCALE: 1/2" = 1'-0"
S2500 — S2501



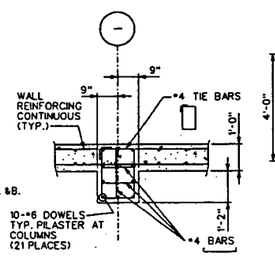
SECTION C
SCALE: 1/2" = 1'-0"
S2500 — S2501



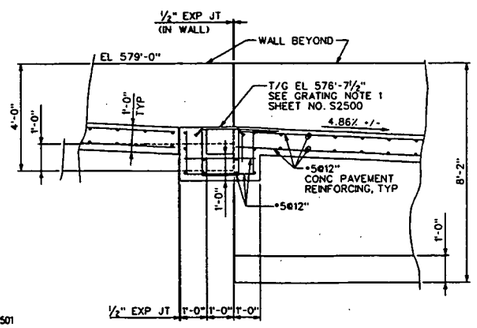
SECTION D
SCALE: 1/2" = 1'-0"
S2500 — S2501



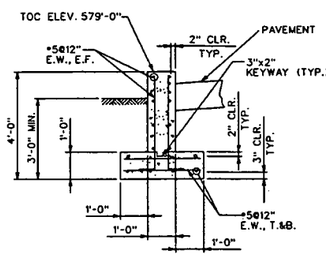
SECTION E
SCALE: 1/2" = 1'-0"
S2501 — S2501



SECTION F
SCALE: 1/2" = 1'-0"
S2501 — S2501

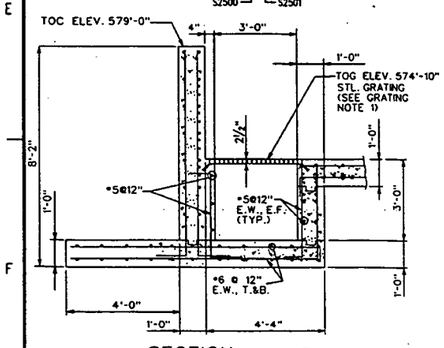


SECTION G
SCALE: 1/2" = 1'-0"
S2500 — S2501

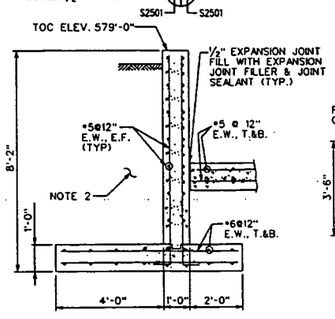


(TYPICAL ALONG BOTH SIDES OF RAMP)

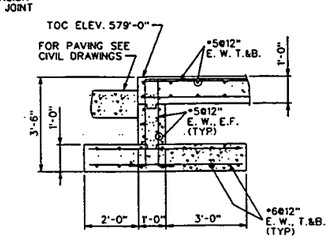
SECTION H
SCALE: 1/2" = 1'-0"
S2500 — S2501



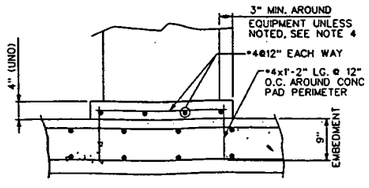
SECTION J
SCALE: 1/2" = 1'-0"
S2500 — S2501



SECTION K
SCALE: 1/2" = 1'-0"
S2500 — S2501

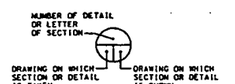


SECTION L
SCALE: 1/2" = 1'-0"
S2500 — S2501



TYPICAL EQUIPMENT PAD DETAIL

SECTION M
SCALE: 1"=1'-0"
S2500 — S2501



SECTION AND DETAIL KEY

1 0 1 2 3 FT
SCALE: 1"= 1'-0"
2 0 2 4 6 FT
SCALE: 1/2"= 1'-0"

NOTES:

1. FOR GENERAL NOTES, SEE SHEET NO. S2500.
2. DO NOT BACKFILL AGAINST RETAINING WALL AT LOADING DOCK ABOVE TOP OF RAMP CONCRETE UNTIL RAMP CONCRETE HAS REACHED MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
3. INSTALL EMBEDDED ITEMS AND SLOPE CONCRETE AS REQUIRED FOR DOCK LEVELER INSTALLATION.
4. INCREASE 3" MINIMUM DIMENSION AS NEED TO INSTALL ANCHORAGE COMPLETELY ON THE RAISED CONCRETE PAD.

REF DWG NO.	DRAWING TITLE
S2500	FOUNDATION PLAN
S2502	BUILDING EXCAVATION AND BACKFILL LIMITS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
1	REVISED PER DCN 40750-JEG-034	12/10/02	SJNS	BP
0	ISSUED FOR BID	02/15/02	AAH	WT

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
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Oak Ridge, Tennessee 37830
Tel: 865-220-4900
Fax: 865-220-6170

PROJECT NAME
SILOS 1 AND 2

DRAWING TITLE
STRUCTURAL
CONCRETE SECTIONS & DETAILS
SPARE PARTS WAREHOUSE BUILDING

DRAWN BY	DATE	TECHNICAL LEAD	DATE	CHECKED BY	DATE
G.M. WEESMER	02/14/02	G.T. ROBERS	02/14/02	A.A. HERGET	02/14/02
PLANT/BLDG. NO.		FLOOR: GRADE		SCALE: AS NOTED	CLASS
SUBMITTED FOR 30% ISSUE		SUBMITTED FOR 60% ISSUE		SUBMITTED FOR 90% ISSUE	
TECH LEAD		TECH LEAD		TECH LEAD	
DATE		DATE		DATE	

T.O. NUMBER	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
N/A	40750	94X-3900-S-01393	S2501	1
JEC PROJECT NO. 35H19603	FILENAME 94XS1393.DGN			

DATE: 12/9/02
TIME: 07:45:47 AM
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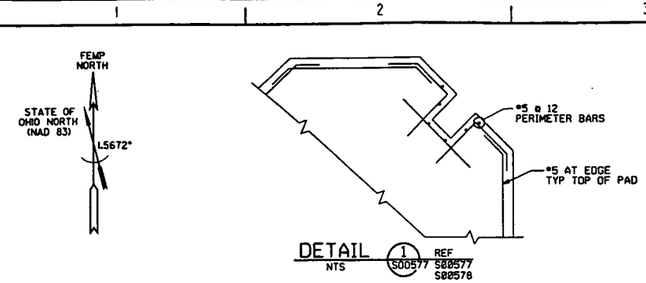
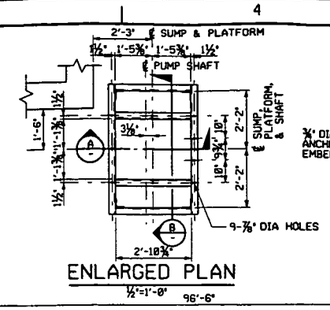
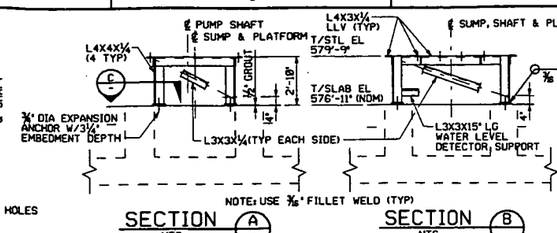
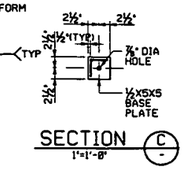








NOTES

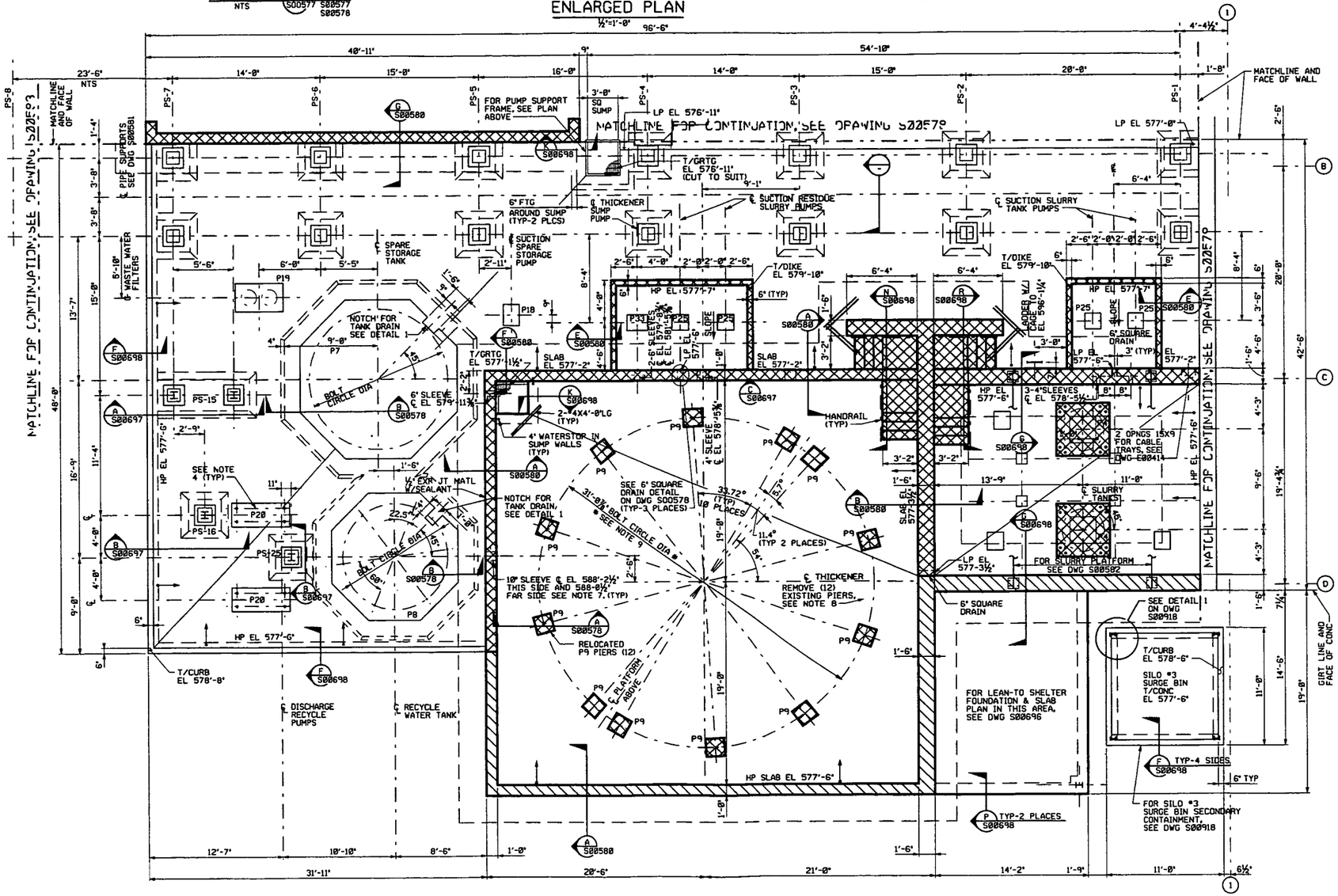
1. FOR DRAWING INDEX, SEE DRAWING 94X-5900-X-00353.
2. FOR LEGEND AND SYMBOLS, SEE DRAWING 94X-5900-X-00316.
3. FOR GENERAL NOTES, SEE DRAWING 94X-5900-S-00699.
4. FOR EQUIPMENT PAD SCHEDULE, SEE DRAWING 94X-5900-S-00711.
5. FOR CONSTRUCTION JOINT AND SLAB DETAILS, SEE DRAWING 94X-5900-S-00698.
6. ALL SLAB AREAS AND PADS ARE TO BE COATED WITH AN EPOXY PAINT. SEE SPECIFICATION SECTION 09815. SHIELDING WALLS ARE TO BE COATED TO A HEIGHT OF 4'-0" ABOVE SLAB OR FLOOR.
7. FOR PIPE SIZES AND LOCATIONS, SEE PIPING DRAWINGS. FOR PIPE SLEEVE DETAIL, SEE DRAWING 94X-5900-S-00580.
8. REMOVE (12) EXISTING PIERS FLUSH WITH THE TOP OF EXISTING CONCRETE SLAB. GRIND THE SURFACE AND FINISH THE SLAB USING PATCHING GROUT (SONOPATCH 200 BY SONNEBORN OR EQUAL) IF PATCHING IS REQUIRED.
9. BOLT CIRCLE AS SHOWN ON THIS DRAWING DETERMINED USING SIMCO APPROVAL DRAWING S-84-3, REV. 2.

LEGEND

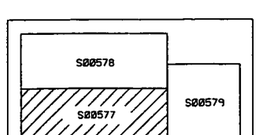
SLOPE DIRECTION

DEMOLISH/REMOVE DOWN TO SLAB ELEVATION

DEMOLISH/REMOVE TO CURB ELEVATION



SLAB AND FOUNDATION PLAN
¼"=1'-0"
NOTE: 8" SLAB UNLESS NOTED OTHERWISE



KEY PLAN

REF DWG NO.	DRAWING TITLE
94X-5900-X-00316	LEGEND AND SYMBOLS
94X-5900-X-00353	DRAWING INDEX - SHEET 1 OF 4
94X-5900-S-00578	OFF-GAS AREA
94X-5900-S-00579	PROCESS AREA
94X-5900-S-00580	SECTIONS AND DETAILS
94X-5900-S-00581	PIPE SUPPORT PLAN
94X-5900-S-00582	EQUIPMENT PLATFORM PLANS
94X-5900-S-00583	PIPE SUPPORT PLAN
94X-5900-S-00696	LEAN-TO AND HVAC PLATFORM PLANS
94X-5900-S-00697	SECTIONS AND DETAILS
94X-5900-S-00698	SECTIONS AND DETAILS
94X-5900-S-00699	KEY PLAN
94X-5900-S-00711	EQUIPMENT PAD SCHEDULE
94X-5900-E-00414	SECTIONS AND DETAILS - DUCTBANK AND MANHOLES
94X-5900-S-00918	SECONDARY CONTAINMENT

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	TL	PM	REVD BY
		INITIALS AND DATE		
8	IDENTIFIED AREAS TO BE DEMOLISHED/REMOVED	GEP KR	RML	11/19/01
7	INCORPORATED MARK-UPS FROM PARSON'S WALK DOWN, ADDED WATER LEVEL DETECTOR SUPPORT ANGLE, REVISED BOLT PATTERN ON P4 PADS			
6	ADDED SECONDARY CONTAINMENT ON SILO #3 SURGE BIN	MRR	RKK	6/29/95
5	RELOCATE (12) P9 THICKENER PIERS, ADDED NOTES 8 AND 9	AAP 1/25/95	TS	1/25/95
4	REVISED THICKENER PIERS & FDN, REVISED P8 BOLT CIRCLE, ADDED PLAN & SECT A,B, & C	APP 12/16/94	CAM	12/16/94
3	REVISED PADS P7, P8, AND SURGE BIN	APP 11/15/94	RKK	11/15/94
2	RELOC PS-15, MODIF PS-16&P33, MOVED P18&P19, MOVED C/S00697.	APP 8/24/94	RKK	8/24/94
1	LAB RELOCATED TO NORTH SIDE FTG "P9" REVISED	RAZ 5/4/94	RCE	5/4/94
0	APPROVED FOR CONSTRUCTION	RAZ 3/15/94	RCE	5/4/94

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
PARSONS
THE RALPH M. PARSONS CO. - PARSONS MAIN, INC. - ENGINEERING-SCIENCE, INC.
CINCINNATI, OHIO

PROJECT NAME
VITRIFICATION PILOT PLANT DESIGN
CRU4 - ONE METRIC TON

DRAWING TITLE
STRUCTURAL
SLAB AND FOUNDATION PLAN - SHEET 1 OF 3
TANK FARM AREA

DRAWN BY	DATE	TECHNICAL LEAD	DATE	CHECKED BY	DATE
JS BROOKS	12-14-93	RB JADHAV	3/14/94	RS DOWNEY	02-11-94

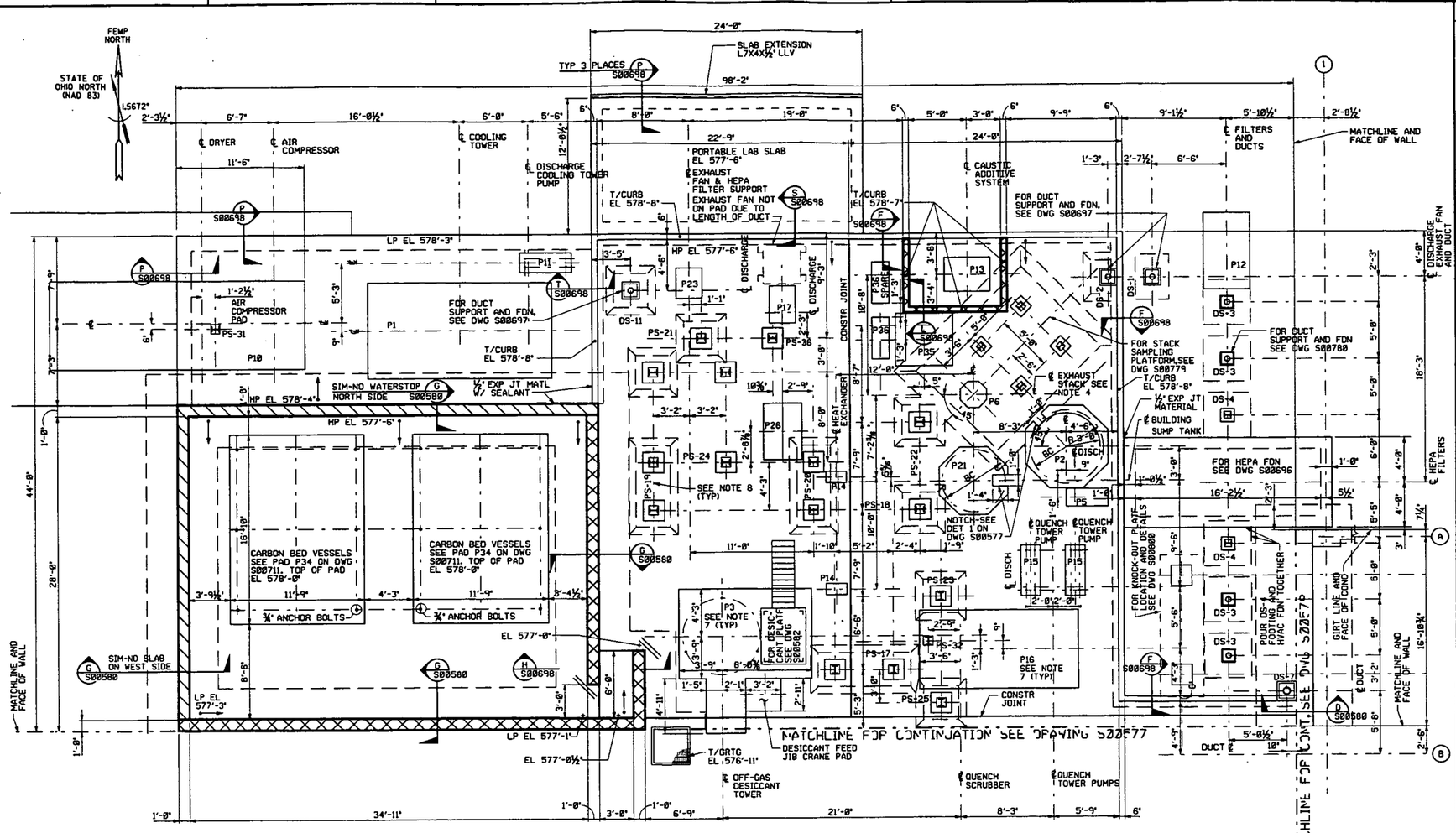
PLANT/BLDG. NO. | FLOOR | SCALE ¼"=1'-0" | CLASS

SUBMITTED FOR 30% ISSUE — TECH LEAD RA ZIEMINSKI — DATE 3/15/94
SUBMITTED FOR 60% ISSUE — TECH LEAD R.CLARKE R.C.EMERTON — DATE 3/15/94
SUBMITTED FOR 90% ISSUE — TECH LEAD W PICKLES — DATE 3/18/94 — CRU DIRECTOR — DATE

PO NUMBER	FOR PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
	WBS 1.1.1.1.4.3.1 00-90701	94X-5900-S-00577	S0002	8

CRU4/P085

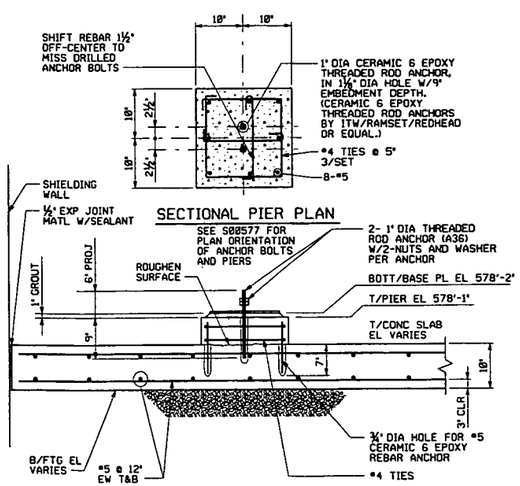
94s00578 CADD11 rabb7064 09/01/2005 09:28:01 AM



SLAB AND FOUNDATION PLAN

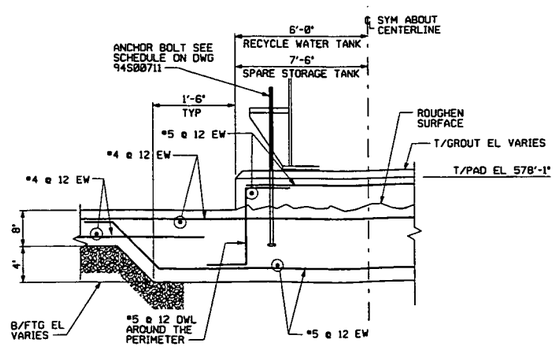
¼"=1'-0"

NOTE: 8" SLAB UNLESS NOTED OTHERWISE

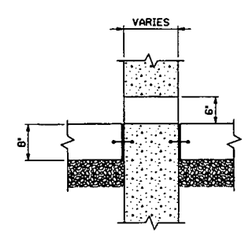


SECTIONAL PIER PLAN

SECTION A NTS REF S00578 S00577

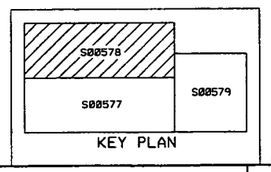


SECTION B NTS REF S00578 S00577 S00711



TYPICAL 6" SQUARE DRAIN DETAIL

1"=1'-0" REF S00577 S00584



KEY PLAN

NOTES

1. FOR DRAWING INDEX, SEE DRAWING 94X-5900-X-00353.
2. FOR LEGEND AND SYMBOLS, SEE DRAWING 94X-5900-X-00316.
3. FOR GENERAL NOTES, SEE DRAWING 94X-5900-S-00699.
4. SEE HVAC SPECIFICATION 15500, FOR GUY WIRE LOCATION AND FOUNDATION DESIGN REQUIREMENTS.
5. FOR DETAILS OF CONSTRUCTION JOINTS AND SLABS, SEE DRAWING 94X-5900-S-00698.
6. ALL SLAB AREAS AND PADS ARE TO BE COATED WITH AN EPOXY PAINT. SEE SPECIFICATION SECTION 09815. SHIELDING WALLS ARE TO BE COATED TO A HEIGHT OF 4'-0" ABOVE SLAB OR FLOOR.
7. FOR EQUIPMENT PAD SCHEDULE, SEE DRAWING 94X-5900-S-00711.
8. FOR OFF-GAS PIPE SUPPORTS PS-17 THRU PS-24, ALSO PS-31, PS-32, AND PS-36 SEE DRAWING 94X-5900-S-00710.

LEGEND

SLOPE DIRECTION

DEMOLISH/REMOVE DOWN TO SLAB ELEVATION

DEMOLISH/REMOVE TO CURB ELEVATION

REF DWG NO.	DRAWING TITLE
94X-5900-X-00316	LEGEND AND SYMBOLS
94X-5900-X-00353	DRAWING INDEX - SHEET 1 OF 4
94X-5900-S-00577	TANK FARM AREA
94X-5900-S-00579	PROCESS AREA
94X-5900-S-00580	SECTIONS AND DETAILS
94X-5900-S-00582	EQUIPMENT PLATFORM PLANS
94X-5900-S-00800	PLANS-MELTER PLATFORM
94X-5900-S-00696	LEAN-TO AND HVAC PLATFORM PLANS
94X-5900-S-00697	SECTIONS AND DETAILS
94X-5900-S-00698	SECTIONS AND DETAILS
94X-5900-S-00699	KEY PLAN
94X-5900-S-00710	OFF-GAS PIPE SUPPORTS
94X-5900-S-00711	EQUIPMENT PAD SCHEDULE
94X-5900-S-00779	PLANS, SECTIONS, AND DETAILS SAMPLING PLATFORM
94X-5900-S-00780	SLAB AND FOUNDATION PLAN - SHEET 2 OF 3

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	A-E	FERNCO	DATE
		INITIALS AND DATE		
10	IDENTIFIED AREAS TO BE DEMOLISHED/REMOVED	GEP KR	RML	11/19/98
9	INCORPORATED MARK-UPS FROM PARSON'S WALK DOWN AND DCN NUMBERS CONS \ 1636:036, CONS \ 1636:087, CONS \ 1636:099.1, AND CONS \ 1636:159			
8	ADDED EQUIPMENT PADS P2, P5, P35, AND P36	JB 6/15/95	RKK	6/16/95
7	ADDED FOUNDATION FOR KNOCK-OUT PLATFORM NEW FILTER & PUMP PAD & PS-36	JB 5-1-95	RKK	5-1-95
6	ADDED PS-31 AND PS-32	JB 4-11-95	RKK	4-11-95
5	REVISED SECTION 'A' AND PIER PLAN	APP 1/25/95	TS	1/25/95
4	REVISED SECTION 'A' AND SECTIONAL PIER PLAN	APP 12/16/94	CAM	12/16/94
3	REVISED PADS P1,P3,P11,P12,P14,P16,ADDED PS-25 ELIMINATED P5,P17,DS-5,DS-6, REVISED DS-3	APP 11/16/94	RKK	11/16/94
	DS-4, ADDED CARBON BED PADS P34			
2	ADDED SAMPLING PLATFORM AND DUCT SUPPORTS SHIFTED P13 CURB 6" WEST,	APP 8/24/94	RKK	8/24/94
	PS-21 RELOCATED, PORTABLE LAB SLAB SIZE CHANGED.			
1	LAB RELOC TO NORTH SIDE, STAIR SLAB RELOC, SECT A 5'-6" WAS 5'-0"	RAZ 5/4/94	RCE	5/4/94
0	APPROVED FOR CONSTRUCTION	RAZ 3-15-94	RFC RCE	3/15/94 3/15/94

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY

PARSONS

THE RALPH M. PARSONS CO. - PARSONS MAIN, INC. - ENGINEERING-SCIENCE, INC.
CINCINNATI, OHIO

PROJECT NAME: VITRIFICATION PILOT PLANT DESIGN
CRU4 - ONE METRIC TON

DRAWING TITLE: STRUCTURAL
SLAB AND FOUNDATION PLAN - SHEET 2 OF 3
OFF-GAS AREA

DRAWN BY	DATE	LEAD ENGINEER	DATE	CHECKED BY	DATE
JS BROOKS	12-14-93	RB JADHAV	3/14/94	RS DOVNEY	02-11-94

PLANT/BLDG. NO.	FLOOR	SCALE	CLASS
		¼"=1'-0"	

SUBMITTED FOR APPROVAL	FERNCO CRU APPROVAL	CERTIFIED FOR CONSTRUCTION
RA ZIEMINSKI 3/15/94	R CLARKE R.C.EMERTON 3/15/94	W PICKLES 3/18/94
A-E DATE	DATE	CRU DIRECTOR DATE

DOE PROJECT NO.	FEMP PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
	WBS 1.1.1.1.4.3.1 00-90701	94X-5900-S-00578	S0003	10

PREPARED UNDER PARSONS PROJECT ORDER NUMBER: CRU4/PO85

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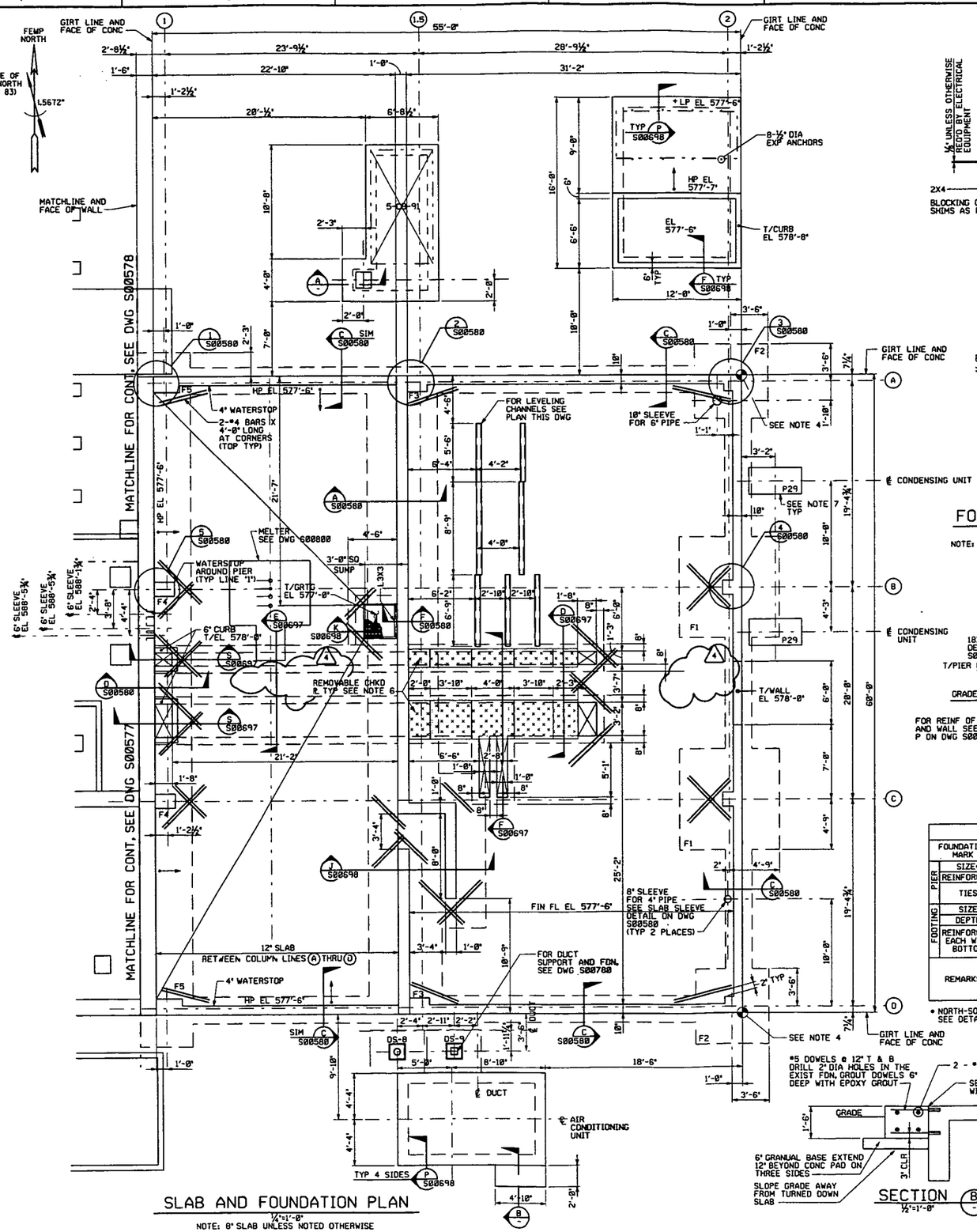
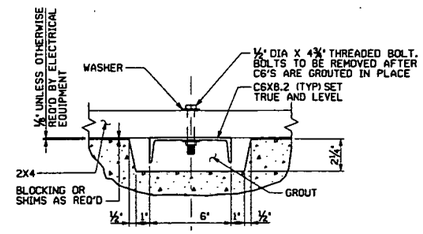


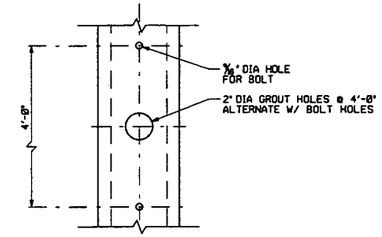
SLAB AND FOUNDATION PLAN

¼"=1'-0"

NOTE: 8" SLAB UNLESS NOTED OTHERWISE



SECTION

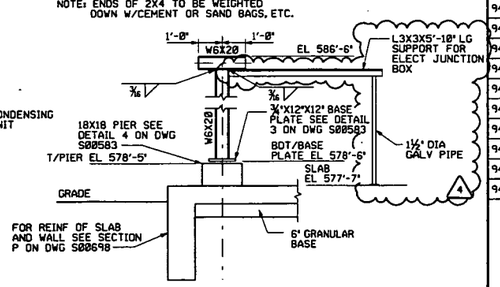


PLAN

LEVELING CHANNELS FOR ELECTRICAL EQUIPMENT

3"=1'-0"

NOTE: ENDS OF 2X4 TO BE WEIGHTED DOWN W/CEMENT OR SAND BAGS, ETC.



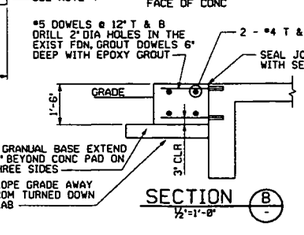
SECTION (A)

½"=1'-0"

PIER AND FOOTING SCHEDULE

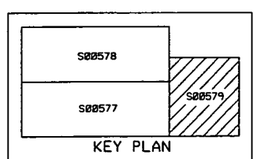
FOUNDATION MARK		F1	F2	F3	F4	F5
PIER	SIZE*	16"X22"	18"X20"	18"X22"	16"X22"	18"X30"
	REINFORCING	6-#5	6-#5	6-#6	6-#5	6-#6
	TIES	#4 @ 12 2 PER SET	#4 @ 12 2 PER SET	#4 @ 12 2 PER SET	#4 @ 12 2 PER SET	#4 @ 12 2 PER SET
FOOTING	SIZE	9'-6"X9'-6"	7'-0"X7'-0"	-	-	-
	DEPTH	1'-0"	1'-0"	-	-	-
	REINFORCING EACH WAY-BOTTOM	9-#5	7-#5	-	-	-
REMARKS		T/FTG EL 575'-0"	T/FTG EL 575'-0"	PIER SITS ON WALL FOOTING	PIER SITS ON WALL FOOTING	PIER SITS ON WALL FOOTING

* NORTH-SOUTH DIMENSIONS ARE GIVEN FIRST SEE DETAILS 1 THRU 5 ON DWG S00580



SECTION (B)

½"=1'-0"



KEY PLAN

NOTES

1. FOR DRAWING INDEX, SEE DRAWING 94X-5900-X-00353.
2. FOR LEGEND AND SYMBOLS, SEE DRAWING 94X-5900-X-00316.
3. FOR GENERAL NOTES, SEE DRAWING 94X-5900-S-00699.
4. FOR COORDINATES OF BUILDING, SEE DRAWING 94X-5900-G-00317.
5. ALL SLAB AREAS AND PADS ARE TO BE COATED WITH AN EPOXY PAINT. SEE SPECIFICATION SECTION 09815. SHIELDING WALLS ARE TO BE COATED TO A HEIGHT OF 4'-0" ABOVE SLAB OR FLOOR.
6. PROVIDE FOUR LIFTING HOLES EACH PANEL.
7. FOR EQUIPMENT PAD SCHEDULE, SEE DRAWING 94X-5900-S-00711
8. FOR BUILDING EMBEDDED CONDUITS AND GROUNDS, SEE DRAWING 94X-5900-E-00464.

LEGEND

⟷ SLOPE DIRECTION

REF DWG NO.	DRAWING TITLE
94X-5900-X-00316	LEGEND AND SYMBOLS
94X-5900-G-00317	SITE PLAN
94X-5900-X-00353	DRAWING INDEX - SHEET 1 OF 4
94X-5900-E-00464	BUILDING EMBEDDED CONDUIT/TRENCH PLAN
94X-5900-P-00525	PLUMBING AND FIRE PROTECTION PLAN
94X-5900-S-00577	TANK FARM AREA
94X-5900-S-00578	OFF-GAS AREA
94X-5900-S-00580	SECTIONS AND DETAILS
94X-5900-S-00697	SECTIONS AND DETAILS
94X-5900-S-00698	SECTIONS AND DETAILS
94X-5900-S-00699	KEY PLAN
94X-5900-S-00711	EQUIPMENT PAD SCHEDULE
94X-5900-S-00780	DUCT AND PIPE SUPPORTS
94X-5900-S-00583	PIPE SUPPORT PLAN-TRANSITION AREA
94X-5900-S-00800	PLANS-MELTER PLATFORM

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	A-E	FERNCO	DATE
4	INCORPORATED MARK-UPS FROM PARSON'S WALK DOWN AND FCR CONS/1597:013			
3	ADDED PAD FOR 5-CB-91, SECT A, MELTER EXTEND PAD FOR AC UNIT, & SECT B	JB 5-1-95	RKK	5-1-95
2	DUCT SUPPORT DS-8&DS-9 MODIFIED, DELETE DS-10, REMOVED HOLDS	APP 11/16/94	RKK	11/16/94
1	ADDED DUCT SUPPORTS, DS-8,DS-9, AND DS-10	APP 8/24/94	RKK	8/24/94
0	APPROVED FOR CONSTRUCTION	RAZ 3/15/94	RCE	3/15/94

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY

PARSONS

THE RALPH M. PARSONS CO. - PARSONS MAIN, INC. - ENGINEERING-SCIENCE, INC.
CINCINNATI, OHIO

PROJECT NAME

VITRIFICATION PILOT PLANT DESIGN
CRU4 - ONE METRIC TON

DRAWING TITLE

STRUCTURAL
SLAB AND FOUNDATION PLAN-SHEET 3 OF 3
PROCESS AREA

DRAWN BY	DATE	LEAD ENGINEER	DATE	CHECKED BY	DATE
JS BROOKS	12-14-93	RB JADHAV	3/14/94	RS DOWNEY	02-11-94

PLANT/BLDG. NO. | FLOOR | SCALE ¼"=1'-0" | CLASS

SUBMITTED FOR APPROVAL	FERNCO CRU APPROVAL	CERTIFIED FOR CONSTRUCTION
RA ZIEMINSKI	R CLARKE R.C.EMERTON	W PICKLES
3/15/94	3/15/94	3/18/94
A-E DATE	DATE	CRU DIRECTOR DATE

DOE PROJECT NO.	FEMP PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
	WBS 1.1.1.1.4.3.1 00-9070I	94X-5900-S-00579	S0004	4

PREPARED UNDER PARSONS PROJECT ORDER NUMBER CRU4/PO85

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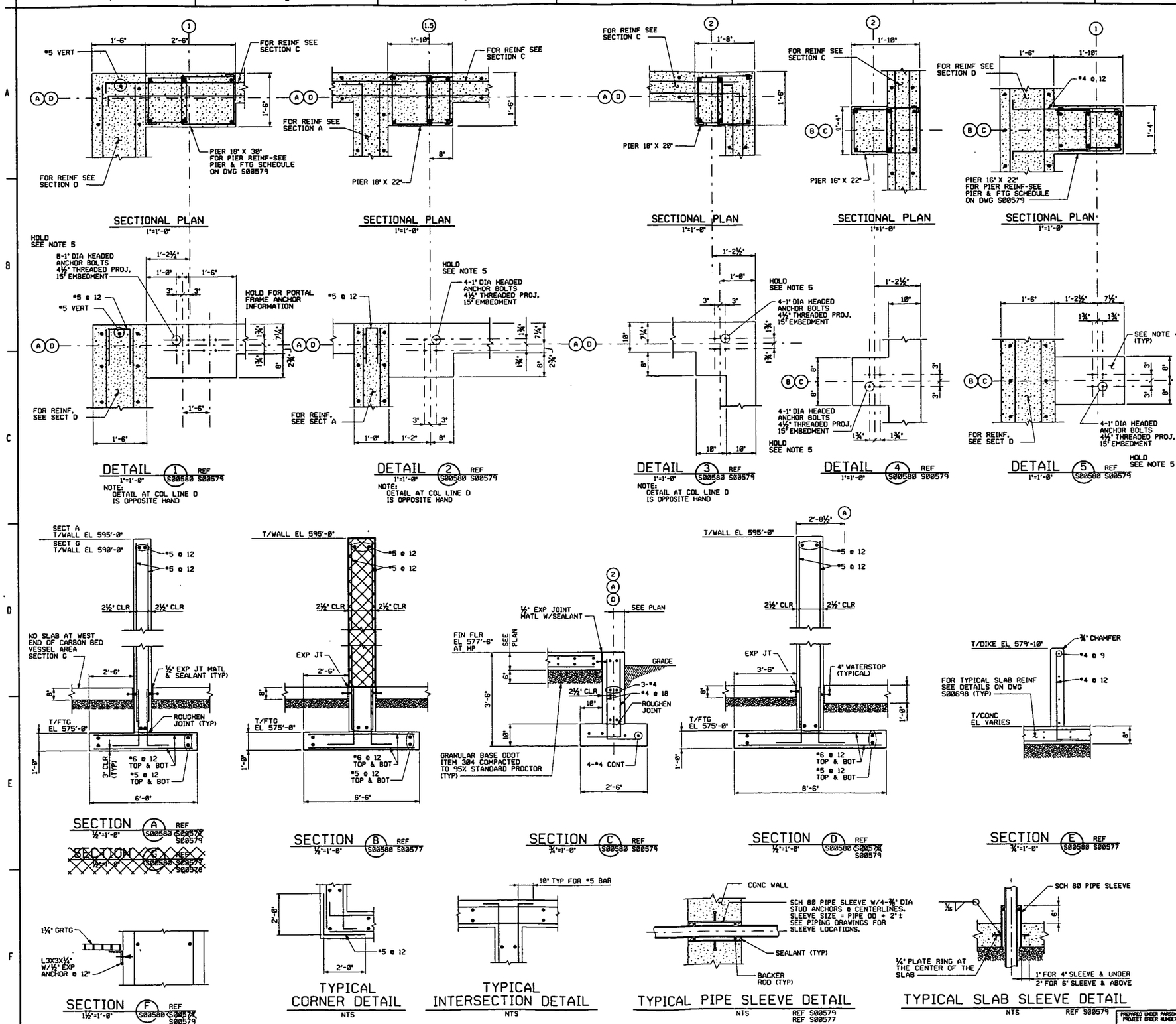

NOTES

1. FOR DRAWING INDEX, SEE DRAWING 94X-5900-X-00353.
2. FOR LEGEND AND SYMBOLS, SEE DRAWING 94X-5900-X-00316.
3. FOR GENERAL NOTES, SEE DRAWING 94X-5900-S-00699.
4. STANDARD BUILDING COLUMNS NOT SHOWN FOR CLARITY. DETAIL SHOWS ANCHOR BOLT LOCATION WHICH WILL BE VERIFIED FROM CERTIFIED VENDOR DRAWINGS.
5. CONCRETE FOUNDATIONS MUST NOT BE POURED UNTIL THE FRAME REACTIONS, ANCHOR BOLT SIZES AND LOCATIONS HAVE BEEN VERIFIED FROM CERTIFIED VENDOR DRAWINGS.

DEMOLISH/REMOVE DOWN TO SLAB ELEVATION

CONFIGURATION MANAGEMENT CONTROL NOTE:

THIS DRAWING IS NO LONGER UNDER CONFIGURATION MANAGEMENT CONTROL. THE ACTUAL STRUCTURE, SYSTEM OR COMPONENT (SSC) CONFIGURATION FOR THE VITPP FACILITY AS DEPICTED MAY NO LONGER BE AS REPRESENTED IN THIS DRAWING.

REF DWG NO.	DRAWING TITLE
94X-5900-X-00316	LEGEND AND SYMBOLS
94X-5900-X-00353	DRAWING INDEX - SHEET 1 OF 4
94X-5900-S-00577	TANK FARM AREA
94X-5900-S-00578	OFF-GAS AREA
94X-5900-S-00579	PROCESS AREA
94X-5900-S-00698	SECTIONS AND DETAILS
94X-5900-S-00699	KEY PLAN

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	A-E INITIALS AND DATE	FERNCO INITIALS AND DATE
3	IDENTIFIED AREAS TO BE DEMOLISHED/REMOVED	GEP KR	RML 11/19/01
2	ADDED CMC NOTE PER DCN 40111-008	GEP	MKF 12/2/99
1	REVISED EL 590'-0" AT SECT G WAS 597'-2"	APP 11/16/94	RKK 11/16/94
0	APPROVED FOR CONSTRUCTION	RAZ 3/15/94	RCE 3/15/94

UNITED STATES DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
PARSONS
THE RALPH M. PARSONS CO. - PARSONS MAIN, INC. - ENGINEERING-SCIENCE, INC.
CINCINNATI, OHIO

PROJECT NAME: VITRIFICATION PILOT PLANT DESIGN CRU4 - ONE METRIC TON

DRAWING TITLE: STRUCTURAL SECTIONS AND DETAILS

DRAWN BY	DATE	LEAD ENGINEER	DATE	CHECKED BY	DATE
JS BROOKS	12-14-93	RB JADHAV	3/14/94	RS DOWNEY	02-11-94

PLANT/BLDG. NO. | FLOOR | SCALE: AS SHOWN | CLASS

SUBMITTED FOR APPROVAL: R.A.ZIEMINSKI 3/15/94 (A-E DATE)
FERNCO CRU APPROVAL: R. CLARKE 3/15/94; R.C.EMERTON 3/15/94
CERTIFIED FOR CONSTRUCTION: W.PICKLES 03/18/94 (CRU DIRECTOR DATE)

DOE PROJECT NO.	TEMP PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
	WBS 1.1.1.1.4.3.1 00-90701	94X-5900-S-00580	S0005	3

PREPARED UNDER PARSONS PROJECT ORDER NUMBER: CRU4/P085

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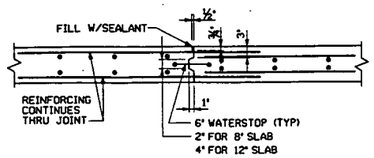
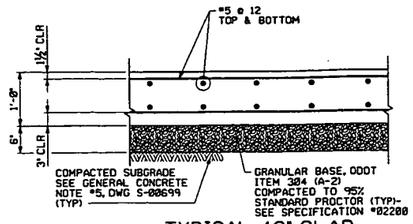
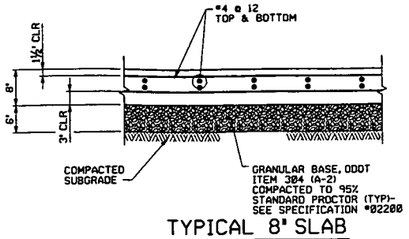


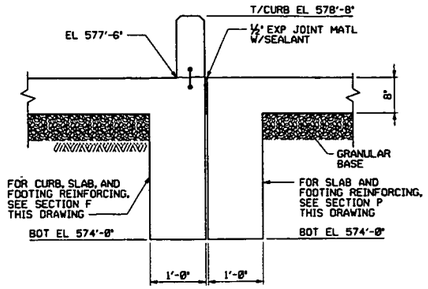
TYPICAL CONSTRUCTION JOINT
NTS



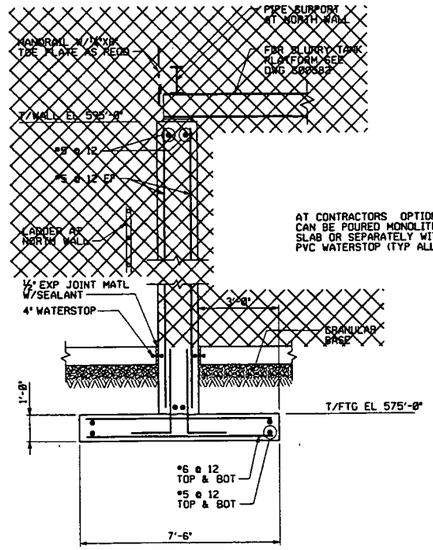
TYPICAL 12" SLAB
NTS



TYPICAL 8" SLAB
NTS



SECTION (S) REF S00698 S00578
½"=1'-0"



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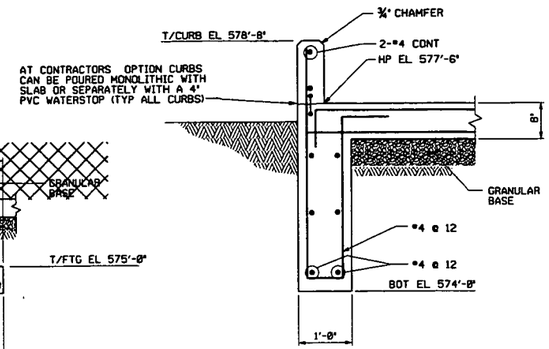

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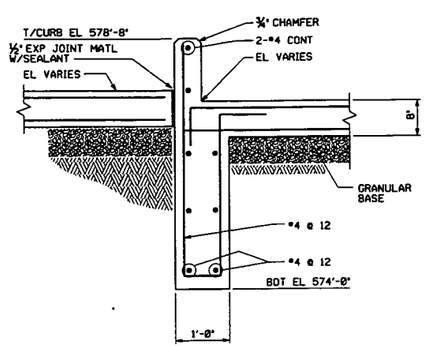

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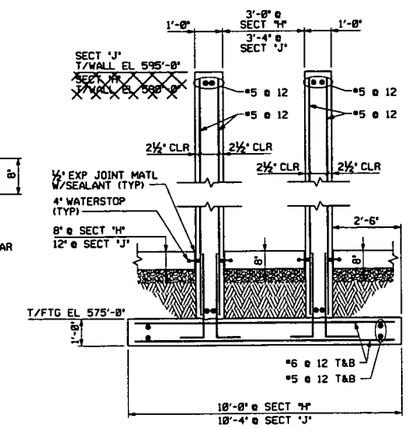

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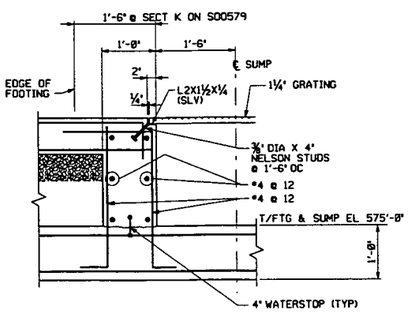

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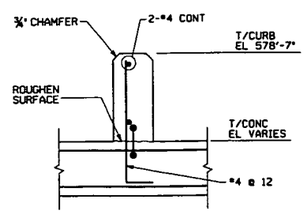

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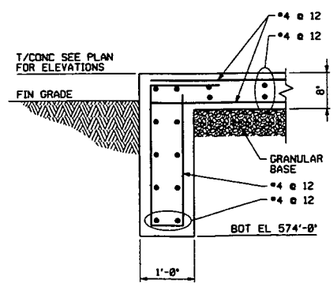

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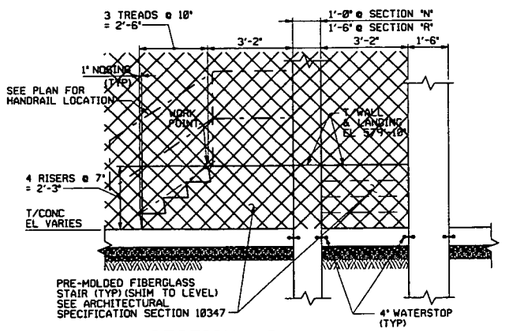

SECTION (N) REF S00698 S00577
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SECTION (R) REF S00698 S00577 SIMILAR-OPPOSITE HAND
½"=1'-0"

NOTES

1. FOR DRAWING INDEX, SEE DRAWING 94X-5900-X-00353.
2. FOR LEGEND AND SYMBOLS, SEE DRAWING 94X-5900-X-00316.
3. FOR GENERAL NOTES, SEE DRAWING 94X-5900-X-00699.

DEMOLISH/REMOVE DOWN TO SLAB ELEVATION

REF DWG NO.	DRAWING TITLE
94X-5900-X-00316	LEGEND AND SYMBOLS
94X-5900-X-00353	DRAWING INDEX - SHEET 1 OF 4
94X-5900-S-00577	TANK FARM AREA
94X-5900-S-00578	OFF-GAS AREA
94X-5900-S-00579	PROCESS AREA
94X-5900-S-00582	EQUIPMENT PLATFORM PLANS
94X-5900-S-00696	LEAN-TO AND HVAC PLATFORM PLANS
94X-5900-S-00699	KEY PLAN

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	A-E	FERNCO	DATE
		INITIALS AND DATE		
3	IDENTIFIED AREAS TO BE DEMOLISHED/REMOVED	GEP KR	RML	11/19/01
2	REVISED EL 598'-0" AT SECT H, WAS 597'-2	APP 11/16/94	RKK	11/15/94
1	ADDED SECTION "S"	RAZ 5/4/94	RCE	5/4/94
0	APPROVED FOR CONSTRUCTION	RAZ 3/15/94	RCE	3/15/94

UNITED STATES
DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

THIS DRAWING PREPARED BY
PARSONS
THE RALPH M. PARSONS CO. - PARSONS MAIN, INC. - ENGINEERING-SCIENCE, INC.
CINCINNATI, OHIO

PROJECT NAME
VITRIFICATION PILOT PLANT DESIGN
CRU4 - ONE METRIC TON

DRAWING TITLE
STRUCTURAL
SECTIONS AND DETAILS

DRAWN BY	DATE	LEAD ENGINEER	DATE	CHECKED BY	DATE
JS BROOKS	01-28-94	RB JADHAV	3/14/94	RS DOWNEY	02-11-94

PLANT/BLDG. NO.	FLOOR	SCALE	CLASS
		AS NOTED	

SUBMITTED FOR APPROVAL	FERNCO CRU APPROVAL	CERTIFIED FOR CONSTRUCTION
RA ZIEMINSKI 3/15/94	R CLARKE R.C.EMERTON 3/15/94	W PICKLES 3/18/94
A-E DATE	DATE	CRU DIRECTOR DATE

PREPARED UNDER PARSONS PROJECT ORDER NUMBER	DOE PROJECT NO.	TEMP PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
CRU4/P085		WBS 1.1.1.1.4.3.1 00-90701	94X-5900-S-00698	S0012	3

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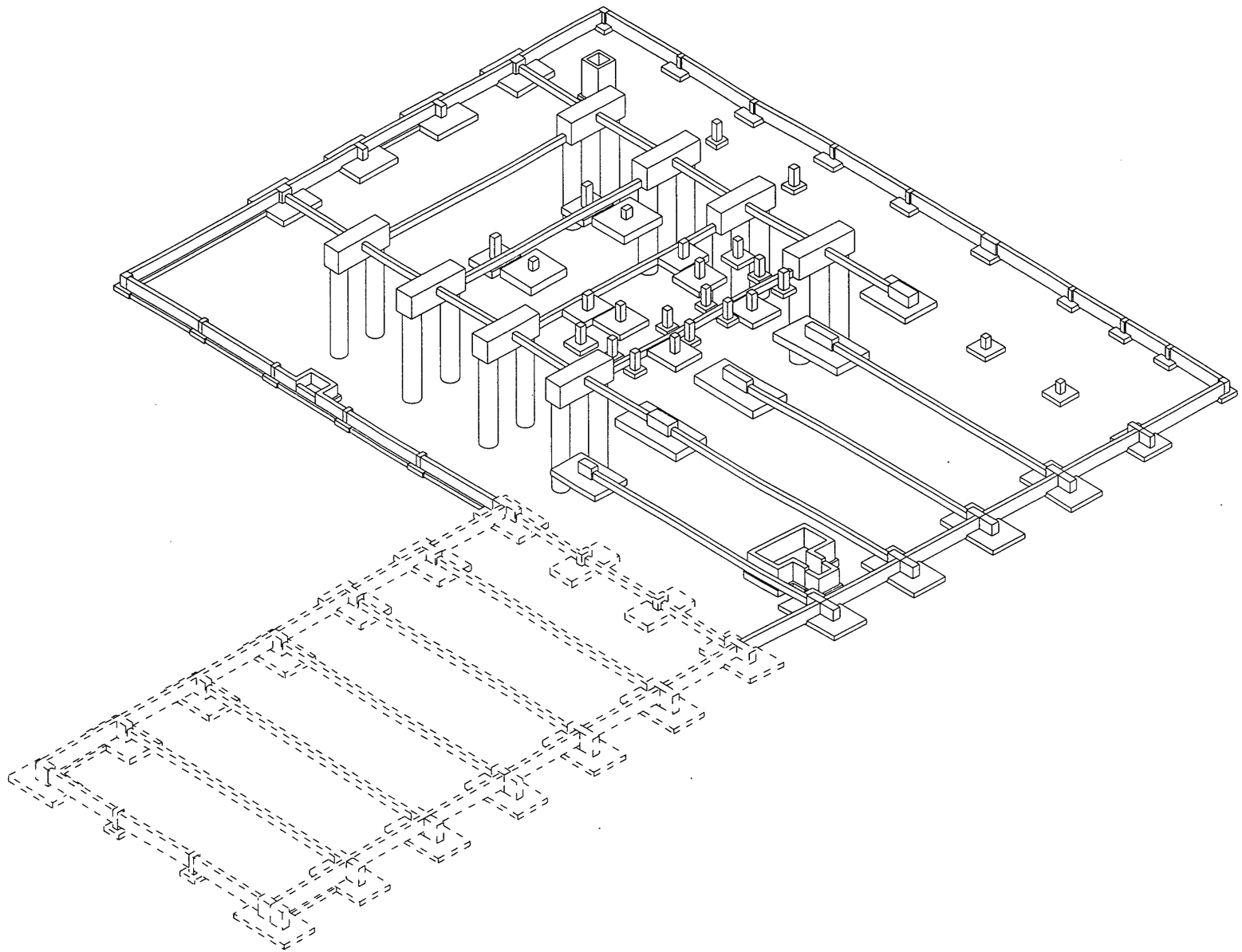

006201
006201
00620

REF DWG NO.	DRAWING TITLE
51X-1910-A-00012	ARCHITECTURAL GROUND FLOOR PLAN
51X-1910-S-00025	FOUNDATION PLAN
51X-1910-S-00026	FOUNDATION, SECTIONS AND DETAILS
51X-1910-S-00031	COLUMN SCHEDULE AND DETAILS
51X-1910-S-00033	GROUND FLOOR PLAN & DETAILS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
BUILDING 51A
ISOMETRIC VIEW

APPROVALS

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

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
K.L. RABBITT	20500	SK-51A	S-2	A
RES PROJECT NO.	FILENAME sk51a.dgn			

PRELIMINARY
NOT FOR CONSTRUCTION

FCPSAE.DGN 5/30/03

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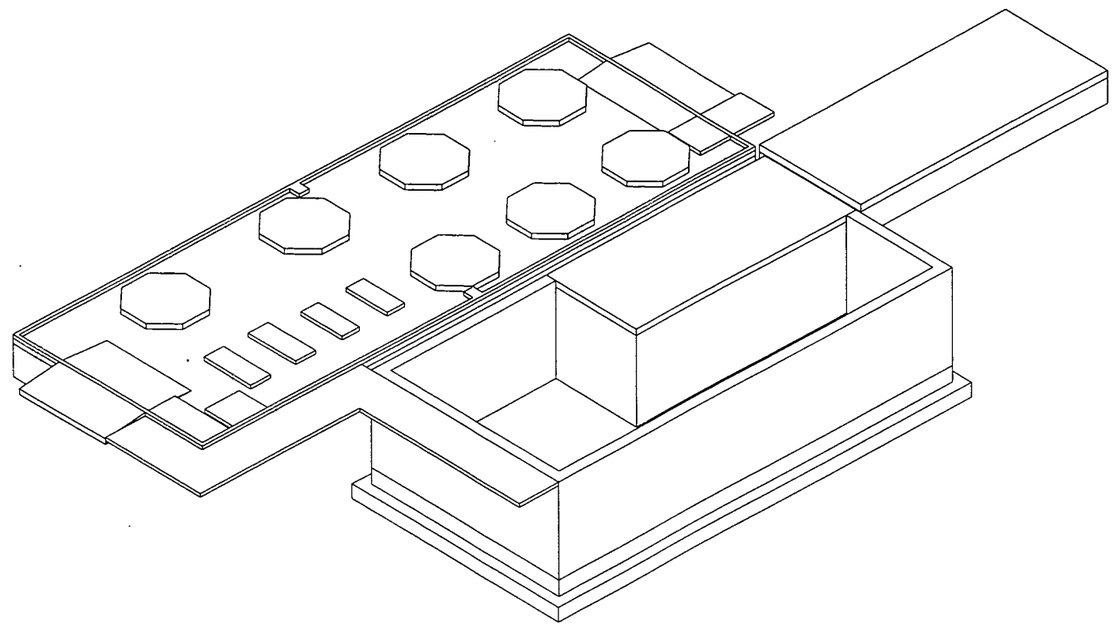

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95X-5900-A-00094	ARCHITECTURAL PLAN, ELEVATION, SECTION, AND DETAILS
95X-5900-S-00145	STRUCTURAL FOUNDATION PLAN, SECTIONS, AND DETAILS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

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PROJECT NAME

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
BUILDING 180
ISOMETRIC VIEW

APPROVALS

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

PRELIMINARY
NOT FOR CONSTRUCTION

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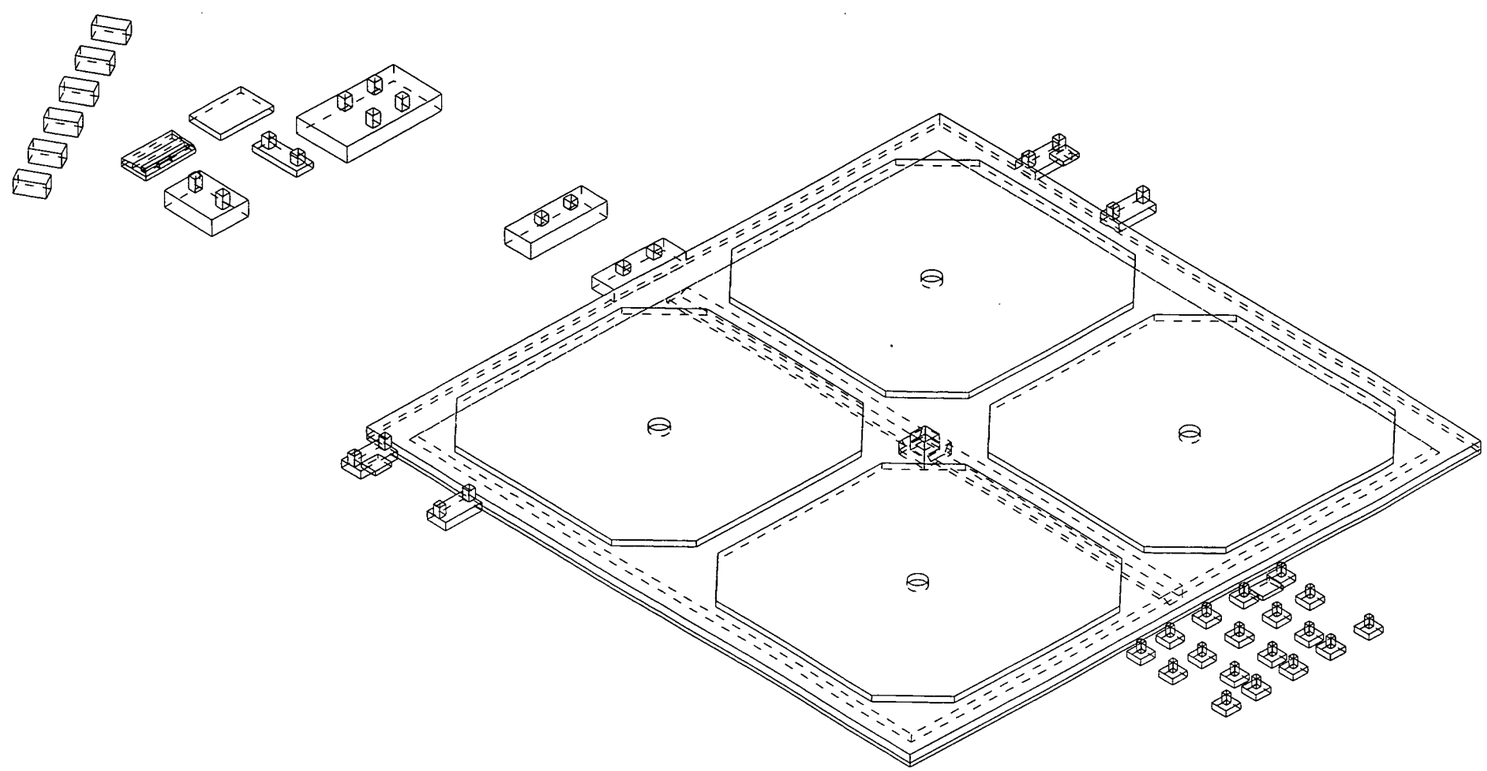

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12FCD005	CROSS SECTIONS SHEET 1
12FCD006	CROSS SECTIONS SHEET 2
12FCD007	CROSS SECTIONS SHEET 3
12FSD010	TTA BUILDING FOUNDATION PLAN & DETAILS (SHEET 1 OF 2)
12FSD011	TTA BUILDING FOUNDATION PLAN & DETAILS (SHEET 2 OF 2)
12FSD012	TTA BLDG TANK PADS PLAN & DETAILS (SHEET 1 OF 2)
12FSD013	TTA BLDG TANK PADS PLAN & DETAILS (SHEET 2 OF 2)
12FSD016	TTA BUILDING FOUNDATION SECTIONS
12FSD017	TTA BLDG TANK PAD FDNS SECTIONS
94X-3900-S-05351	CONCRETE PLAN, SECTIONS AND DETAILS ELECTRICAL EQUIPMENT PADS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY

FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE

AREA 7 SUPPORT AND SILOS PROCESS AREAS
TTA BULDING 94C
ISOMETRIC VIEW

APPROVALS

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

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
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RES PROJECT NO.	FILENAME sktta94c.dgn			

PRELIMINARY
NOT FOR CONSTRUCTION

FCP54E.DGN 5/30/03

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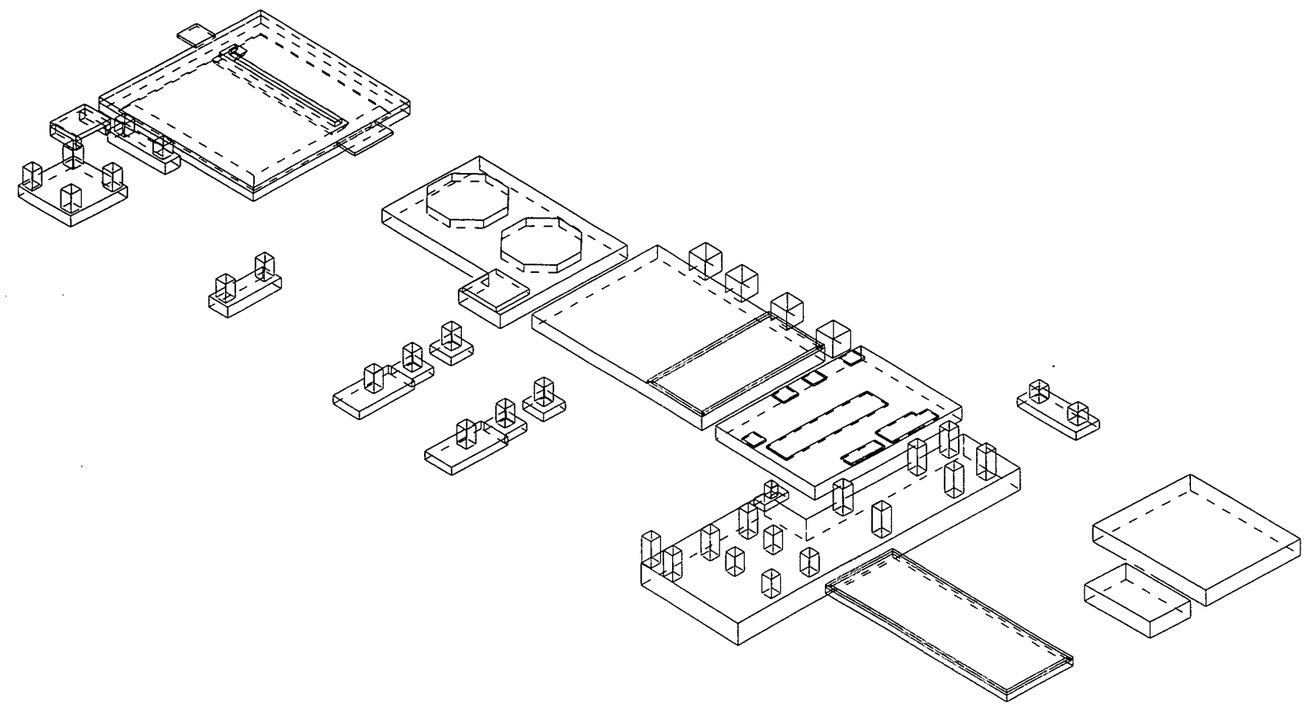

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94X-3900-S-05178	FOUNDATION PLAN MAKE-UP WATER TANK AREA AND UTILTIY BUILDING
94X-3900-S-05179	SECTIONS AND DETAILS MAKE-UP WATER TANK AREA AND UTILITY BUILDING
94X-3900-S-05215	FOUNDATION PLAN & DETAILS CHILLED WATER STORAGE TANKS
94X-3900-S-05225	FOUNDATION PLAN HPP/BA SERVICE PIPE RACK
94X-3900-S-05226	FOUNDATION SECTIONS AND DETAILS HPP/BA SERVICE PIPE RACK
94X-3900-S-05351	CONCRETE PLAN, SECTIONS AND DETAILS ELECTRICAL EQUIPMENT PADS

REV. NO.	ISSUE OR REVISION PURPOSE - DESCRIPTION	DATE	REV. BY	APPR.
A	ISSUED FOR TECHNICAL REFERENCE ONLY			

INITIALS AND DATE

UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

PROJECT NAME

DRAWING TITLE
AREA 7 SUPPORT AND SILOS PROCESS AREAS
UTILITY BLDG 94R AND MISC FOUNDATIONS
ISOMETRIC VIEW

APPROVALS

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

PRELIMINARY
NOT FOR CONSTRUCTION

DRAWN BY	PROJECT NO.	DRAWING INDEX CODE NO.	SHEET NO.	REV. NO.
R.L. RABBITT	20500	SK-94RMISC	S-9	A
RES PROJECT NO.	FILENAME sk94rmisc.dgn			

FCPSAE.DGN 5/30/03

006201

Department of Energy

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

MAR 30 2006

DOE-0101-06

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Thomas Schneider, Project Manager
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE FINAL EXCAVATION PLAN FOR AREA 7 SUPPORT AND SILOS PROCESS AREA AND REVISED PROJECT SPECIFIC PLAN FOR THE EXCAVATION CONTROL AND PRECERTIFICATION OF AREA 7 SUPPORT AND SILOS PROCESS AREA

References:

1) Letter, J. Saric to J. Reising, "A7 Excavation Control and Precertification PSP for Support and Silos Process Area," dated October 5, 2005

2) Letter, T. Schneider to W. Taylor, "Approval - PSP for the Excavation Control and Precertification of Area 7 Support and Silos Process Area," dated October 7, 2005

3) Letter DOE-0013-06, J. Reising to J. Saric/T. Schneider, "Transmittal of Responses to U.S. Environmental Protection Agency and Ohio Environmental Protection Agency Comments on the Draft Excavation Plan for Area 7 Support and Silos Process Areas," dated October 31, 2005

4) Letter, T. Schneider to J. Reising, "Approval-RTC for Excavation Plan for Area 7 Support and Silos Process Areas," dated November 22, 2005

Enclosed for your approval are the final Excavation Plan for Area 7 Support and Silos Process Area and associated drawings, and the revised Project Specific Plan (PSP) for the Excavation Control and Precertification of Area 7 Support and Silos Process Area (Supplement to 20300-PSP-0011). The PSP has been approved by both the U.S. Environmental Protection Agency and Ohio Environmental Protection Agency (OEPA) as noted in References 1 and 2. Revisions to the enclosed PSP include the incorporation of the comment responses and inclusion of variances written against Revision A of the PSP. The Excavation Plan has been revised to include all comment responses and approved by OEPA per Reference 4.

A retention basin, known as the Tank Transfer Area (TTA) Decontamination and Dismantlement (D&D) Retention Basin, will be constructed with a high-density polyethylene liner in the remediated Silo 1 footprint that will be used both during the D&D and soil remediation activities associated with Building 94B (Operable Unit 4 Remediation Facility) and Building 94C (TTA Building). During D&D activities, water collected in this basin will be pumped to the Converted Advanced Wastewater Treatment (CAWWT) Facility Backwash Basin for subsequent treatment at CAWWT prior to being released to the Great Miami River via the Fernald Site's Outfall Line. This basin is not being constructed to handle remediation water that comes in contact with Silos 1 and 2 process material or process equipment, but is being constructed to prevent stormwater runoff from the TTA and Remediation Facility general area going to the Pilot Plant Drainage Ditch (PPDD) and Paddys Run.

During subsequent soil remediation, runoff from the TTA and Remediation Facility area will be collected in this basin and sampled to determine appropriate discharge. This water will either be pumped to the CAWWT Backwash Basin for subsequent treatment at CAWWT or released into the PPDD, based on sampling results. This basin was not addressed in the previously reviewed Excavation Plan for Area 7 Support and Silos Process Areas.

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

Sincerely,

Johnny Reising

Johnny W. Reising
Director

Enclosures

cc w/enclosures:
J. Desormeau, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosures)
G. Jablonowski, USEPA-V, SR-6J
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS6

cc w/o enclosures:
J. Chiou, Fluor Fernald, Inc./MS88
F. Johnston, Fluor Fernald, Inc./MS12
C. Murphy, Fluor Fernald, Inc./MS1

006201

PROJECT SPECIFIC PLAN FOR THE EXCAVATION CONTROL AND PRECERTIFICATION OF AREA 7 SUPPORT AND SILOS PROCESS AREA

(SUPPLEMENT TO 20300-PSP-0011)

ENVIRONMENTAL CLOSURE PROJECT

FERNALD CLOSURE PROJECT
FERNALD, OHIO

NOVEMBER 2005

U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

20500-PSP-0010
REVISION 1

006201

PROJECT SPECIFIC PLAN FOR THE EXCAVATION CONTROL AND PRECERTIFICATION OF AREA 7 SUPPORT AND SILOS PROCESS AREA (SUPPLEMENT TO 20300-PSP-0011)

Document Number 20500-PSP-0010

Revision 1

November 2005

APPROVAL:

11/10/05

Jyh-Dong Chiou, Project Manager — Date
Environmental Closure Project

11/10/05

Frank Miller, Characterization/Waste Management Manager — Date
Environmental Closure Project

11/10/05

Tom Buhrlage, Soil Sampling Manager — Date
Environmental Closure Project

11/10/05

Mike Frank, Real-Time Instrumentation Measurement Program Manager — Date
Environmental Closure Project

Mark Barlow for Scott Osborn 11/10/05

Scott Osborn, Waste Acceptance Organization — Date
Environmental Closure Project

11-10-05

Reinhard Friske, Quality Control — Date
Safety, Health and Quality Division

FERNALD CLOSURE PROJECT

Fluor Fernald, Inc.
P.O. Box 538704
Cincinnati, Ohio 45253-8704

REVISION SUMMARY

Revision	Date	Description of Revision
Rev. 0	11-2-05	Initial controlled issuance, which includes text revisions made from comment responses relating to the Area 7 Support and Silos Process Area Excavation Plan.
Rev. 1	11-10-05	Revised to include Variance/Field Change Notices 20500-PSP-0010-01 through 20500-PSP-0010-06 from Revision A.

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APPENDICES

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LIST OF ACRONYMS AND ABBREVIATIONS

ASCOC	area-specific constituent of concern
ASL	analytical support level
CAWWT	Converted Advanced Waste Water Treatment (Facility)
COC	constituent of concern
DOE	U.S. Department of Energy
EMS	Excavation Monitoring System
FACTS	Fernald Analytical Computerized Tracking System
FCP	Fernald Closure Project
FRL	final remediation level
GC	gas chromatograph
HPGe	High-Purity Germanium (Detector)
ICP-AES/MS	inductively coupled plasma-atomic emission spectroscopy/mass spectroscopy
LCS	liquid scintillation counting
MDC	minimum detectable concentration
MDL	minimum detection level
mg/kg	milligrams per kilogram
NaI	sodium iodide
pCi/g	picoCuries per gram
PID	photoionization detector
ppm	parts per million
PSP	Project Specific Plan
PWID	Project Waste Identification and Disposition Report
QC	Quality Control
RSS	Radiation Scanning System
RTIMP	Real Time Instrumentation Measurement Program
RTRAK	Real-Time Radiation Tracking System
RWP	Radiation Work Permit
SED	Sitewide Environmental Database
SEP	Sitewide Excavation Plan
SWRB	Storm Water Retention Basin
TAL	Target Analyte List
V/FCN	Variance/Field Change Notice
WAC	Waste Acceptance Criteria
WAO	Waste Acceptance Organization

1.0 INTRODUCTION

This Project Specific Plan (PSP) describes the data collection activities necessary to support excavation control and precertification activities of Area 7 Support and Silos Process Area. This PSP only represents the specific information regarding Area 7 Support and Silos Process Area. The general information that is routinely addressed in a PSP can be found in 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation*. While this PSP has section headings similar to a full-length PSP, where the information in the section is identical to the information in the General PSP (20300-PSP-0011), a reference to this General PSP is made and the information is not repeated.

1.1 PURPOSE

The purpose of this PSP is to provide specific direction regarding the excavation control and precertification of Area 7 Support and Silos Process Area. This detailed information includes reason to sample and constituents of concern.

1.2 SCOPE

The area included within the scope of this PSP is Area 7 Support and Silos Process Area. See Figure 1-1 for areas included in excavation control and precertification of this PSP

The Area 7 Support and Silos Process Area includes the Silos Process Area, Converted Advanced Waste Water Treatment (CAWWT) Facility Area, Silo Truck Staging Area, area north of the Storm Water Retention Basins (SWRBs), and the area west of the Security Trailer Complex. Various utilities, slabs, footers, and foundations are also in the area. Portions of Area 7 (i.e., the Silos and General Area) not addressed in this document have been included in separate documentation.

The schedule for implementation of this PSP began in October 2005. Precertification of this area will begin following successful completion of the excavation control process and prior to certification.

This PSP is not considered a work authorization document (for implementation of fieldwork) per SH-0012, Work Permits. Work authorization documents directing the implementation of fieldwork, per SH-0012, may include applicable Environmental Services procedures, Fluor Fernald work permits, Radiation Work Permits (RWPs), penetration permits, and other applicable permits.

1.3 VARIANCE/FIELD CHANGE NOTICE (V/FCN) DOCUMENTATION

The Variance/Field Change Notice (V/FCN) process is utilized to document the occurrence of two situations. The first is to document a change in protocol occurring when a modification in the characterization approach is required [e.g., a different decision process for defining the extent of

contamination or for verifying that soil is below-waste acceptance criteria (WAC) or below-final remediation level (FRL) concentrations]. Factors that will be considered under special circumstances include safety of the workers, cost effectiveness, the need for a timely response, and impending weather conditions. This type of V/FCN requires agency approval prior to implementation.

The second situation requiring a V/FCN is to provide documentation of sampling and analytical activities and to provide variable information that is dependent upon field conditions and cannot be specified initially in this PSP. As part of the excavation control process, the collection of physical samples will be documented in applicable field logs and with V/FCNs. Additionally, the Data Group Form, FS-F-5157 will be generated per Procedure EW-1021, Preparation of the Project Waste Identification and Disposition (PWID) Report, following the generation of data from the analysis of physical samples. In this situation the use of this V/FCN form is not used to document a change in the protocol of this PSP, but is used to document sampling and analytical activities in order to demonstrate that these activities are compliant with the protocols of this PSP.

If a V/FCN is required, the Characterization Manager, or designee, will document the change and requirements through the V/FCN process in accordance with Section 7.5 of the *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation*, 20300-PSP-0011.

Upon verbal approval of Revision A of this PSP, V/FCNs were written to document sampling and analytical activities in this area. These are documented in Appendix B.

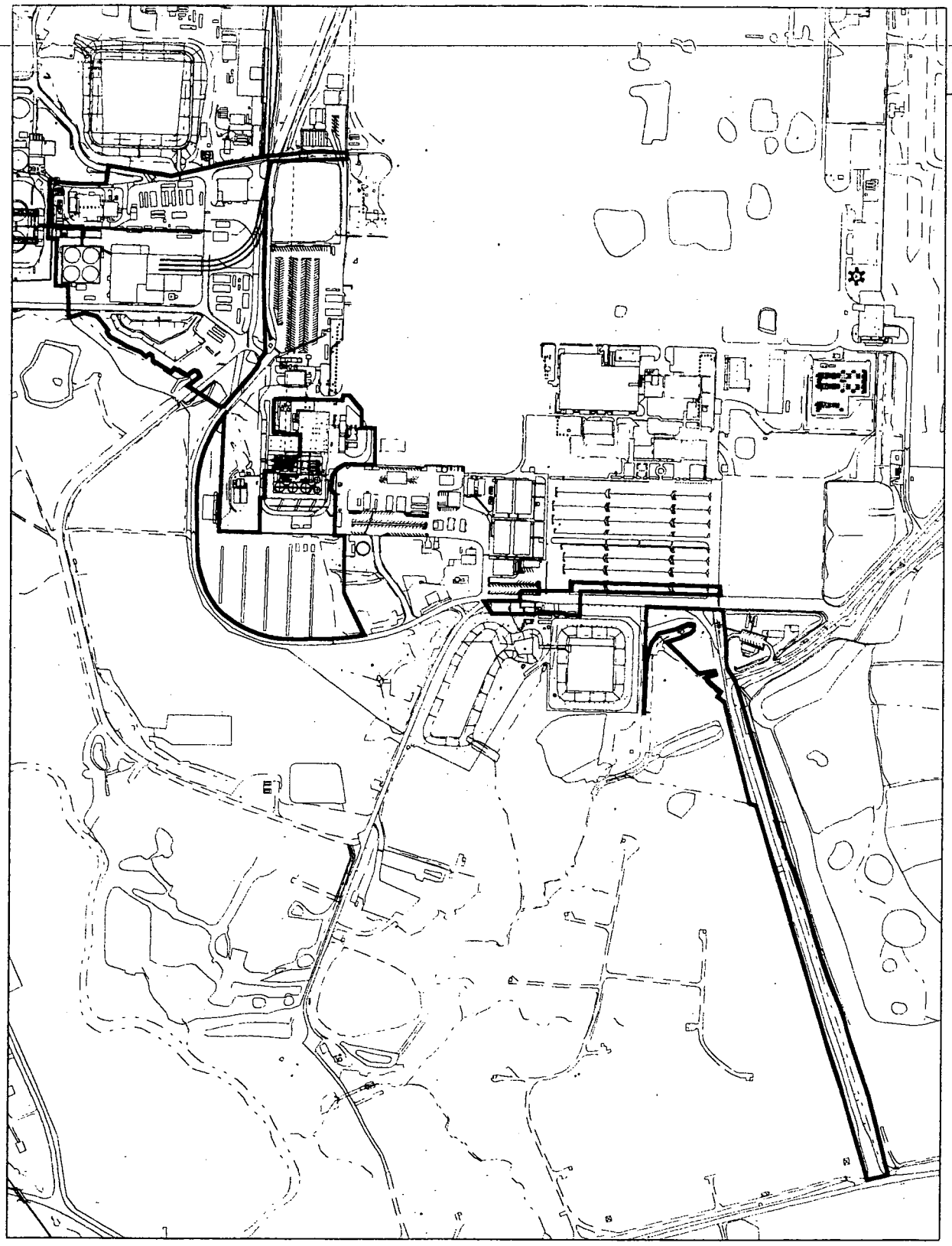
1.4 KEY PERSONNEL

Refer to Section 1.4 of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* and Table 1-1.

TABLE 1-1
KEY PERSONNEL

Title	Primary	Alternate
Department of Energy (DOE) Contact	Johnny Reising	TBD
Environmental Closure Project Manager	Jyh-Dong Chiou	Rich Abitz
Characterization Manager	Frank Miller	Deborah Brennan
Area 7 Support and Silos Process Area Lead	Deborah Brennan	Denise Arico
RTIMP Manager	Mike Frank	Dale Seiller
Soil Sampling Manager	Tom Buhrlage	Jim Hey
Surveying Manager	Jim Schwing	Eric Harman/Andy Clinton
WAO Contact	Scott Osborn	Linda Barlow
Construction Manager	Mike Stumbo	Tim Hastings
Engineering Lead	Tony Snider	Dave Russell
Laboratory Contact	Paul McSwigan	Amy Meyer
Data Validation Contact	Jim Chambers	Baohe Chen
Field Data Validation Contact	Dee Dee Edwards	Jim Chambers
Data Management Lead	Deborah Brennan	Denise Arico
Radiological Control Contact	Corey Fabricante	Jeff Denton
FACTS/SED Database Contact	Kym Lockard	Susan Marsh
Quality Control Contact	Reinhard Friske	Dick Scheper
Safety and Health Contact	Gregg Johnson	Jeff Middaugh

FACTS - Fernald Analytical Computerized Tracking System
RTIMP - Real Time Instrumentation Measurement Program
SED - Sitewide Environmental Database
WAO - Waste Acceptance Organization



LEGEND:

SCALE

600 300 0 600 FEET

STATE PLANAR COORDINATE SYSTEM 1983

08-SEP-2005

FIGURE 1-1. AREA 7 SUPPORT AND SILOS PROCESS AREA LOCATION MAP

2.0 AREA-SPECIFIC WORK REMAINING STATUS

2.1 AREA 7 SUPPORT AND SILOS PROCESS AREA

2.1.1 History

Area 7 constitutes 85 acres of the Fernald Closure Project (FCP). The majority of this area is located to the west and south of the Former Production Area, with a portion located south of the Main Parking Lot and just east of Area 5. Area 7 is bordered by Paddys Run on the west and Area 1 borders it to the east. Areas 1 and 2 comprise the southern border while the Waste Pits and Areas 4B and 3B are to the north. The Area 7 Support and Silos Process Area Excavation represent approximately 29.6 acres and includes the following:

- Silos Process Area
- CAWWT Area
- Silo Truck Staging Area
- Area North of the SWRBs
- Area West of the Security Trailer Complex

As stated in the Excavation Plan for Area 7 Support and Silos Process Area, at- and below-grade structures, roadways, and underground utilities not related to groundwater remediation are present throughout. Those utilities, etc. associated with ongoing site needs and/or groundwater remediation will not be addressed in this document. Rather they will be covered under separate documentation. The portion of Area 7 (i.e., the Silos and General Area) not addressed by this PSP will be presented in separate documentation.

2.1.2 Excavation Control

2.1.2.1 ASCOCs

The evaluation of the preliminary list of area-specific constituents of concern (ASCOCs) found in the Sitewide Excavation Plan (SEP) Table 2-7 for Remediation Area 7, data from the predesign investigation of the area, and historical information resulted in the following list of primary and secondary constituents of concern (COCs) for excavation control of Area 7. The list of primary COCs is unchanged and will be carried through to certification. The secondary COC list is reduced to beryllium and technetium-99 as they are the only secondary COCs driving any portion of the excavation.

Primary COCs

- Total Uranium
- Radium-226
- Radium-228
- Thorium-228
- Thorium-232

Secondary COCs

- Beryllium
- Technetium-99

The above list of COCs will be used to verify that the planned remedial excavation limits are sufficient to capture the above-FRL contamination during excavation. Note that the entire ASCOC list applicable to this area will be reevaluated during the certification design process to determine which of the ASCOCs will be carried into certification. As always, this evaluation as well as the justification for the retention or elimination of any COC will be presented in the Certification Design Letter for agency review and approval.

2.1.2.2 Excavation Types

The types of excavation identified in Area 7 Support and Silos Process Area are those that are either above-WAC (driven by technetium-99) or above-FRL (driven by total uranium, radium-226, radium-228, thorium-228, thorium-232, and beryllium). The only constituents controlling excavation in Area 7 Silos and General Area are technetium-99, total uranium, radium-226, radium-228, thorium-228, thorium-232, and beryllium.

Real-time scanning for total uranium, radium-226, radium-228, thorium-228, and thorium-232 will be performed for above-FRL areas per 20300-PSP-0011, Section 5.1. Physical sampling for excavation control of above-WAC technetium-99 and above-FRL beryllium contamination will be performed per 20300-PSP-0011, Section 5.2.

Table 2-1 lists the excavation control COCs and their limits. Tables 2-2 and 2-3 address the excavation monitoring and sampling requirements, as well as the physical sample volumes, preservation requirements, and analysis information. Appendix A lists the Target Analyte Lists (TALs).

2.1.2.3 Locations

The list of above-WAC areas (see Figure 2-1) and COCs are as follows:

Above-WAC Areas	COC
AWAC #1 - Area North of the K-65 Trench	Technetium-99
AWAC #2 - K-65 Trench[1]	Technetium-99

[1]Sediment within the concrete K-65 Trench has been identified as above-WAC. Prior to removal of the K-65 Trench, soil around it will be sampled to ensure it is below-WAC. Following removal of the K-65 Trench, soil underneath it will be sampled to ensure it is below-WAC.

The list of above-FRL areas (see Figures 2-1 and 2-2) and COCs are listed below.

Above-FRL Areas	COC
FRL #1 - Northwestern Silos Process Area	Radium-226
FRL #2 - Northeastern Silos Process Area	Radium-226
FRL #3 - Southeastern Silos Process Area	Radium-226
FRL #4 - Southwest of CAWWT	Beryllium
FRL #5 - Northeastern CAWWT Area	Total Uranium
FRL #6 - Southeastern CAWWT Area	Total Uranium
FRL #7 - Eastern Silos Process Area	Radium-226

2.1.3 Precertification

Precertification will be performed per 20300-PSP-0011, Section 3.0 and Section 6.0.

TABLE 2-1
LIMITS FOR AREA 7 EXCAVATION CONTROL COCS

Area 7 COCs	WAC	FRL	MDC
Primary			
Uranium	1030 mg/kg	82.0 mg/kg	8.2 mg/kg
Uranium (high leachability)	1030 mg/kg	20.0 mg/kg	2.0 mg/kg
Radium-226	NA	1.7 pCi/g	0.17 pCi/g
Secondary			
Technetium-99	29.1 pCi/g	30 pCi/g	2.91 pCi/g
Beryllium	NA	1.5 mg/kg	0.15 mg/kg

MDC - minimum detectable concentration
mg/kg - milligrams per kilogram
pCi/g - picoCuries per gram

TABLE 2-2
PHYSICAL SAMPLE ANALYTICAL REQUIREMENTS

TAL[1,2] (all ASL B)	Hold Time	Method	Sample Matrix	Preservative	Container	Minimum Sample Mass/Volume
TAL A Technetium-99	12 mos	LSC	Solid	None	Appropriate size plastic or glass	50 grams
TAL B Beryllium	6 months	ICP-AES/MS	Solid	Cool 4°C	Appropriate size plastic or glass with Teflon lid	50 grams

[1] One sample per release shipped to an off-site laboratory shall be identified on the Chain of Custody/Request for Analysis forms as "designated for laboratory Quality Control (QC)".

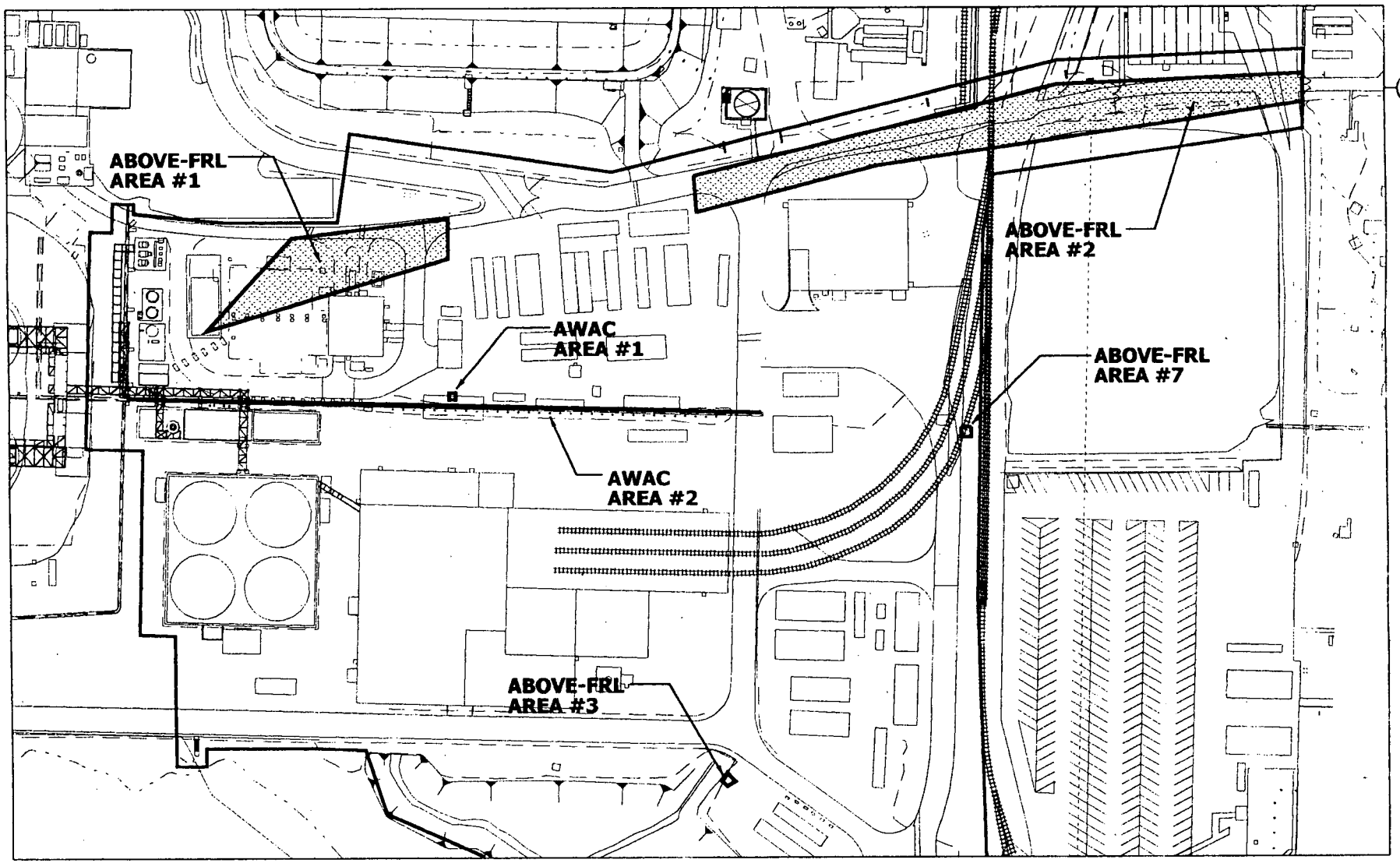
[2] All samples will be shipped off-site for analysis utilizing historical data.

ASL - analytical support level
ICP-AES/MS - inductively coupled plasma-atomic emission spectroscopy/mass spectroscopy
LSC - liquid scintillation counting

TABLE 2-3
EXCAVATION MONITORING/SAMPLING REQUIREMENTS

Type of Contamination Zone	Types of Samples/Measurements and Data Use		
	Sideslope of Each Excavation Lift	**Floor of Each Excavation Lift**	**Floor/Sideslope at Design Depth for Contamination Zone**
Above-FRL Uranium	• Real-time for Uranium (WAC)	• Real-time for Uranium (WAC)	• Real-time for Uranium (WAC/FRL)*
Above-FRL Radium-226	• Real-time for Uranium (WAC)	• Real-time for Uranium (WAC)	• Real-time for Radium-226/Uranium (WAC/FRL)*
Above-WAC Technetium-99	• Physical sample for Technetium-99 (WAC) • Real-time for Uranium (WAC)	• Real-time for Uranium (WAC)	• Physical sample for Technetium-99 (WAC) • Real-time for Uranium (FRL)*
Above-FRL Beryllium	• Physical sample for Beryllium (for FRL) • Real-time for Uranium (WAC)	• Real-time for Uranium (WAC)	• Physical sample for Beryllium (for FRL) • Real-time for Uranium (FRL)*

* During real-time uranium WAC/FRL scan, the data collected will be evaluated later for precertification purposes by reviewing concentrations of thorium-232 and radium-226, as well as thorium-228 and radium-228 based on equilibrium in comparison to their respective FRLs.



LEGEND:

SCALE

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STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 2-1. SILOS SUPPORT AREA ABOVE-WAC/ABOVE-FRL EXCAVATION AREAS

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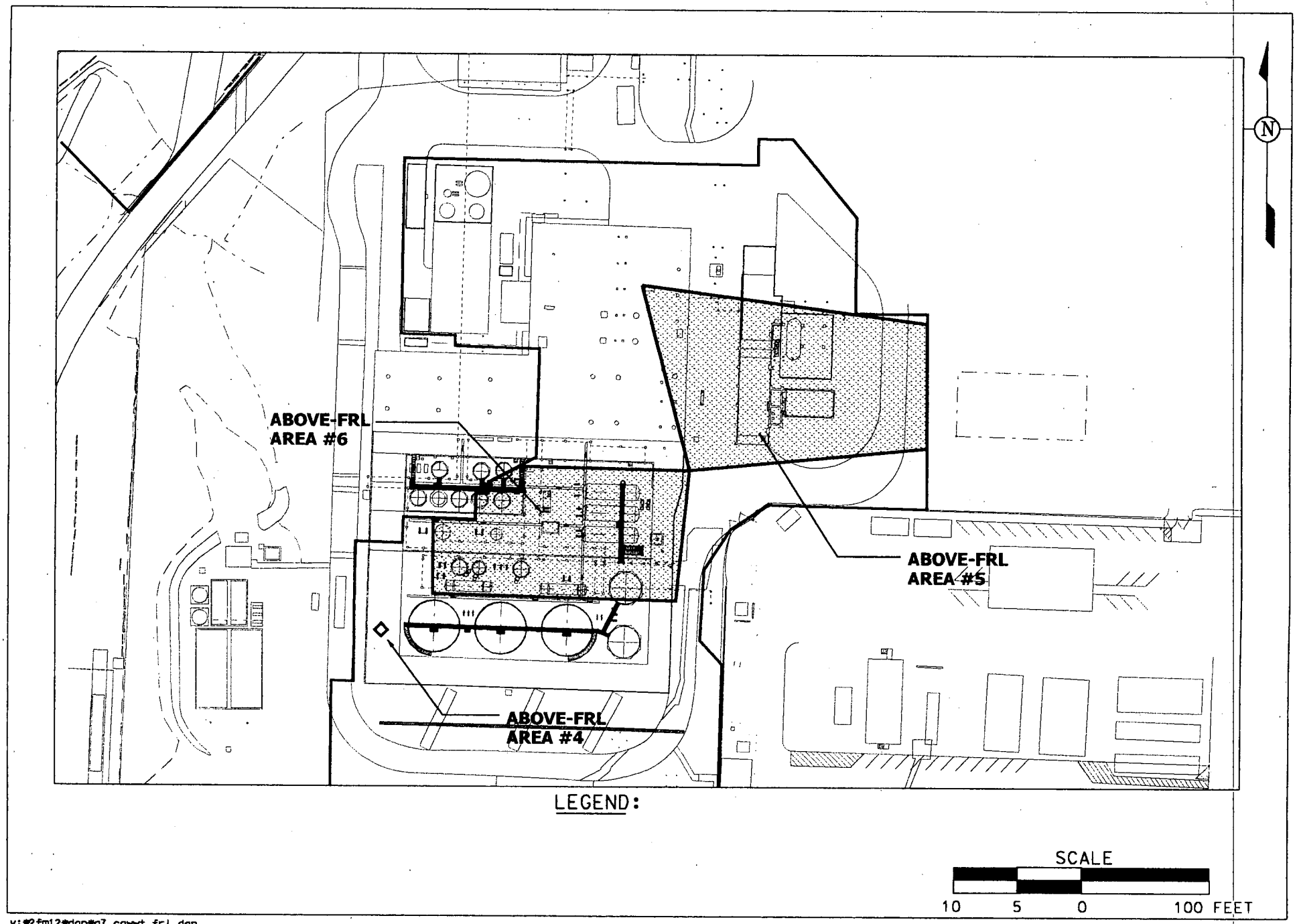

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STATE PLANAR COORDINATE SYSTEM 1983

19-OCT-2005

FIGURE 2-2. CAWWT ABOVE-FRL EXCAVATION AREAS

3.0 INSTRUMENTATION AND TECHNIQUES

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections:

3.1 MEASUREMENT INSTRUMENTATION AND TECHNIQUES

3.1.1 Real-Time

3.1.1.1 Sodium Iodide Data Acquisition (RTRAK, RSS, GATOR, EMS)

3.1.1.2 HPGe Data Acquisition

3.1.1.3 Excavation Monitoring System

3.1.1.4 Radon Monitor

3.1.2 Surface Moisture Measurements

3.2 REAL-TIME MEASUREMENT IDENTIFICATION

3.3 REAL-TIME DATA MAPPING

3.4 REAL-TIME SURVEYING

4.0 PREDESIGN

The predesign investigations of Area 7 were completed using the PSPs noted in the Excavation Plan Area 7 Support and Silos Process Areas.

5.0 EXCAVATION CONTROL MEASURES

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections:

5.1 EXCAVATION DESIGN CONTROL REQUIREMENTS
5.1.1 Contamination Zone
5.1.2 Floors, Roads and Foundations
5.1.3 Real-Time Lift Scans
5.1.4 Above-WAC Lift Scans
5.2 ORGANIC SCREENING AND PHYSICAL SAMPLING REQUIREMENTS
5.2.1 Above-WAC Photoionization Detector (PID)/Gas Chromatograph (GC) Screening
5.2.2 All Other Physical Sample Requirements
In addition to the information contained in the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation,* if discolored or stained soil is noted further investigation with the possibility of additional sampling may occur.

5.2.3 PID Screening and Physical Sampling Procedures
5.2.4 Physical Sample Identification

6.0 PRECERTIFICATION

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections:

6.1 INITIAL PRECERTIFICATION NaI SCAN AT BASE OF DESIGN GRADE
6.2 PRECERTIFICATION HPGE MEASUREMENTS IN 20 PPM FRL (URANIUM) AREAS
6.3 PRECERTIFICATION HPGE MEASUREMENTS IN 82 PPM FRL (URANIUM) AREAS
6.4 DELINEATING HOT SPOTS FOLLOWING PRECERTIFICATION HPGE MEASUREMENTS

7.0 QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections:

7.1 QUALITY CONTROL SAMPLES - REAL-TIME MEASUREMENTS AND PHYSICAL SAMPLES
7.2 DATA VALIDATION
7.2.1 Physical Sample Data Validation
7.2.2 Real-Time Data Verification/Validation
7.3 APPLICABLE DOCUMENTS, METHODS AND STANDARDS
7.4 SURVEILLANCES
7.5 IMPLEMENTATION AND DOCUMENTATION OF VARIANCE/ FIELD CHANGE NOTICES (V/FCN)

8.0 SAFETY AND HEALTH

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for this section.

9.0 EQUIPMENT DECONTAMINATION

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for this section.

10.0 DISPOSITION OF WASTES

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for this section.

11.0 DATA AND RECORDS MANAGEMENT

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections:

11.1 REAL-TIME
11.2 PHYSICAL SAMPLES

APPENDIX A

TARGET ANALYTE LISTS FOR EXCAVATION CONTROL AND PRECERTIFICATION

APPENDIX A
TARGET ANALYTE LISTS FOR EXCAVATION CONTROL AND PRECERTIFICATION

TAL A

Analyte	FRL	MDL (soil)
Technetium-99	30 pCi/g	29.1 pCi/g

TAL B

Analyte	FRL	MDL (soil)
Beryllium	1.5 mg/kg	0.15 mg/kg

MDL - minimum detection level

APPENDIX B

VARIANCE/FIELD CHANGE NOTICES TO PSP FOR THE EXCAVATION CONTROL AND PRECERTIFICATION OF AREA 7 SUPPORT AND SILOS PROCESS AREA (SUPPLEMENT TO 20300-PSP-0011), REVISION A

VARIANCE/FIELD CHANGE NOTICE LOG FOR THE PROJECT SPECIFIC PLAN FOR EXCAVATION CONTROL AND PRECERTIFICATION OF THE AREA 7 SUPPORT AND SILOS PROCESS AREA (SUPPLEMENT TO 20300-PSP-0011)

Variance No.	Variance Date	Variance Description	Significant? (Y or N)	Date Signed	Date Distributed	EPA/OEPA Approval
Revision A						
20500-PSP-0010-1	9/13/05	Documents real-time replacement sampling of area east of the CAWWT.	N	9/15/05		NA
20500-PSP-0010-2	9/20/05	Documents real-time replacement sampling of area underneath slab south of CAWWT	N	9/26/05		NA
20500-PSP-0010-3	9/27/05	Documents precertification sampling of area south of CAWWT designated for backwash basin construction	N	9/27/05		NA
20500-PSP-0010-4	10/3/05	Documents sampling in above-FRL Be area south-west of CAWWT	N	10/12/05		NA
20500-PSP-0010-5	10/11/05	Documents real-time replacement sampling of area south-east of the CAWWT	N	10/17/05		NA
20500-PSP-0010-6	10/28/05	Documents real-time replacement sampling of pile on the east side of the CAWWT	N	10/28/05		NA

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VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-1
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		Page: 1 of 3 006201
PROJECT TITLE: Project Specific Plan For Excavation Control And Precertification Of The Area 7 Support and Silos Process Area		Date: 9/13/05

VARIANCE / FIELD CHANGE NOTICE (Include justification):

EXCAVATION CONTROL SAMPLING

This Variance/Field Change Notice (V/FCN) documents the collection of grab soil samples to replace the real-time surface lift scanning requirements for total uranium in the area to the east of the CAWWT. The area is approximately 100' x 100'. Also, a 40 yd^3 soil stockpile adjacent to this area will be sampled. Coordinate with the Real-Time Lead and/or WAO representative for this sampling event.

The floor will be divided into a 100' x 100' grid and one location will be marked in each block. A minimum of two samples at representative spacing will be collected. Because there are no sidewalls to sample, approximately two samples will be collected for total uranium (TAL C).

The soil stockpile is to be quartered. Samples will be taken from four locations on the soil pile (one from each quarter). Samples at locations 1 and 3 will be taken from the top 3rd of the pile and samples at locations 2 and 4 will be taken from the bottom 3rd of the pile. Angles of penetration and depth will be based on the sampling team lead's professional judgment. The actual sample depths and intervals will be recorded in the Field Activity Log (FAL). All samples will be analyzed for total uranium (TAL C).

See Attachment 1 for the TAL and the Sampling and Analytical Requirements.

For the real-time replacement samples, the first sample ID will be A7EC-CAWWT-SF-1^RTL and each additional sample ID will be sequentially numbered (e.g. second sample ID is A7EC-CAWWT-SF-2^RTL).

For the soil pile samples, he first sample ID will be A7EC-CAWWT-SP-1^R and each additional sample ID will be sequentially numbered (e.g. second sample ID is A7EC-CAWWT-SP-2^R).

Where:

- A7EC = Area 7 Excavation Control
- CAWWT = Converted AWWT Facility
- SF = Surface Scan
- SP = Soil Pile
- 1, 2 = Consecutive Sample Numbers (Locations)
- RTL = Real-Time Replacement for total uranium
- R = Radiological analyses

Surveying required: Yes (Real-Time replacement samples only) – by surveyors (stockpile does not need to be surveyed)
Field QC samples required: No
Field validation required: Yes
Analytical data validation required: No
Data package required: ASL B

Historical data for this area is 101 mg/kg total uranium at boring A7-SA2-50.

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-1
WBS NO.: PROJECT/DOCUMENT/ECDC # 20600-PSP-0016 Rev.A		Page: 2 of 23
PROJECT TITLE: Project Specific Plan For Excavation Control And Precertification Of The Area 6 Waste Pits And General Area		Date: 9/13/05

Justification:
Due to existing field conditions, real-time scanning could not be performed in this area. Therefore, physical samples for total uranium analysis will be collected. Physical samples will be collected in lieu of real-time scans to represent the lift scan for this area. Per Section 1.3 of the PSP, the collection of physical sample will be documented with a V/FCN.

REQUESTED BY: Debbie Brennan Date: 9/13/05

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: R. Friske	9/16/05	X	PROJECT MANAGER: J.D. Ogbu	9/14/05
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: F. Miller	9/13/05
X	ANALYTICAL CUSTOMER SUPPORT:	9/15/05		RTIMP Manager	
X	WAO	9/14/05	X	SAMPLING MANAGER: T. Burlage	9/15/05

VARIANCE/FCN APPROVED [X]YES [ ]NO REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

ATTACHMENT 1

SAMPLING AND ANALYTICAL REQUIREMENTS

Analyte	Lab	Sample Matrix	TAT	Preservative	Holding Time	Container	Minimum Sample Mass
TAL C	Offsite	Soil	24 hr	None	12 months	Plastic or glass or stainless steel push tube	50 g

TAL 20500-PSP-0010-C
Soil Analysis (ASL B)

Analyte	WAC	MDL - Soil
Total Uranium	1030 mg/kg	103 mg/kg

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VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-2
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		Page: 1 of 4 006201
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		Date: 9/02/05

VARIANCE / FIELD CHANGE NOTICE (Include justification):

EXCAVATION CONTROL SAMPLING

This Variance/Field Change Notice (V/FCN) documents the collection of grab samples from the soil that was once underneath the slab to the south of the CAWWT for Real-Time Replacement. The location of the area to be sampled is shown in Figure 1 as above-FRL area #6. The top 6-inches of soil is to be sampled for Total Uranium (TAL C). Coordinate with the Real-Time Lead and/or WAO Representative for this sampling event.

The floor will be divided into a grid where each block measures approximately 100' x 100'. One location will be sampled for each block. There are no sidewalls to this area.

The Sampling and Analytical Requirements and TALs are shown on Attachment 1.

For the real-time replacement samples, the first sample ID will be A7E-CAWWT-SF-3^RTL and each additional sample ID will be sequentially numbered (e.g. second sample ID is A7E-CAWWT-SF-4^RTL).

Where:

A7E = Area 7 Excavation Control
CAWWT = Converted AWWT Facility
SF = Surface Scan
3, 4 = Consecutive Sample Numbers (Locations)
RTL = Real-Time Replacement for total uranium

Surveying required: Yes by samplers
Field QC samples required: No
Field validation required: Yes
Analytical data validation required: No
Data package required: ASL B

Historical data for this area is 574 mg/kg total uranium at boring P34-1.

RF

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-2
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		**Page:** 2 **of 4**
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		**Date: 9/02/05**

Justification:

Due to existing field conditions, real-time scanning could not be performed in this area. Therefore, physical samples for total uranium analysis will be collected. Physical samples will be collected in lieu of real-time scans to represent the lift scan for this area. Per Section 1.3 of the PSP, the collection of physical sample will be documented with a V/FCN.

REQUESTED BY: Debbie Brennan Date: 9/22/05

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: R. Friske	9-26-05	X	PROJECT MANAGER: J.D. Chiou	9/26/05
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: F. Miller	9/28/05
X	ANALYTICAL CUSTOMER SUPPORT: Paul J. Mahnken	9/27/05		RTIMP Manager	
X	WAO Linda Barlow	9/26/05	X	SAMPLING MANAGER: T. Hutchings	9/27/05

VARIANCE/FCN APPROVED [X]YES [ ]NO REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

ATTACHMENT 1

SAMPLING AND ANALYTICAL REQUIREMENTS

Analyte	Lab	Sample Matrix	TAT	Preservative	Holding Time	Container	Minimum Sample Mass
TAL C	Offsite	Soil	24 hr	None	12 months	Plastic or glass or stainless steel push tube	50 g

TAL 20500-PSP-0010-C
Soil Analysis (ASL B)

Analyte	WAC	MDL - Soil
Total Uranium	1030 mg/kg	103 mg/kg

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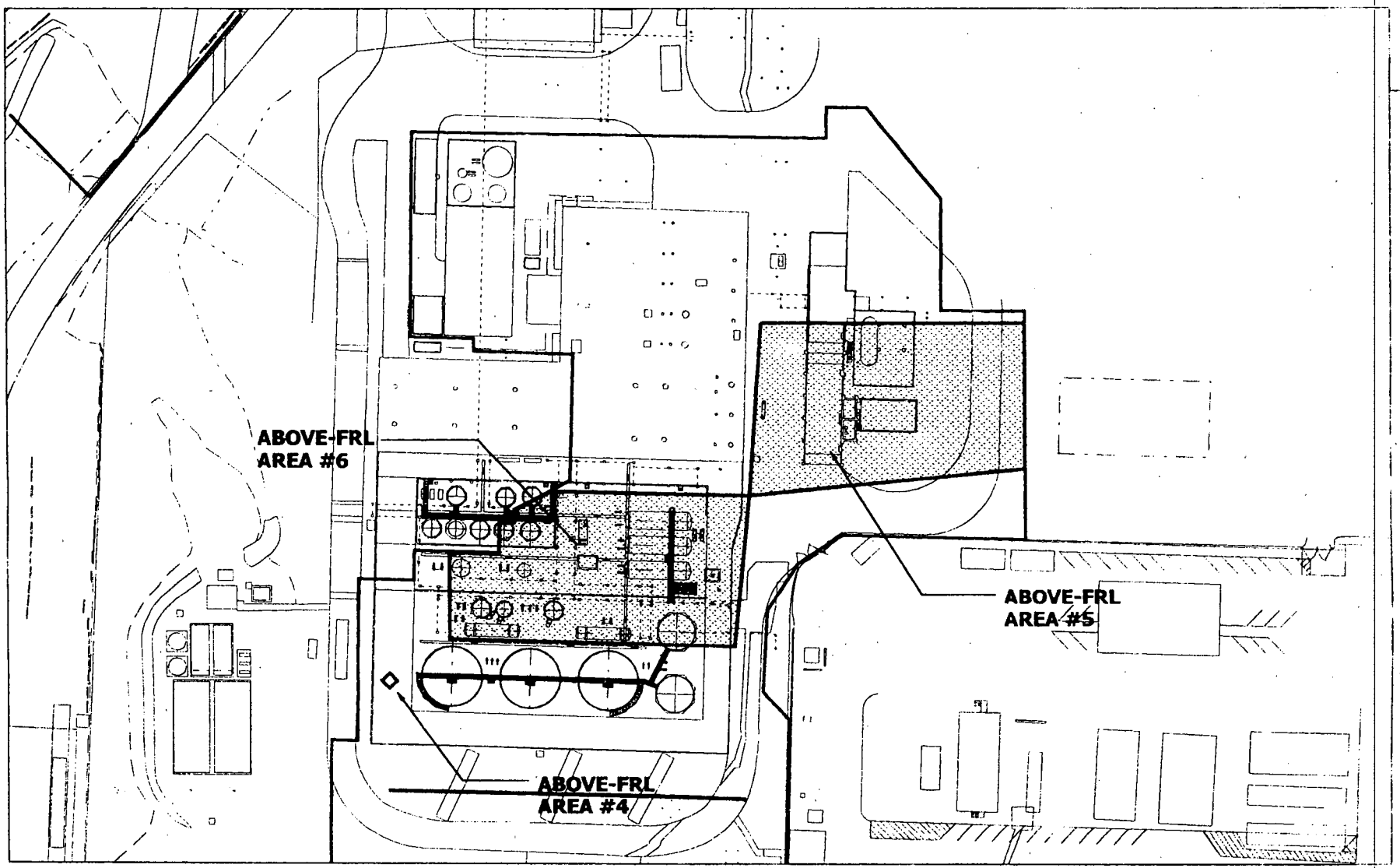

LEGEND:

SCALE

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STATE PLANAR COORDINATE SYSTEM 1983

08-SEP-2003

FIGURE ~~2~~ 1. CAWWT ABOVE-FRL EXCAVATION AREAS

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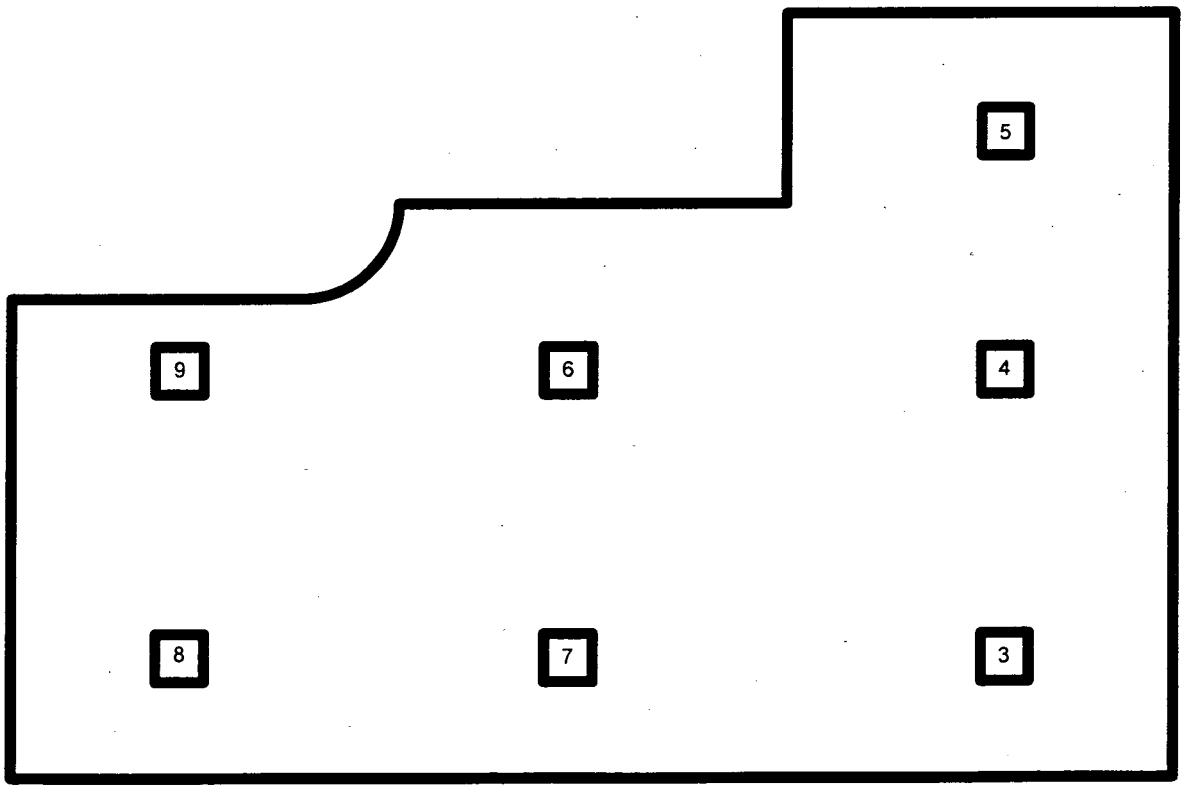
EXCAVATION CONTROL OF AREA 7 SUPPORT AND SILOS PROCESS

20500-PSP-0010

VARIANCE 02

SAMPLED 09-22-05



VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-3
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		Page: 1 of 4 006201
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		Date: 9/27/05

VARIANCE / FIELD CHANGE NOTICE (Include justification):

EXCAVATION CONTROL SAMPLING

This Variance/Field Change Notice (V/FCN) documents the collection of grab soil samples from the area south of the CAWWT facility. At each boring location, two samples are to be collected - one sample will be analyzed for the primary rads (TAL D), technetium-99 (TAL A), and beryllium (TAL B); the other sample will be analyzed for aroclor-1254 and aroclor-1260 (TAL E). The Sampling and Analytical Requirements and TALs are shown on Attachment 1. The location of the area to be sampled and all sample locations are shown in Figure 1.

The Sample Locations and Identifiers are provided on Attachment 2. The IDs for the samples collected from the first boring shall be A7E-CAWWT-PC-1^1-RM and A7E-CAWWT-PC-1^1-P, where: DAB 9/27/05 DAB 9/27/05

A7E = Area 7 Excavation Control/Precertification
CAWWT = Area South of CAWWT
PC = Precertification
1, 2, etc. = Consecutive Sample Numbers (Locations)
RM = radiological and metals analysis
P = PCB analysis
D = Duplicate Sample DAB 9/27/05
Historical data for shipping is 9.0 mg/kg total uranium from boring A7E-CAWWT-SF-5.

Surveying required: Yes, by surveying group
Field QC samples required: Yes
Field data validation: Yes
Analytical data validation: Yes
Off-site data package requirements (if applicable): ASL D

Justification:
Additional soil from this area is required to be excavated in order to construct the CAWWT Backwash Facility. Once all contaminated material has been remediated from this footprint, samples will be collected to confirm that no additional remediation is necessary. Therefore, this area will undergo Precertification activities including physical sampling. This is similar to the approach used in the Area 5 Administration Complex remediation.

REQUESTED BY: Debbie Brennan Date: 9/27/05

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: R. Friske	9-28-05	X	PROJECT MANAGER: D. Chaffey	9/27/05
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: F. Miller	9/27/05
X	ANALYTICAL CUSTOMER SUPPORT: Paul J. McGregor	9/27/05		RTIMP Manager	
X	WAO Linda Barlow	9/27/05	X	SAMPLING MANAGER: T. Burbage	9/27/05

VARIANCE/FCN APPROVED [X]YES [ ]NO REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

ATTACHMENT 1

SAMPLING AND ANALYTICAL REQUIREMENTS

Analyte	Sample Matrix	Lab	ASL	TAT	Preservative	Holding Time	Container	Sample Volume/Mass
TAL ABD (rads/metals)	Solid	Offsite	B	30 days	Cool 4 deg C	12 months 6 months	Appropriate Plastic or Glass	500 g
TAL E (PCBs)	Solid	Offsite	B	30 days	Cool 4 deg C	14 days	Appropriate Glass w/ Teflon lid	100 g

TAL 20500-PSP-0009-A

Component	MDL
Technetium-99	2.91 pCi/g

TAL 20500-PSP-0009-B

Component	MDL
Beryllium	0.15 mg/kg

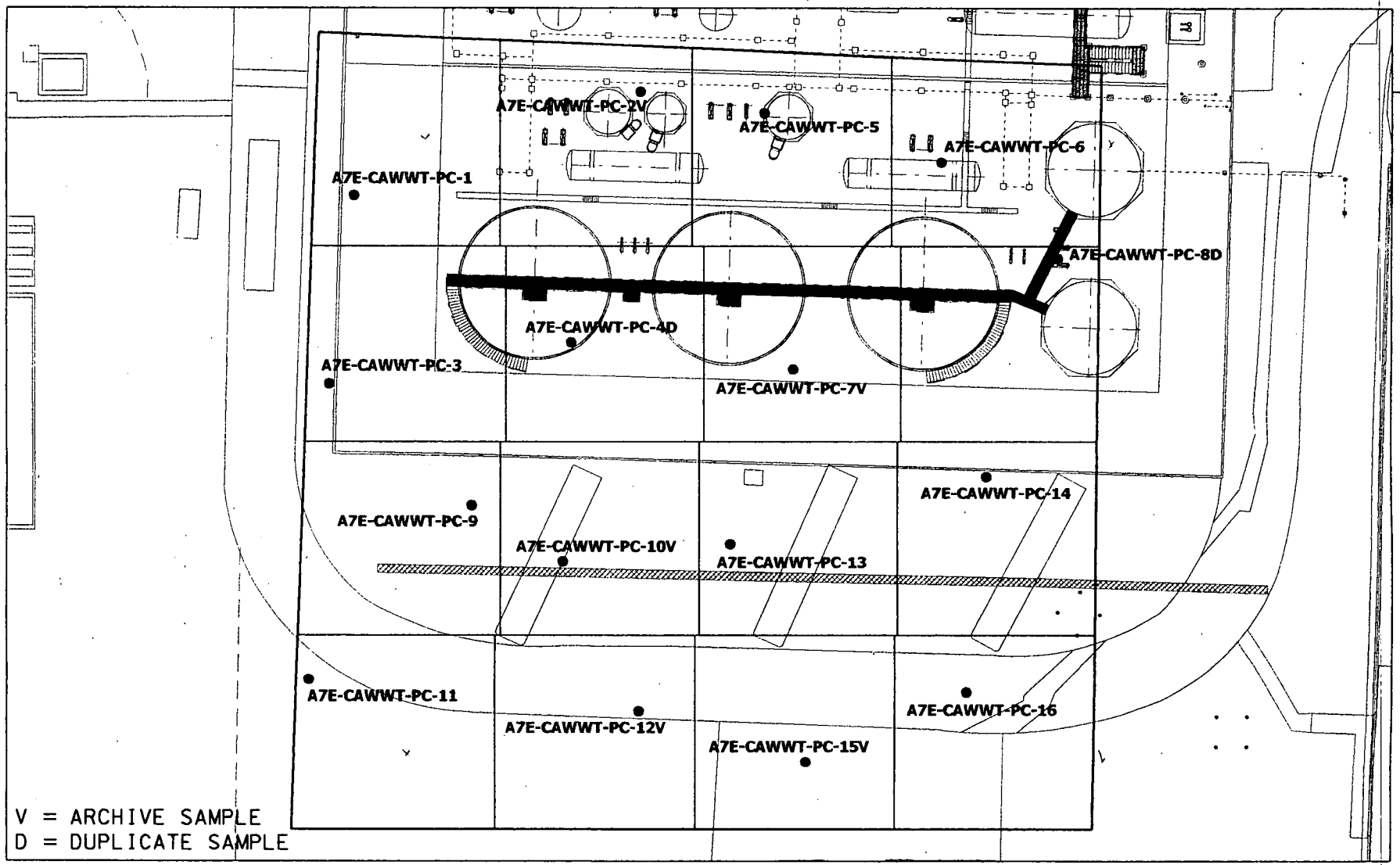
TAL 20500-PSP-0009-D

Component	MDL
Total Uranium	8.2 mg/kg
Radium-226	0.17 pCi/g
Radium-228	0.18 pCi/g
Thorium-228	0.17 pCi/g
Thorium-232	0.15 pCi/g

TAL 20500-PSP-0009-E

Component	MDL
Aroclor-1254	0.013 mg/kg
Aroclor-1260	0.013 mg/kg

SAMPLE LOCATIONS AND IDENTIFIERS				
Boring	Sample ID	Analysis (TAL)	Northing	Easting
A7E-CAWWT-PC-1	A7E-CAWWT-PC-1^RM	ABD	479443.39	1348041.4
	A7E-CAWWT-PC-1^P	E		
A7E-CAWWT-PC-2V	A7E-CAWWT-PC-2^RM	archive	479471.07	1348118.19
	A7E-CAWWT-PC-2^P			
A7E-CAWWT-PC-3	A7E-CAWWT-PC-3^RM	ABD	479393.23	1348034.8
	A7E-CAWWT-PC-3^P	E		
A7E-CAWWT-PC-4D	A7E-CAWWT-PC-4^RM	ABD	479404.38	1348099.58
	A7E-CAWWT-PC-4^P	E		
	A7E-CAWWT-PC-4^RM-D	ABD		
	A7E-CAWWT-PC-4^P-D	E		
A7E-CAWWT-PC-5	A7E-CAWWT-PC-5^RM	ABD	479465.45	1348151.33
	A7E-CAWWT-PC-5^P	E		
A7E-CAWWT-PC-6	A7E-CAWWT-PC-6^RM	ABD	479452.23	1348198.96
	A7E-CAWWT-PC-6^P	E		
A7E-CAWWT-PC-7V	A7E-CAWWT-PC-7^RM	archive	479397.08	1348159
	A7E-CAWWT-PC-7^P			
A7E-CAWWT-PC-8	A7E-CAWWT-PC-8^RM	ABD	479426.57	1348230.1
	A7E-CAWWT-PC-8^P	E		
A7E-CAWWT-PC-9	A7E-CAWWT-PC-9^RM	ABD	479360.82	1348072.92
	A7E-CAWWT-PC-9^P	E		
A7E-CAWWT-PC-10V	A7E-CAWWT-PC-10^RM	archive	479345.73	1348097.39
	A7E-CAWWT-PC-10^P			
A7E-CAWWT-PC-11	A7E-CAWWT-PC-11^RM	ABD	479314.12	1348029.45
	A7E-CAWWT-PC-11^P	E		
A7E-CAWWT-PC-12	A7E-CAWWT-PC-12^RM	ABD	479305.76	1348117.76
	A7E-CAWWT-PC-12^P	E		
A7E-CAWWT-PC-13	A7E-CAWWT-PC-13^RM	ABD	479350.28	1348142.11
	A7E-CAWWT-PC-13^P	E		
A7E-CAWWT-PC-14	A7E-CAWWT-PC-14^RM	ABD	479368.39	1348210.96
	A7E-CAWWT-PC-14^P	E		
A7E-CAWWT-PC-15V	A7E-CAWWT-PC-15^RM	archive	479292.21	1348162.34
	A7E-CAWWT-PC-15^P			
A7E-CAWWT-PC-16	A7E-CAWWT-PC-16^RM	ABD	479310.65	1348205.6
	A7E-CAWWT-PC-16^P	E		



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LEGEND:

● SAMPLE LOCATION

SCALE

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20-OCT-2005

FIGURE 1. AREA 7 - CAWWT BACKWASH BASIN FACILITY PRECERTIFICATION AREA

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): **NO**	**V/F:** 20500-PSP-0010-4
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		**Page:** 1 **of** 4
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		**Date: 10/03/05**

VARIANCE / FIELD CHANGE NOTICE (Include justification):

EXCAVATION CONTROL SAMPLING

This Variance/Field Change Notice (V/FCN) documents the collection of grab soil samples in the excavated above-FRL area #4 (for Beryllium – see figure 1 for approximate location of above-FRL area 4). This sampling will occur when all excavation has been completed.

Samples are to be collected to verify/confirm that all above-FRL material has been removed from the excavated area. The area does not exceed 10'x10'. Coordinate with the construction lead and/or the WAO representative for this sampling event. One sample will be collected every 20' on the floor of the excavation. If the floor of the excavation is less than 40' in any direction, a minimum of 2 samples at representative spacing will be collected in the direction that is less than 40'. Additionally, 1 sample every 20 linear feet along the perimeter of each 4' excavation lift will be collected at a minimum of 1 per side slope. Therefore, should the excavation parameters remain as designed, it is expected that 6 samples will be collected for Beryllium (TAL B – see Attachment 1 for TAL and Sampling and Analytical requirements). Samplers will provide an illustration of approximate sample location after collection has been completed.

The first sample Id shall be A7E-2FRL4-DG-1^M and each additional sample Id will be sequentially numbered (e.g., the second sample Id is A7E-2FRL4-DG-2^M). Where:

A7E = Area 7 Excavation Control
2FRL4 = Above-FRL Area #4 from the second Area 7 Excavation Control PSP
DG = Design Grade
1, 2, etc. = Consecutive Sample Numbers (Locations)
M = Metals analysis

Historical data for shipping is 13.9 mg/kg total uranium from boring A7P3-AWWT12.

Surveying required: Yes, field location with follow-up by surveying group
Field QC samples required: No
Field data validation: Yes
Analytical data validation: No
Off-site data package requirements (if applicable): ASL B

RK

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-4
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		**Page:** 2 **of** 4
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		**Date: 10/03/05**

Justification:

Physical sampling is required to ensure all above-FRL Beryllium contamination has been removed during excavation. Additionally, due to the analyte being non-radiological, real-time scanning could not be performed in this area for this analyte. Therefore, physical samples for Beryllium will be collected. Per Section 1.3 of the PSP, the collection of physical samples will be documented with a V/FCN.

REQUESTED BY: Debbie Brennan Date: 10/03/05

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: R. Friske	10/12/05	X	PROJECT MANAGER: J.F. Chen	10/6/05
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: F. Miller	10/5/05
X	ANALYTICAL CUSTOMER SUPPORT:	10/17/05		RTIMP Manager	
X	WAO	10/5/05	X	SAMPLING MANAGER: T. Buhrlage	10/6/05

VARIANCE/FCN APPROVED [X]YES [ ]NO

REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

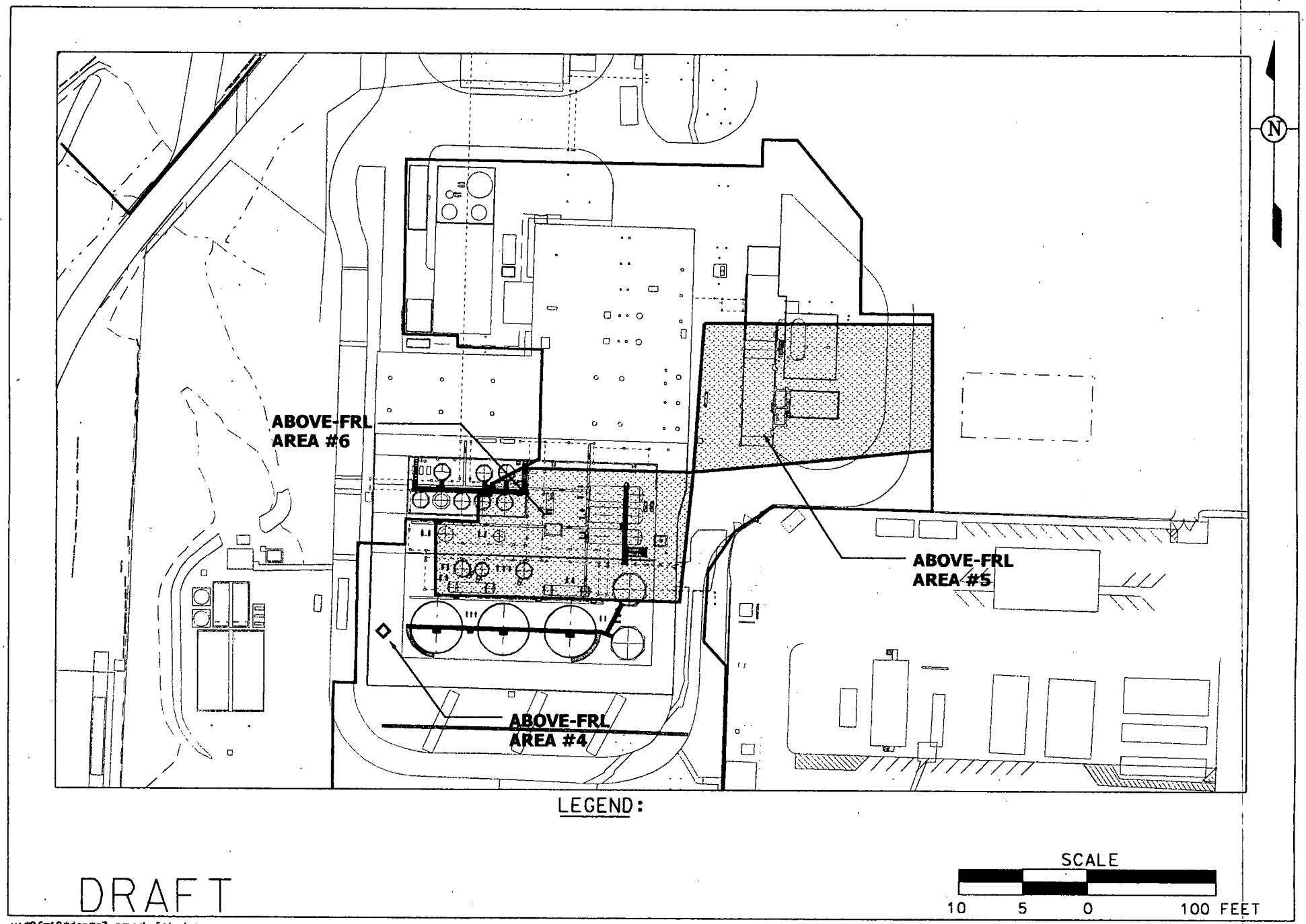
ATTACHMENT 1

SAMPLING AND ANALYTICAL REQUIREMENTS

Analyte	Sample Matrix	Lab	ASL	TAT	Preservative	Holding Time	Container	Sample Volume/Mass
TAL B (metals)	Solid	Offsite	B	3 days	Cool 4 deg C	6 months	Appropriate Plastic or Glass	50 g

TAL 20500-PSP-0009-B

Component	MDL
Beryllium	0.15 mg/kg



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STATE PLANAR COORDINATE SYSTEM 1983

05-OCT-2005

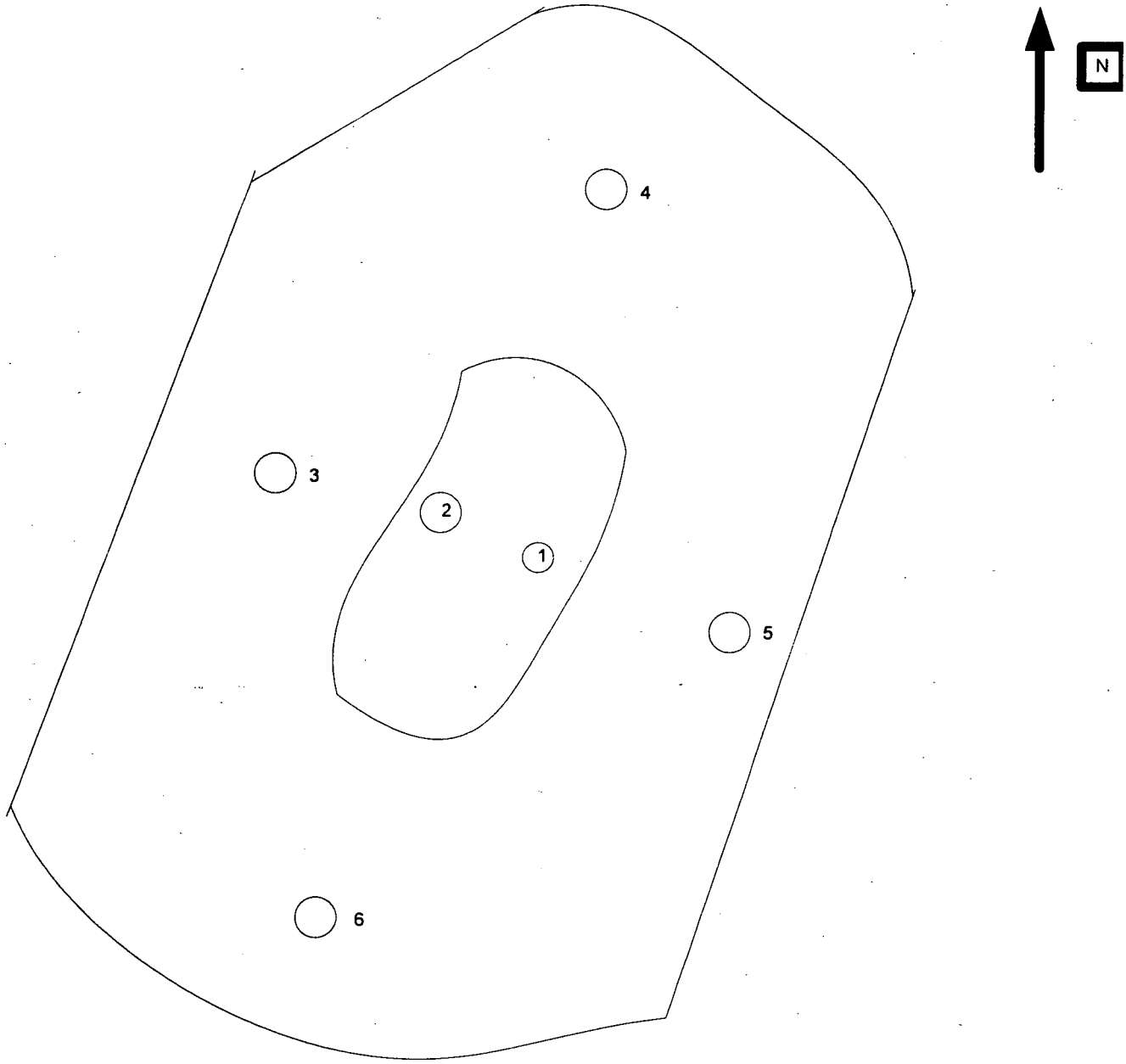
FIGURE 1. CAWWT ABOVE-FRL EXCAVATION AREAS

AREA 7 SUPPORT AND SILOS PROCESS AREA
EXCAVATION CONTROL AND PRECERTIFICATION SOUTH OF CAWWT

006201

20500-PSP-0010 VARIANCE 04

SAMPLED 10-06-05



VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-5
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		Page: 1 of 3 006201
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		Date: 10/11/05

VARIANCE / FIELD CHANGE NOTICE (Include justification):

EXCAVATION CONTROL SAMPLING

This Variance/Field Change Notice (V/FCN) documents the collection of grab samples from the area southeast of CAWWT for Real-Time Replacement. The top 6-inches of soil is to be sampled for Total Uranium (TAL C). Coordinate with the Construction Lead and/or WAO Representative for this sampling event.

The area to be sampled is approximately 30' x 150'. The floor will be divided into a grid where each block measures approximately 100' x 100'. One location will be sampled for each block. Additionally, one sample every 100 linear feet along the sidewalls of the excavation will be collected at a minimum of 1 sample per sidewall. The sidewalls will be sampled in the 0-4' interval as measured from the floor. Approximately 8 samples will be collected.

The Sampling and Analytical Requirements and TALs are shown on Attachment 1.

For the real-time replacement samples, the first sample ID will be A7E-CAWWT-L1-1^RTL and each additional sample ID will be sequentially numbered (e.g. second sample ID is A7E-CAWWT-L1-2^RTL).

Where:

A7E = Area 7 Excavation Control
CAWWT = Converted AWWT Facility
L1 = Lift 1 Scan
1, 2 = Consecutive Sample Numbers (Locations)
RTL = Real-Time Replacement for total uranium

Surveying required: Yes by samplers
Field QC samples required: No
Field validation required: Yes
Analytical data validation required: No
Data package required: ASL B

Historical data for this area is 574 mg/kg total uranium at boring P34-1.

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-5
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		Page: 2 of 3
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		Date: 10/11/05

Justification:

Due to existing field conditions, real-time scanning could not be performed in this area. Therefore, physical samples for total uranium analysis will be collected. Physical samples will be collected in lieu of real-time scans to represent the lift scan for this area. Per Section 1.3 of the PSP, the collection of physical sample will be documented with a V/FCN.

REQUESTED BY: Debbie Brennan Date: 10/11/05

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: R. Fiske	10/12/05	X	PROJECT MANAGER: J.D. Chou	10/14/05
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: F. Miller	10/11/05
X	ANALYTICAL CUSTOMER SUPPORT:	10/17/05		RTIMP Manager	
X	WAO	10/12/05	X	SAMPLING MANAGER: T. Buhrlage	10/17/05

VARIANCE/FCN APPROVED [X]YES [ ]NO REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

ATTACHMENT 1

SAMPLING AND ANALYTICAL REQUIREMENTS

Analyte	Lab	Sample Matrix	TAT	Preservative	Holding Time	Container	Minimum Sample Mass
TAL C	Offsite	Soil	24 hr	None	12 months	Plastic or glass or stainless steel push tube	50 g

TAL 20500-PSP-0010-C
Soil Analysis (ASL B)

Analyte	FRL	MDL - Soil
Total Uranium	20 mg/kg	8.2 mg/kg

006101

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): NO	V/F: 20500-PSP-0010-6
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		Page: 1 of 3
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		Date: 10/28/05

VARIANCE / FIELD CHANGE NOTICE (Include justification):

EXCAVATION CONTROL SAMPLING

This Variance/Field Change Notice (V/FCN) documents the collection of grab samples from a pile on the east side of CAWWT for Real-Time Replacement. The pile is adjacent to an excavation measuring approximately 120' x 20'. The surface of soil is to be sampled for Total Uranium (TAL C). Coordinate with the Construction Lead and/or WAO Representative for the location of this pile.

The area to be sampled (the pile) is to be quartered with one sample being taken from each of the 4 quadrants. The sampling locations should be of representative spacing for each area and the sample collection method(s) will be based on the team lead's professional judgement.

The Sampling and Analytical Requirements and TALs are shown on Attachment 1.

For the real-time replacement samples, the first sample ID will be A7E-CAWWT-EP-1^RTL and each additional sample ID will be sequentially numbered (e.g. second sample ID is A7E-CAWWT-EP-2^RTL).

Where:

A7E = Area 7 Excavation Control
CAWWT = Converted AWWT Facility
EP = Pile to the East of the CAWWT
1, 2 = Consecutive Sample Numbers (Locations)
RTL = Real-Time Replacement for total uranium

Surveying required: No surveying is needed for these locations
Field QC samples required: No
Field validation required: Yes
Analytical data validation required: No
Data package required: ASL B

Historical data for this area is 180 mg/kg total uranium at boring A7-SA2-32.

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): **NO**	**V/F:** 20500-PSP-0010-6
WBS NO.: PROJECT/DOCUMENT/ECDC # 20500-PSP-0010 Rev.A		**Page:** 2 **of 3**
PROJECT TITLE: PSP for the Excavation Control of Area 7 Support and Silos Process Area		**Date: 10/28/05**

Justification:

Due to existing field conditions, real-time scanning could not be performed in this area. Therefore, physical samples for total uranium analysis will be collected. Physical samples will be collected in lieu of real-time scans to represent the lift scan for this area. Per Section 1.3 of the PSP, the collection of physical sample will be documented with a V/FCN.

REQUESTED BY: Debbie Brennan Date: 10/28/05

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: R. Friske	11/1/05	X	PROJECT MANAGER: J.D. Chiou	10/28/05
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: F. Miller	10/28/05
X	ANALYTICAL CUSTOMER SUPPORT:	11-1-05		RTIMP Manager	
X	WAO	11-8-05	X	SAMPLING MANAGER: T. Buhrlage for T.E.B.	10/28/05

VARIANCE/FCN APPROVED [X]YES [ ]NO REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

ATTACHMENT 1

SAMPLING AND ANALYTICAL REQUIREMENTS

Analyte	Lab	Sample Matrix	TAT	Preservative	Holding Time	Container	Minimum Sample Mass
TAL C	Offsite	Soil	24 hr	None	12 months	Plastic or glass or stainless steel push tube	50 g

TAL 20500-PSP-0010-C
Soil Analysis (ASL B)

Analyte	FRL	MDL - Soil
Total Uranium	20 mg/kg	8.2 mg/kg

006201

EXCAVATION PLAN FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

FERNALD CLOSURE PROJECT
FERNALD, OHIO

MARCH 2006

U.S. DEPARTMENT OF ENERGY

20500-PL-0003
REVISION 0
FINAL

006201

EXCAVATION PLAN FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

FERNALD CLOSURE PROJECT

FERNALD, OHIO

MARCH 2006

U.S. DEPARTMENT OF ENERGY

20500-PL-0003
REVISION 0
FINAL

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Figure 2-5 Silos Support Area Predesign Boring Locations
Figure 2-6 CAWWT and Silo Truck Staging Areas Predesign Boring Locations
Figure 2-7 Area North of the SWRBs, Security Check Point Area and the South Access Road Predesign Boring Locations
Figure 2-8 Silos Support Area Above-WAC/Above-FRL Excavation Areas
Figure 2-9 CAWWT Above-FRL Excavation Areas
Figure 3-1 NPDES Permitted Stormwater Outfall STRM 4005 Location

LIST OF ACRONYMS AND ABBREVIATIONS

ALARA	As Low As Reasonably Achievable
ASCOC	area-specific constituent of concern
AWR	Accelerated Waste Retrieval
AWWT	Advanced Waste Water Treatment (Facility)
CAWWT	Converted Advanced Waste Water Treatment (Facility)
CDL	Certification Design Letter
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFC	Certified for Construction
CFR	Code of Federal Regulations
COC	constituent of concern
CT	Construction Traveler
D&D	Decontamination and Dismantlement
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FEMP	Fernald Environmental Closure Project
FCP	Fernald Closure Project
FRL	final remediation level
GMA	Great Miami Aquifer
gpm	gallons per minutes
HDPE	high density polyethylene
HPGe	high-purity germanium (detector)
HWMU	hazardous waste management unit
IRDP	Integrated Remedial Design Package
mg/kg	milligrams per kilogram
NPDES	National Pollution Discharge Elimination System
NRRP	Natural Resource Restoration Plan
NRTs	Natural Resource Trustees
OEPA	Ohio Environmental Protection Agency
OSDF	On-Site Disposal Facility
OU	operable unit
pCi/g	picoCuries per gram
PPDD	Pilot Plant Drainage Ditch
PSP	Project Specific Plan
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SEP	Sitewide Excavation Plan
SMTA	Special Materials Transfer Area
SP	Soil Stockpile
SWRB	Storm Water Retention Basin
TACO	Transitional Additional Contractor Office Space

LIST OF ACRONYMS AND ABBREVIATIONS
(Continued)

UST	underground storage tank
WAC	waste acceptance criteria
WAO	Waste Acceptance Organization
yd^3	cubic yards

1.0 INTRODUCTION

This Excavation Plan addresses the U.S. Department of Energy's (DOE's) remediation of debris and impacted soil within portions of Area 7 at the Fernald Closure Project (FCP) in southwestern Ohio. To facilitate site cleanup, the FCP was re-organized into nine remediation areas (Figure 1-1) based on the operable unit (OU) concept and including off-site locations adjacent to the FCP property. Area 7 is located generally around the southern and western perimeters of the southern portions of the Former Production Area (Areas 4B and 5), and includes the K-65 Silos, OU4 operation and remediation areas and many of the site's support areas and facilities (see Figure 1-2). These support areas and facilities include the Converted Advanced Waste Water Treatment Facility (CAWWT), Storm Water Retention Basins (SWRBs), primary access roads (including the Main Access Road and Western Access Road), Silos office trailer complex areas, Transitional Additional Contractor Office Space (TACO) office trailer complex area, Security Trailer Complex, Building 82A, several paved and graveled parking lots, the former Lime Sludge Ponds footprint, and the Cement Pond (18N).

This document addresses a majority of Area 7 including the remediation of at-and below-grade structures and impacted soil in the vicinity of the South Access Road, Silos Truck Staging Area, northern portion of Building 18Q (South Plume Interim Treatment Building), 18Y (AWWT Ozone Generation Building), portions of a 60-inch Storm Sewer Line, 22C (Silos Project Truck Scale), the demolished portion of Building 51A (CAWWT Facility), Building 51B (Slurry Dewatering Facility), Building 51C (AWWT Laboratory Expansion), Building 94A (Silos Operations and Maintenance Building), Building 94B (Silos 1 and 2 Remediation Facility), Building 94C (Silos 1 and 2 Tank Transfer Area), 94D (Silos 1 and 2 Radon Control System Carbon Beds), 94E (Silos 1 and 2 Radon Control System), Building 94G (Silos 1 and 2 Electrical Building), Building 94K (Silos 1 and 2 Warehouse), Building 94L (Silos 1 and 2 Continuous Emissions Monitoring Building), Building 94G (Silos Electrical Building), Building 94R (Silos 1 and 2 High Pressure Pump/Breathing Air Utility Building), Building 94S (Small Lab Building - Silos Operations), 94T (Silos AWR Test Stand), and Building 94Y (Silos Maintenance Machine Shop) (see Figure 1-3).

The areas within Area 7 not addressed by this plan are those areas addressed in the Excavation Plan for Area 7 Silos and General Area (DOE 2005a) submitted to the agencies for review in June 2005 which include the four K-65 Silos (Silos 1, 2, 3, and 4), Cement Pond (18N), former Lime Sludge Ponds, Building 30/45 Parking Lot, Building 93A (Southwest Boiler House), Building 25K (Sewage Treatment Plant Complex), Construction Parking Lot (Southwest), 400,000 Gallon Water Storage Tank (26E), TACO office trailer complex area, 18Z (Sludge Mix Tank), portions of the West Access Road, Security Trailer Complex, Storm Water Retention Basin and associated structures, and Building 82A. Other areas also not addressed in this plan are areas required to support post-closure operations. This includes

facilities required for long-term treatment of groundwater and the infrastructure required to support that treatment [e.g., extraction wellhouses, various overhead and underground utilities, certain roadways and parking lots, and the non-demolished portion of the CAWWT (51A) and associated blow-down pond (to be constructed)].

The remediation of Area 7 Support and Silos Process Areas will be performed using a similar approach depicted in the Excavation Plan for Area 7 Silos and General Area that was submitted to the agencies for review in June 2005.

Removal of above-waste acceptance criteria (WAC) soil and debris within the areas covered by this plan is governed by the OU5 and/or OU3 Records of Decision (RODs) (DOE 1996a and 1996b) and is therefore addressed in this plan. Above-WAC areas are bounded both vertically and laterally by either physical sampling or real time scanning. There are only two known above-WAC areas within the Area 7 Support and Silos Process Areas jurisdiction (see Section 2 for details): the remaining portion of the K-65 Trench and a small area north of both Building 94B (Silos 1 and 2 Remediation Facility) and the K-65 Trench. Above-WAC areas may be discovered during remedial excavation and will be bounded in accordance with the Project Specific Plan (PSP) for the Excavation Control and Precertification of Area 7 Support and Silos Process neighborhood (Supplement to 20300-PSP-0011) (DOE 2005b).

For above-final remediation level (FRL) soil areas, bounding of contaminants is governed by the OU5 ROD and is therefore addressed in this plan. Remedial activities in the Area 7 Support and Silos Process Areas will take place in accordance with the OU5 ROD, which addresses remediation of soil, sediment and environmental media.

Impacted soil excavations have been bound by discrete sampling. The lateral bounding of the excavation immediately east of the demolished portion of the original Advanced Waste Water Treatment (AWWT) Facility has not been completed.

This laterally unbounded area is discussed further in Section 2.3.2.

This Excavation Plan and the Sitewide Excavation Plan (SEP, DOE 1998a) satisfy the Amended Consent Agreement [U.S. Environmental Protection Agency (EPA) 1991] requirement for a remedial action (RA) work plan. In addition, this Excavation Plan and the associated remedial design (RD) construction drawings and technical specifications constitute the Integrated Remedial Design Package (IRDP), as outlined in the Remedial Design Work Plan for Remedial Actions at OU5 (DOE 1996c). As the integrating document for the IRDP, this Excavation Plan is issued for regulatory agency review of the RD and summarizes the RA scope of work. RAs described in this plan are being conducted in accordance

with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and corrective action requirements of the Resource Conservation and Recovery Act (RCRA). The Excavation Plan conforms to the general model outline for IRDPs provided in Section 7.0 of the SEP.

The remediation of Area 7 Support and Silos Process Areas is scheduled for execution starting in September 2005. Portions of this remediation cannot be completed until after OU4 operations and the subsequent decontamination and dismantlement (D&D) of OU4 structures has occurred; however, the bulk of impacted material will be excavated by October 2005. The OSDF is scheduled for closure at the end of October 2005. Any impacted material generated after the OSDF has been closed will be shipped by truck or rail for off-site disposal to a DOE or privately owned disposal facility licensed to receive low-level radioactive waste.

Section 1.0 of this Excavation Plan describes the scope of work for the Area 7 Support and Silos Process Areas, including the remedial background and description, scope and general approach of the Excavation Plan, and programmatic strategy.

1.1 EXCLUSIONS

This document is being submitted to govern a specific area within Remedial Area 7 and does not address the remediation of Area 7 as a whole. As such, the Area 7 components for the Western Access Road, K-65 Silos, SWRBs, TACO office trailer complex area, Security Trailer Complex, Building 82A, the former Lime Sludge Ponds footprint, and the Cement Pond (18N) (see Figure 1-4) are excluded from this document.

The remediation of the above-grade structures associated with Building 51A (CAWWT), Building 51B (Slurry Dewatering Facility), and Building 51C (AWWT Laboratory Expansion) is not addressed in this Excavation Plan [see Advanced Waste Water Treatment Facility (AWWT) for Above-Grade Decontamination and Dismantlement (DOE 2005c) for above-grade remediation scope]. The above-grade remediation of a portion of Building 18Q (South Plume Interim Treatment Building), and Building 18Y (AWWT Ozone Generation Building) is not addressed in this Excavation Plan [see Miscellaneous Small Structures (Phase II) Implementation Plan for Above-Grade Decontamination and Dismantlement (DOE 2003)]. Likewise, above-grade remediation of Building 94A (Silos Operations and Maintenance Building), Building 94B (Silos 1 and 2 Remediation Facility), Building 94C (Silos 1 and 2 Tank Transfer Area), 94D (Silos 1 and 2 Radon Control System Carbon Beds), 94E (Silos 1 and 2 Radon Control System), Building 94G (Silos 1 and 2 Electrical Building), Building 94K (Silos 1 and 2 Warehouse), Building 94L (Silos 1 and 2 Continuous Emissions Monitoring Building), Building 94G (Silos Electrical Building), Building 94R (Silos 1 and 2 High Pressure Pump/Breathing Air Utility

Building), Building 94S (Small Lab Building - Silos Operations), 94T (Silos AWR Test Stand), and Building 94Y (Silos Maintenance Machine Shop) is not addressed in this Excavation Plan.

1.2 REMEDIATION AREA DESCRIPTION

The Area 7 Support and Silos Process Areas are approximately 56 acres and include the South Access Road, Silos Truck Staging Area, northern portion of Building 18Q (South Plume Interim Treatment Building), Building 18Y (AWWT Ozone Generation Building), portions of a 60-inch Storm Sewer Line, 22C (Silos Project Truck Scale), portions of Building 51A (CAWWT Facility), Building 51B (Slurry Dewatering Facility), Building 51C (AWWT Laboratory Expansion), Building 94A (Silos Operations and Maintenance Building), Building 94B (Silos 1 and 2 Remediation Facility), Building 94C (Silos 1 and 2 Tank Transfer Area), 94D (Silos 1 and 2 Radon Control System Carbon Beds), 94E (Silos 1 and 2 Radon Control System), Building 94G (Silos 1 and 2 Electrical Building), Building 94K (Silos 1 and 2 Warehouse), Building 94L (Silos 1 and 2 Continuous Emissions Monitoring Building), Building 94G (Silos Electrical Building), Building 94R (Silos 1 and 2 High Pressure Pump/Breathing Air Utility Building), Building 94S (Small Lab Building - Silos Operations), 94T (Silos AWR Test Stand), and Building 94Y (Silos Maintenance Machine Shop).

1.3 SCOPE AND GENERAL APPROACH OF THE EXCAVATION PLAN

The Area 7 Support and Silos Process Areas Excavation Plan consists of the following sections:

- Section 1.0 - Introduction, which summarizes the purpose and scope of this Excavation Plan and describes programmatic strategies and requirements for this remedial action project.

- Section 2.0 - Predesign Investigations and Characterization Data for the Area 7 Support and Silos Process Areas, which describes the constituents of concern (COCs) for the Area 7 Support and Silos Process Areas, the subsurface conditions, the nature and extent of contamination, and the anticipated excavation boundaries based on Remedial Investigation/Feasibility Study (RI/FS) data and other data collected to fill data gaps.

- Section 3.0 - Remedial Action Approach, which presents the work associated with site preparation, and presents the strategy for above-WAC and general excavation to remove contaminated soil, real-time monitoring of the excavation surface, management of waste streams in accordance with final disposition requirements, management of surface and perched water in the excavation, and documentation that the soil in the area meets the FRLs for all COCs.

- Appendix A - Characterization Data for the Area 7 Support and Silos Process Areas, which tabulates predesign characterization data used to develop the remedial strategy.

- Appendix B - Real-Time Map for Area 7 Support and Silos Process Areas

- Appendix C - List of Drawings issued with this Excavation Plan and Specifications applicable to the remedial action governed by this Excavation Plan.

The area-specific RD/RA process at the FCP is illustrated on Figure 1-1 of the SEP and involves the following steps:

- Predesign investigations
- Remedial design
- Remedial action
- Precertification of excavated areas
- Certification of excavated areas
- Post-remedial action.

1.4 PROGRAMMATIC STRATEGY

This Excavation Plan includes the first of four steps of the programmatic strategy.

Specific performance requirements to accomplish the scope of work presented in this plan are provided in the technical specifications, and the Construction Traveler (CT). The CT will be reviewed and approved by the DOE and Fluor Fernald.

1.4.1 Predesign Investigation

Predesign activities began in the Area 7 Support and Silos Process Areas in December 2004. These predesign investigations were conducted to supplement RI/FS information on the nature and extent of contamination in Area 7. These predesign investigations were performed, in general, to identify the extent of soil exceeding the various action levels (i.e., RCRA, WAC, FRL). The specific goals of these predesign sampling investigations included filling data gaps, confirming questionable analytical results, bounding above-WAC or above-FRL areas, and investigating potentially characteristic areas. Section 2.3 addresses the PSPs used to predesign the area addressed in this IRDP.

1.4.2 Remedial Design

The RD began in July 2005 with Title I/II design and will continue through completion of the certified-for-construction (CFC) package. The drawings submitted with this Excavation Plan build upon the Area 3B/4B/5 and Area 6 Former Production Area construction designs. The specifications noted also build upon the same construction design, but have not been submitted with this plan as they have already been previously approved.

The design-grade for excavation is depicted on the construction drawings and is based on:

- RI/FS data on the nature of COC concentrations in soil and perched groundwater
- Data collected during predesign investigations to delineate the extent of contamination for above-WAC, RCRA, and below-WAC zones
- Excavation required to control surface water.

1.4.3 Remedial Action

The RA for the Area 7 Support and Silos Process Areas will be performed in accordance with Section 3.0 and is scheduled to begin in September 2005.

The extent of excavation will be based on actual field conditions (e.g., previously unidentified debris), radiological field survey measurements (i.e., real-time surveys), and physical sampling results. In particular, real-time surveys will be used to minimize the excavation volume of above-WAC uranium contamination (Section 3.3) and to evaluate potential reduction of the below-FRL soil volume that is hauled to the On-Site Disposal Facility (OSDF).

Impacted material is defined as soil with above-FRL contamination or man-made materials. Impacted material will be hauled to the OSDF for disposal if OSDF WAC are met. Impacted material that meets the chemical/radiological WAC, but not the physical WAC, will be size-reduced to achieve the WAC and delivered to the OSDF. Items that are prohibited from disposal in the OSDF will be containerized and shipped off site to a permitted disposal facility. The OSDF is scheduled for closure at the end of October 2005. Any impacted material generated after the OSDF has been closed will be shipped by truck or rail for off-site disposal.

Interim grading of the Area 7 Support and Silos Process Areas will be performed as necessary to maintain safe stable slopes.

1.4.4 Precertification

The precertification of the Area 7 Support and Silos Process Areas will be performed in accordance with Section 3.9.

1.4.5 Certification

As stated in the SEP, a Certification Design Letter (CDL) will be prepared and submitted to the regulatory agencies following completion of the precertification process that summarizes the area-specific remediation completed, results of the precertification activities, and design of the certification sampling and analysis program. Certification of Area 7 Support and Silos Process Areas will not be governed by this plan.

1.4.6 Post-Remedial Action

Final restoration of the Area 7 Support and Silos Process Areas will follow interim grading and be guided on a sitewide basis by the latest/final version of the Natural Resource Restoration Plan (NRRP, DOE 2002a). Area 7 Support and Silos Process Areas post-remedial actions are not addressed by this plan.

1.5 SUMMARY OF THE REGULATORY DRIVERS

The regulatory requirements, criteria and legal obligations that constitute the drivers for FCP remediation activities are presented in Section 1.3.1 of the SEP. Those regulatory drivers applicable to the Area 7 Support and Silos Process Areas remediation are summarized in this section.

1.5.1 Permits

The National Pollutant Discharge Elimination System (NPDES) permit (Permit No. 1IO0000*GD), for storm water and wastewater discharges to Paddys Run and the Great Miami River, is the permit that is applicable to Area 7 Support and Silos Process Areas remediation. Activities involved in the remediation of the Area 7 Support and Silos Process Areas are anticipated under the existing NPDES permit; therefore, no modification to the permit is required. Water collected within the excavation area will be pumped to either the remaining storm sewer system to drain to the SWRB for subsequent CAWWT treatment prior to discharge to the Great Miami River or be pumped or trucked to the yet to be constructed CAWWT Backwash Basin once the SWRB is taken out of service. Note: the SWRB cannot be taken out of service until the CAWWT Backwash Basin has been constructed and is operational.

1.5.2 Natural Resource Trusteeship and Related Natural and Cultural Resource Regulations

Two mechanisms drive protection of natural resources during remediation: the Natural Resource Trusteeship process and compliance with pertinent federal and state regulations. Both of these mechanisms have been incorporated into Area 7 Support and Silos Process Areas remedial strategy.

Conceptual restoration designs for the Area 7 Support and Silos Process Areas have been presented to the Trustee Council as part of the NRRP. The proposed restoration, which consists of expanded prairie and wetland habitat, will be implemented after approval of the area specific Natural Resource Restoration Design Plan has been reviewed and approved by the Natural Resource Trustees (NRTs). Implementation of restoration activities will occur as close to the completion of required remediation activities as possible. Regulatory drivers for the management of natural and cultural resources and associated surveys are grouped into three areas: threatened and endangered species protection, wetlands/floodplain protection, and the resolution of DOE's liability for injuries to natural resources.

1.5.2.1 Threatened and Endangered Species

Based on updated FCP property surveys conducted in 1993 through 1994, DOE does not expect to encounter any federal- or state-listed threatened or endangered species or critical habitat in the areas to be addressed by the remediation of Area 7 Support and Silos Process Areas. Therefore, no additional threatened or endangered species surveys are planned for the area.

1.5.2.2 Wetlands/Floodplains

The 1993 sitewide wetland delineation identified approximately 36 acres of jurisdictional wetlands and 8.9 acres of waters of the United States within the 1,050-acre property. The 1993 Wetland Delineation was approved by the U.S. Army Corps of Engineers, Louisville District Office, in August 1993. Since the 1993 delineation, DOE has identified an additional 2.27 acres of wetlands that have been formed as the result of construction activities at the FCP. Although DOE plans to avoid or minimize impacts to these areas to the maximum extent practicable during remediation, approximately 11.87 acres of wetlands have been impacted or are planned to be impacted requiring mitigation. These planned impacts will occur as a result of CERCLA remediation activities and have been identified in the appropriate OU RODs. Because dredge and/or fill activities will be carried out under CERCLA, notification to the U.S. Army Corps of Engineers is not required and EPA is the lead agency regarding wetland mitigation. On June 20, 1995, DOE met with representatives from EPA, Ohio Environmental Protection Agency (OEPA), U.S. Fish and Wildlife Service and the Ohio Department of Natural Resources and determined that mitigation would occur on-property to the extent possible and a mitigation ratio of 1:1.5 would apply to wetlands impacted at the FCP.

The NRRP includes DOE plans for conducting wetland mitigation activities at the FCP. The NRRP currently includes plans to conduct two wetland mitigation projects to create the required 17.8 acres of new wetlands. Any additional wetland mitigation required from unanticipated impacts to wetland will be addressed through implementing the NRRP. Dredge and/or fill activities will be subject to the substantive requirements of Sections 404 and 401 of the Clean Water Act. A permit information summary will be prepared for any impact to wetlands at the FCP and will be submitted to the appropriate regulatory agencies.

1.5.2.3 Resolution of DOE's Liability for Injuries to Natural Resources

The NRTs are working to resolve liability that DOE faces for injuries to natural resources under CERCLA. In 1986, the State of Ohio filed a claim against DOE for injuries to natural resources. The claim has been in stay while negotiations are proceeding toward resolution. The State of Ohio has designated OEPA as their trustee representative in matters involving natural resource injuries. The Fernald NRTs have jointly developed the NRRP and have tentatively agreed that DOE, through implementation of the plan, will resolve natural resource liability at the FCP, including the 1986 State of Ohio claim. The NRTs signed a Memorandum of Understanding in July 2001 formally agreeing to implementation of the NRRP. The NRTs are currently working on a final settlement agreement.

1.5.2.4 Cultural Resource Management

The DOE, the Ohio Historic Preservation Office, and the Advisory Council on Historic Preservation have entered into a "Programmatic Agreement Regarding Archaeological Investigations at the Fernald

Environmental Management Project" dated March 6, 1997 (DOE 1997), pursuant to 36 Code of Federal Regulations (CFR) Part 800.13. Area 7 Support and Silos Process Areas was excluded from survey due to past disturbances during site construction and operation. However, any unexpected discoveries of cultural resources during project activities will be managed per the Programmatic Agreement and applicable regulations.

1.6 POST-CLOSURE DRAINAGE

In general, post closure runoff from the site will be from five basic areas and will discharge approximately as follows:

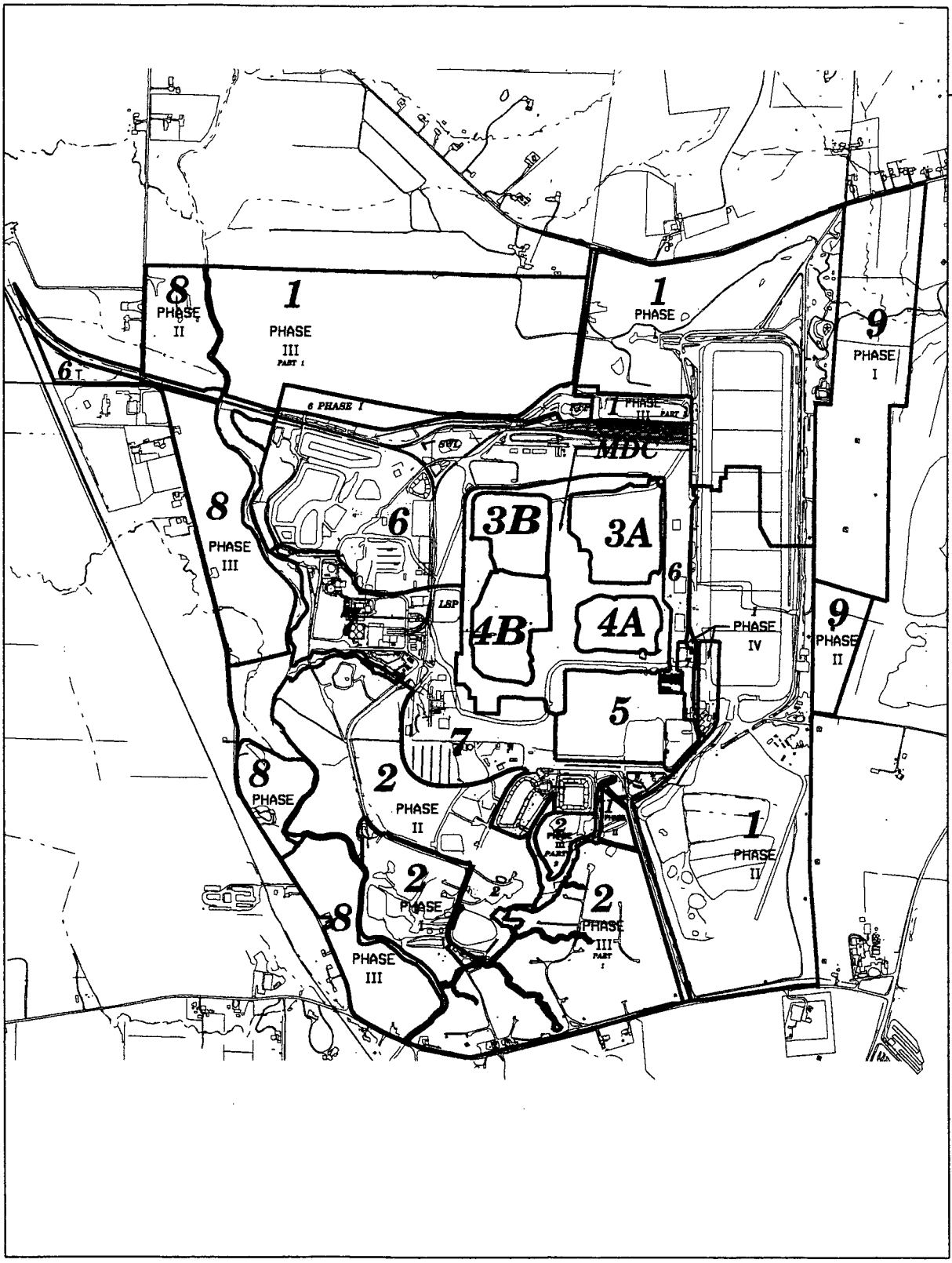
- Former Production and Administration Areas - These areas will discharge through ditches formed by the removal of the site's stormwater sewer system into the SWRB excavation where water will infiltrate directly into the Great Miami Aquifer (GMA) or overflow into the Storm Sewer Outfall Ditch for subsequent discharge into Paddys Run.

- Waste Pit Area - Surface water from this area will either infiltrate directly into the GMA or runoff through the former Cement Pond into Paddys Run.

- OSDF and OSDF Borrow Areas - Surface water collect from the above and around the OSDF and from the OSDF Borrow Area will be discharge through the either the OSDF Sediment Basins No. 1 or 2 then discharged into the Storm Sewer Outfall Ditch for subsequent discharge into Paddys Run.

- Northern Portion of the Site - Surface water collected from the northern portion of the site will drain southward into a ditch that drains to Paddys Run just upstream of the railroad trestle.

- Southern Portion of the Site - Surface water from the southern portion of the site will either infiltrate into the GMA or drain into Paddys Run. This includes areas that drain into the Storm Sewer Outfall Ditch.



LEGEND:

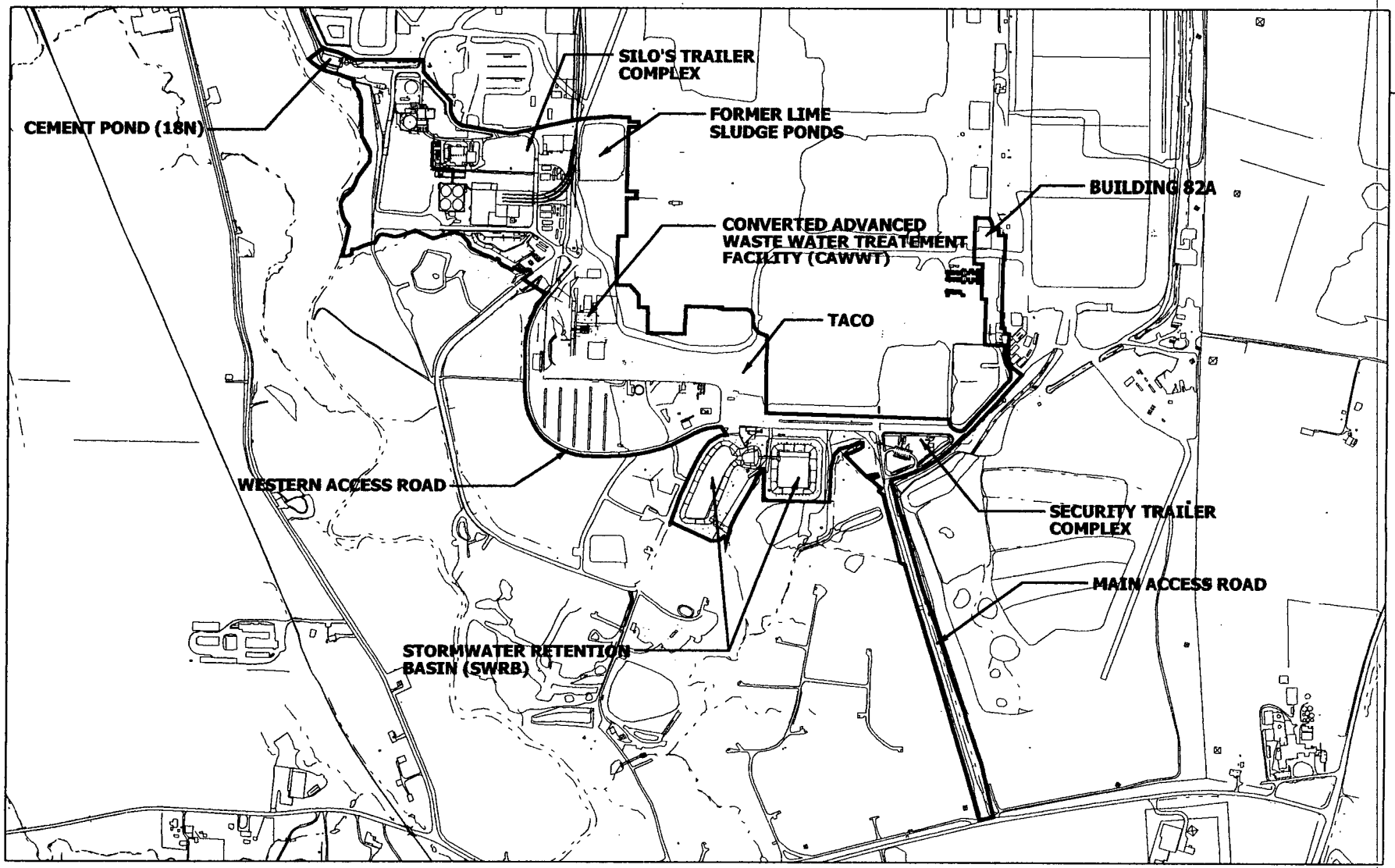
——— REMEDIATION BOUNDARIES

SCALE

1500 750 0 1500 FEET

FIGURE 1-1. GENERALIZED SITEWIDE REMEDIATION AREAS

v:\82fm12\dgn\ei7_fig_1_1.dgn
STATE PLANAR COORDINATE SYSTEM 1983
08-MAR-2006



LEGEND:

A7 BOUNDARY

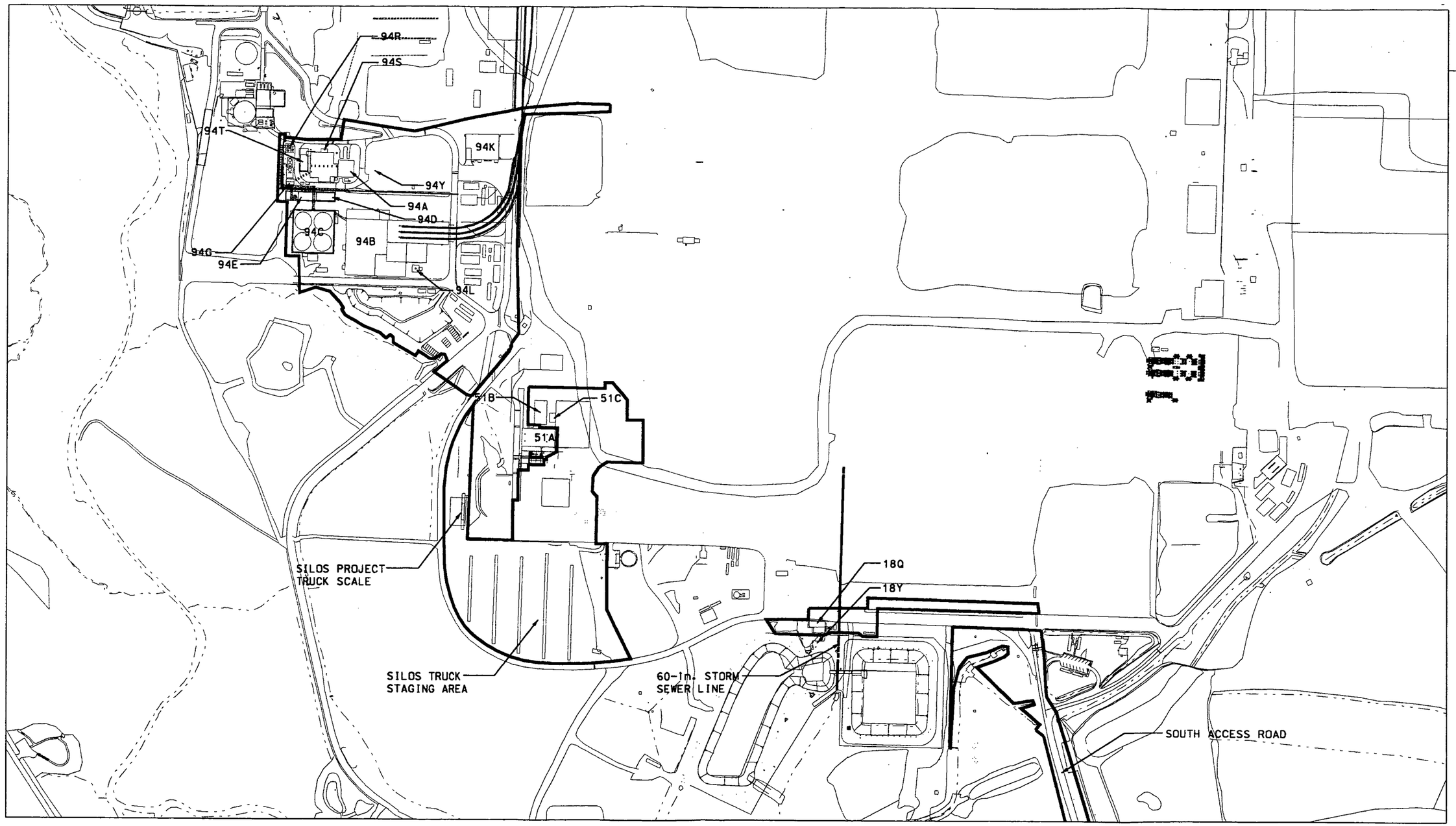
SCALE

900 450 0 900 FEET

v:\02fm12\dgn\a7_index.dgn
STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 1-2. AREA 7 REMEDIATION AREA

08-MAR-2006



LEGEND:

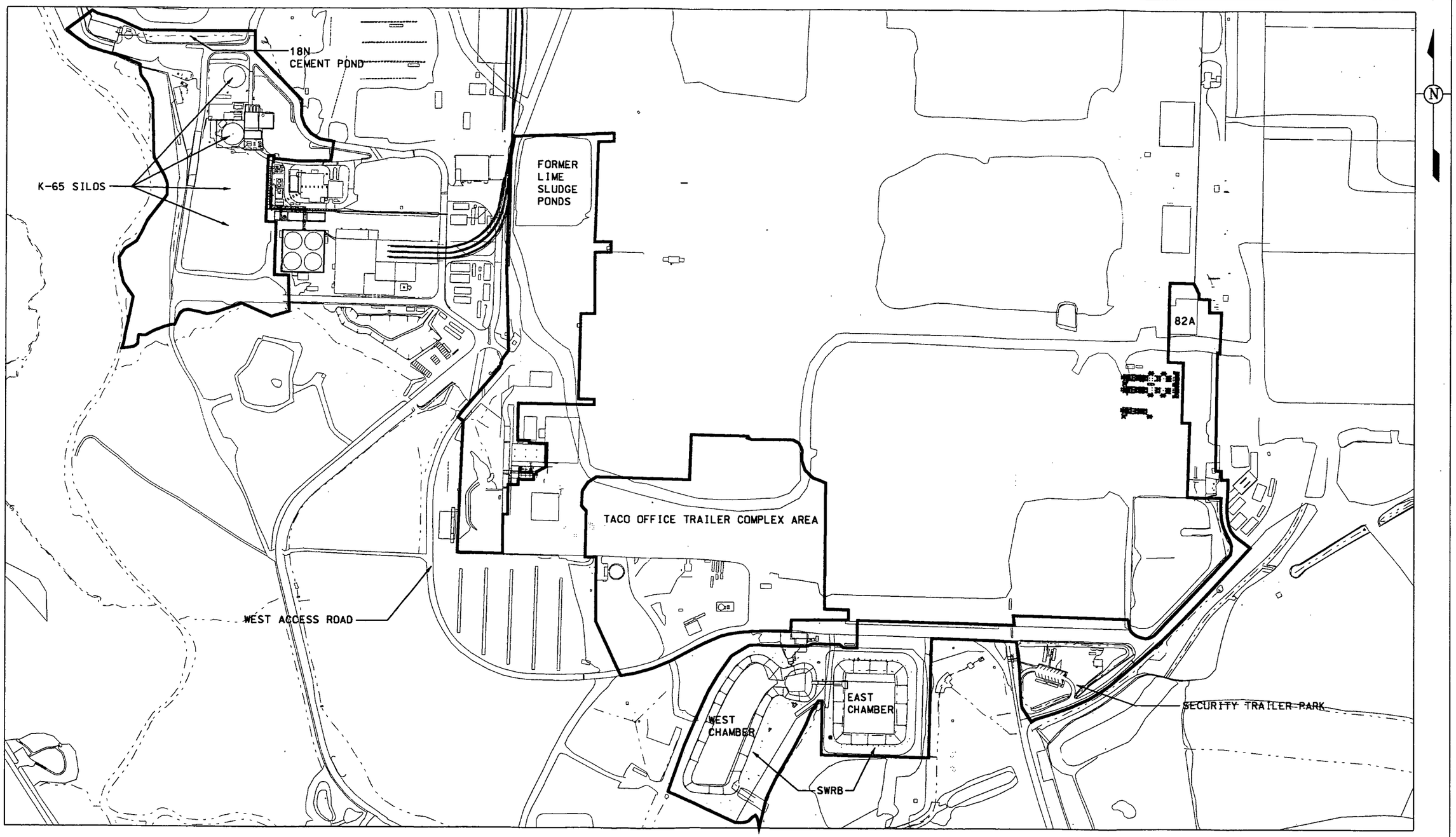
BOUNDARY OF INCLUDED COMPONENTS

SCALE

350 175 0 350 FEET

v:\2fm12\dgn\a7_index2.dgn STATE PLANAR COORDINATE SYSTEM 1983 08-MAR-2006

FIGURE 1-3. EXCAVATON PLAN INCLUDED COMPONENTS



LEGEND:

BOUNDARY OF EXCLUDED COMPONENTS

SCALE

350 175 0 350 FEET

v:\2fm12\dgn\07_exclusions.dgn STATE PLANAR COORDINATE SYSTEM 1983 08-MAR-2006

FIGURE 1-4. EXCAVATION PLAN EXCLUDED COMPONENTS

2.0 PREDESIGN INVESTIGATIONS AND CHARACTERIZATION DATA

2.1 SUMMARY OF THE RI/FS INVESTIGATION

Extensive soil sampling was performed at the FCP in the late 1980s and early 1990s as part of the OU5 RI/FS (DOE 1995a and 1995b) to characterize the nature and extent of contamination resulting from decades of uranium-metal production. Figure 2-1 shows the overall breakdown of the figures in Section 2. Figures 2-2 through 2-4 present RI/FS soil borings in the area defined by this document. Most locations shown on the figures represent multiple samples collected at various depths (i.e., multiple samples may have been collected at each boring location).

2.1.1 Preliminary Constituents of Concern

Based on results of the RI/FS investigation, the SEP presented a preliminary list of area-specific constituents of concern (ASCOCs) for Remediation Area 7 (Table 2-1) and stated that a more thorough screening of ASCOCs would be performed for each remediation area during the predesign phase. The additional COC screening for Area 7 is discussed in Section 2.4.

2.1.2 On-Site Disposal Facility Waste Acceptance Criteria

The concentration-based OSDF WAC was established in the OU5 ROD (Table 2-1). Soil excavated from Area 7 must meet these WAC 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 or metal COCs, disposal at the OSDF is permitted if the soil treatment results in the COC levels falling below the established WAC. The Area 7 predesign and RI/FS data were compared to the OSDF WAC to identify areas that exceed the OSDF WAC. The results of this comparison were studied to determine the areas that require additional data to delineate the extent of the above-WAC contamination. Sampling performed to further delineate the above-WAC contamination is discussed in Section 2.3.1.

2.1.3 Final Remediation Levels for Soil

Like the OSDF WAC, the OU5 ROD established the FRLs for soil remediation (Table 2-1). 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. Remediation in Area 7 will remove contaminated soil until the residual concentration of contaminants is at or below the respective FRL. There are two FRLs for total uranium - 82 milligrams per kilogram (mg/kg) outside the high leachability areas and 20 mg/kg within the high leachability areas. These areas are delineated in the applicable figures depicting RI/FS and predesign boring locations (see Figures 2-2 through 2-7). In addition, there is a goal of meeting 50 mg/kg for total uranium outside the high leachability area that is driven by the as low as reasonably achievable (ALARA) philosophy. The ALARA goal of 50 mg/kg will

be reached if soil exceeding 50 mg/kg is within one lift thickness (i.e., 3 feet ±1 foot) of soil exceeding the uranium FRL of 82 mg/kg.

2.1.4 Hazardous Waste Management Units

There are no known hazardous waste management units (HWMUs) within Area 7.

2.1.5 Underground Storage Tanks

There are no known underground storage tanks (USTs) within Area 7.

2.1.6 Identification of Potentially Characteristic Areas

Based on historical process knowledge and soil contaminant concentration levels identified through the OU5 RI/FS investigation, six geographic areas of the FCP have a reasonable potential for containing RCRA characteristic waste that provides an opportunity for treatment. There are no known potentially characteristic areas associated with this area.

2.2 SUMMARY OF SURFACE AND SUBSURFACE PHYSICAL CONDITIONS

Remediation Area 7 Support and Silos Process Areas include the Silos Process Area, CAWWT Area, Silo Truck Staging Area, the Area North of the SWRB and the Area West of the Security Trailer Complex and is approximately 29.6 acres (see Figure 2-1). Various utilities, slabs, footers, and foundations are also in the area. This area is located south and west of the Former Production Area and a portion is south of the main parking lot.

Subsurface conditions at the FCP have been described in detail in the OU5 RI/FS documents and in the Geotechnical Engineering Report for Project Order 177 (DOE 1998b). Briefly, the stratigraphic column under Area 7 Support and Silos Process Areas is generally fill, glacial deposits, sand and gravel deposits of the GMA, and carbonate bedrock. The discussion here is on the fill and glacial deposits, as these are the impacted materials being addressed by the soil remediation activities. Fill is a mixture of gravel and the native deposits of clay, silt and sand that have been moved or mechanically placed to level areas for building pads and roadbeds. A large amount of gravel was imported into the Area 7 for construction of building pads and roadbeds.

Glacial deposits are comprised primarily of a carbonate clay matrix enclosing muddy stream deposits. The stream deposits are primarily silt and sand with minor gravel and are continuous along the channel traces (primarily northeast to southwest) but discontinuous over broad lateral areas. When present, most of the channel deposits lie between the gray clay and overlying brown clay layers. Over half of Area 7 Support and Silos Process Areas is underlain by silty stream and lacustrine deposits. Most of these deposits are 5 to 7 feet thick and lie approximately 6 to 12 feet beneath the surface.

To establish preliminary remedial excavation boundaries in Area 7 Support and Silos Process Areas, all historical RI/FS data were pulled from the Sitewide Environmental Database. Figures 2-2 through 2-4 identify the locations of all RI/FS borings. This information was used to establish the areas where predesign investigation data were needed to verify and delineate additional remedial excavations that are necessary to capture contamination. Predesign investigation sampling that was performed to further delineate the above-WAC and above-FRL contamination is discussed in Section 2.3.2.

2.2.1 High-Leachability Zones

High leachability zones in Area 7 Support and Silos Process Areas are delineated in the applicable figures depicting both RI/FS and predesign boring locations, shown on Figures 2-2 through 2-7. As committed in the SEP, soil within this high-leachability zone will be excavated to the uranium FRL of 20 mg/kg.

2.3 SUMMARY OF PREDESIGN INVESTIGATIONS

Several predesign investigations were conducted to supplement RI/FS information on the nature and extent of contamination in Area 7 Support and Silos Process Areas. These predesign investigations were performed, in general, to identify the extent of soil exceeding the various action levels (i.e., WAC and FRL). The specific goals of these predesign sampling investigations included filling data gaps, confirming questionable analytical results, bounding above-WAC or above-FRL areas. Figures 2-5 through 2-7 identify the locations of all predesign borings. The following predesign investigations were completed to meet these goals:

- Project Specific Plan for Predesign Investigation in Area 7 (Supplement to 20300-PSP-0011) (DOE 2005d)

  This PSP (referred to in this Excavation Plan as the Area 7 Predesign PSP) describes the investigation of Area 7, which is located to the west and south of the Former Production Area, as well as south of the main parking lot and just east of Area 5. Area 7 is bordered by Paddys Run to the west and Area 1 to the east. Areas 1 and 2 serve as a southern border while the Waste Pits, Area 4B and 5 are to the north.

- Project Specific Plan for Predesign Investigation in Area 5 (DOE 2002b)

  Area 7 includes some areas that were previously considered to be a part of Remediation Area 5. This PSP included investigation of the Security Trailer Complex and adjacent area just west of the South Access Road, and the area south of Building 82 and east of the electrical substation

- Project Specific Plan for WAC Attainment of Area 7 Soils (DOE 1998c)

  This PSP was developed to evaluate soils in Area 7 that were scheduled for excavation as part of various Silos Project construction activities. The purpose of the PSP was to obtain WAC characterization data to identify soil that may exceed the OSDF WAC in order to properly segregate these soil and to preclude: 1) the reuse of above-WAC soil for roads or other fill purposes and, 2) the spread of above-WAC soil during construction activities.

- Project Specific Plan for Predesign Investigation in Area 7, Phase III (DOE 2002c)

  This PSP was developed to fill data gaps in the area surrounding the TACO trailer complex, including interspersed sidewalks, roadways, and small grassy areas, prior to the placement of new trailers within the vicinity.

- Project Specific Plan for Area 7, Phase I Precertification Physical Sampling and Real-Time Scan (DOE 2002d)

  This PSP was developed to evaluate any patterns of residual surface soil contamination in Area 7, Phase I and ensure that all accessible impacted material was removed prior to preparation of a remediated footprint for construction of the Silos Project Remediation Facility and support structures.

- Project Specific Plan for Characterization of Subsurface Soils Beneath the Area 7 Tank Transfer Area (DOE 2004a)

  This PSP was developed to provide details of the sampling to be conducted to characterize subsurface soils beneath the Tank Transfer Area. This PSP covered all data collection activities beneath the footprint of the Tank Transfer Area.

The predesign locations in the portions of Area 7 Support and Silos Process Areas are shown in Figures 2-5 through 2-7. Appendix A includes all available analytical results from the predesign investigations.

In addition to the physical sampling conducted under the above PSPs, real-time scanning was performed in unpaved and accessible areas. This was accomplished using both mobile and stationary sodium iodide gamma detectors and high-purity germanium (HPGe) detector. However, the ability to perform these scans in the Area 7 Support and Silos Process Areas was severely limited due to the presence of pavement, rail lines, and structures covering a large majority of this surface. More information on the real-time scanning and a discussion of the results is provided in Section 2.3.3.

Excavation boundaries for Area 7 Support and Silos Process Areas are established based on the following information:

- Above-WAC and above-FRL areas, which are manually established based on bounding physical sampling results and/or real-time measurements.
- Location of building foundations, support structures, and utilities
- Constructability and safe-slope configurations necessary to effectively excavate the material.

2.3.1 Above-WAC Areas and Boundaries

Two above-WAC areas remain within the Area 7 Support and Silos Process Areas. The first area is located north of the K-65 Trench and is above-WAC for technetium-99. This above-WAC location was

defined during the RI/FS by boring location CIS_SYSGEN_286 and bound as part of the PSP for WAC Attainment for Area 7 Soils. This area was bound laterally by boring locations A7-KW3, A7-KW4, A7-KW5, and A7-KW6 and vertically by A7-KW7. Excavation will be done to 572 feet. This area is depicted on Figure 2-8.

The other above-WAC area is the remaining portion of the K-65 Trench and sediments within the trench. This excavation is a continuation of the K-65 Trench excavation described in the Area 7, Phase I Excavation Plan (DOE 2002e) as well as the Excavation Plan for Area 7 Silos and General Area and will be handled in a similar manner. The area is depicted on Figure 2-8.

2.3.2 Above-FRL Areas and Boundaries

Below is a discussion of the above-FRL areas and boundaries within Area 7 Support and Silos Process Areas.

FRL #1 (Northwestern Silos Process Area)

Located in the northwestern portion of the Silos Process Area are RI/FS borings WPA34 and CIS_SYSGEN_317 and predesign location A7-SA1-16. These three boring locations collectively have above-FRL constituents identified including total uranium, radium-226, and thorium-228. These samples were vertically bound by borings A7-SA1-15, A7-SA1-16, A7-SA1-17, and A7-SA1-18. Three of the four borings were also used to laterally bound this area (A7-SA1-15, A7-SA1-17, and A7-SA1-18). In the southwest, the area was laterally bound by boring location CIS_SYSGEN_311. This area will be excavated to a depth of 575 feet. Please refer to Figure 2-2 for RI/FS boring locations, Figure 2-5 for predesign sample locations and Figure 2-8 for the area to be excavated.

FRL #2 (Northeastern Silos Process Area)

During RI/FS, four locations (CIS_SYSGEN_320, CIS_SYSGEN_323, LSP-SS-13, and LSP-SS-14) were identified as above-FRL for a variety of parameters including total uranium, radium-226, radium-228, thorium-228, thorium-232, beryllium, and aroclor-1254. These locations were vertically bound for all analytes by borings A7-SA1-19, A7-SA1-20, A7-SA1-21, A7-SA1-22, A7-SA1-23, and A7-SA1-24. Lateral bounding was achieved in the same locations for all analytes except radium-226. Boring location A7-SA1-23 was not bound laterally for radium-226 [3.44 picoCuries per gram (pCi/g) on the surface]. Because the contamination was only present on the surface and the area abuts an excavated area in Area 3B, bounding will occur through the use of real-time measurement systems. The area will be excavated to a depth of 573 feet. Refer to Figure 2-2 for RI/FS boring locations, Figure 2-5 for predesign sample locations and Figure 2-8 for the area to be excavated.

FRL #3 (Southeastern Silos Process Area)

Boring A7-SA1-8 was identified as above-FRL for radium-226 and arsenic during predesign of Area 7. The location was vertically bound at the surface by itself for radium-226. Further sampling at locations A7-SA1-49 and A7-SA1-50 laterally bound this area to the south and west. The bounding samples for the north and east (A7-SA1-47 and A7-SA1-48) continued to indicate surface contamination for radium-226. Therefore, RTIMP was used to laterally bound this area to the north and east. Real-Time measurement #31265 was collected at a detector height of 31 cm. This provided bounding to the north and east at 8.2 feet. The area will be excavated to a depth of 571 feet. Please refer to Figure 2-5 for predesign sample locations and Figure 2-8 for the area to be excavated.

FRL #4 (Southwest of CAWWT)

Located southwest of the CAWWT, boring A7P3-AWWT12 was identified as above-FRL for beryllium. The boring is vertically bound within itself. The boring is laterally bound to the four cardinal directions by A7-SA2-25, A7-SA2-26, A7-SA2-27, and A7-SA2-28. This area will be excavated to a depth of 569 feet. Please refer to Figure 2-3 for RI/FS boring locations, Figure 2-6 for predesign sample locations and Figure 2-9 for the area to be excavated.

FRL #5 (Northeastern CAWWT Area)

Borings 1267 and A7P3-AWWT16 are located in the high leachability area and are above-FRL for total uranium and thorium-232. Borings A7-SA2-31, A7-SA2-32, A7-SA2-33, and A7-SA3-37, sampled during Area 7 predesign, were to be used as lateral bounding borings. However, borings A7-SA2-31, A7-SA2-32, and A7-SA2-33 were also identified above-FRL for total uranium and/or thorium-232. All above-FRL borings were vertically bound. Boring locations A7-SA2-32 and A7-SA2-33 have been completely overtaken by the excavation in Area 4B which has extended significantly into this above-FRL area from the east. Further sampling at A7-SA2-31 was done to bound the area vertically. After several attempts, boring location A7-SA2-53 bound this area laterally to the northwest. The borings were laterally bound to the southwest by A7-SA2-37. This area will be excavated to a depth of 571 feet. Please refer to Figure 2-3 for RI/FS boring locations, Figure 2-6 for predesign sample locations and Figure 2-9 for the area to be excavated.

FRL #6 (Southeastern CAWWT Area)

Borings P34-1 through P34-6, sampled during the RI/FS, are located in the high leachability area and are above-FRL for total uranium. These locations were laterally bound with boring locations A7-SA2-37 (in the northeast), A7-SA2-39 (in the southwest), and A7-SA2-40 (in the southeast). The area extends to the footprint of the CAWWT building to the northwest, which is covered under different documentation. The area is bound to a depth of 1 foot with boring location P34-3. Please refer to Figure 2-3 for RI/FS boring locations, Figure 2-6 for predesign sample locations and Figure 2-9 for the area to be excavated.

FRL #7 (Eastern Silos Process Area)

Located on the railroad embankment and west of the Lime Sludge Pond, boring A7-K12 was identified as above-FRL for arsenic and radium-226 to a depth of 10 feet during the Area 7, Phase I investigation. The removal of location A7-K12 is a continuation of the excavation described in the approved Area 7, Phase I Excavation Plan. The commitment to excavate this area at a later date (i.e., as part of this excavation effort) is outlined in the Post-Excavation As-Built Report for Area 7, Phase I (DOE 2004b). This area will be excavated to a depth of 566 feet. Please refer to Figure 2-2 for RI/FS boring locations and Figure 2-8 for the area to be excavated.

2.3.3 Real-Time Scanning Within Area 7 Support and Silos Process Areas

The real-time maps for Area 7 Support and Silos Process Areas are located in Appendix B. These maps depict the current coverage obtained by the Real Time Instrumentation Measurement Group. The Tank Transfer Area Facility, remediation facility, and warehouse were precertified as part of the Area 7, Phase I Excavation Plan and the Area 7, Phase I As-Built Report. As these structures were built on clean soils, the concrete will be considered clean if radiological scanning of the surfaces demonstrate acceptable conditions. After all activities in this area have been completed, certification samples will be collected through the concrete as part of the certification process.

2.4 IDENTIFICATION OF AREA-SPECIFIC CONSTITUENTS OF CONCERN

Section 2.1.1 identified the preliminary list of COCs for Area 7 Support and Silos Process Areas, which was based on the results of sampling and analysis performed during the RI/FS investigation. These COCs were evaluated against the design and where the design was extended due to a non-uranium constituent, that constituent was retained as an ASCOC.

Table 2-2 presents the revised list of COCs for Area 7 Support and Silos Process Areas that drives the excavations. This modified list will be used to verify that the planned remedial excavation limits are sufficient to capture above-FRL contamination. The list in Table 2-2 in no way represents the constituents that will be carried through certification. Note that the ASCOC Lists will again be reevaluated during the certification design process to determine which of the area-wide COCs identified in the SEP will be carried into certification and presented in the area CDL for approval.

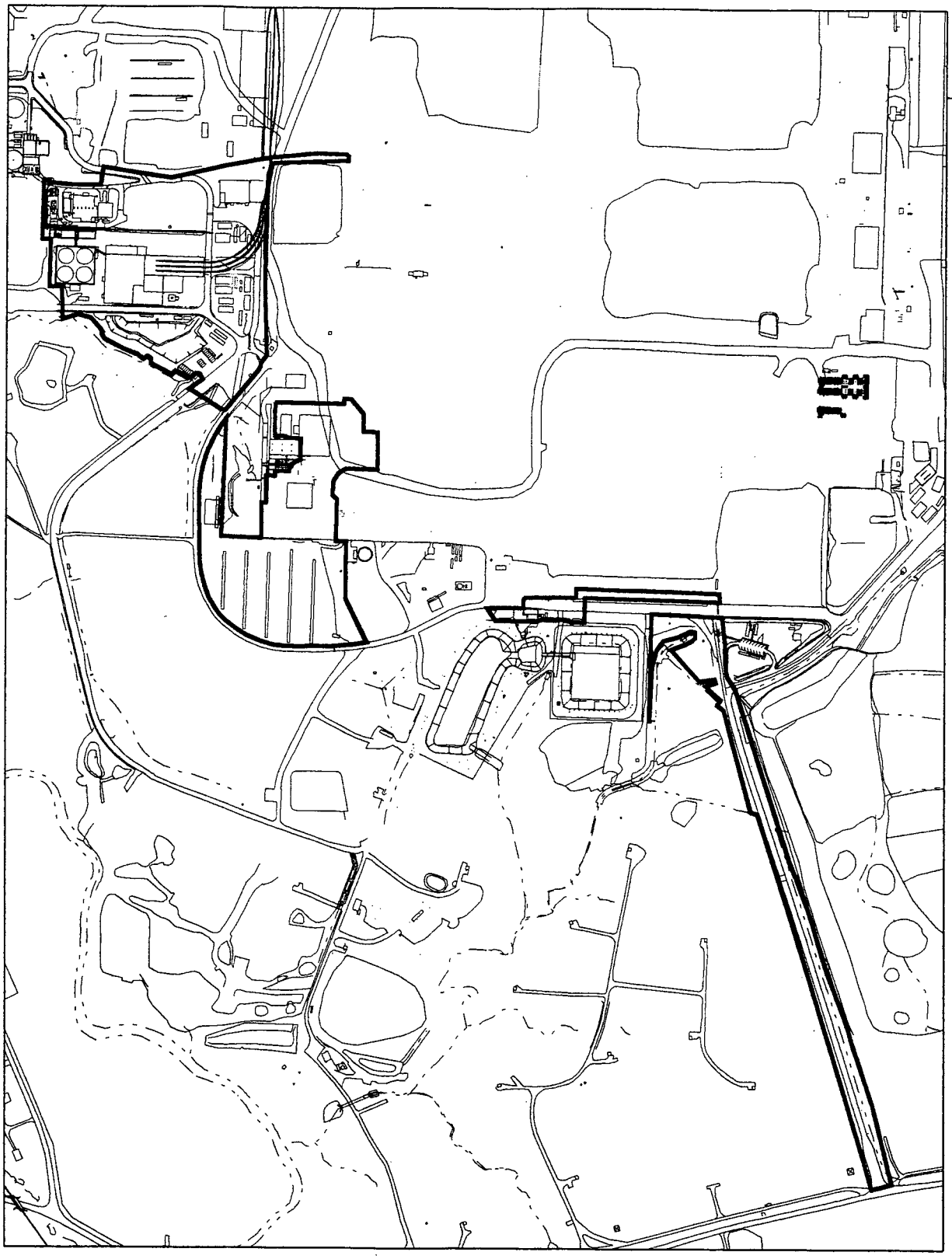
TABLE 2-1
PRELIMINARY AREA-SPECIFIC CONSTITUENTS OF CONCERN PER THE SITE EXCAVATION PLAN

Primary COCs (Area 7)	FRL	WAC
Radium-226	1.7 pCi/g	NA
Radium-228	1.8 pCi/g	NA
Thorium-228	1.7 pCi/g	NA
Thorium-232	1.5 pCi/g	NA
Uranium, Total (outside a high-leachability area)	82 mg/kg	1030 mg/kg
Uranium, Total (inside a high-leachability area)	20 mg/kg	1030 mg/kg

Secondary COCs (Area 7)	FRL	WAC
Aroclor-1254	0.13 mg/kg	NA
Aroclor-1260	0.13 mg/kg	NA
Arsenic	12 mg/kg	NA
Beryllium	1.5 mg/kg	NA
Cesium-137	1.4 pCi/g	NA
Dieldrin	0.015 mg/kg	NA
Lead	400 mg/kg	NA
Lead-210	38 mg/kg	NA
Manganese	4600 mg/kg	NA
Technetium-99	30 pCi/g	29.1 pCi/g
Thorium-230	280 pCi/g	NA

TABLE 2-2
AREA 7 SUPPORT AND SILOS PROCESS AREAS REVISED LIST OF AREA-SPECIFIC CONSTITUENTS OF CONCERN

Area 7	
Primary COCs	*Secondary COCs*
Radium-226	Aroclor-1254
Radium-228	Beryllium
Thorium-228	
Thorium-232	
Total Uranium	



LEGEND:

SCALE

600 300 0 600 FEET

FIGURE 2-1. AREA 7 SUPPORT AND SILOS PROCESS AREA LOCATION MAP

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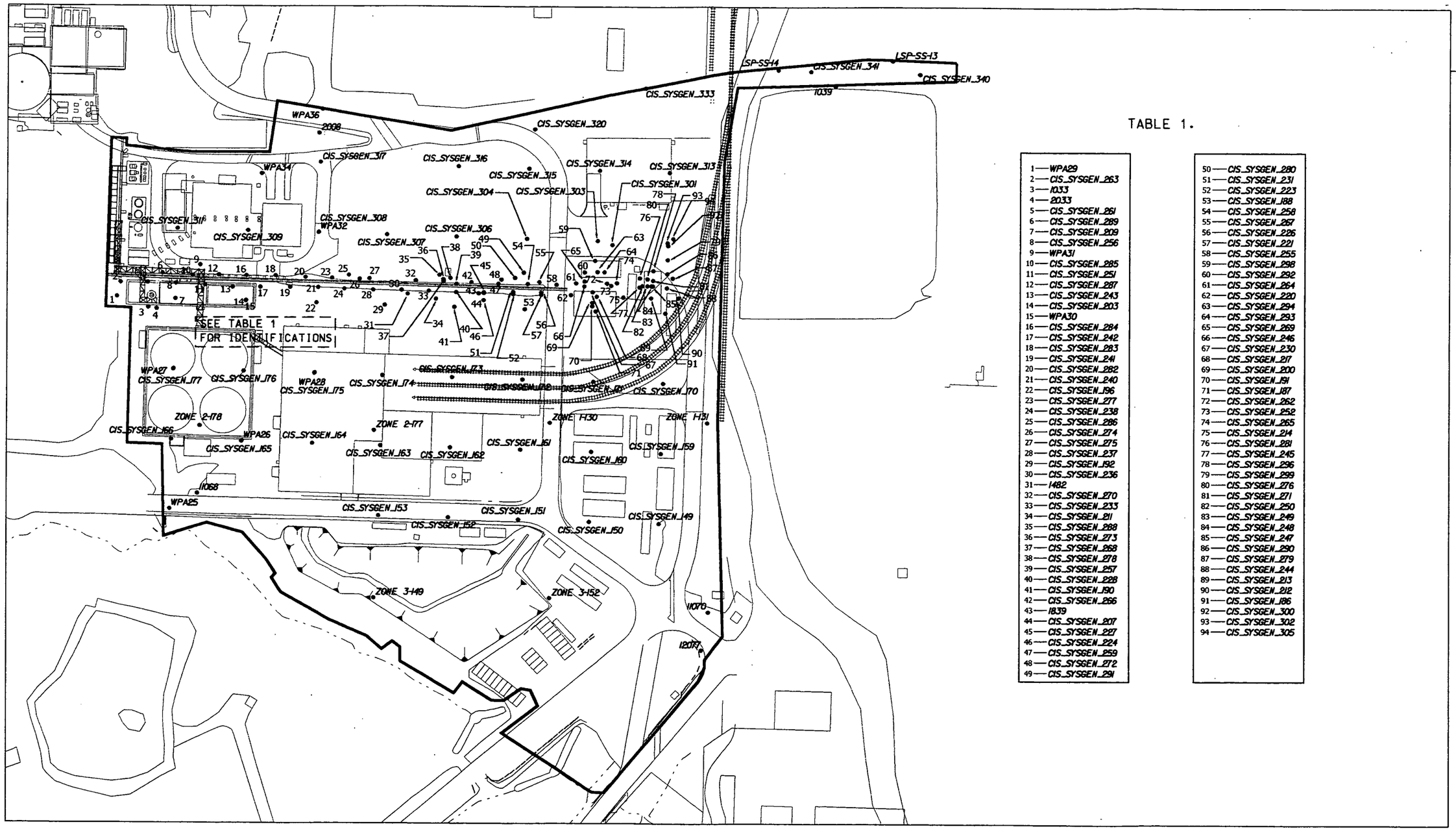

TABLE 1.

1 — WPA29	50 — CIS_SYSGEN_280
2 — CIS_SYSGEN_263	51 — CIS_SYSGEN_231
3 — 1033	52 — CIS_SYSGEN_223
4 — 2033	53 — CIS_SYSGEN_188
5 — CIS_SYSGEN_261	54 — CIS_SYSGEN_258
6 — CIS_SYSGEN_289	55 — CIS_SYSGEN_267
7 — CIS_SYSGEN_209	56 — CIS_SYSGEN_226
8 — CIS_SYSGEN_256	57 — CIS_SYSGEN_221
9 — WPA31	58 — CIS_SYSGEN_255
10 — CIS_SYSGEN_285	59 — CIS_SYSGEN_298
11 — CIS_SYSGEN_251	60 — CIS_SYSGEN_292
12 — CIS_SYSGEN_287	61 — CIS_SYSGEN_264
13 — CIS_SYSGEN_243	62 — CIS_SYSGEN_220
14 — CIS_SYSGEN_203	63 — CIS_SYSGEN_294
15 — WPA30	64 — CIS_SYSGEN_293
16 — CIS_SYSGEN_284	65 — CIS_SYSGEN_269
17 — CIS_SYSGEN_242	66 — CIS_SYSGEN_246
18 — CIS_SYSGEN_283	67 — CIS_SYSGEN_230
19 — CIS_SYSGEN_241	68 — CIS_SYSGEN_217
20 — CIS_SYSGEN_282	69 — CIS_SYSGEN_200
21 — CIS_SYSGEN_240	70 — CIS_SYSGEN_191
22 — CIS_SYSGEN_196	71 — CIS_SYSGEN_187
23 — CIS_SYSGEN_277	72 — CIS_SYSGEN_262
24 — CIS_SYSGEN_238	73 — CIS_SYSGEN_252
25 — CIS_SYSGEN_286	74 — CIS_SYSGEN_265
26 — CIS_SYSGEN_274	75 — CIS_SYSGEN_214
27 — CIS_SYSGEN_275	76 — CIS_SYSGEN_281
28 — CIS_SYSGEN_237	77 — CIS_SYSGEN_245
29 — CIS_SYSGEN_192	78 — CIS_SYSGEN_296
30 — CIS_SYSGEN_236	79 — CIS_SYSGEN_299
31 — 1482	80 — CIS_SYSGEN_276
32 — CIS_SYSGEN_270	81 — CIS_SYSGEN_271
33 — CIS_SYSGEN_233	82 — CIS_SYSGEN_250
34 — CIS_SYSGEN_211	83 — CIS_SYSGEN_249
35 — CIS_SYSGEN_288	84 — CIS_SYSGEN_248
36 — CIS_SYSGEN_273	85 — CIS_SYSGEN_247
37 — CIS_SYSGEN_268	86 — CIS_SYSGEN_290
38 — CIS_SYSGEN_278	87 — CIS_SYSGEN_279
39 — CIS_SYSGEN_257	88 — CIS_SYSGEN_244
40 — CIS_SYSGEN_228	89 — CIS_SYSGEN_213
41 — CIS_SYSGEN_190	90 — CIS_SYSGEN_212
42 — CIS_SYSGEN_266	91 — CIS_SYSGEN_186
43 — 1839	92 — CIS_SYSGEN_300
44 — CIS_SYSGEN_207	93 — CIS_SYSGEN_302
45 — CIS_SYSGEN_227	94 — CIS_SYSGEN_305
46 — CIS_SYSGEN_224	
47 — CIS_SYSGEN_259	
48 — CIS_SYSGEN_272	
49 — CIS_SYSGEN_291	

LEGEND:

• RI/FS SAMPLE LOCATION

SCALE

140 70 0 140 FEET

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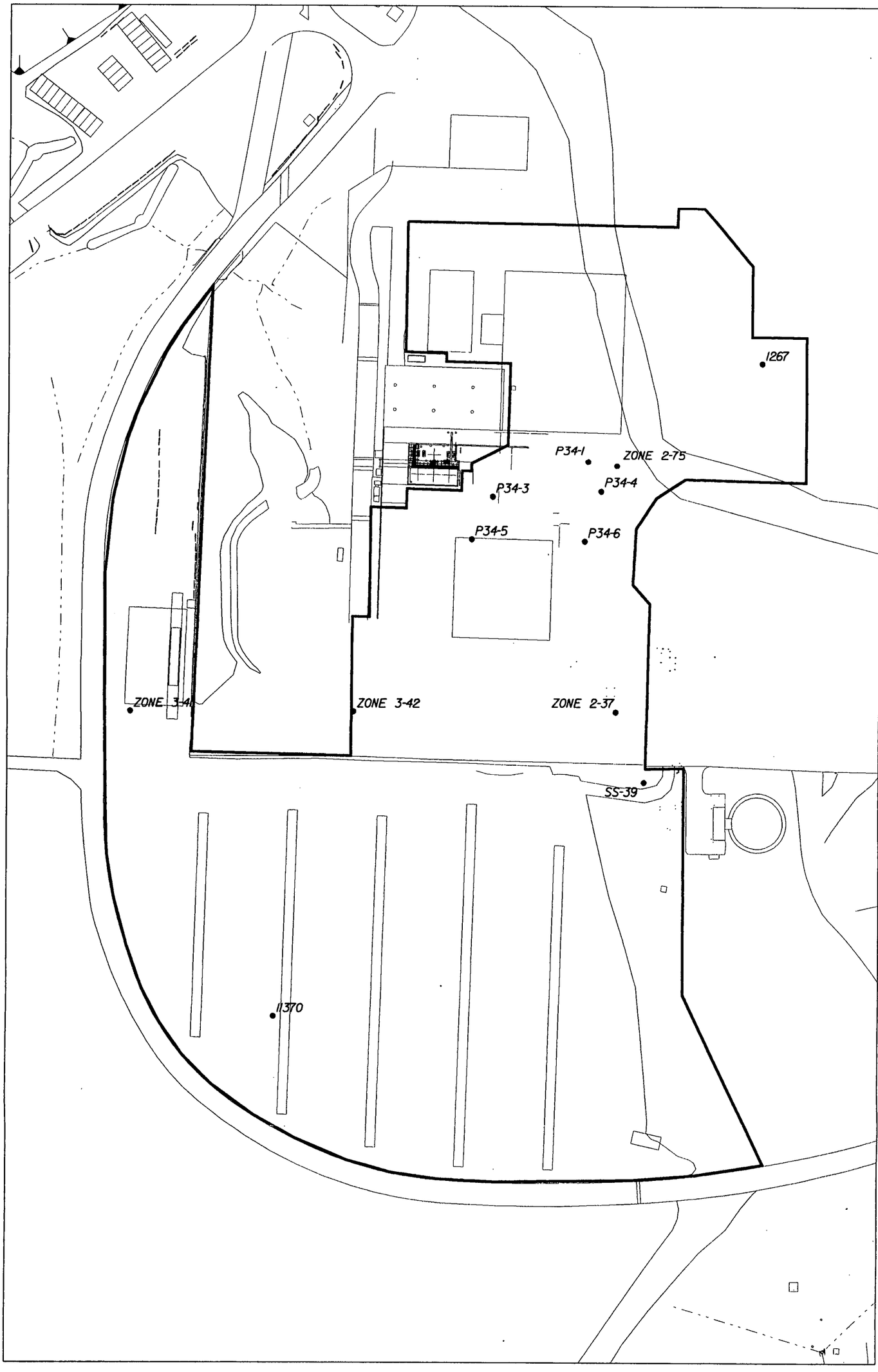
FIGURE 2-2. SILOS SUPPORT AREA RI/FS BORING LOCATIONS



LEGEND:

• RI/FS SAMPLE LOCATION

SCALE
100 50 0 100 FEET

FIGURE 2-3. CAWWT AND SILO TRUCK STAGING AREAS RI/FS BORING LOCATIONS

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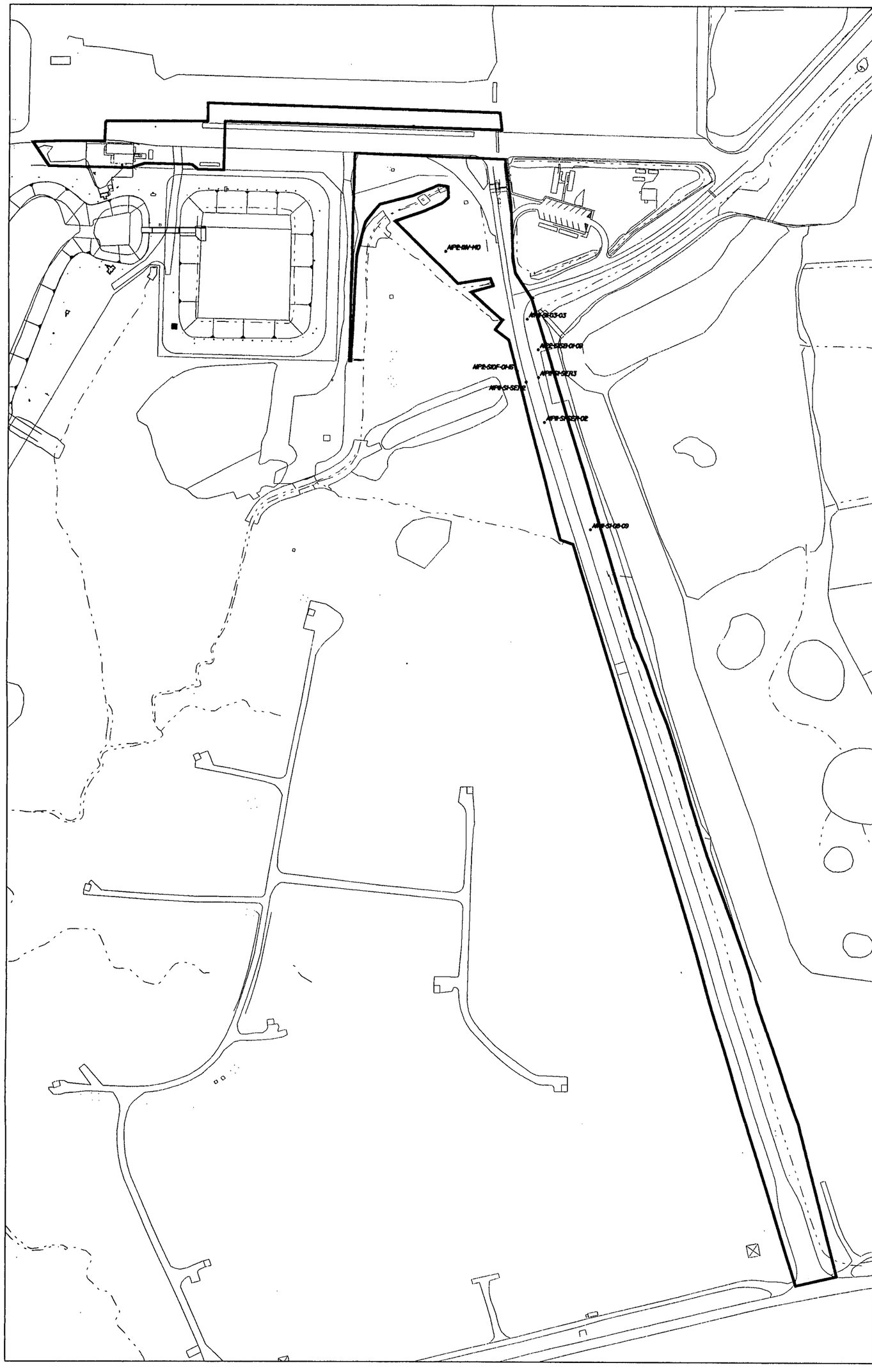

LEGEND:

• RI/FS SAMPLE LOCATION

SCALE

10 5 0 10 FEET

FIGURE 2-4. AREA NORTH OF THE SWRBs, SECURITY CHECK POINT AREA AND THE SOUTH ACCESS ROAD RI/FS BORING LOCATIONS

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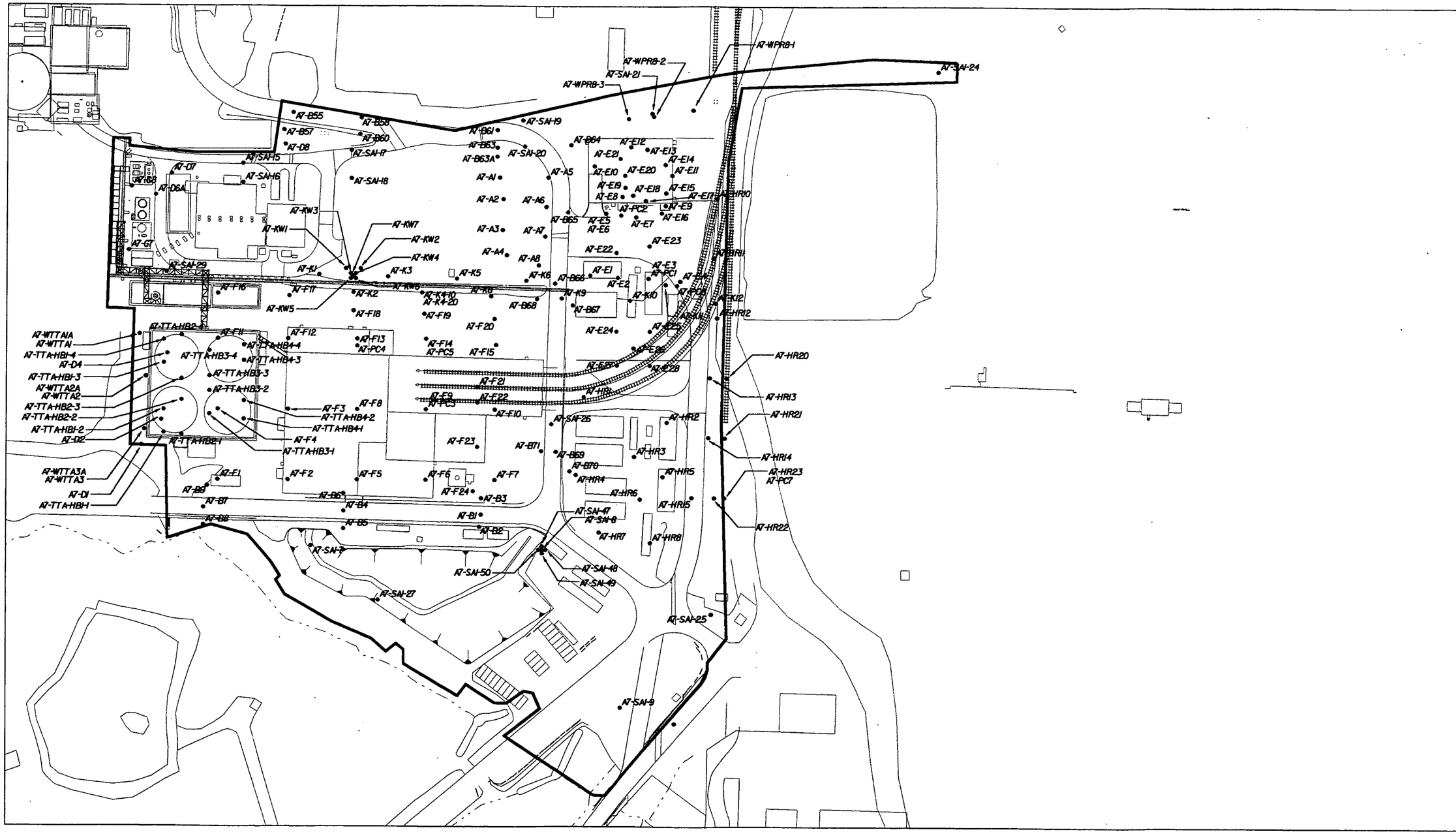
A7-WPR8-1
A7-WPR8-2
A7-WPR8-3
A7-SAI-21
A7-SAI-24
A7-SAI-19
A7-SAI-20
A7-SAI-17
A7-SAI-15
A7-SAI-16
A7-SAI-18
A7-SAI-29
A7-SAI-26
A7-SAI-47
A7-SAI-8
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A7-HR11
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A7-TTA-HB2-3
A7-TTA-HB2-2
A7-TTA-HB1-2
A7-D2
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A7-D8
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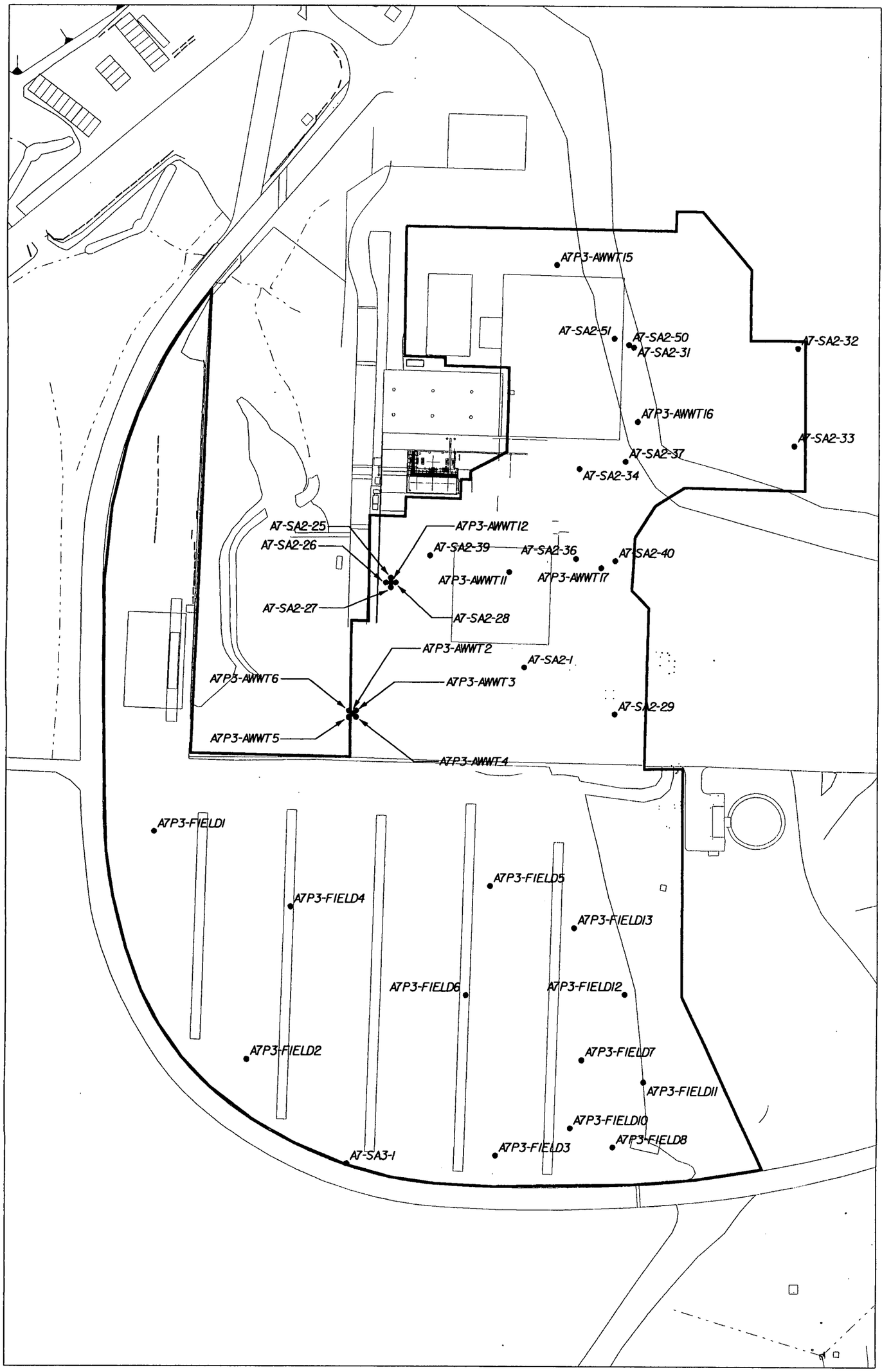

LEGEND:

• PREDESIGN SAMPLE LOCATION

SCALE

100 50 0 100 FEET

FIGURE 2-6. CAWWT AND SILO TRUCK STAGING AREAS PREDESIGN BORING LOCATIONS

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LEGEND:

• PREDESIGN SAMPLE LOCATION

SCALE

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FIGURE 2-7. AREA NORTH OF THE SWRBs, SECURITY CHECK POINT AREA AND THE SOUTH ACCESS ROAD PREDESIGN BORING LOCATIONS

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minute (gpm). The CAWWT stormwater/remediation wastewater treatment system consists of two multimedia filters and one ion exchange. The SWRB will continue to be used as the headworks, providing surge capacity for the modified 600-gpm treatment system until the SWRB is taken out of service for remediation.

Treatment of storm water from the remediation of Area 7 Support and Silos Process Areas will be performed by CAWWT treatment.

Since storm water/remediation wastewater treated by CAWWT will go through the same treatment process, there will be no more need to segregate water for treatment purposes. However, process water cannot be discharged to the SWRB; therefore, processed wastewater will undergo CAWWT treatment routed so that it bypasses the SWRB. Water that goes to the SWRB will go through the same treatment as water that is pumped directly to CAWWT. When discharges to SWRB are not possible due to an excessive water inventory, water will be held within the excavation until sufficient holding capacity is reestablished within the SWRB. To the extent possible, no discharges to the storm sewer system will be made during periods when the SWRB is bypassing, overflowing, or nearing capacity. These actions will be taken consistent with the bypassing provisions included in the NPDES permit.

Once the SWRB is taken out of service, the CAWWT Backwash Basin will be the collection point for construction water that requires treatment. The CAWWT Backwash Basin will be an above-grade modular tank. This tank will be used to hold the backwash from the CAWWT filtration process and construction wastewater once the SWRB has been taken out of service. The backwash basin will remain in-service post closure. Once the SWRB is taken out of service, the holding capacity for construction water will be greatly reduce. Based on this fact, it is prudent that the vast majority of remedial excavation be completed for the site prior to taken the SWRB out of service.

The design and construction of the CAWWT Backwash Basin is not addressed in this Excavation Plan but will be performed by the Aquifer Restoration/Wastewater Project. The proposed location for the tank is shown on Drawing 99X-5500-G-00907.

3.5 REMEDIAL EXCAVATION

Excavation to remove impacted material will follow the general guidance of Excavation Approach D, as discussed in the SEP. Soil and debris associated with an above-WAC area will be targeted for early removal to minimize cross contamination.

The generic approach to massive soil excavation is presented in the SEP. Massive soil excavation is in contrast to discrete soil excavation that will be carried out to remove utilities that lie below FRL contamination. In general, above-WAC soil will be excavated in nominal 3-foot lifts not exceeding 4 feet in thickness prior to initiating FRL excavation. The FRL excavation will proceed in nominal 3-foot lifts that will not exceed 4 feet in thickness. Excavation driven by contamination, as shown on Excavation and Grading Plan drawings, will be performed in lifts to allow for visual inspection of excavated soil and the cut surface. Soil surfaces under the gravel, asphalt, and concrete will be scanned with *in situ* gamma spectroscopy techniques to determine if excavation is required outside the established limits of known contamination. Time will be scheduled to allow real-time monitoring of newly exposed soil lying below gravel, asphalt, and concrete surfaces, and between excavation lifts. Real-time monitoring is required to identify potential above-WAC zones prior to general excavation operations.

Unless otherwise noted on the Construction Drawings, slope stability requirements shall be as stated in technical specification Section 02205.

3.5.1 Above-WAC Excavations

There are two known above-WAC areas identified in Area 7 Support and Silos Process Areas, accounting for an estimated 520 cubic yards (yd^3) of above-WAC soil and debris. The first above-WAC area is the K-65 Trench. The second is a small area located north of the K-65 trench (see Section 2 for description). The concrete trench, associated sediment within the trench, and small above-WAC area to the north of the trench will be excavated and disposed of as above-WAC material (see Drawings 99X-5500-G-00890 and 99X-5500-G-00891). There is a third above-WAC area identified in Area 7 Support and Silos Process Areas and is the sediment in the SWRB. This sediment will be removed and disposed of as above-WAC material as part of ongoing SWRB operations and technically is not covered by this document.

All three of these areas are above-WAC due to concentrations of technetium-99. Since real-time monitoring cannot detect the presence of technetium-99, physical sampling and analysis must be used to determine technetium-99 contaminant concentrations.

In the remediation of the K-65 Trench, a WAC determination of the underlying and adjacent soil will be made via sampling and analysis once the trench concrete and associated sediment have been removed. The sampling protocol for the soil around the K-65 Trench will be detailed in the Area 7 Support and Silos Process Areas Excavation Control PSP.

The bounding above-WAC areas have been completed to the extent possible, based on area accessibility. Where bounding borings were not possible, landmarks (i.e., edge of building, etc.) were used to conservatively bound the areas.

Characterization will be ongoing to bound and quantify known above-WAC areas, as well as, identify and bound additional above-WAC excavations. If above-WAC material is found during excavation, real-time monitoring and/or physical sampling will be used, depending on COC, to establish the limits of above-WAC areas. Once identified, an above-WAC area will be staked and a buffer area will be established adjacent to the excavation in accordance with technical specification Section 02205 to control the spread of contamination.

Above-WAC areas will be excavated in nominal 3 feet ± 1 foot lifts. Lifts may be reduced if the opportunity exists to reduce above-WAC soil volumes through more frequent scanning or sampling. Excavated material containing only above-WAC levels of radiological constituents (uranium and/or technetium-99) will be hauled directly to SP-7. If SP-7 is no longer in service, then above-WAC material will be loaded directly into shipping containers at the excavation site and transported by truck to the off-site disposal facility. Side slopes will be excavated to 2:1 and monitored to determine material disposition and lateral excavation as necessary to verify that above-WAC contamination has been removed. The Construction Manager will direct the use of working stockpiles for materials removed from above-WAC excavation side slopes. Disposition of these materials requires the results of: 1) real-time scans performed on the slope formed by the removal of the soil or 2) analytical analyses performed on soil samples collected from the slope. This sampling and monitoring will determine if the contamination zone has been captured laterally. Upon completion of sampling or real-time scanning, this material will be transported to the above-WAC stockpile (SP-7), loaded directly into shipping containers for off-site shipment and disposal, or taken to the OSDF for disposal if determined to meet WAC.

When the design grade has been reached, real-time scans and/or physical sampling will be conducted to determine if above-WAC materials is present, depending on COCs. The Construction Manager may direct further excavation based on results. Equipment used to excavate, load, haul and place above-WAC material will be decontaminated prior to use elsewhere by rinsing until no visible material is present on exterior surfaces.

3.5.2 HWMUs and USTs

Area 7 Support and Silos Process Areas contains no HWMUs.

There are no known USTs or former UST footprints in Area 7 Support and Silos Process Areas requiring excavation and/or demonstration of FRL attainment.

3.5.3 General Excavation

General excavation involves mass removal of above-FRL, but below-WAC soil and debris and below-FRL soil following completion of above-WAC excavation. Above-FRL but below-WAC soil and

debris will be excavated and disposed of in the OSDF for achievement of final remediation limits. Removal of below-FRL soil is occasionally necessary for excavation of safe slopes, removal of building footers and foundations, and to promote positive drainage within the excavation area. Excavation of Area 7 Support and Silos Process Areas entails removal of approximately 41,000 yd^3 of above-FRL but below-WAC soil and 19,000 yd^3 of debris. Designed excavation contours are shown on the Grading Plan drawings. Table 3-1 provides soil and debris volume estimates for these excavation activities.

Existing isolation trenches will be sampled to confirm or deny the presence of suspect contamination. If no contamination is present, the trenches will remain unexcavated. However, if contamination is found, the trenches will be excavated and left in a safe configuration without backfill and will represent final remediation grade. These exposed surfaces will then be certified along with the rest of the final remediation grade surface. Isolation trenches found to be contaminated above-FRLs will be excavated to a width of 2 feet and a depth of 12 feet, as measured from the grade elevation at the time the trenches were cut.

3.5.4 Utilities Removal

Utility lines that remain after general excavation has reached the design grade, are not required to remain in service for post-closure operations, and are more than 4 feet away from utility lines remaining in service will be removed using a backhoe and trench excavation techniques as detailed on the Civil Detail drawing. A combination of *in situ* gamma measurements and laboratory analyses will be used to demonstrate the soil and bedding material removed from the trench meet OSDF WAC and site FRLs.

Utility overburden soil will be removed and placed in the OSDF as select and/or contouring material. The Construction Manager and Waste Acceptance Organization (WAO) will observe the excavation and stop the excavation of overburden soil when the pipe or bedding material is encountered. Once removed, the pipes interior will be inspected by WAO to determine its disposition. Pipe that is free of visible process residue it will be size reduced to meet OSDF WAC and placed in the OSDF. Pipe that is deformed, closed or otherwise not amenable to visual inspection of the interior walls will be hauled to SP-7 or loaded directly into shipping containers in accordance with technical specification Section 02205.

If pipe bedding shows no visible signs of pipe leakage, real-time monitoring will be performed on the pipe bedding within the trench using Excavation Monitoring System or adjacent to the trench using the HPGe tripod. Material will be hauled to SP-7 (exceeds WAC) or to the OSDF based on the results of real-time scanning. If the material is below the OSDF WAC, it will be placed in the OSDF as select impacted material. As necessary, when removing the stockpiled material or pads, underlying areas will be over-excavated to a depth of 6 inches to ensure that contaminated material is removed.

If pipe bedding shows visible signs of pipe leakage, physical sampling will be performed on the pipe bedding within the trench. Material will be hauled to SP-7 or loaded directly into shipping containers (exceeds WAC) or hauled to the OSDF based on the results of physical sampling. If the material is below OSDF WAC, it will be placed in the OSDF as select impacted material.

Utility trenches will be excavated to 2:1 side slopes to stabilize the trenches and to provide a modified design grade. Excavated material will be disposed of in accordance with technical specification Section 02205.

3.5.5 60-Inch Storm Sewer Excavation

The main 60-inch storm sewer that drains into the SWRB must be taken out of service and removed. In order for this to occur, several things must happen. First the site storm sewer system must effectively be removed from service so that storm water is not discharged to the 60-inch storm sewer line during rain events. A portion of the 60-inch storm sewer line will not be removed prior to establishing post-closure conditions due to two utilities located above the sewer line. One utility is the underground 24-inch HDPE force main that has become the 24-inch HDPE outfall line near the eastern limit of the site and discharges into the Great Miami River. The other utility is Utility Pole #522 located within the excavation area required to remove the 60-inch storm sewer. The two overhead 13.2 kv electrical transmission lines that service both OU4 operations, CAWWT Facility, and numerous ground water extraction wells are strung across Utility Pole #522. This pole cannot be relocated during silos operations without shutting off power on both 13.2 kv lines. This would directly impact the Silos operation to complete the OU4 scope of work and would impact other important operations located on the western half of the site.

The underground 24-inch HDPE force main crosses over the 60-inch storm sewer line approximately 8 feet above the sewer. Due to the depth (approximately 18 feet below grade) and size of the sewer line, approximately 56 feet of the 24-inch HDPE force main will have to be exposed and undermined in order to remove the 60-inch storm sewer. This is to great of a span for a 24-inch HDPE pipe to be temporarily supported during an active excavation underneath the pipe.

Since both the overhead 13.2 kv electrical lines and the underground 24-inch HDPE force main are utilities required for post-closure operations at the site and the removal of the 60-inch storm sewer line underneath this area would impact both utilities, a section of the 60-inch storm sewer line will be left in place as part of Area 10. This section of 60-inch storm sewer line will be remediated as part of the post-closure activities.

In addition, the portion of the 60-inch storm sewer line that runs underneath the West Access Road may be left in place as part of Area 10. This will be determined from an EPA examination of the 60-inch

storm sewer once both ends have been exposed. The examination cannot happen until the spillway structure located between the East and West Chambers of the SWRB has been removed to expose the south end of the storm sewer.

The removal of the portion of the 60-inch storm sewer line underneath the West Access Road will require the temporary relocation of a OSDF Leachate Conveyance System Line that crosses over the main storm sewer line, and is contingent based on the examination by the EPA of the 60-inch storm sewer. The OSDF Leachate Conveyance System Line is a double containment pipe (4-inch/8-inch HDPE) used to convey water that is collected in the OSDF Leachate Collection System and pumped to CAWWT for subsequent treatment. Due to the presence of a manhole (Leachate Conveyance System Manhole MH#4) within the excavation area required to remove the 60-inch storm sewer line, it is impractical to temporarily support the Leachate Conveyance System Line above the underlying 60-inch storm sewer line excavation. Therefore the OSDF Leachate Conveyance System Line will be temporarily rerouted around the perimeter of the excavation and placed across the ditch created by the previous removal of another section of 60-inch storm sewer line where a temporary roadway will be constructed. The design for this rerouted OSDF Leachate Conveyance System Line is included in the construction drawings; however, the design to reinstall the OSDF Leachate Conveyance System Line along its original placement path is not included in this submittal.

3.5.6 Original AWWT Facility Caissons

There are 16 concrete caissons underneath the northern portion of the original AWWT Building (51A) that has been demolished as part of D&D remediation. Each caisson has a diameter of 3.5 feet and extends down into the GMA approximately at elevation 550.0 feet. Predesign sampling and analysis taken immediately outside the original AWWT Building indicates that the soil surrounding the original AWWT Building is below-FRL (non-impacted). After the foundations above the caissons have been removed and the caissons have been removed down to at least elevation 568.0 feet, certification samples will be taken of the soil surrounding the remaining caissons to verify removal of above-FRL soil. Any addition above-FRL soil found in the vicinity of these caissons will be removed and the remaining soil retested. Once the removal of above-FRL soil has been confirmed, a minimum 2-foot thick clay cap will be constructed over each caisson or group of caissons, and the caissons will be abandoned in-place. The clay caps will be constructed to reduce the likelihood of a pathway existing from the surface to the GMA. Remaining caissons will not be considered part of Area 10 and will not be addressed as part of post-closure remediation.

3.5.7 Excavation Sequencing

Since much of the remedial excavation associated with the Area 7 Support and Silos Process Areas deal with infrastructure installed to handle impacted storm, surface water, and groundwater, special attention

must be given to assure that the excavation sequence does not remove critical storm water control components that could jeopardize the sites ability to handle and treat storm water. In addition, certain areas and infrastructure are required to support Silos operations that are included within the remedial scope of this plan but need to remain in service until Silos operations are complete. The following is a list of prerequisites that need to be observed during remedial excavation to assure uninterrupted operations to the OU4 remediation effort and site's wastewater handling and treatment.

- Prior to beginning the excavation of the west chamber of the SWRB (see Excavation Plan for Area 7 Silos and General Area):
  - A plug will be installed in the western end of the SWRB Diversion Box that will direct water from the site's storm water sewer system into the eastern chamber of the SWRB.
  - A check dam will be installed across the Storm Sewer Outfall Ditch
  - Three storm water inlet lines will be plugged inside Storm Transfer and Under Drain Pump Station (optionally 3 gate valves at the bottom of the Storm Transfer and Under Drain Pump Station can be locked in the closed position (and locked) and the inlet lines physically plugged wherever they are exposed at the edge of excavation)

- Prior to the removal of the portion of the OSDF 4-inch/8-inch double contained HDPE Force Main Leachate Line located within the 60-inch storm sewer excavation area, a 4-inch/8-inch double contained HDPE temporary leachate force main line must be installed around the 60-inch storm sewer excavation area to reroute the conveyance of OSDF leachate around the excavation.

- Prior to removing the portion of the 60-inch storm sewer depicted on Drawing 99X-5500-G-00909:
  - An 4-inch/8-inch HDPE double wall temporary leachate force main line must be install to reroute the OSDF 4-inch/8-inch double contained HDPE Force Main Leachate Line around the 60-inch storm sewer excavation area
  - Underground electrical lines coming from transformer N18-1 located to the east of the South Plume Valve House (18Q) must be taken out of service
  - A temporary bypass road must be constructed north of the excavation across the ditch created during the removal of the portion of the 60-inch storm sewer governed under the Area 7 Silos and General Excavation Plan
  - Disconnect underground electrical lines within the excavation area coming from Pull Box PB-4 (see Drawing 99X-5500-G-00909)
  - The West Access Road north of the SWRB must be rerouted northward across the temporary bypass road

- The 6-inch Contaminated Effluent Line located west of the CAWWT Building and running north is to remain in service until the OU4 remediation effort is completed.

- Prior to beginning the excavation of the east chamber of the SWRB (see Excavation Plan for Area 7 Silos and General Area):
  - Site's storm sewer system will be removed from service
  - CAWWT Backwash Basin must be constructed and operational
  - CAWWT backwash must be redirected to the CAWWT Backwash Basin
  - The discharge from the OSDF Leachate Conveyance System will be rerouted from the SWRB directly to CAWWT
  - Construction water from the OSDF Cell 8 haul ramp is to be redirected to the OSDF Access Control Facility Manhole [see OSDF Drawings 90X-5500-G-00730 and 90X-5500-G-00731 (OSDF Cell 8 Access Control Point Design Drawings)]. Water collected in this manhole is sent through the OSDF Leachate Conveyance System to CAWWT for treatment. As an alternative, water from this area may be pumped to one of the OSDF Valve Houses which discharge directly into the OSDF Permanent Lift Station for subsequent treatment at CAWWT.

3.5.8 Material Reuse

Based on the existing precertification data, both from real-time measurements scans and physical samples of the soil beneath Buildings 94B and 94C, it is known that the concrete foundations and slabs of these facilities were constructed on clean (below-FRL) soils.

Prior to demolition of Building 94C (Tank Transfer Area) foundations, a radiological scan will be performed to determine if concrete can be free released from site. Prior to demolition of Building 94B foundations outside the DOE Trailer Area (see Drawing 99X-5500-G-00906), a radiological scan will be performed to determine if concrete can be free released from site. If foundations can be free released from site, then the concrete will be removed as "clean" and reused on site as general subgrade fill. Excess rebar will be disposed as "clean" material at an off-site disposal facility. If foundations cannot be free released from site, then the concrete will be transported using appropriate shipping methods by either rail or truck to an appropriate off-site disposal facility. General subgrade fill will be covered in accordance with the Chock Stone Detail on Drawing 99X-5500-G-00910.

Concrete slabs, foundations, and underlying storm sewer piping will remain in place for post-closure activities to facilitate the placement of several DOE trailers.

3.6 AT- AND BELOW-GRADE STRUCTURES

Removal of at-grade concrete and asphalt pads/roads will be initiated early to prepare the area for general soil excavation activities. The soil surface below at-grade concrete and asphalt pads/roads will be scanned with *in situ* gamma spectroscopy techniques to determine if excavation is required beyond the limits of known contamination. At- and below-grade structures to be removed from the Area 7 Support

and Silos Process Areas include slabs and foundations of the Silos Truck Staging Area, northern portion of Building 18Q (South Plume Interim Treatment Building), Building 18Y (AWWT Ozone Generation Building), portions of a 60-inch Storm Sewer Line, 22C (Silos Project Truck Scale), the demolished portion of Building 51A (CAWWT), Building 51B (Slurry Dewatering Facility), Building 51C (AWWT Laboratory Expansion), Building 94A (Silos Operations and Maintenance Building), Building 94B (Silos 1 and 2 Remediation Facility), Building 94C (Silos 1 and 2 Tank Transfer Area), 94D (Silos 1 and 2 Radon Control System Carbon Beds), 94E (Silos 1 and 2 Radon Control System), Building 94G (Silos 1 and 2 Electrical Building), Building 94K (Silos 1 and 2 Warehouse), Building 94L (Silos 1 and 2 Continuous Emissions Monitoring Building), Building 94G (Silos Electrical Building), Building 94R (Silos 1 and 2 High Pressure Pump/Breathing Air Utility Building), Building 94S (Small Lab Building - Silos Operations), 94T (Silos AWR Test Stand), and Building 94Y (Silos Maintenance Machine Shop). Most foundations within Area 7 Support and Silos Process Areas are located within 6 feet of existing grade.

Generally, the soil excavated to gain access to below-grade structures will be disposed in the OSDF as impacted soil, unless determined otherwise to be above-WAC. However in one location, overburden soil will be removed from over the 60-inch storm sewer as below-FRL soil and stockpiled. Prior to excavation of this overburden soil, certification samples must be taken. Based on the results of the certification samples, the stockpiled soil will be hauled to the OSDF, disposed off-site as impacted material (if the OSDF is closed) or used as fill material within the excavation. If OSDF or off-site disposal is required, stockpiled material will be over-excavated to a depth of 6 inches to ensure that contaminated material is removed.

In general, excavated structures that are free of visible process residue will be size reduced to meet OSDF WAC and placed in the OSDF. If a structure is deformed, closed or otherwise not amenable to visual inspection of the interior walls, it will be hauled to SP-7 in accordance with technical specification Section 02205 or loaded directly into shipping containers for off-site disposal of OSDF above-WAC material.

Structures that remain after general excavation has reached the design grade will be excavated using a combination of *in situ* gamma measurements and laboratory analyses to demonstrate the soil and bedding material removed from around the structure meet OSDF WAC and site FRLs. Additionally, the surface area above the structure will be precertified with *in situ* gamma spectroscopy measurements prior to excavating the structure.

3.7 PROHIBITED MATERIALS

Section 3.3.2.2 of the SEP identifies special materials that, when encountered, require WAO input before the contractor can determine their disposition. Materials from this list may be encountered in Area 7 Support and Silos Process Areas include:

- Asbestos
- Drums and tanks
- Piping and pumps
- Process residues
- Uranium metal
- Miscellaneous debris
- Acid brick

If not specifically prohibited from OSDF disposition, these materials can be placed in the OSDF if they meet the physical and chemical WAC, and if a visual inspection of pipe interiors is passed. Materials prohibited from OSDF disposition and materials that do not meet the OSDF WAC will be placed at SP-7 or packaged into containers and placed at the SMTA. In general, special materials that exceed the OSDF WAC, except process residues and uranium metal, will be hauled to SP-7. Process residues and uranium metal will be containerized and placed at the SMTA for disposal at an off-site disposal facility. Information on the identification, management, and tracking of these materials is provided in the SEP (Section 3.6 and Appendix F).

3.8 INTERIM GRADING

Interim grading, defined as grading that occurs for slope maintenance and to prevent unsafe working conditions, is dependent on actual field conditions and may occur prior to or after precertification in accordance with technical specification Section 02206, Item 3.5. The frequency of interim grading in a given excavation will be a function of the slope materials and their ability to maintain the design grade during precipitation events that occur prior to completion of certification and the restoration grading.

3.9 PRECERTIFICATION

Precertification will be performed in accordance with the PSP Guidelines for General Characterization for Sitewide Soil Remediation (DOE 2005e). Precertification activities will commence after the design grade has been reached, the perimeter ditches have been established, and other construction in the area is complete.

The precertification area will be delineated and controlled to prevent cross-contamination of environmental media. Real-time monitoring of the design grade will be performed to precertify the area as attaining the uranium, thorium, and radium FRL goals.

A CDL/PSP for certification of Area 7 will be submitted to the regulatory agencies for review and approval.

TABLE 3-1
AREA 7 SUPPORT AND SILOS PROCESS AREA QUANTITIES

Area	Subarea	Total	CAT 1	CAT 2	Above-WAC	Comments
7 Silos Process Area	General Excavation	19,631	19,331	0	300	2-ft scrape + above-WAC
	TTA Building	3,153	0	3,153	0	
	Bldg 94B	5,200	0	5,200	0	
	94R + Misc	590	0	590	0	
	Bldg 94D	222	0	222	0	
	Bldg 94E	285	0	285	0	
	Bldg 94A	170	0	170	0	
	Bldg 94K	0	0	0	0	Post closure
	Utilities	2,000	0	2,000	0	
Subtotal		31,251	19,331	11,620	300	
7 Support Area	General Excavation	21,700	21,000	0	700	
	AWWT	5,389	0	5,389	0	
	Utilities	2,000	0	2,000	0	
Subtotal		29,089	21,000	7,389	700	
Totals		**60,340**	**40,331**	**19,009**	**1,000**	

Notes:
1 - All quantities are represented in bank cubic yards.
2 - Quantities are based primarily on preliminary design calculations.

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APPENDIX A

PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

SPECIFICATIONS REFERENCED FROM OSDF DESIGN

The following specifications are referenced in this design from the OSDF technical specifications and will be applicable to this remediation effort:

Specifications Referenced from OSDF Design:
OSDF Phase V Technical Specifications, Part of Document 20105-TS-0001

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

APPENDIX C
LIST OF DRAWINGS AND TECHNICAL SPECIFICATIONS

The following drawings have been submitted along with this Excavation Plan to constitute the IRDP for Area 7 Support and Silos Process Areas. The technical specifications have not been submitted with this plan as they have been previously approved.

IRDP DRAWINGS

Drawing Number	Sheet	Title
99X-5500-G-00903	G-1	Master Layout Plan
99X-5500-G-00904	G-2	Northwest Silos Process Area Grading Plan
99X-5500-G-00905	G-3	Northeast Silos Process Area Grading Plan
99X-5500-G-00906	G-4	South Silos Process Area Grading Plan
99X-5500-G-00907	G-5	CAWWT Area Grading Plan
99X-5500-G-00908	G-6	Silos Truck Staging Area Grading Plan
99X-5500-G-00909	G-7	Support Areas Grading Plan
99X-5500-G-00911	G-8	24' Roadway and Leachate Line Plan and Profiles
99X-5500-G-00925	G-9	Proposed Haul Road
99X-5500-G-00910	G-10	Civil Details

For a list of utility grid and technical reference drawings included in this package, see Drawing 99X-5500-X-00887.

IRDP TECHNICAL SPECIFICATIONS

The following technical specifications make up the Area 7 Support and Silos Process Areas technical specification package:

Technical Specifications for Soil and Disposal Facility Project Excavation for Remediation, Document 20300-TS-0001

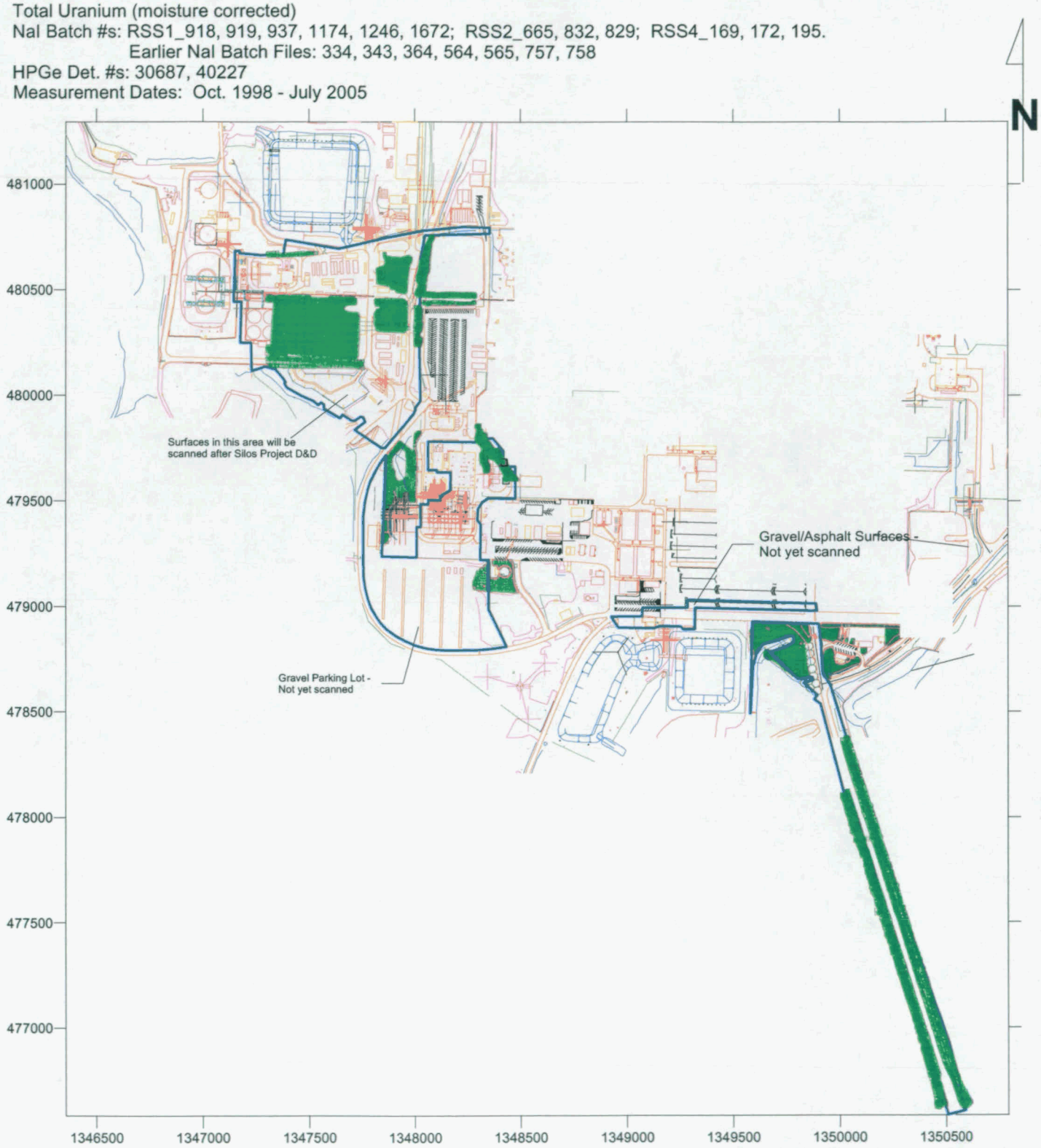
Section	Title
02150	Traffic Control
02205	Impacted Material Excavation
02206	Earthwork for Remediation
02207	Area Isolation Trenching
02275	Surface Water Management and Erosion Control for Remediation

APPENDIX C

LIST OF DRAWINGS AND TECHNICAL SPECIFICATIONS

Area 7 Support & Silos Process Area Surface Scan

Total Uranium (moisture corrected)
NaI Batch #s: RSS1_918, 919, 937, 1174, 1246, 1672; RSS2_665, 832, 829; RSS4_169, 172, 195.
Earlier NaI Batch Files: 334, 343, 364, 564, 565, 757, 758
HPGe Det. #s: 30687, 40227
Measurement Dates: Oct. 1998 - July 2005



Planned Excavation Boundary

NaI (V1&2) Total U (ppm)	NaI (V3) Total U (ppm)	HPGe @ 100 cm Total U (ppm)
-9999 to 246	-9999 to 246	0 to 246
246 to 721	246 to 875	246 to 400
721 to 9999	875 to 9999	400 to 9999

RTIMP DWG Title: A7_Suppt&Silos_SF_P1_TU.srf
Project Name: Gen. Char. for Site. Soil Rem.
Project #: 20300-PSP-0011
Prepared By: Mike Frank/8591; 09-01-2005
Support Data: (multiple files stored on Real-Time directory groups1-Active Maps-A7-Surface-Suppt_& _Silo_Process)

APPENDIX B

REAL-TIME MAP OF AREA 7 SUPPORT AND SILOS PROCESS AREAS

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-A1	A7-A1-1-R	3-Nov-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480628.41	1347706.03
A7-A1	A7-A1-1-R	3-Nov-98	0.0	0.5	Uranium, Total	7.94	ug/g dry	-	480628.41	1347706.03
A7-A1	A7-A1-14-R	3-Nov-98	6.5	7.0	Technetium-99	1.41	pCi/g dry	U	480628.41	1347706.03
A7-A1	A7-A1-14-R	3-Nov-98	6.5	7.0	Uranium, Total	12.5	ug/g dry	J	480628.41	1347706.03
A7-A2	A7-A2-2-R	3-Nov-98	0.5	1.0	Technetium-99	1.1	pCi/g dry	U	480597.8	1347711.18
A7-A2	A7-A2-2-R	3-Nov-98	0.5	1.0	Uranium, Total	8.7	ug/g dry	-	480597.8	1347711.18
A7-A2	A7-A2-6-R	3-Nov-98	2.5	3.0	Technetium-99	1	pCi/g dry	U	480597.8	1347711.18
A7-A2	A7-A2-6-R	3-Nov-98	2.5	3.0	Uranium, Total	10	ug/g dry	-	480597.8	1347711.18
A7-A3	A7-A3-9-R	3-Nov-98	4.0	4.5	Technetium-99	1.2	pCi/g dry	U	480554.22	1347710.26
A7-A3	A7-A3-9-R	3-Nov-98	4.0	4.5	Uranium, Total	7.94	ug/g dry	-	480554.22	1347710.26
A7-A3	A7-A3-14-R	3-Nov-98	6.5	7.0	Technetium-99	1.2	pCi/g dry	U	480554.22	1347710.26
A7-A3	A7-A3-14-R	3-Nov-98	6.5	7.0	Uranium, Total	6.48	ug/g dry	-	480554.22	1347710.26
A7-A4	A7-A4-10-R	3-Nov-98	4.5	5.0	Technetium-99	1.2	pCi/g dry	U	480518.75	1347716.2
A7-A4	A7-A4-10-R	3-Nov-98	4.5	5.0	Uranium, Total	3.61	ug/g dry	-	480518.75	1347716.2
A7-A4	A7-A4-14-R	3-Nov-98	6.5	7.0	Technetium-99	1.2	pCi/g dry	U	480518.75	1347716.2
A7-A4	A7-A4-14-R	3-Nov-98	6.5	7.0	Uranium, Total	7.29	ug/g dry	-	480518.75	1347716.2
A7-A5	A7-A5-4-R	2-Nov-98	1.5	2.0	Technetium-99	0.95	pCi/g dry	U	480628.64	1347774.93
A7-A5	A7-A5-4-R	2-Nov-98	1.5	2.0	Uranium, Total	5.22	ug/g dry	-	480628.64	1347774.93
A7-A5	A7-A5-6-R	2-Nov-98	2.5	3.0	Technetium-99	1.2	pCi/g dry	U	480628.64	1347774.93
A7-A5	A7-A5-6-R	2-Nov-98	2.5	3.0	Uranium, Total	13.7	ug/g dry	-	480628.64	1347774.93
A7-A6	A7-A6-5-R	2-Nov-98	2.0	2.5	Technetium-99	1.5	pCi/g dry	-	480587.1	1347772.2
A7-A6	A7-A6-5-R	2-Nov-98	2.0	2.5	Uranium, Total	11.7	ug/g dry	-	480587.1	1347772.2
A7-A6	A7-A6-7-R	2-Nov-98	3.0	3.5	Technetium-99	1.3	pCi/g dry	U	480587.1	1347772.2
A7-A6	A7-A6-7-R	2-Nov-98	3.0	3.5	Uranium, Total	6.43	ug/g dry	-	480587.1	1347772.2
A7-A7	A7-A7-5-R	2-Nov-98	2.0	2.5	Technetium-99	2.1	pCi/g dry	U	480545.27	1347770.58
A7-A7	A7-A7-5-R	2-Nov-98	2.0	2.5	Uranium, Total	9.07	ug/g dry	-	480545.27	1347770.58
A7-A7	A7-A7-17-R	2-Nov-98	8.0	8.5	Technetium-99	1.2	pCi/g dry	U	480545.27	1347770.58
A7-A7	A7-A7-17-R	2-Nov-98	8.0	8.5	Uranium, Total	12.9	ug/g dry	-	480545.27	1347770.58
A7-A8	A7-A8-3-R	2-Nov-98	1.0	1.5	Technetium-99	1.2	pCi/g dry	U	480504.5	1347761.79
A7-A8	A7-A8-3-R	2-Nov-98	1.0	1.5	Uranium, Total	15	ug/g dry	-	480504.5	1347761.79
A7-A8	A7-A8-10-R	2-Nov-98	4.5	5.0	Technetium-99	1.2	pCi/g dry	U	480504.5	1347761.79
A7-A8	A7-A8-10-R	2-Nov-98	4.5	5.0	Uranium, Total	8.91	ug/g dry	-	480504.5	1347761.79
A7-B1	A7-B1-1-R	12-Oct-98	0.0	0.5	Technetium-99	1	pCi/g dry	U	480150.79	1347680.6
A7-B2	A7-B2-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480133.45	1347678.15
A7-B2	A7-B2-5-R	13-Oct-98	2.0	2.5	Technetium-99	1.2	pCi/g dry	U	480133.45	1347678.15
A7-B2	A7-B2-5-R	13-Oct-98	2.0	2.5	Uranium, Total	1.42	ug/g dry	J	480133.45	1347678.15

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-B3	A7-B3-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480174.04	1347680.99
A7-B3	A7-B3-3-R	13-Oct-98	1.0	1.5	Technetium-99	1.1	pCi/g dry	U	480174.04	1347680.99
A7-B3	A7-B3-3-R	13-Oct-98	1.0	1.5	Uranium, Total	2.06	ug/g dry	J	480174.04	1347680.99
A7-B3	A7-B3-6-R	13-Oct-98	2.5	3.0	Technetium-99	1.1	pCi/g dry	U	480174.04	1347680.99
A7-B3	A7-B3-6-R	13-Oct-98	2.5	3.0	Uranium, Total	1.89	ug/g dry	J	480174.04	1347680.99
A7-B4	A7-B4-1-R	12-Oct-98	0.0	0.5	Technetium-99	1	pCi/g dry	U	480155.72	1347480.66
A7-B5	A7-B5-1-R	12-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480130.72	1347480.66
A7-B5	A7-B5-3-R	12-Oct-98	1.0	1.5	Technetium-99	1	pCi/g dry	U	480130.72	1347480.66
A7-B5	A7-B5-3-R	12-Oct-98	1.0	1.5	Uranium, Total	1.99	ug/g dry	J	480130.72	1347480.66
A7-B55	A7-B55-1-R	6-Oct-98	0.0	0.5	Technetium-99	1	pCi/g dry	U	480720.43	1347406.18
A7-B57	A7-B57-1-R	8-Oct-98	0.0	0.5	Technetium-99	0.76	pCi/g dry	U	480695.78	1347393.12
A7-B57	A7-B57-1-R	8-Oct-98	0.0	0.5	Uranium, Total	6.55	ug/g dry	-	480695.78	1347393.12
A7-B57	A7-B57-4-R	8-Oct-98	1.5	2.0	Technetium-99	1.1	pCi/g dry	J	480695.78	1347393.12
A7-B57	A7-B57-4-R	8-Oct-98	1.5	2.0	Uranium, Total	5.13	ug/g dry	-	480695.78	1347393.12
A7-B57	A7-B57-7-R	8-Oct-98	3.0	3.5	Technetium-99	0.76	pCi/g dry	U	480695.78	1347393.12
A7-B57	A7-B57-7-R	8-Oct-98	3.0	3.5	Uranium, Total	7.97	ug/g dry	-	480695.78	1347393.12
A7-B6	A7-B6-1-R	12-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480180.72	1347480.66
A7-B6	A7-B6-3-R	12-Oct-98	1.0	1.5	Technetium-99	1.1	pCi/g dry	U	480180.72	1347480.66
A7-B6	A7-B6-3-R	12-Oct-98	1.0	1.5	Uranium, Total	2.28	ug/g dry	-	480180.72	1347480.66
A7-B6	A7-B6-6-R	12-Oct-98	2.5	3.0	Technetium-99	1.2	pCi/g dry	U	480180.72	1347480.66
A7-B6	A7-B6-6-R	12-Oct-98	2.5	3.0	Uranium, Total	2.96	ug/g dry	-	480180.72	1347480.66
A7-B60	A7-B60-1-R	8-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480689.82	1347503
A7-B60	A7-B60-1-R	8-Oct-98	0.0	0.5	Uranium, Total	28.2	ug/g dry	J	480689.82	1347503
A7-B60	A7-B60-3-R	8-Oct-98	1.0	1.5	Technetium-99	1.2	pCi/g dry	U	480689.82	1347503
A7-B60	A7-B60-3-R	8-Oct-98	1.0	1.5	Uranium, Total	9.58	ug/g dry	J	480689.82	1347503
A7-B60	A7-B60-6-R	8-Oct-98	2.5	3.0	Technetium-99	1.1	pCi/g dry	U	480689.82	1347503
A7-B60	A7-B60-6-R	8-Oct-98	2.5	3.0	Uranium, Total	2.29	ug/g dry	J	480689.82	1347503
A7-B61	A7-B61-1-R	8-Oct-98	0.0	0.5	Technetium-99	0.7	pCi/g dry	U	480695.71	1347702.57
A7-B61	A7-B61-1-R	8-Oct-98	0.0	0.5	Uranium, Total	2.23	ug/g dry	-	480695.71	1347702.57
A7-B63	A7-B63-1-R	8-Oct-98	0.0	0.5	Technetium-99	0.76	pCi/g dry	J	480670.74	1347702.57
A7-B63	A7-B63-1-R	8-Oct-98	0.0	0.5	Uranium, Total	11.9	ug/g dry	-	480670.74	1347702.57
A7-B63	A7-B63-4-R	8-Oct-98	1.5	2.0	Technetium-99	0.81	pCi/g dry	J	480670.74	1347702.57
A7-B63	A7-B63-4-R	8-Oct-98	1.5	2.0	Uranium, Total	5.2	ug/g dry	-	480670.74	1347702.57
A7-B63	A7-B63-7-R	8-Oct-98	3.0	3.5	Technetium-99	1.6	pCi/g dry	-	480670.74	1347702.57
A7-B63	A7-B63-7-R	8-Oct-98	3.0	3.5	Uranium, Total	1.86	ug/g dry	-	480670.74	1347702.57
A7-B63A	A7-B63A-1-R	3-Dec-98	0.0	0.5	Technetium-99	1.16	pCi/g dry	U	480658.1	1347702.3

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-B63A	A7-B63A-1-R	3-Dec-98	0.0	0.5	Uranium, Total	21.2	ug/g dry	-	480658.1	1347702.3
A7-B64	A7-B64-1-R	8-Oct-98	0.0	0.5	Technetium-99	0.89	pCi/g dry	U	480674.8	1347807.05
A7-B64	A7-B64-1-R	8-Oct-98	0.0	0.5	Uranium, Total	3.64	ug/g dry	-	480674.8	1347807.05
A7-B64	A7-B64-3-R	8-Oct-98	1.0	1.5	Technetium-99	0.92	pCi/g dry	J	480674.8	1347807.05
A7-B64	A7-B64-3-R	8-Oct-98	1.0	1.5	Uranium, Total	2.19	ug/g dry	-	480674.8	1347807.05
A7-B64	A7-B64-6-R	8-Oct-98	2.5	3.0	Technetium-99	2.2	pCi/g dry	-	480674.8	1347807.05
A7-B64	A7-B64-6-R	8-Oct-98	2.5	3.0	Uranium, Total	2.1	ug/g dry	-	480674.8	1347807.05
A7-B65	A7-B65-1-R	8-Oct-98	0.0	0.5	Technetium-99	8.3	pCi/g dry	-	480579.39	1347802.89
A7-B65	A7-B65-1-R	8-Oct-98	0.0	0.5	Uranium, Total	3.51	ug/g dry	-	480579.39	1347802.89
A7-B65	A7-B65-4-R	8-Oct-98	1.5	2.0	Technetium-99	1	pCi/g dry	J	480579.39	1347802.89
A7-B65	A7-B65-4-R	8-Oct-98	1.5	2.0	Uranium, Total	1.89	ug/g dry	-	480579.39	1347802.89
A7-B66	A7-B66-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480478.79	1347785
A7-B66	A7-B66-3-R	13-Oct-98	1.0	1.5	Technetium-99	1.1	pCi/g dry	U	480478.79	1347785
A7-B66	A7-B66-3-R	13-Oct-98	1.0	1.5	Uranium, Total	3.37	ug/g dry	-	480478.79	1347785
A7-B67	A7-B67-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480447.98	1347810.3
A7-B67	A7-B67-4-R	13-Oct-98	1.5	2.0	Technetium-99	1	pCi/g dry	U	480447.98	1347810.3
A7-B67	A7-B67-4-R	13-Oct-98	1.5	2.0	Uranium, Total	4.39	ug/g dry	-	480447.98	1347810.3
A7-B68	A7-B68-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480456.84	1347759.5
A7-B69	A7-B69-1-R	13-Oct-98	0.0	0.5	Technetium-99	0.99	pCi/g dry	U	480240.25	1347786.82
A7-B7	A7-B7-1-R	12-Oct-98	0.0	0.5	Technetium-99	0.98	pCi/g dry	U	480160.65	1347280.72
A7-B70	A7-B70-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480212.78	1347806.5
A7-B70	A7-B70-3-R	13-Oct-98	1.0	1.5	Technetium-99	1.1	pCi/g dry	U	480212.78	1347806.5
A7-B70	A7-B70-3-R	13-Oct-98	1.0	1.5	Uranium, Total	1.14	ug/g dry	-	480212.78	1347806.5
A7-B70	A7-B70-6-R	13-Oct-98	2.5	3.0	Technetium-99	1.1	pCi/g dry	U	480212.78	1347806.5
A7-B70	A7-B70-6-R	13-Oct-98	2.5	3.0	Uranium, Total	1.49	ug/g dry	-	480212.78	1347806.5
A7-B71	A7-B71-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480241.37	1347766.21
A7-B9	A7-B9-1-R	13-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	J	480191.53	1347285.78
A7-B9	A7-B9-4-R	13-Oct-98	1.5	2.0	Technetium-99	1.3	pCi/g dry	J	480191.53	1347285.78
A7-B9	A7-B9-4-R	13-Oct-98	1.5	2.0	Uranium, Total	2.58	ug/g dry	J	480191.53	1347285.78
A7-B9	A7-B9-7-R	13-Oct-98	3.0	3.5	Technetium-99	1.1	pCi/g dry	U	480191.53	1347285.78
A7-B9	A7-B9-7-R	13-Oct-98	3.0	3.5	Uranium, Total	3.42	ug/g dry	J	480191.53	1347285.78
A7-D2	A7-D2-1-R	27-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	J	480284.83	1347220.09
A7-D2	A7-D2-3-R	27-Oct-98	1.0	1.5	Technetium-99	1.2	pCi/g dry	U	480284.83	1347220.09
A7-D2	A7-D2-3-R	27-Oct-98	1.0	1.5	Uranium, Total	5.95	ug/g dry	-	480284.83	1347220.09
A7-D2	A7-D2-6-R	27-Oct-98	2.5	3.0	Technetium-99	1.1	pCi/g dry	U	480284.83	1347220.09
A7-D2	A7-D2-6-R	27-Oct-98	2.5	3.0	Uranium, Total	1.57	ug/g dry	-	480284.83	1347220.09

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Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-D2	A7-D2-10-R	27-Oct-98	4.5	5.0	Technetium-99	1.1	pCi/g dry	U	480284.83	1347220.09
A7-D2	A7-D2-10-R	27-Oct-98	4.5	5.0	Uranium, Total	1.55	ug/g dry	-	480284.83	1347220.09
A7-D4	A7-D4-1-R	27-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480378.98	1347228.73
A7-D4	A7-D4-3-R	27-Oct-98	1.0	1.5	Technetium-99	1.2	pCi/g dry	U	480378.98	1347228.73
A7-D4	A7-D4-3-R	27-Oct-98	1.0	1.5	Uranium, Total	1.43	ug/g dry	-	480378.98	1347228.73
A7-D4	A7-D4-6-R	27-Oct-98	2.5	3.0	Technetium-99	1.2	pCi/g dry	U	480378.98	1347228.73
A7-D4	A7-D4-6-R	27-Oct-98	2.5	3.0	Uranium, Total	2.34	ug/g dry	-	480378.98	1347228.73
A7-D4	A7-D4-10-R	27-Oct-98	4.5	5.0	Technetium-99	1.1	pCi/g dry	U	480378.98	1347228.73
A7-D4	A7-D4-10-R	27-Oct-98	4.5	5.0	Uranium, Total	1.46	ug/g dry	-	480378.98	1347228.73
A7-D6A	A7-D6A-1-R	26-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480603.5	1347211.07
A7-D6A	A7-D6A-1-R	26-Oct-98	0.0	0.5	Uranium, Total	17.1	ug/g dry	-	480603.5	1347211.07
A7-D6A	A7-D6A-3-R	26-Oct-98	1.0	1.5	Technetium-99	1.1	pCi/g dry	U	480603.5	1347211.07
A7-D6A	A7-D6A-3-R	26-Oct-98	1.0	1.5	Uranium, Total	2.04	ug/g dry	-	480603.5	1347211.07
A7-D6A	A7-D6A-6-R	26-Oct-98	2.5	3.0	Technetium-99	1.3	pCi/g dry	U	480603.5	1347211.07
A7-D6A	A7-D6A-6-R	26-Oct-98	2.5	3.0	Uranium, Total	2.5	ug/g dry	-	480603.5	1347211.07
A7-D6A	A7-D6A-10-R	26-Oct-98	4.5	5.0	Technetium-99	1.2	pCi/g dry	U	480603.5	1347211.07
A7-D6A	A7-D6A-10-R	26-Oct-98	4.5	5.0	Uranium, Total	2.1	ug/g dry	-	480603.5	1347211.07
A7-D7	A7-D7-1-R	26-Oct-98	0.0	0.5	Technetium-99	1.8	pCi/g dry	U	480633.49	1347233.9
A7-D7	A7-D7-1-R	26-Oct-98	0.0	0.5	Uranium, Total	19.5	ug/g dry	-	480633.49	1347233.9
A7-D7	A7-D7-3-R	26-Oct-98	1.0	1.5	Technetium-99	1.3	pCi/g dry	U	480633.49	1347233.9
A7-D7	A7-D7-3-R	26-Oct-98	1.0	1.5	Uranium, Total	18.5	ug/g dry	-	480633.49	1347233.9
A7-D7	A7-D7-6-R	26-Oct-98	2.5	3.0	Technetium-99	1.2	pCi/g dry	U	480633.49	1347233.9
A7-D7	A7-D7-6-R	26-Oct-98	2.5	3.0	Uranium, Total	2.18	ug/g dry	-	480633.49	1347233.9
A7-D7	A7-D7-10-R	26-Oct-98	4.5	5.0	Technetium-99	0.96	pCi/g dry	U	480633.49	1347233.9
A7-D7	A7-D7-10-R	26-Oct-98	4.5	5.0	Uranium, Total	2.35	ug/g dry	J	480633.49	1347233.9
A7-D8	A7-D8-1-R	26-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480675.57	1347395.08
A7-D8	A7-D8-1-R	26-Oct-98	0.0	0.5	Uranium, Total	15	ug/g dry	J	480675.57	1347395.08
A7-E1	A7-E1-1-R	29-Oct-98	0.0	0.5	Technetium-99	4.2	pCi/g dry	-	480490.32	1347835.39
A7-E1	A7-E1-1-R	29-Oct-98	0.0	0.5	Uranium, Total	4.12	ug/g dry	-	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Arsenic	5.1	mg/kg	J	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.17	mg/kg	-	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Boron	1.11	mg/kg	UJ	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Lead	19.2	mg/kg	-	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Manganese	354	mg/kg	J	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Mercury	0.026	mg/kg	-	480490.32	1347835.39
A7-E1	A7-E1-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	40	ug/kg	U	480490.32	1347835.39

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E1	A7-E1-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	40	ug/kg	U	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.04	pCi/g	U	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.242	pCi/g	J	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Radium-228	0.963	pCi/g	-	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Technetium-99	7.06	pCi/g	J	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Thorium-228	0.918	pCi/g	-	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Thorium-230	20.9	pCi/g	U	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Thorium-232	0.963	pCi/g	-	480490.32	1347835.39
A7-E1	A7-E1-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	3.479	ug/g	J	480490.32	1347835.39
A7-E10	A7-E10-2-M	29-Oct-98	0.5	1.0	Chromium	12.8	mg/kg	J	480644.91	1347841.09
A7-E10	A7-E10-2-M	29-Oct-98	0.5	1.0	Lead	22.5	mg/kg	UJ	480644.91	1347841.09
A7-E10	A7-E10-2-R	29-Oct-98	0.5	1.0	Technetium-99	1.1	pCi/g dry	U	480644.91	1347841.09
A7-E10	A7-E10-2-R	29-Oct-98	0.5	1.0	Uranium, Total	12	ug/g dry	J	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Arsenic	7.65	mg/kg	J	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.34	mg/kg	-	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Boron	1.06	mg/kg	UJ	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Lead	20.2	mg/kg	-	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Manganese	813	mg/kg	J	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Mercury	0.042	mg/kg	-	480644.91	1347841.09
A7-E10	A7-E10-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	U	480644.91	1347841.09
A7-E10	A7-E10-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	U	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.05	pCi/g	U	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.462	pCi/g	J	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Radium-228	1.142	pCi/g	-	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Technetium-99	1.88	pCi/g	UJ	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Thorium-228	1.124	pCi/g	-	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Thorium-230	22.8	pCi/g	U	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Thorium-232	1.142	pCi/g	-	480644.91	1347841.09
A7-E10	A7-E10-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	4.191	ug/g	-	480644.91	1347841.09
A7-E11	A7-E11-1-M	16-Nov-98	0.0	0.5	Chromium	17.2	mg/kg	-	480631.62	1347952.78
A7-E11	A7-E11-1-M	16-Nov-98	0.0	0.5	Lead	18.1	mg/kg	J	480631.62	1347952.78
A7-E11	A7-E11-1-R	16-Nov-98	0.0	0.5	Technetium-99	1.23	pCi/g dry	J	480631.62	1347952.78
A7-E11	A7-E11-1-R	16-Nov-98	0.0	0.5	Uranium, Total	7.15	ug/g dry	J	480631.62	1347952.78
A7-E11	A7-E11-3-M	16-Nov-98	1.0	1.5	Chromium	16.8	mg/kg	-	480631.62	1347952.78
A7-E11	A7-E11-3-M	16-Nov-98	1.0	1.5	Lead	17.8	mg/kg	J	480631.62	1347952.78
A7-E11	A7-E11-3-R	16-Nov-98	1.0	1.5	Technetium-99	1.22	pCi/g dry	J	480631.62	1347952.78

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E11	A7-E11-3-R	16-Nov-98	1.0	1.5	Uranium, Total	2.43	ug/g dry	J	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Arsenic	3.69	mg/kg	J	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.081	mg/kg	-	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Boron	1.11	mg/kg	UJ	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Lead	21.5	mg/kg	-	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Manganese	250	mg/kg	J	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Mercury	0.035	mg/kg	-	480631.62	1347952.78
A7-E11	A7-E11-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	U	480631.62	1347952.78
A7-E11	A7-E11-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	U	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.052	pCi/g	U	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.229	pCi/g	J	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Radium-228	1	pCi/g	-	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Technetium-99	1.76	pCi/g	UJ	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Thorium-228	1.035	pCi/g	-	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Thorium-230	21.1	pCi/g	U	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Thorium-232	1	pCi/g	-	480631.62	1347952.78
A7-E11	A7-E11-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	2.543	ug/g	U	480631.62	1347952.78
A7-E12	A7-E12-R	5-Nov-98	0.0	0.5	Technetium-99	1.48	pCi/g dry	J	480672.12	1347894.79
A7-E12	A7-E12-R	5-Nov-98	0.0	0.5	Uranium, Total	5.05	ug/g dry	-	480672.12	1347894.79
A7-E13	A7-E13-R	5-Nov-98	0.0	0.5	Technetium-99	1.15	pCi/g dry	U	480668.56	1347917.79
A7-E13	A7-E13-R	5-Nov-98	0.0	0.5	Uranium, Total	4.19	ug/g dry	-	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Arsenic	8.07	mg/kg	J	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.25	mg/kg	-	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Boron	1.03	mg/kg	UJ	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Lead	23	mg/kg	-	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Manganese	513	mg/kg	J	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Mercury	0.037	mg/kg	-	480668.56	1347917.79
A7-E13	A7-E13-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	U	480668.56	1347917.79
A7-E13	A7-E13-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	U	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.041	pCi/g	U	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.547	pCi/g	J	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Radium-228	1.069	pCi/g	-	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Technetium-99	3.85	pCi/g	J	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Thorium-228	1.05	pCi/g	-	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Thorium-230	22.4	pCi/g	U	480668.56	1347917.79
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Thorium-232	1.069	pCi/g	-	480668.56	1347917.79

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E13	A7-E13-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	6.407	ug/g	-	480668.56	1347917.79
A7-E14	A7-E14-R	5-Nov-98	0.0	0.5	Technetium-99	2.19	pCi/g dry	J	480646.94	1347943.45
A7-E14	A7-E14-R	5-Nov-98	0.0	0.5	Uranium, Total	4.44	ug/g dry	-	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Arsenic	4.62	mg/kg	J	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.099	mg/kg	-	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Boron	1.01	mg/kg	UJ	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Lead	20.1	mg/kg	-	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Manganese	235	mg/kg	J	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Mercury	0.036	mg/kg	-	480646.94	1347943.45
A7-E14	A7-E14-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	U	480646.94	1347943.45
A7-E14	A7-E14-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	U	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.045	pCi/g	U	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.149	pCi/g	J	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Radium-228	0.936	pCi/g	-	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Technetium-99	1.72	pCi/g	UJ	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Thorium-228	0.911	pCi/g	-	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Thorium-230	21	pCi/g	U	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Thorium-232	0.936	pCi/g	-	480646.94	1347943.45
A7-E14	A7-E14-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	3.721	ug/g	J	480646.94	1347943.45
A7-E15	A7-E15-R	5-Nov-98	0.0	0.5	Technetium-99	1.3	pCi/g dry	J	480606.82	1347944.39
A7-E15	A7-E15-R	5-Nov-98	0.0	0.5	Uranium, Total	5.01	ug/g dry	-	480606.82	1347944.39
A7-E16	A7-E16-R	5-Nov-98	0.0	0.5	Technetium-99	1.38	pCi/g dry	J	480578.37	1347938.44
A7-E16	A7-E16-R	5-Nov-98	0.0	0.5	Uranium, Total	6.77	ug/g	J	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Arsenic	7.46	mg/kg	J	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.17	mg/kg	-	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Boron	1.09	mg/kg	UJ	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Lead	23.8	mg/kg	-	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Manganese	682	mg/kg	J	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Mercury	0.046	mg/kg	-	480578.37	1347938.44
A7-E16	A7-E16-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	U	480578.37	1347938.44
A7-E16	A7-E16-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	U	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.067	pCi/g	U	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.687	pCi/g	J	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Radium-228	1.021	pCi/g	-	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Technetium-99	2.37	pCi/g	J	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Thorium-228	1.01	pCi/g	-	480578.37	1347938.44

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Thorium-230	22.5	pCi/g	U	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Thorium-232	1.021	pCi/g	-	480578.37	1347938.44
A7-E16	A7-E16-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	6.27	ug/g	-	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Arsenic	8.76	mg/kg	J	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Beryllium	0.02	mg/kg	U	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Boron	1.02	mg/kg	UJ	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Lead	20.2	mg/kg	-	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Manganese	402	mg/kg	J	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Mercury	0.054	mg/kg	-	480578.37	1347938.44
A7-E16	A7-E16-9-P	1-Apr-02	4.0	4.5	Aroclor-1254	38	ug/kg	U	480578.37	1347938.44
A7-E16	A7-E16-9-P	1-Apr-02	4.0	4.5	Aroclor-1260	38	ug/kg	U	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Cesium-137	0.055	pCi/g	U	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Radium-226	1.202	pCi/g	J	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Radium-228	0.843	pCi/g	-	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Technetium-99	1.99	pCi/g	UJ	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Thorium-228	0.842	pCi/g	-	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Thorium-230	19.4	pCi/g	U	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Thorium-232	0.843	pCi/g	-	480578.37	1347938.44
A7-E16	A7-E16-9-RM	1-Apr-02	4.0	4.5	Uranium, Total	4.47	ug/g	J	480578.37	1347938.44
A7-E17	A7-E17-R	5-Nov-98	0.0	0.5	Technetium-99	1.48	pCi/g dry	J	480595.92	1347915.98
A7-E17	A7-E17-R	5-Nov-98	0.0	0.5	Uranium, Total	3.88	ug/g dry	J	480595.92	1347915.98
A7-E18	A7-E18-R	5-Nov-98	0.0	0.5	Technetium-99	1.59	pCi/g dry	J	480603.63	1347897.88
A7-E18	A7-E18-R	5-Nov-98	0.0	0.5	Uranium, Total	2.71	ug/g dry	J	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Arsenic	10.1	mg/kg	J	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.35	mg/kg	-	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Boron	1.12	mg/kg	UJ	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Lead	25.1	mg/kg	-	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Manganese	504	mg/kg	J	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Mercury	0.044	mg/kg	-	480603.63	1347897.88
A7-E18	A7-E18-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	40	ug/kg	U	480603.63	1347897.88
A7-E18	A7-E18-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	40	ug/kg	U	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.045	pCi/g	U	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.548	pCi/g	J	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Radium-228	1.099	pCi/g	-	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Technetium-99	1.94	pCi/g	UJ	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Thorium-228	1.063	pCi/g	-	480603.63	1347897.88

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Thorium-230	22.9	pCi/g	U	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Thorium-232	1.099	pCi/g	-	480603.63	1347897.88
A7-E18	A7-E18-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	7.41	ug/g	-	480603.63	1347897.88
A7-E19	A7-E19-R	5-Nov-98	0.0	0.5	Technetium-99	1.25	pCi/g dry	J	480614.81	1347887
A7-E19	A7-E19-R	5-Nov-98	0.0	0.5	Uranium, Total	4.76	ug/g dry	J	480614.81	1347887
A7-E2	A7-E2-1-R	29-Oct-98	0.0	0.5	Technetium-99	3.7	pCi/g dry	-	480487.2	1347875.95
A7-E2	A7-E2-1-R	29-Oct-98	0.0	0.5	Uranium, Total	5.23	ug/g dry	-	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Arsenic	8.9	mg/kg	J	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.39	mg/kg	-	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Boron	1.15	mg/kg	UJ	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Lead	19.8	mg/kg	-	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Manganese	273	mg/kg	J	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Mercury	0.034	mg/kg	-	480487.2	1347875.95
A7-E2	A7-E2-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	40	ug/kg	U	480487.2	1347875.95
A7-E2	A7-E2-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	40	ug/kg	U	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.057	pCi/g	U	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.388	pCi/g	J	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Radium-228	1.08	pCi/g	-	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Technetium-99	19.6	pCi/g	J	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Thorium-228	1.075	pCi/g	-	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Thorium-230	21.8	pCi/g	U	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Thorium-232	1.08	pCi/g	-	480487.2	1347875.95
A7-E2	A7-E2-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	3.068	ug/g	J	480487.2	1347875.95
A7-E20	A7-E20-R	5-Nov-98	0.0	0.5	Technetium-99	1.93	pCi/g dry	-	480631.78	1347886.18
A7-E20	A7-E20-R	5-Nov-98	0.0	0.5	Uranium, Total	7.15	ug/g dry	J	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Arsenic	10.6	mg/kg	J	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.021	mg/kg	U	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Boron	1.08	mg/kg	UJ	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Lead	24.9	mg/kg	-	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Manganese	324	mg/kg	J	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Mercury	0.044	mg/kg	-	480631.78	1347886.18
A7-E20	A7-E20-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	41	ug/kg	U	480631.78	1347886.18
A7-E20	A7-E20-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	41	ug/kg	U	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.046	pCi/g	J	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.479	pCi/g	J	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Radium-228	1.056	pCi/g	-	480631.78	1347886.18

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Technetium-99	1.72	pCi/g	UJ	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Thorium-228	1.053	pCi/g	-	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Thorium-230	21.7	pCi/g	U	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Thorium-232	1.056	pCi/g	-	480631.78	1347886.18
A7-E20	A7-E20-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	4.743	ug/g	-	480631.78	1347886.18
A7-E21	A7-E21-R	5-Nov-98	0.0	0.5	Technetium-99	2.41	pCi/g dry	-	480655.57	1347879.39
A7-E21	A7-E21-R	5-Nov-98	0.0	0.5	Uranium, Total	5.75	ug/g dry	J	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Arsenic	5.8	mg/kg	J	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.29	mg/kg	-	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Boron	1.11	mg/kg	UJ	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Lead	23.2	mg/kg	-	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Manganese	958	mg/kg	J	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Mercury	0.048	mg/kg	-	480655.57	1347879.39
A7-E21	A7-E21-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	U	480655.57	1347879.39
A7-E21	A7-E21-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	U	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.064	pCi/g	U	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.373	pCi/g	J	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Radium-228	1.075	pCi/g	-	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Technetium-99	1.81	pCi/g	UJ	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Thorium-228	1.08	pCi/g	-	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Thorium-230	22.1	pCi/g	U	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Thorium-232	1.075	pCi/g	-	480655.57	1347879.39
A7-E21	A7-E21-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	4.541	ug/g	-	480655.57	1347879.39
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Arsenic	2.86	mg/kg	J	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.13	mg/kg	-	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Boron	1.04	mg/kg	UJ	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Lead	24.5	mg/kg	-	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Manganese	417	mg/kg	J	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Mercury	0.042	mg/kg	-	480522.234	1347873.764
A7-E22	A7-E22-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	41	ug/kg	U	480522.234	1347873.764
A7-E22	A7-E22-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	41	ug/kg	U	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.038	pCi/g	U	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.222	pCi/g	J	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Radium-228	1.062	pCi/g	-	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Technetium-99	1.93	pCi/g	UJ	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Thorium-228	1.035	pCi/g	-	480522.234	1347873.764

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Thorium-230	22.1	pCi/g	U	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Thorium-232	1.062	pCi/g	-	480522.234	1347873.764
A7-E22	A7-E22-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	2.469	ug/g	J	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Arsenic	2.83	mg/kg	J	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Beryllium	0.24	mg/kg	-	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Boron	1.23	mg/kg	UJ	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Lead	25.1	mg/kg	-	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Manganese	252	mg/kg	J	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Mercury	0.058	mg/kg	-	480522.234	1347873.764
A7-E22	A7-E22-9-P	1-Apr-02	4.0	4.5	Aroclor-1254	42	ug/kg	U	480522.234	1347873.764
A7-E22	A7-E22-9-P	1-Apr-02	4.0	4.5	Aroclor-1260	42	ug/kg	U	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Cesium-137	0.038	pCi/g	U	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Radium-226	1.469	pCi/g	J	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Radium-228	1.155	pCi/g	-	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Technetium-99	1.93	pCi/g	UJ	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Thorium-228	1.139	pCi/g	-	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Thorium-230	22.8	pCi/g	U	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Thorium-232	1.155	pCi/g	-	480522.234	1347873.764
A7-E22	A7-E22-9-RM	1-Apr-02	4.0	4.5	Uranium, Total	4.687	ug/g	-	480522.234	1347873.764
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Arsenic	6.2	mg/kg	J	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.13	mg/kg	-	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Boron	1.06	mg/kg	UJ	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Lead	20.9	mg/kg	-	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Manganese	386	mg/kg	J	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Mercury	0.041	mg/kg	-	480531.92	1347921.33
A7-E23	A7-E23-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	40	ug/kg	U	480531.92	1347921.33
A7-E23	A7-E23-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	40	ug/kg	U	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.048	pCi/g	U	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.249	pCi/g	J	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Radium-228	0.874	pCi/g	-	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Technetium-99	1.8	pCi/g	UJ	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Thorium-228	0.846	pCi/g	-	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Thorium-230	20.9	pCi/g	U	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Thorium-232	0.874	pCi/g	-	480531.92	1347921.33
A7-E23	A7-E23-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	3.974	ug/g	J	480531.92	1347921.33
A7-E24	A7-E24-6-M	15-May-02	2.5	3.0	Arsenic	5.5	mg/kg	NV	480411.14	1347874.27

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E24	A7-E24-6-M	15-May-02	2.5	3.0	Beryllium	0.83	mg/kg	NV	480411.14	1347874.27
A7-E24	A7-E24-6-M	15-May-02	2.5	3.0	Boron	2.4	mg/kg	NV	480411.14	1347874.27
A7-E24	A7-E24-6-M	15-May-02	2.5	3.0	Lead	14	mg/kg	NV	480411.14	1347874.27
A7-E24	A7-E24-6-M	15-May-02	2.5	3.0	Manganese	607	mg/kg	NV	480411.14	1347874.27
A7-E24	A7-E24-6-M	15-May-02	2.5	3.0	Mercury	0.02	mg/kg	NV	480411.14	1347874.27
A7-E24	A7-E24-6-P	15-May-02	2.5	3.0	Aroclor-1254	40	ug/kg	UNV	480411.14	1347874.27
A7-E24	A7-E24-6-P	15-May-02	2.5	3.0	Aroclor-1260	40	ug/kg	UNV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Cesium-137	0.058	pCi/g	UNV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Radium-226	1.26	pCi/g	NV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Radium-228	0.937	pCi/g	NV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Thorium-228	0.916	pCi/g	NV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Thorium-230	21.7	pCi/g	UNV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Thorium-232	0.937	pCi/g	NV	480411.14	1347874.27
A7-E24	A7-E24-6-R	15-May-02	2.5	3.0	Uranium, Total	3.25	ug/g	NV	480411.14	1347874.27
A7-E25	A7-E25-6-M	15-May-02	2.5	3.0	Arsenic	5.6	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-6-M	15-May-02	2.5	3.0	Beryllium	0.56	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-6-M	15-May-02	2.5	3.0	Boron	3	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-6-M	15-May-02	2.5	3.0	Lead	13	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-6-M	15-May-02	2.5	3.0	Manganese	536	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-6-M	15-May-02	2.5	3.0	Mercury	0.02	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-6-P	15-May-02	2.5	3.0	Aroclor-1254	38	ug/kg	UNV	480411.14	1347922.35
A7-E25	A7-E25-6-P	15-May-02	2.5	3.0	Aroclor-1260	38	ug/kg	UNV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Cesium-137	0.045	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Radium-226	1.17	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Radium-228	0.925	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Technetium-99	1.6	pCi/g	UNV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Thorium-228	0.895	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Thorium-230	20.6	pCi/g	UNV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Thorium-232	0.925	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-6-R	15-May-02	2.5	3.0	Uranium, Total	2.25	ug/g	UNV	480411.14	1347922.35
A7-E25	A7-E25-8-M	15-May-02	3.5	4.0	Arsenic	4	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-8-M	15-May-02	3.5	4.0	Beryllium	0.78	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-8-M	15-May-02	3.5	4.0	Boron	2.7	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-8-M	15-May-02	3.5	4.0	Lead	13.4	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-8-M	15-May-02	3.5	4.0	Manganese	325	mg/kg	NV	480411.14	1347922.35

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E25	A7-E25-8-M	15-May-02	3.5	4.0	Mercury	0.03	mg/kg	NV	480411.14	1347922.35
A7-E25	A7-E25-8-P	15-May-02	3.5	4.0	Aroclor-1254	40	ug/kg	UNV	480411.14	1347922.35
A7-E25	A7-E25-8-P	15-May-02	3.5	4.0	Aroclor-1260	40	ug/kg	UNV	480411.14	1347922.35
A7-E25	A7-E25-8-R	15-May-02	3.5	4.0	Radium-226	1.4	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-8-R	15-May-02	3.5	4.0	Technetium-99	1.6	pCi/g	UNV	480411.14	1347922.35
A7-E25	A7-E25-8-R	15-May-02	3.5	4.0	Thorium-228	1	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-8-R	15-May-02	3.5	4.0	Thorium-230	1.5	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-8-R	15-May-02	3.5	4.0	Thorium-232	1	pCi/g	NV	480411.14	1347922.35
A7-E25	A7-E25-8-R	15-May-02	3.5	4.0	Uranium, Total	1.68	ug/g dry	NV	480411.14	1347922.35
A7-E26	A7-E26-6-M	15-May-02	2.5	3.0	Arsenic	5	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-6-M	15-May-02	2.5	3.0	Beryllium	0.83	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-6-M	15-May-02	2.5	3.0	Boron	6.1	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-6-M	15-May-02	2.5	3.0	Lead	14.9	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-6-M	15-May-02	2.5	3.0	Manganese	670	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-6-M	15-May-02	2.5	3.0	Mercury	0.02	mg/kg	UNV	480387.15	1347899.58
A7-E26	A7-E26-6-P	15-May-02	2.5	3.0	Aroclor-1254	39	ug/kg	UNV	480387.15	1347899.58
A7-E26	A7-E26-6-P	15-May-02	2.5	3.0	Aroclor-1260	39	ug/kg	UNV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Cesium-137	0.05	pCi/g	UNV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Radium-226	1.15	pCi/g	NV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Radium-228	0.933	pCi/g	NV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Technetium-99	1.4	pCi/g	UNV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Thorium-228	0.915	pCi/g	NV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Thorium-230	20.2	pCi/g	UNV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Thorium-232	0.933	pCi/g	NV	480387.15	1347899.58
A7-E26	A7-E26-6-R	15-May-02	2.5	3.0	Uranium, Total	2.36	ug/g	UNV	480387.15	1347899.58
A7-E26	A7-E26-7-M	15-May-02	3.0	3.5	Arsenic	8.6	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-7-M	15-May-02	3.0	3.5	Beryllium	0.97	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-7-M	15-May-02	3.0	3.5	Boron	2.6	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-7-M	15-May-02	3.0	3.5	Lead	17.9	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-7-M	15-May-02	3.0	3.5	Manganese	919	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-7-M	15-May-02	3.0	3.5	Mercury	0.03	mg/kg	NV	480387.15	1347899.58
A7-E26	A7-E26-7-P	15-May-02	3.0	3.5	Aroclor-1254	40	ug/kg	UNV	480387.15	1347899.58
A7-E26	A7-E26-7-P	15-May-02	3.0	3.5	Aroclor-1260	40	ug/kg	UNV	480387.15	1347899.58
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Cesium-137	0.061	pCi/g	UNV	480387.15	1347899.58
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Radium-226	1.35	pCi/g	NV	480387.15	1347899.58
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Radium-228	1.14	pCi/g	NV	480387.15	1347899.58

PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Technetium-99	1.7	pCi/g	UNV	480387.15	1347899.58
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Thorium-228	1.14	pCi/g	NV	480387.15	1347899.58
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Thorium-230	21.8	pCi/g	UNV	480387.15	1347899.58
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Thorium-232	1.14	pCi/g	NV	480387.15	1347899.58
A7-E26	A7-E26-7-R	15-May-02	3.0	3.5	Uranium, Total	3.39	ug/g	NV	480387.15	1347899.58
A7-E27	A7-E27-6-M	15-May-02	2.5	3.0	Arsenic	9	mg/kg	NV	480363.06	1347875.27
A7-E27	A7-E27-6-M	15-May-02	2.5	3.0	Beryllium	1.1	mg/kg	NV	480363.06	1347875.27
A7-E27	A7-E27-6-M	15-May-02	2.5	3.0	Boron	2.2	mg/kg	NV	480363.06	1347875.27
A7-E27	A7-E27-6-M	15-May-02	2.5	3.0	Lead	18.3	mg/kg	NV	480363.06	1347875.27
A7-E27	A7-E27-6-M	15-May-02	2.5	3.0	Manganese	419	mg/kg	NV	480363.06	1347875.27
A7-E27	A7-E27-6-M	15-May-02	2.5	3.0	Mercury	0.03	mg/kg	NV	480363.06	1347875.27
A7-E27	A7-E27-6-P	15-May-02	2.5	3.0	Aroclor-1254	41	ug/kg	UNV	480363.06	1347875.27
A7-E27	A7-E27-6-P	15-May-02	2.5	3.0	Aroclor-1260	41	ug/kg	UNV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Cesium-137	0.039	pCi/g	NV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Radium-226	1.48	pCi/g	NV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Radium-228	1.18	pCi/g	NV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Technetium-99	1.5	pCi/g	UNV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Thorium-228	1.15	pCi/g	NV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Thorium-230	23	pCi/g	UNV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Thorium-232	1.18	pCi/g	NV	480363.06	1347875.27
A7-E27	A7-E27-6-R	15-May-02	2.5	3.0	Uranium, Total	4.01	ug/g	NV	480363.06	1347875.27
A7-E28	A7-E28-6-M	15-May-02	2.5	3.0	Arsenic	10.4	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-6-M	15-May-02	2.5	3.0	Beryllium	0.83	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-6-M	15-May-02	2.5	3.0	Boron	4.4	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-6-M	15-May-02	2.5	3.0	Lead	13.2	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-6-M	15-May-02	2.5	3.0	Manganese	373	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-6-M	15-May-02	2.5	3.0	Mercury	0.05	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-6-P	15-May-02	2.5	3.0	Aroclor-1254	39	ug/kg	UNV	480363.06	1347922.35
A7-E28	A7-E28-6-P	15-May-02	2.5	3.0	Aroclor-1260	39	ug/kg	UNV	480363.06	1347922.35
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Cesium-137	0.039	pCi/g	UNV	480363.06	1347922.35
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Radium-226	0.964	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Radium-228	0.74	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Technetium-99	1.5	pCi/g	UNV	480363.06	1347922.35
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Thorium-228	0.731	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Thorium-230	17.6	pCi/g	UNV	480363.06	1347922.35
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Thorium-232	0.74	pCi/g	NV	480363.06	1347922.35

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E28	A7-E28-6-R	15-May-02	2.5	3.0	Uranium, Total	5.34	ug/g	NV	480363.06	1347922.35
A7-E28	A7-E28-7-M	15-May-02	3.0	3.5	Arsenic	4.6	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-7-M	15-May-02	3.0	3.5	Beryllium	0.48	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-7-M	15-May-02	3.0	3.5	Boron	1.8	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-7-M	15-May-02	3.0	3.5	Lead	11.8	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-7-M	15-May-02	3.0	3.5	Manganese	470	mg/kg	NV	480363.06	1347922.35
A7-E28	A7-E28-7-M	15-May-02	3.0	3.5	Mercury	0.02	mg/kg	UNV	480363.06	1347922.35
A7-E28	A7-E28-7-P	15-May-02	3.0	3.5	Aroclor-1254	38	ug/kg	UNV	480363.06	1347922.35
A7-E28	A7-E28-7-P	15-May-02	3.0	3.5	Aroclor-1260	38	ug/kg	UNV	480363.06	1347922.35
A7-E28	A7-E28-7-R	15-May-02	3.0	3.5	Radium-226	1.4	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-7-R	15-May-02	3.0	3.5	Technetium-99	1.6	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-7-R	15-May-02	3.0	3.5	Thorium-228	1.1	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-7-R	15-May-02	3.0	3.5	Thorium-230	1.3	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-7-R	15-May-02	3.0	3.5	Thorium-232	1	pCi/g	NV	480363.06	1347922.35
A7-E28	A7-E28-7-R	15-May-02	3.0	3.5	Uranium, Total	1.87	ug/g dry	NV	480363.06	1347922.35
A7-E3	A7-E3-1-R	29-Oct-98	0.0	0.5	Technetium-99	5.4	pCi/g dry	-	480486.16	1347920.17
A7-E3	A7-E3-1-R	29-Oct-98	0.0	0.5	Uranium, Total	4.66	ug/g dry	-	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Arsenic	15.4	mg/kg	J	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.091	mg/kg	-	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Boron	1.19	mg/kg	UJ	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Lead	22.4	mg/kg	-	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Manganese	277	mg/kg	J	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Mercury	0.054	mg/kg	-	480486.16	1347920.17
A7-E3	A7-E3-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	42	ug/kg	U	480486.16	1347920.17
A7-E3	A7-E3-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	42	ug/kg	U	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.062	pCi/g	U	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.46	pCi/g	J	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Radium-228	1.196	pCi/g	-	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Technetium-99	2.25	pCi/g	J	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Thorium-228	1.177	pCi/g	-	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Thorium-230	22.8	pCi/g	U	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Thorium-232	1.196	pCi/g	-	480486.16	1347920.17
A7-E3	A7-E3-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	5.22	ug/g	-	480486.16	1347920.17
A7-E4	A7-E4-1-R	29-Oct-98	0.0	0.5	Technetium-99	1.5	pCi/g dry	J	480482	1347964.39
A7-E4	A7-E4-1-R	29-Oct-98	0.0	0.5	Uranium, Total	8.39	ug/g dry	-	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Arsenic	5.36	mg/kg	J	480482	1347964.39

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Beryllium	0.19	mg/kg	-	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Boron	1.12	mg/kg	UJ	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Lead	19.2	mg/kg	-	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Manganese	265	mg/kg	J	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Mercury	0.073	mg/kg	-	480482	1347964.39
A7-E4	A7-E4-6-P	2-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	U	480482	1347964.39
A7-E4	A7-E4-6-P	2-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	U	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Cesium-137	0.023	pCi/g	U	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Radium-226	1.272	pCi/g	J	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Radium-228	0.976	pCi/g	-	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Technetium-99	4.79	pCi/g	J	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Thorium-228	0.937	pCi/g	-	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Thorium-230	21.2	pCi/g	U	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Thorium-232	0.976	pCi/g	-	480482	1347964.39
A7-E4	A7-E4-6-RM	2-Apr-02	2.5	3.0	Uranium, Total	2.538	ug/g	J	480482	1347964.39
A7-E5	A7-E5-2-M	29-Oct-98	0.5	1.0	Chromium	17	mg/kg	J	480577.9	1347858.46
A7-E5	A7-E5-2-M	29-Oct-98	0.5	1.0	Lead	23.9	mg/kg	J	480577.9	1347858.46
A7-E5	A7-E5-2-R	29-Oct-98	0.5	1.0	Technetium-99	7.14	pCi/g dry	-	480577.9	1347858.46
A7-E5	A7-E5-2-R	29-Oct-98	0.5	1.0	Uranium, Total	3.15	ug/g dry	J	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Arsenic	11.2	mg/kg	J	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.38	mg/kg	-	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Boron	1.01	mg/kg	UJ	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Lead	31	mg/kg	-	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Manganese	684	mg/kg	J	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Mercury	0.044	mg/kg	-	480577.9	1347858.46
A7-E5	A7-E5-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	37	ug/kg	U	480577.9	1347858.46
A7-E5	A7-E5-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	37	ug/kg	U	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.05	pCi/g	U	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.119	pCi/g	J	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Radium-228	0.832	pCi/g	-	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Technetium-99	1.75	pCi/g	UJ	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Thorium-228	0.821	pCi/g	-	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Thorium-230	20.1	pCi/g	U	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Thorium-232	0.832	pCi/g	-	480577.9	1347858.46
A7-E5	A7-E5-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	7.046	ug/g	-	480577.9	1347858.46
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Arsenic	13.2	mg/kg	J	480575.29	1347880.76

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.69	mg/kg	-	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Boron	1.17	mg/kg	UJ	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Lead	31.1	mg/kg	-	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Manganese	990	mg/kg	J	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Mercury	0.059	mg/kg	-	480575.29	1347880.76
A7-E6	A7-E6-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	41	ug/kg	U	480575.29	1347880.76
A7-E6	A7-E6-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	41	ug/kg	U	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.058	pCi/g	U	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.536	pCi/g	J	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Radium-228	1.158	pCi/g	-	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Technetium-99	1.88	pCi/g	UJ	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Thorium-228	1.156	pCi/g	-	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Thorium-230	23.5	pCi/g	U	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Thorium-232	1.158	pCi/g	-	480575.29	1347880.76
A7-E6	A7-E6-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	4.502	ug/g	J	480575.29	1347880.76
A7-E6	A7-E6-9-M	29-Oct-98	4.0	4.5	Chromium	11.9	mg/kg	J	480575.29	1347880.76
A7-E6	A7-E6-9-M	29-Oct-98	4.0	4.5	Lead	20.3	mg/kg	UJ	480575.29	1347880.76
A7-E6	A7-E6-9-R	29-Oct-98	4.0	4.5	Technetium-99	3.21	pCi/g dry	-	480575.29	1347880.76
A7-E6	A7-E6-9-R	29-Oct-98	4.0	4.5	Uranium, Total	1.92	ug/g dry	J	480575.29	1347880.76
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Arsenic	7.27	mg/kg	J	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Beryllium	0.079	mg/kg	-	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Boron	1.01	mg/kg	UJ	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Lead	17.2	mg/kg	-	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Manganese	647	mg/kg	J	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Mercury	0.047	mg/kg	-	480572.85	1347902.34
A7-E7	A7-E7-6-P	1-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	U	480572.85	1347902.34
A7-E7	A7-E7-6-P	1-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	U	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Cesium-137	0.037	pCi/g	U	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Radium-226	1.311	pCi/g	J	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Radium-228	0.94	pCi/g	-	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Technetium-99	1.73	pCi/g	UJ	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Thorium-228	0.903	pCi/g	-	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Thorium-230	20.3	pCi/g	U	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Thorium-232	0.94	pCi/g	-	480572.85	1347902.34
A7-E7	A7-E7-6-RM	1-Apr-02	2.5	3.0	Uranium, Total	6.791	ug/g	-	480572.85	1347902.34
A7-E7	A7-E7-7-M	29-Oct-98	3.0	3.5	Chromium	15	mg/kg	J	480572.85	1347902.34

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-E7	A7-E7-7-M	29-Oct-98	3.0	3.5	Lead	32	mg/kg	J	480572.85	1347902.34
A7-E7	A7-E7-7-R	29-Oct-98	3.0	3.5	Technetium-99	2.17	pCi/g dry	-	480572.85	1347902.34
A7-E7	A7-E7-7-R	29-Oct-98	3.0	3.5	Uranium, Total	2.8	ug/g dry	J	480572.85	1347902.34
A7-E8	A7-E8-1-R	29-Oct-98	0.0	0.5	Technetium-99	3.3	pCi/g dry	-	480601.77	1347882.71
A7-E9	A7-E9-1-M	16-Nov-98	0.0	0.5	Chromium	13.9	mg/kg	-	480588.83	1347943.73
A7-E9	A7-E9-1-M	16-Nov-98	0.0	0.5	Lead	15.5	mg/kg	J	480588.83	1347943.73
A7-E9	A7-E9-1-R	16-Nov-98	0.0	0.5	Technetium-99	2.33	pCi/g dry	-	480588.83	1347943.73
A7-E9	A7-E9-1-R	16-Nov-98	0.0	0.5	Uranium, Total	6.92	ug/g dry	J	480588.83	1347943.73
A7-E9	A7-E9-3-M	16-Nov-98	1.0	1.5	Chromium	19	mg/kg	-	480588.83	1347943.73
A7-E9	A7-E9-3-M	16-Nov-98	1.0	1.5	Lead	22.9	mg/kg	J	480588.83	1347943.73
A7-E9	A7-E9-3-R	16-Nov-98	1.0	1.5	Technetium-99	21.4	pCi/g dry	-	480588.83	1347943.73
A7-E9	A7-E9-3-R	16-Nov-98	1.0	1.5	Uranium, Total	3.56	ug/g dry	J	480588.83	1347943.73
A7-E9	A7-E9-5-M	16-Nov-98	2.0	2.5	Chromium	20.4	mg/kg	-	480588.83	1347943.73
A7-E9	A7-E9-5-M	16-Nov-98	2.0	2.5	Lead	24.6	mg/kg	J	480588.83	1347943.73
A7-E9	A7-E9-5-R	16-Nov-98	2.0	2.5	Technetium-99	2.8	pCi/g dry	J	480588.83	1347943.73
A7-E9	A7-E9-5-R	16-Nov-98	2.0	2.5	Uranium, Total	2.58	ug/g dry	J	480588.83	1347943.73
A7-F1	A7-F1-1-R	15-Oct-98	0.0	0.5	Technetium-99	1	pCi/g dry	U	480200	1347300.02
A7-F1	A7-F1-3-R	15-Oct-98	1.0	1.5	Technetium-99	1.2	pCi/g dry	U	480200	1347300.02
A7-F1	A7-F1-3-R	15-Oct-98	1.0	1.5	Uranium, Total	2.43	ug/g dry	-	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Arsenic	10.9	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Beryllium	0.022	mg/kg	UNV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Boron	1.1	mg/kg	UNV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Lead	15	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Manganese	459	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Mercury	0.025	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-6-P	4-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	UNV	480200	1347300.02
A7-F1	A7-F1-6-P	4-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	UNV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Cesium-137	0.063	pCi/g	UNV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Radium-226	1.04	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Radium-228	0.896	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-6-R	15-Oct-98	2.5	3.0	Technetium-99	1.1	pCi/g dry	U	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Technetium-99	1.5	pCi/g	UNV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Thorium-228	0.889	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Thorium-230	18.9	pCi/g	UNV	480200	1347300.02
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Thorium-232	0.896	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-6-R	15-Oct-98	2.5	3.0	Uranium, Total	3.41	ug/g dry	-	480200	1347300.02

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F1	A7-F1-6-RM	4-Apr-02	2.5	3.0	Uranium, Total	4.2	ug/g	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Arsenic	11.3	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Beryllium	0.021	mg/kg	UNV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Boron	1.06	mg/kg	UNV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Lead	19.6	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Manganese	857	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Mercury	0.023	mg/kg	NV	480200	1347300.02
A7-F1	A7-F1-8-P	4-Apr-02	3.5	4.0	Aroclor-1254	40	ug/kg	UNV	480200	1347300.02
A7-F1	A7-F1-8-P	4-Apr-02	3.5	4.0	Aroclor-1260	40	ug/kg	UNV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Cesium-137	0.059	pCi/g	UNV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Radium-226	1.33	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Radium-228	1.08	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Technetium-99	1.9	pCi/g	UNV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Thorium-228	1.06	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Thorium-230	22.2	pCi/g	UNV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Thorium-232	1.05	pCi/g	NV	480200	1347300.02
A7-F1	A7-F1-8-RM	4-Apr-02	3.5	4.0	Uranium, Total	4.23	ug/g	NV	480200	1347300.02
A7-F1	A7-F1-10-R	15-Oct-98	4.5	5.0	Technetium-99	1.1	pCi/g dry	U	480200	1347300.02
A7-F1	A7-F1-10-R	15-Oct-98	4.5	5.0	Uranium, Total	3.29	ug/g dry	-	480200	1347300.02
A7-F10	A7-F10-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Arsenic	10.8	mg/kg	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Beryllium	0.3	mg/kg	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Boron	3.29	mg/kg	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Lead	19.3	mg/kg	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Manganese	540	mg/kg	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Mercury	0.02	mg/kg	NV	480300	1347700.09
A7-F10	A7-F10-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	41	ug/kg	UNV	480300	1347700.09
A7-F10	A7-F10-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	41	ug/kg	UNV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.033	pCi/g	UNV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Radium-226	1.02	pCi/g	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Radium-228	0.802	pCi/g	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Thorium-228	0.795	pCi/g	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Thorium-230	18.9	pCi/g	UNV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Thorium-232	0.802	pCi/g	NV	480300	1347700.09
A7-F10	A7-F10-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	3.96	ug/g	NV	480300	1347700.09

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F11	A7-F11-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480400	1347300.09
A7-F12	A7-F12-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Arsenic	10.2	mg/kg	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Beryllium	0.15	mg/kg	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Boron	1.15	mg/kg	UNV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Lead	23.3	mg/kg	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Manganese	465	mg/kg	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Mercury	0.024	mg/kg	NV	480400	1347400.09
A7-F12	A7-F12-6-P	4-Apr-02	2.5	3.0	Aroclor-1254	41	ug/kg	UNV	480400	1347400.09
A7-F12	A7-F12-6-P	4-Apr-02	2.5	3.0	Aroclor-1260	41	ug/kg	UNV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Cesium-137	0.063	pCi/g	UNV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Radium-226	1.52	pCi/g	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Radium-228	1.16	pCi/g	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Thorium-228	1.13	pCi/g	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Thorium-230	22.7	pCi/g	UNV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Thorium-232	1.16	pCi/g	NV	480400	1347400.09
A7-F12	A7-F12-6-RM	4-Apr-02	2.5	3.0	Uranium, Total	3.94	ug/g	NV	480400	1347400.09
A7-F13	A7-F13-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.3	pCi/g dry	U	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Arsenic	18.4	mg/kg	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Beryllium	0.19	mg/kg	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Boron	1.11	mg/kg	UNV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Lead	24.2	mg/kg	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Manganese	696	mg/kg	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Mercury	0.061	mg/kg	NV	480400	1347500.09
A7-F13	A7-F13-6-P	4-Apr-02	2.5	3.0	Aroclor-1254	41	ug/kg	UNV	480400	1347500.09
A7-F13	A7-F13-6-P	4-Apr-02	2.5	3.0	Aroclor-1260	41	ug/kg	UNV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Cesium-137	0.04	pCi/g	UNV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Radium-226	1.43	pCi/g	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Radium-228	1.18	pCi/g	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Technetium-99	1.5	pCi/g	UNV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Thorium-228	1.14	pCi/g	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Thorium-230	22.9	pCi/g	UNV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Thorium-232	1.18	pCi/g	NV	480400	1347500.09
A7-F13	A7-F13-6-RM	4-Apr-02	2.5	3.0	Uranium, Total	2.97	ug/g	NV	480400	1347500.09
A7-F14	A7-F14-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480400	1347600.09

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Arsenic	4.46	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Beryllium	0.02	mg/kg	UNV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Boron	1.01	mg/kg	UNV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Lead	6.51	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Manganese	209	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Mercury	0.006	mg/kg	UNV	480400	1347600.09
A7-F14	A7-F14-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	UNV	480400	1347600.09
A7-F14	A7-F14-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	UNV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.033	pCi/g	UNV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Radium-226	0.818	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Radium-228	0.461	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Technetium-99	1.8	pCi/g	UNV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Thorium-228	0.447	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Thorium-230	16.6	pCi/g	UNV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Thorium-232	0.461	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	1.95	ug/g	UNV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Arsenic	12.8	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Beryllium	0.21	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Boron	1.16	mg/kg	UNV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Lead	17.4	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Manganese	321	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Mercury	0.032	mg/kg	NV	480400	1347600.09
A7-F14	A7-F14-8-P	3-Apr-02	3.5	4.0	Aroclor-1254	40	ug/kg	UNV	480400	1347600.09
A7-F14	A7-F14-8-P	3-Apr-02	3.5	4.0	Aroclor-1260	40	ug/kg	UNV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Cesium-137	0.041	pCi/g	UNV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Radium-226	1.24	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Radium-228	1.01	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Technetium-99	1.7	pCi/g	UNV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Thorium-228	0.987	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Thorium-230	21.5	pCi/g	UNV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Thorium-232	1.01	pCi/g	NV	480400	1347600.09
A7-F14	A7-F14-8-RM	3-Apr-02	3.5	4.0	Uranium, Total	3.79	ug/g	NV	480400	1347600.09
A7-F15	A7-F15-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Arsenic	8.81	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Beryllium	0.36	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Boron	2.76	mg/kg	NV	480391.47	1347701.58

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Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Lead	17.8	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Manganese	531	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Mercury	0.019	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	UNV	480391.47	1347701.58
A7-F15	A7-F15-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	UNV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.059	pCi/g	UNV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Radium-226	1.11	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Radium-228	0.891	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Technetium-99	1.8	pCi/g	UNV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Thorium-228	0.87	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Thorium-230	21.5	pCi/g	UNV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Thorium-232	0.891	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	2.55	ug/g	UNV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Arsenic	8.26	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Beryllium	0.17	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Boron	1.73	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Lead	14	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Manganese	306	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Mercury	0.024	mg/kg	NV	480391.47	1347701.58
A7-F15	A7-F15-8-P	3-Apr-02	3.5	4.0	Aroclor-1254	39	ug/kg	UNV	480391.47	1347701.58
A7-F15	A7-F15-8-P	3-Apr-02	3.5	4.0	Aroclor-1260	39	ug/kg	UNV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Cesium-137	0.053	pCi/g	UNV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Radium-226	1.07	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Radium-228	0.794	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Technetium-99	1.9	pCi/g	UNV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Thorium-228	0.773	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Thorium-230	21	pCi/g	UNV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Thorium-232	0.794	pCi/g	NV	480391.47	1347701.58
A7-F15	A7-F15-8-RM	3-Apr-02	3.5	4.0	Uranium, Total	3.75	ug/g	NV	480391.47	1347701.58
A7-F16	A7-F16-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480464.04	1347299.93
A7-F17	A7-F17-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Arsenic	13	mg/kg	NV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Beryllium	0.022	mg/kg	UNV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Boron	1.12	mg/kg	UNV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Lead	27.1	mg/kg	NV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Manganese	1090	mg/kg	NV	480460.94	1347401.52

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Mercury	0.037	mg/kg	NV	480460.94	1347401.52
A7-F17	A7-F17-6-P	4-Apr-02	2.5	3.0	Aroclor-1254	42	ug/kg	UNV	480460.94	1347401.52
A7-F17	A7-F17-6-P	4-Apr-02	2.5	3.0	Aroclor-1260	42	ug/kg	UNV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Cesium-137	0.046	pCi/g	UNV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Radium-226	1.42	pCi/g	NV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Radium-228	1.1	pCi/g	NV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Thorium-228	1.07	pCi/g	NV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Thorium-230	22.5	pCi/g	UNV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Thorium-232	1.1	pCi/g	NV	480460.94	1347401.52
A7-F17	A7-F17-6-RM	4-Apr-02	2.5	3.0	Uranium, Total	2.63	ug/g	NV	480460.94	1347401.52
A7-F18	A7-F18-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Arsenic	8.69	mg/kg	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Beryllium	0.5	mg/kg	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Boron	1.14	mg/kg	UNV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Lead	24.6	mg/kg	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Manganese	564	mg/kg	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Mercury	0.035	mg/kg	NV	480439.84	1347494.52
A7-F18	A7-F18-6-P	11-Apr-02	2.5	3.0	Aroclor-1254	40	ug/kg	UNV	480439.84	1347494.52
A7-F18	A7-F18-6-P	11-Apr-02	2.5	3.0	Aroclor-1260	40	ug/kg	UNV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Cesium-137	0.058	pCi/g	UNV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Radium-226	1.51	pCi/g	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Radium-228	1.14	pCi/g	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Technetium-99	1.8	pCi/g	UNV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Thorium-228	1.11	pCi/g	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Thorium-230	20.8	pCi/g	UNV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Thorium-232	1.14	pCi/g	NV	480439.84	1347494.52
A7-F18	A7-F18-6-RM	11-Apr-02	2.5	3.0	Uranium, Total	3.48	ug/g	NV	480439.84	1347494.52
A7-F19	A7-F19-1-R	19-Oct-98	0.0	0.5	Technetium-99	2.1	pCi/g dry	-	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Arsenic	7.23	mg/kg	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Beryllium	0.38	mg/kg	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Boron	1.13	mg/kg	UNV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Lead	24.9	mg/kg	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Manganese	358	mg/kg	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Mercury	0.022	mg/kg	NV	480435.25	1347597.4
A7-F19	A7-F19-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	UNV	480435.25	1347597.4

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F19	A7-F19-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	UNV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.037	pCi/g	UNV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Radium-226	1.32	pCi/g	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Radium-228	1.1	pCi/g	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Technetium-99	1.6	pCi/g	UNV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Thorium-228	1.05	pCi/g	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Thorium-230	22.5	pCi/g	UNV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Thorium-232	1.1	pCi/g	NV	480435.25	1347597.4
A7-F19	A7-F19-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	3.59	ug/g	NV	480435.25	1347597.4
A7-F2	A7-F2-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480200	1347400.02
A7-F2	A7-F2-3-R	15-Oct-98	1.0	1.5	Technetium-99	1.1	pCi/g dry	U	480200	1347400.02
A7-F2	A7-F2-3-R	15-Oct-98	1.0	1.5	Uranium, Total	3.01	ug/g dry	-	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Arsenic	8.38	mg/kg	NV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Beryllium	0.02	mg/kg	UNV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Boron	1.02	mg/kg	UNV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Lead	24.4	mg/kg	NV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Manganese	1630	mg/kg	NV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Mercury	0.014	mg/kg	NV	480200	1347400.02
A7-F2	A7-F2-6-P	8-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	UNV	480200	1347400.02
A7-F2	A7-F2-6-P	8-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	UNV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Cesium-137	0.06	pCi/g	UNV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Radium-226	1.28	pCi/g	NV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Radium-228	1.06	pCi/g	NV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Thorium-228	1.05	pCi/g	NV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Thorium-230	21.1	pCi/g	UNV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Thorium-232	1.06	pCi/g	NV	480200	1347400.02
A7-F2	A7-F2-6-RM	8-Apr-02	2.5	3.0	Uranium, Total	4.03	ug/g	NV	480200	1347400.02
A7-F2	A7-F2-6-R	15-Oct-98	3.0	3.5	Technetium-99	1	pCi/g dry	U	480200	1347400.02
A7-F2	A7-F2-6-R	15-Oct-98	3.0	3.5	Uranium, Total	1.66	ug/g dry	-	480200	1347400.02
A7-F2	A7-F2-10-R	15-Oct-98	4.5	5.0	Technetium-99	0.98	pCi/g dry	U	480200	1347400.02
A7-F2	A7-F2-10-R	15-Oct-98	4.5	5.0	Uranium, Total	1.98	ug/g dry	J	480200	1347400.02
A7-F20	A7-F20-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Arsenic	9.53	mg/kg	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Beryllium	0.38	mg/kg	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Boron	4.43	mg/kg	NV	480428.43	1347699.28

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Lead	20.9	mg/kg	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Manganese	508	mg/kg	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Mercury	0.025	mg/kg	NV	480428.43	1347699.28
A7-F20	A7-F20-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	UNV	480428.43	1347699.28
A7-F20	A7-F20-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	UNV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.045	pCi/g	UNV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Radium-226	1.04	pCi/g	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Radium-228	0.889	pCi/g	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Thorium-228	0.882	pCi/g	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Thorium-230	19.7	pCi/g	UNV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Thorium-232	0.889	pCi/g	NV	480428.43	1347699.28
A7-F20	A7-F20-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	2.35	ug/g	UNV	480428.43	1347699.28
A7-F21	A7-F21-4-R	13-Apr-00	1.5	2.0	Technetium-99	1.5	pCi/g dry	UNV	480332.1	1347674.9
A7-F21	A7-F21-4-R	13-Apr-00	1.5	2.0	Uranium, Total	2.35	ug/g dry	NV	480332.1	1347674.9
A7-F21	A7-F21-7-R	13-Apr-00	3.5	4.0	Technetium-99	0.65	pCi/g dry	UNV	480332.1	1347674.9
A7-F21	A7-F21-7-R	13-Apr-00	3.5	4.0	Uranium, Total	2.29	ug/g dry	NV	480332.1	1347674.9
A7-F21	A7-F21-11-R	13-Apr-00	5.5	6.0	Technetium-99	0.82	pCi/g dry	UNV	480332.1	1347674.9
A7-F21	A7-F21-11-R	13-Apr-00	5.5	6.0	Uranium, Total	2.7	ug/g dry	NV	480332.1	1347674.9
A7-F22	A7-F22-4-R	13-Apr-00	1.5	2.0	Technetium-99	0.74	pCi/g dry	UNV	480310	1347675
A7-F22	A7-F22-4-R	13-Apr-00	1.5	2.0	Uranium, Total	2.1	ug/g dry	NV	480310	1347675
A7-F22	A7-F22-7-R	13-Apr-00	3.5	4.0	Technetium-99	0.76	pCi/g dry	UNV	480310	1347675
A7-F22	A7-F22-7-R	13-Apr-00	3.5	4.0	Uranium, Total	1.67	ug/g dry	NV	480310	1347675
A7-F22	A7-F22-11-R	13-Apr-00	5.5	6.0	Technetium-99	0.89	pCi/g dry	UNV	480310	1347675
A7-F22	A7-F22-11-R	13-Apr-00	5.5	6.0	Uranium, Total	2.09	ug/g dry	NV	480310	1347675
A7-F23	A7-F23-4-R	13-Apr-00	1.5	2.0	Technetium-99	0.81	pCi/g dry	UNV	480246.9	1347675
A7-F23	A7-F23-4-R	13-Apr-00	1.5	2.0	Uranium, Total	1.88	ug/g dry	NV	480246.9	1347675
A7-F23	A7-F23-7-R	13-Apr-00	3.5	4.0	Technetium-99	0.88	pCi/g dry	UNV	480246.9	1347675
A7-F23	A7-F23-7-R	13-Apr-00	3.5	4.0	Uranium, Total	1.79	ug/g dry	NV	480246.9	1347675
A7-F23	A7-F23-11-R	13-Apr-00	5.5	6.0	Technetium-99	0.79	pCi/g dry	UNV	480246.9	1347675
A7-F23	A7-F23-11-R	13-Apr-00	5.5	6.0	Uranium, Total	1.27	ug/g dry	NV	480246.9	1347675
A7-F24	A7-F24-4-R	13-Apr-00	1.5	2.0	Technetium-99	1.1	pCi/g dry	NV	480184	1347669
A7-F24	A7-F24-4-R	13-Apr-00	1.5	2.0	Uranium, Total	1.69	ug/g dry	NV	480184	1347669
A7-F24	A7-F24-7-R	13-Apr-00	3.5	4.0	Technetium-99	0.88	pCi/g dry	UNV	480184	1347669
A7-F24	A7-F24-7-R	13-Apr-00	3.5	4.0	Uranium, Total	2.16	ug/g dry	NV	480184	1347669
A7-F24	A7-F24-11-R	13-Apr-00	5.5	6.0	Technetium-99	0.85	pCi/g dry	UNV	480184	1347669

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F24	A7-F24-11-R	13-Apr-00	5.5	6.0	Uranium, Total	1.89	ug/g dry	NV	480184	1347669
A7-F3	A7-F3-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480300	1347400.02
A7-F3	A7-F3-3-R	15-Oct-98	1.0	1.5	Technetium-99	1.1	pCi/g dry	U	480300	1347400.02
A7-F3	A7-F3-3-R	15-Oct-98	1.0	1.5	Uranium, Total	3.95	ug/g dry	J	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Arsenic	4.54	mg/kg	NV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Beryllium	0.05	mg/kg	NV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Boron	1.04	mg/kg	UNV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Lead	19.1	mg/kg	NV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Manganese	325	mg/kg	NV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Mercury	0.021	mg/kg	NV	480300	1347400.02
A7-F3	A7-F3-6-P	8-Apr-02	2.5	3.0	Aroclor-1254	40	ug/kg	UNV	480300	1347400.02
A7-F3	A7-F3-6-P	8-Apr-02	2.5	3.0	Aroclor-1260	40	ug/kg	UNV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Cesium-137	0.1	pCi/g	NV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Radium-226	1.44	pCi/g	NV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Radium-228	1.08	pCi/g	NV	480300	1347400.02
A7-F3	A7-F3-6-R	15-Oct-98	2.5	3.0	Technetium-99	1.2	pCi/g dry	U	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Technetium-99	1.9	pCi/g	UNV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Thorium-228	1.04	pCi/g	NV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Thorium-230	22.6	pCi/g	UNV	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Thorium-232	1.08	pCi/g	NV	480300	1347400.02
A7-F3	A7-F3-6-R	15-Oct-98	2.5	3.0	Uranium, Total	3.05	ug/g dry	J	480300	1347400.02
A7-F3	A7-F3-6-RM	8-Apr-02	2.5	3.0	Uranium, Total	11.6	ug/g	NV	480300	1347400.02
A7-F3	A7-F3-10-R	15-Oct-98	4.5	5.0	Technetium-99	1.1	pCi/g dry	U	480300	1347400.02
A7-F3	A7-F3-10-R	15-Oct-98	4.5	5.0	Uranium, Total	5.96	ug/g dry	J	480300	1347400.02
A7-F4	A7-F4-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480300	1347300.02
A7-F4	A7-F4-3-R	15-Oct-98	1.0	1.5	Technetium-99	1.2	pCi/g dry	U	480300	1347300.02
A7-F4	A7-F4-3-R	15-Oct-98	1.0	1.5	Uranium, Total	2.71	ug/g dry	-	480300	1347300.02
A7-F4	A7-F4-6-R	15-Oct-98	2.5	3.0	Technetium-99	1.2	pCi/g dry	U	480300	1347300.02
A7-F4	A7-F4-6-R	15-Oct-98	2.5	3.0	Uranium, Total	2.22	ug/g dry	J	480300	1347300.02
A7-F4	A7-F4-10-R	15-Oct-98	4.5	5.0	Technetium-99	1.2	pCi/g dry	U	480300	1347300.02
A7-F4	A7-F4-10-R	15-Oct-98	4.5	5.0	Uranium, Total	9.84	ug/g dry	J	480300	1347300.02
A7-F5	A7-F5-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Arsenic	6.29	mg/kg	NV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Beryllium	0.021	mg/kg	UNV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Boron	1.07	mg/kg	UNV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Lead	7.93	mg/kg	NV	480200	1347500.09

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Manganese	382	mg/kg	NV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Mercury	0.014	mg/kg	NV	480200	1347500.09
A7-F5	A7-F5-6-P	8-Apr-02	2.5	3.0	Aroclor-1254	38	ug/kg	UNV	480200	1347500.09
A7-F5	A7-F5-6-P	8-Apr-02	2.5	3.0	Aroclor-1260	38	ug/kg	UNV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Cesium-137	0.039	pCi/g	UNV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Radium-226	0.763	pCi/g	NV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Radium-228	0.508	pCi/g	NV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Thorium-228	0.479	pCi/g	NV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Thorium-230	19.8	pCi/g	UNV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Thorium-232	0.508	pCi/g	NV	480200	1347500.09
A7-F5	A7-F5-6-RM	8-Apr-02	2.5	3.0	Uranium, Total	3.81	ug/g	NV	480200	1347500.09
A7-F6	A7-F6-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Arsenic	8.92	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Beryllium	0.029	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Boron	1.1	mg/kg	UNV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Lead	21.2	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Manganese	235	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Mercury	0.01	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	UNV	480200	1347600.09
A7-F6	A7-F6-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	UNV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.04	pCi/g	UNV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Radium-226	1.46	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Radium-228	1.15	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Technetium-99	1.9	pCi/g	UNV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Thorium-228	1.12	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Thorium-230	23	pCi/g	UNV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Thorium-232	1.15	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	4.72	ug/g	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Arsenic	8.24	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Beryllium	0.25	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Boron	2.23	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Lead	20.8	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Manganese	756	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Mercury	0.027	mg/kg	NV	480200	1347600.09
A7-F6	A7-F6-8-P	3-Apr-02	3.5	4.0	Aroclor-1254	39	ug/kg	UNV	480200	1347600.09

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F6	A7-F6-8-P	3-Apr-02	3.5	4.0	Aroclor-1260	39	ug/kg	UNV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Cesium-137	0.049	pCi/g	UNV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Radium-226	1.32	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Radium-228	0.921	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Technetium-99	1.6	pCi/g	UNV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Thorium-228	0.891	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Thorium-230	20.6	pCi/g	UNV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Thorium-232	0.921	pCi/g	NV	480200	1347600.09
A7-F6	A7-F6-8-RM	3-Apr-02	3.5	4.0	Uranium, Total	3.52	ug/g	NV	480200	1347600.09
A7-F7	A7-F7-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Arsenic	7.8	mg/kg	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Beryllium	0.33	mg/kg	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Boron	8.64	mg/kg	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Lead	19.3	mg/kg	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Manganese	392	mg/kg	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Mercury	0.016	mg/kg	NV	480200	1347700.09
A7-F7	A7-F7-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	41	ug/kg	UNV	480200	1347700.09
A7-F7	A7-F7-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	41	ug/kg	UNV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.044	pCi/g	UNV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Radium-226	1.09	pCi/g	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Radium-228	0.943	pCi/g	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Technetium-99	1.8	pCi/g	UNV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Thorium-228	0.938	pCi/g	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Thorium-230	21.9	pCi/g	UNV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Thorium-232	0.943	pCi/g	NV	480200	1347700.09
A7-F7	A7-F7-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	2.6	ug/g	UNV	480200	1347700.09
A7-F8	A7-F8-1-R	15-Oct-98	0.0	0.5	Technetium-99	1.2	pCi/g dry	U	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Arsenic	3.84	mg/kg	NV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Beryllium	0.022	mg/kg	UNV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Boron	1.1	mg/kg	UNV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Lead	18.7	mg/kg	NV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Manganese	298	mg/kg	NV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Mercury	0.007	mg/kg	UNV	480300	1347500.09
A7-F8	A7-F8-6-P	4-Apr-02	2.5	3.0	Aroclor-1254	39	ug/kg	UNV	480300	1347500.09
A7-F8	A7-F8-6-P	4-Apr-02	2.5	3.0	Aroclor-1260	39	ug/kg	UNV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Cesium-137	0.048	pCi/g	UNV	480300	1347500.09

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Radium-226	1.54	pCi/g	NV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Radium-228	1.14	pCi/g	NV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Technetium-99	1.7	pCi/g	UNV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Thorium-228	1.11	pCi/g	NV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Thorium-230	23.8	pCi/g	UNV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Thorium-232	1.14	pCi/g	NV	480300	1347500.09
A7-F8	A7-F8-6-RM	4-Apr-02	2.5	3.0	Uranium, Total	5.45	ug/g	NV	480300	1347500.09
A7-F9	A7-F9-1-R	19-Oct-98	0.0	0.5	Technetium-99	1.1	pCi/g dry	U	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Arsenic	17.6	mg/kg	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Beryllium	1.16	mg/kg	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Boron	1.12	mg/kg	UNV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Lead	46.5	mg/kg	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Manganese	1470	mg/kg	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Mercury	0.014	mg/kg	NV	480300	1347600.09
A7-F9	A7-F9-6-P	3-Apr-02	2.5	3.0	Aroclor-1254	40	ug/kg	UNV	480300	1347600.09
A7-F9	A7-F9-6-P	3-Apr-02	2.5	3.0	Aroclor-1260	40	ug/kg	UNV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Cesium-137	0.064	pCi/g	UNV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Radium-226	1.73	pCi/g	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Radium-228	1.29	pCi/g	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Technetium-99	2	pCi/g	UNV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Thorium-228	1.27	pCi/g	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Thorium-230	25.5	pCi/g	UNV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Thorium-232	1.29	pCi/g	NV	480300	1347600.09
A7-F9	A7-F9-6-RM	3-Apr-02	2.5	3.0	Uranium, Total	4.87	ug/g	NV	480300	1347600.09
A7-G7	A7-G7-1-R	19-Apr-00	0.0	0.5	Technetium-99	1.4	pCi/g dry	UNV	480524.9	1347173.8
A7-G7	A7-G7-1-R	19-Apr-00	0.0	0.5	Uranium, Total	2.95	ug/g dry	NV	480524.9	1347173.8
A7-G7	A7-G7-3-R	19-Apr-00	1.0	1.5	Technetium-99	1.2	pCi/g dry	UNV	480524.9	1347173.8
A7-G7	A7-G7-3-R	19-Apr-00	1.0	1.5	Uranium, Total	10.6	ug/g dry	NV	480524.9	1347173.8
A7-G7	A7-G7-6-R	19-Apr-00	2.5	3.0	Technetium-99	1.4	pCi/g dry	UNV	480524.9	1347173.8
A7-G7	A7-G7-6-R	19-Apr-00	2.5	3.0	Uranium, Total	2.17	ug/g dry	NV	480524.9	1347173.8
A7-G7	A7-G7-10-R	19-Apr-00	4.5	5.0	Technetium-99	1.3	pCi/g dry	UNV	480524.9	1347173.8
A7-G7	A7-G7-10-R	19-Apr-00	4.5	5.0	Uranium, Total	2.46	ug/g dry	NV	480524.9	1347173.8
A7-G8	A7-G8-1-R	19-Apr-00	0.0	0.5	Technetium-99	1.2	pCi/g dry	UNV	480614.9	1347177
A7-G8	A7-G8-1-R	19-Apr-00	0.0	0.5	Uranium, Total	13.7	ug/g dry	NV	480614.9	1347177
A7-G8	A7-G8-3-R	19-Apr-00	1.0	1.5	Technetium-99	1.3	pCi/g dry	UNV	480614.9	1347177
A7-G8	A7-G8-3-R	19-Apr-00	1.0	1.5	Uranium, Total	4.11	ug/g dry	NV	480614.9	1347177

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-G8	A7-G8-6-R	19-Apr-00	2.5	3.0	Technetium-99	1.3	pCi/g dry	UNV	480614.9	1347177
A7-G8	A7-G8-6-R	19-Apr-00	2.5	3.0	Uranium, Total	2.15	ug/g dry	NV	480614.9	1347177
A7-G8	A7-G8-10-R	19-Apr-00	4.5	5.0	Technetium-99	1.4	pCi/g dry	UNV	480614.9	1347177
A7-G8	A7-G8-10-R	19-Apr-00	4.5	5.0	Uranium, Total	3.25	ug/g dry	NV	480614.9	1347177
A7-HR1	A7-HR1-1-M	26-May-02	0.0	0.5	Arsenic	11.6	mg/kg	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-M	26-May-02	0.0	0.5	Beryllium	0.89	mg/kg	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-M	26-May-02	0.0	0.5	Boron	2.8	mg/kg	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-M	26-May-02	0.0	0.5	Lead	17.1	mg/kg	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-M	26-May-02	0.0	0.5	Manganese	859	mg/kg	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-M	26-May-02	0.0	0.5	Mercury	0.02	mg/kg	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-P	26-May-02	0.0	0.5	Aroclor-1254	35	ug/kg	UNV	480318.48	1347826.46
A7-HR1	A7-HR1-1-P	26-May-02	0.0	0.5	Aroclor-1260	35	ug/kg	UNV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Cesium-137	0.063	pCi/g	UNV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Gross Alpha	9.1	pCi/g	UNV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Gross Beta	15	pCi/g	UNV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Radium-226	1.39	pCi/g	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Radium-228	1.1	pCi/g	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Technetium-99	1.9	pCi/g	UNV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Thorium-228	1.11	pCi/g	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Thorium-230	25.5	pCi/g	UNV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Thorium-232	1.1	pCi/g	NV	480318.48	1347826.46
A7-HR1	A7-HR1-1-R	26-May-02	0.0	0.5	Uranium, Total	4.03	ug/g	UNV	480318.48	1347826.46
A7-HR10	A7-HR10-1-M	22-May-02	0.0	0.5	Arsenic	2.4	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-M	22-May-02	0.0	0.5	Beryllium	0.1	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-M	22-May-02	0.0	0.5	Boron	6.4	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-M	22-May-02	0.0	0.5	Lead	3.2	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-M	22-May-02	0.0	0.5	Manganese	518	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-M	22-May-02	0.0	0.5	Mercury	0.01	mg/kg	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-1-P	22-May-02	0.0	0.5	Aroclor-1254	52	ug/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-P	22-May-02	0.0	0.5	Aroclor-1260	40	ug/kg	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Cesium-137	0.077	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Gross Alpha	11	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Gross Beta	16	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Radium-226	0.498	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Radium-228	0.414	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Technetium-99	1.8	pCi/g	UNV	480598.94	1348014.005

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Thorium-228	0.39	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Thorium-230	16.7	pCi/g	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Thorium-232	0.414	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-1-R	22-May-02	0.0	0.5	Uranium, Total	4.36	ug/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-M	22-May-02	1.0	1.5	Arsenic	9.9	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-M	22-May-02	1.0	1.5	Beryllium	0.75	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-M	22-May-02	1.0	1.5	Boron	10.1	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-M	22-May-02	1.0	1.5	Lead	14.1	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-M	22-May-02	1.0	1.5	Manganese	545	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-M	22-May-02	1.0	1.5	Mercury	0.02	mg/kg	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-P	22-May-02	1.0	1.5	Aroclor-1254	39	ug/kg	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-3-P	22-May-02	1.0	1.5	Aroclor-1260	39	ug/kg	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Cesium-137	0.043	pCi/g	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Gross Alpha	10	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Gross Beta	16	pCi/g	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Radium-226	1.21	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Radium-228	0.815	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Technetium-99	1.8	pCi/g	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Thorium-228	0.811	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Thorium-230	22.3	pCi/g	UNV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Thorium-232	0.815	pCi/g	NV	480598.94	1348014.005
A7-HR10	A7-HR10-3-R	22-May-02	1.0	1.5	Uranium, Total	6.1	ug/g	NV	480598.94	1348014.005
A7-HR11	A7-HR11-8-M	26-May-02	3.5	4.0	Arsenic	6.3	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-M	26-May-02	3.5	4.0	Beryllium	0.58	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-M	26-May-02	3.5	4.0	Boron	7.6	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-M	26-May-02	3.5	4.0	Lead	11	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-M	26-May-02	3.5	4.0	Manganese	478	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-M	26-May-02	3.5	4.0	Mercury	0.02	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-P	26-May-02	3.5	4.0	Aroclor-1254	40	ug/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-8-P	26-May-02	3.5	4.0	Aroclor-1260	40	ug/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Cesium-137	0.051	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Gross Alpha	10	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Gross Beta	16	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Radium-226	1.64	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Radium-228	1.19	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Technetium-99	1.7	pCi/g	UNV	480515.02	1348009.62

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Thorium-228	1.17	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Thorium-230	26.3	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Thorium-232	1.19	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-R	26-May-02	3.5	4.0	Uranium, Total	6.79	ug/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-8-P	26-May-02	3.5	4.0	Aroclor-1254	40	ug/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-8-P	26-May-02	3.5	4.0	Aroclor-1260	40	ug/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-M	26-May-02	4.0	4.5	Arsenic	4.8	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-M	26-May-02	4.0	4.5	Beryllium	0.47	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-M	26-May-02	4.0	4.5	Boron	8.5	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-M	26-May-02	4.0	4.5	Lead	7.9	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-M	26-May-02	4.0	4.5	Manganese	294	mg/kg	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-M	26-May-02	4.0	4.5	Mercury	0.02	mg/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-P	26-May-02	4.0	4.5	Aroclor-1254	41	ug/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-P	26-May-02	4.0	4.5	Aroclor-1260	41	ug/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Cesium-137	0.05	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Gross Alpha	9.3	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Gross Beta	16	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Radium-226	1.15	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Radium-228	0.947	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Technetium-99	1.6	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Thorium-228	0.929	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Thorium-230	24.7	pCi/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Thorium-232	0.947	pCi/g	NV	480515.02	1348009.62
A7-HR11	A7-HR11-9-R	26-May-02	4.0	4.5	Uranium, Total	3.11	ug/g	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-P	26-May-02	4.0	4.5	Aroclor-1254	41	ug/kg	UNV	480515.02	1348009.62
A7-HR11	A7-HR11-9-P	26-May-02	4.0	4.5	Aroclor-1260	41	ug/kg	UNV	480515.02	1348009.62
A7-HR12	A7-HR12-8-M	22-May-02	3.5	4.0	Arsenic	10.2	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-M	22-May-02	3.5	4.0	Beryllium	0.78	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-M	22-May-02	3.5	4.0	Boron	8.8	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-M	22-May-02	3.5	4.0	Lead	15.9	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-M	22-May-02	3.5	4.0	Manganese	627	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-M	22-May-02	3.5	4.0	Mercury	0.02	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-P	22-May-02	3.5	4.0	Aroclor-1254	41	ug/kg	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-8-P	22-May-02	3.5	4.0	Aroclor-1260	41	ug/kg	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Cesium-137	0.05	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Gross Alpha	11	pCi/g	NV	480430.188	1348014.659

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Gross Beta	18	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Radium-226	1.07	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Radium-228	0.94	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Technetium-99	1.8	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Thorium-228	0.931	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Thorium-230	23.4	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Thorium-232	0.94	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-8-R	22-May-02	3.5	4.0	Uranium, Total	4.31	ug/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-M	22-May-02	4.0	4.5	Arsenic	3.2	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-M	22-May-02	4.0	4.5	Beryllium	0.65	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-M	22-May-02	4.0	4.5	Boron	4.3	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-M	22-May-02	4.0	4.5	Lead	12.3	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-M	22-May-02	4.0	4.5	Manganese	188	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-M	22-May-02	4.0	4.5	Mercury	0.03	mg/kg	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-P	22-May-02	4.0	4.5	Aroclor-1254	40	ug/kg	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-9-P	22-May-02	4.0	4.5	Aroclor-1260	40	ug/kg	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Cesium-137	0.05	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Gross Alpha	9.2	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Gross Beta	16	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Radium-226	1.09	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Radium-228	0.875	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Technetium-99	1.8	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Thorium-228	0.842	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Thorium-230	23.6	pCi/g	UNV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Thorium-232	0.875	pCi/g	NV	480430.188	1348014.659
A7-HR12	A7-HR12-9-R	22-May-02	4.0	4.5	Uranium, Total	3.6	ug/g	UNV	480430.188	1348014.659
A7-HR13	A7-HR13-12-M	26-May-02	5.5	6.0	Arsenic	5.6	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-M	26-May-02	5.5	6.0	Beryllium	0.5	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-M	26-May-02	5.5	6.0	Boron	5.1	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-M	26-May-02	5.5	6.0	Lead	10.1	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-M	26-May-02	5.5	6.0	Manganese	601	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-M	26-May-02	5.5	6.0	Mercury	0.02	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-P	26-May-02	5.5	6.0	Aroclor-1254	40	ug/kg	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-12-P	26-May-02	5.5	6.0	Aroclor-1260	40	ug/kg	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Cesium-137	0.064	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Gross Alpha	10	pCi/g	UNV	480345.251	1348004.96

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Gross Beta	18	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Radium-226	1.24	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Radium-228	0.869	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Technetium-99	1.8	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Thorium-228	0.852	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Thorium-230	22.1	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Thorium-232	0.869	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-12-R	26-May-02	5.5	6.0	Uranium, Total	2.49	ug/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-M	26-May-02	6.0	6.5	Arsenic	6.8	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-M	26-May-02	6.0	6.5	Beryllium	0.55	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-M	26-May-02	6.0	6.5	Boron	4.9	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-M	26-May-02	6.0	6.5	Lead	10.9	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-M	26-May-02	6.0	6.5	Manganese	634	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-M	26-May-02	6.0	6.5	Mercury	0.02	mg/kg	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-P	26-May-02	6.0	6.5	Aroclor-1254	40	ug/kg	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-P	26-May-02	6.0	6.5	Aroclor-1260	40	ug/kg	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Cesium-137	0.05	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Gross Alpha	8	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Gross Beta	15	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Radium-226	1.29	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Radium-228	0.815	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Technetium-99	1.9	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Thorium-228	0.815	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Thorium-230	20	pCi/g	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Thorium-232	0.815	pCi/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-R	26-May-02	6.0	6.5	Uranium, Total	4.35	ug/g	NV	480345.251	1348004.96
A7-HR13	A7-HR13-13-P	26-May-02	6.0	6.5	Aroclor-1254	40	ug/kg	UNV	480345.251	1348004.96
A7-HR13	A7-HR13-13-P	26-May-02	6.0	6.5	Aroclor-1260	40	ug/kg	UNV	480345.251	1348004.96
A7-HR14	A7-HR14-8-M	23-May-02	3.5	4.0	Arsenic	7.4	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-M	23-May-02	3.5	4.0	Beryllium	0.84	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-M	23-May-02	3.5	4.0	Boron	3.3	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-M	23-May-02	3.5	4.0	Lead	14.3	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-M	23-May-02	3.5	4.0	Manganese	647	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-M	23-May-02	3.5	4.0	Mercury	0.04	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-P	23-May-02	3.5	4.0	Aroclor-1254	39	ug/kg	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-8-P	23-May-02	3.5	4.0	Aroclor-1260	39	ug/kg	UNV	480260.66	1348003.2

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Cesium-137	0.036	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Gross Alpha	8.2	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Gross Beta	16	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Radium-226	1.34	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Radium-228	0.904	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Technetium-99	1.9	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Thorium-228	0.88	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Thorium-230	24.3	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Thorium-232	0.904	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-R	23-May-02	3.5	4.0	Uranium, Total	5.3	ug/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-8-P	23-May-02	3.5	4.0	Aroclor-1254	40	ug/kg	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-8-P	23-May-02	3.5	4.0	Aroclor-1260	40	ug/kg	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-M	23-May-02	4.0	4.5	Arsenic	7.3	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-M	23-May-02	4.0	4.5	Beryllium	0.68	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-M	23-May-02	4.0	4.5	Boron	6.5	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-M	23-May-02	4.0	4.5	Lead	10.9	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-M	23-May-02	4.0	4.5	Manganese	529	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-M	23-May-02	4.0	4.5	Mercury	0.02	mg/kg	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-P	23-May-02	4.0	4.5	Aroclor-1254	40	ug/kg	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-P	23-May-02	4.0	4.5	Aroclor-1260	40	ug/kg	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Cesium-137	0.038	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Gross Alpha	9.6	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Gross Beta	16	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Radium-226	1.23	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Radium-228	0.887	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Technetium-99	1.9	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Thorium-228	0.894	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Thorium-230	21.6	pCi/g	UNV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Thorium-232	0.887	pCi/g	NV	480260.66	1348003.2
A7-HR14	A7-HR14-9-R	23-May-02	4.0	4.5	Uranium, Total	2.54	ug/g	NV	480260.66	1348003.2
A7-HR15	A7-HR15-11-M	23-May-02	5.0	5.5	Arsenic	6.4	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-M	23-May-02	5.0	5.5	Beryllium	0.41	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-M	23-May-02	5.0	5.5	Boron	6.2	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-M	23-May-02	5.0	5.5	Lead	7.1	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-M	23-May-02	5.0	5.5	Manganese	412	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-M	23-May-02	5.0	5.5	Mercury	0.02	mg/kg	NV	480175.363	1347981.203

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR15	A7-HR15-11-P	23-May-02	5.0	5.5	Aroclor-1254	38	ug/kg	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-P	23-May-02	5.0	5.5	Aroclor-1260	38	ug/kg	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Cesium-137	0.051	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Gross Alpha	9.3	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Gross Beta	16	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Radium-226	1.22	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Radium-228	0.698	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Technetium-99	2	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Thorium-228	0.69	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Thorium-230	19.5	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Thorium-232	0.698	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-11-R	23-May-02	5.0	5.5	Uranium, Total	2.73	ug/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-P	23-May-02	5.0	5.5	Aroclor-1254	38	ug/kg	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-11-P	23-May-02	5.0	5.5	Aroclor-1260	38	ug/kg	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-M	23-May-02	5.5	6.0	Arsenic	9.7	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-M	23-May-02	5.5	6.0	Beryllium	0.92	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-M	23-May-02	5.5	6.0	Boron	1.7	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-M	23-May-02	5.5	6.0	Lead	16.5	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-M	23-May-02	5.5	6.0	Manganese	529	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-M	23-May-02	5.5	6.0	Mercury	0.04	mg/kg	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-P	23-May-02	5.5	6.0	Aroclor-1254	42	ug/kg	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-P	23-May-02	5.5	6.0	Aroclor-1260	42	ug/kg	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Cesium-137	0.055	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Gross Alpha	10	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Gross Beta	17	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Radium-226	0.968	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Radium-228	0.779	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Technetium-99	1.8	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Thorium-228	0.75	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Thorium-230	20	pCi/g	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Thorium-232	0.779	pCi/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-R	23-May-02	5.5	6.0	Uranium, Total	2.39	ug/g	NV	480175.363	1347981.203
A7-HR15	A7-HR15-12-P	23-May-02	5.5	6.0	Aroclor-1254	42	ug/kg	UNV	480175.363	1347981.203
A7-HR15	A7-HR15-12-P	23-May-02	5.5	6.0	Aroclor-1260	42	ug/kg	UNV	480175.363	1347981.203
A7-HR2	A7-HR2-1-M	18-May-02	0.0	0.5	Arsenic	7.3	mg/kg	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-M	18-May-02	0.0	0.5	Beryllium	0.65	mg/kg	NV	480282.146	1347946.661

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR2	A7-HR2-1-M	18-May-02	0.0	0.5	Boron	1.8	mg/kg	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-M	18-May-02	0.0	0.5	Lead	12	mg/kg	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-M	18-May-02	0.0	0.5	Manganese	118	mg/kg	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-M	18-May-02	0.0	0.5	Mercury	0.02	mg/kg	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-P	18-May-02	0.0	0.5	Aroclor-1254	40	ug/kg	UNV	480282.146	1347946.661
A7-HR2	A7-HR2-1-P	18-May-02	0.0	0.5	Aroclor-1260	40	ug/kg	UNV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Cesium-137	0.055	pCi/g	UNV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Gross Alpha	11	pCi/g	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Gross Beta	18	pCi/g	UNV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Radium-226	1.26	pCi/g	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Radium-228	1.07	pCi/g	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Technetium-99	1.5	pCi/g	UNV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Thorium-228	1.05	pCi/g	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Thorium-230	22.1	pCi/g	UNV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Thorium-232	1.07	pCi/g	NV	480282.146	1347946.661
A7-HR2	A7-HR2-1-R	18-May-02	0.0	0.5	Uranium, Total	2.62	ug/g	UNV	480282.146	1347946.661
A7-HR22	A7-HR22-12-M	23-May-02	5.5	6.0	Arsenic	7.5	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-M	23-May-02	5.5	6.0	Beryllium	0.45	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-M	23-May-02	5.5	6.0	Boron	6	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-M	23-May-02	5.5	6.0	Lead	10.9	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-M	23-May-02	5.5	6.0	Manganese	872	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-M	23-May-02	5.5	6.0	Mercury	0.01	mg/kg	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-P	23-May-02	5.5	6.0	Aroclor-1254	40	ug/kg	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-P	23-May-02	5.5	6.0	Aroclor-1260	40	ug/kg	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Cesium-137	0.06	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Gross Alpha	10	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Gross Beta	17	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Radium-226	1.1	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Radium-228	0.786	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Technetium-99	1.6	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Thorium-228	0.774	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Thorium-230	22	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Thorium-232	0.786	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-12-R	23-May-02	5.5	6.0	Uranium, Total	3.18	ug/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-P	23-May-02	5.5	6.0	Aroclor-1254	40	ug/kg	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-12-P	23-May-02	5.5	6.0	Aroclor-1260	40	ug/kg	UNV	480175.048	1348011.599

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR22	A7-HR22-13-M	23-May-02	6.0	6.5	Arsenic	3.2	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-M	23-May-02	6.0	6.5	Beryllium	0.55	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-M	23-May-02	6.0	6.5	Boron	10.1	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-M	23-May-02	6.0	6.5	Lead	9.3	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-M	23-May-02	6.0	6.5	Manganese	405	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-M	23-May-02	6.0	6.5	Mercury	0.02	mg/kg	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-P	23-May-02	6.0	6.5	Aroclor-1254	40	ug/kg	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-13-P	23-May-02	6.0	6.5	Aroclor-1260	40	ug/kg	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Cesium-137	0.038	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Gross Alpha	10	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Gross Beta	18	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Radium-226	1.09	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Radium-228	0.929	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Technetium-99	1.4	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Thorium-228	0.915	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Thorium-230	22.7	pCi/g	UNV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Thorium-232	0.929	pCi/g	NV	480175.048	1348011.599
A7-HR22	A7-HR22-13-R	23-May-02	6.0	6.5	Uranium, Total	3.98	ug/g	NV	480175.048	1348011.599
A7-HR3	A7-HR3-1-M	18-May-02	0.0	0.5	Arsenic	12.2	mg/kg	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-M	18-May-02	0.0	0.5	Beryllium	0.61	mg/kg	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-M	18-May-02	0.0	0.5	Boron	1.9	mg/kg	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-M	18-May-02	0.0	0.5	Lead	12.2	mg/kg	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-M	18-May-02	0.0	0.5	Manganese	179	mg/kg	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-M	18-May-02	0.0	0.5	Mercury	0.03	mg/kg	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-P	18-May-02	0.0	0.5	Aroclor-1254	39	ug/kg	UNV	480233.643	1347901.023
A7-HR3	A7-HR3-1-P	18-May-02	0.0	0.5	Aroclor-1260	39	ug/kg	UNV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Cesium-137	0.039	pCi/g	UNV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Gross Alpha	6	pCi/g	UNV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Gross Beta	17	pCi/g	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Radium-226	1.29	pCi/g	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Radium-228	0.97	pCi/g	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Technetium-99	1.9	pCi/g	UNV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Thorium-228	0.934	pCi/g	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Thorium-230	22	pCi/g	UNV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Thorium-232	0.97	pCi/g	NV	480233.643	1347901.023
A7-HR3	A7-HR3-1-R	18-May-02	0.0	0.5	Uranium, Total	3.02	ug/g	NV	480233.643	1347901.023

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR4	A7-HR4-1-M	18-May-02	0.0	0.5	Arsenic	8.9	mg/kg	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-M	18-May-02	0.0	0.5	Beryllium	0.75	mg/kg	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-M	18-May-02	0.0	0.5	Boron	1.9	mg/kg	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-M	18-May-02	0.0	0.5	Lead	14.5	mg/kg	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-M	18-May-02	0.0	0.5	Manganese	591	mg/kg	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-M	18-May-02	0.0	0.5	Mercury	0.03	mg/kg	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-P	18-May-02	0.0	0.5	Aroclor-1254	39	ug/kg	UNV	480207.622	1347815.422
A7-HR4	A7-HR4-1-P	18-May-02	0.0	0.5	Aroclor-1260	39	ug/kg	UNV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Cesium-137	0.043	pCi/g	UNV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Gross Alpha	10	pCi/g	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Gross Beta	17	pCi/g	UNV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Radium-226	1.35	pCi/g	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Radium-228	0.998	pCi/g	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Technetium-99	1.7	pCi/g	UNV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Thorium-228	0.958	pCi/g	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Thorium-230	20.8	pCi/g	UNV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Thorium-232	0.998	pCi/g	NV	480207.622	1347815.422
A7-HR4	A7-HR4-1-R	18-May-02	0.0	0.5	Uranium, Total	4	ug/g	NV	480207.622	1347815.422
A7-HR5	A7-HR5-1-M	18-May-02	0.0	0.5	Arsenic	7.5	mg/kg	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-M	18-May-02	0.0	0.5	Beryllium	0.59	mg/kg	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-M	18-May-02	0.0	0.5	Boron	1.7	mg/kg	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-M	18-May-02	0.0	0.5	Lead	12.4	mg/kg	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-M	18-May-02	0.0	0.5	Manganese	264	mg/kg	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-M	18-May-02	0.0	0.5	Mercury	0.03	mg/kg	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-P	18-May-02	0.0	0.5	Aroclor-1254	39	ug/kg	UNV	480205.07	1347941.118
A7-HR5	A7-HR5-1-P	18-May-02	0.0	0.5	Aroclor-1260	39	ug/kg	UNV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Cesium-137	0.052	pCi/g	UNV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Gross Alpha	12	pCi/g	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Gross Beta	15	pCi/g	UNV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Radium-226	1.21	pCi/g	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Radium-228	1.04	pCi/g	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Technetium-99	1.8	pCi/g	UNV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Thorium-228	1.02	pCi/g	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Thorium-230	22.6	pCi/g	UNV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Thorium-232	1.04	pCi/g	NV	480205.07	1347941.118
A7-HR5	A7-HR5-1-R	18-May-02	0.0	0.5	Uranium, Total	3.73	ug/g	NV	480205.07	1347941.118

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR6	A7-HR6-1-M	18-May-02	0.0	0.5	Arsenic	9.1	mg/kg	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-M	18-May-02	0.0	0.5	Beryllium	0.66	mg/kg	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-M	18-May-02	0.0	0.5	Boron	2.9	mg/kg	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-M	18-May-02	0.0	0.5	Lead	11.5	mg/kg	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-M	18-May-02	0.0	0.5	Manganese	481	mg/kg	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-M	18-May-02	0.0	0.5	Mercury	0.03	mg/kg	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-P	18-May-02	0.0	0.5	Aroclor-1254	38	ug/kg	UNV	480172.921	1347909.313
A7-HR6	A7-HR6-1-P	18-May-02	0.0	0.5	Aroclor-1260	38	ug/kg	UNV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Cesium-137	0.035	pCi/g	UNV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Gross Alpha	12	pCi/g	UNV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Gross Beta	17	pCi/g	UNV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Radium-226	1.07	pCi/g	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Radium-228	0.89	pCi/g	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Technetium-99	1.6	pCi/g	UNV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Thorium-228	0.867	pCi/g	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Thorium-230	21.8	pCi/g	UNV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Thorium-232	0.89	pCi/g	NV	480172.921	1347909.313
A7-HR6	A7-HR6-1-R	18-May-02	0.0	0.5	Uranium, Total	4.95	ug/g	NV	480172.921	1347909.313
A7-HR7	A7-HR7-1-M	18-May-02	0.0	0.5	Arsenic	20.1	mg/kg	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-M	18-May-02	0.0	0.5	Beryllium	0.79	mg/kg	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-M	18-May-02	0.0	0.5	Boron	1.5	mg/kg	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-M	18-May-02	0.0	0.5	Lead	14.1	mg/kg	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-M	18-May-02	0.0	0.5	Manganese	660	mg/kg	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-M	18-May-02	0.0	0.5	Mercury	0.03	mg/kg	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-P	18-May-02	0.0	0.5	Aroclor-1254	38	ug/kg	UNV	480126.029	1347849.304
A7-HR7	A7-HR7-1-P	18-May-02	0.0	0.5	Aroclor-1260	38	ug/kg	UNV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Cesium-137	0.04	pCi/g	UNV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Gross Alpha	8	pCi/g	UNV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Gross Beta	15	pCi/g	UNV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Radium-226	1.35	pCi/g	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Radium-228	1.1	pCi/g	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Technetium-99	1.8	pCi/g	UNV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Thorium-228	1.07	pCi/g	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Thorium-230	22.6	pCi/g	UNV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Thorium-232	1.1	pCi/g	NV	480126.029	1347849.304
A7-HR7	A7-HR7-1-R	18-May-02	0.0	0.5	Uranium, Total	2.8	ug/g	UNV	480126.029	1347849.304

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-HR8	A7-HR8-1-M	18-May-02	0.0	0.5	Arsenic	14.1	mg/kg	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-M	18-May-02	0.0	0.5	Beryllium	0.65	mg/kg	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-M	18-May-02	0.0	0.5	Boron	1.5	mg/kg	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-M	18-May-02	0.0	0.5	Lead	13.7	mg/kg	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-M	18-May-02	0.0	0.5	Manganese	297	mg/kg	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-M	18-May-02	0.0	0.5	Mercury	0.02	mg/kg	UNV	480111.209	1347923.793
A7-HR8	A7-HR8-1-P	18-May-02	0.0	0.5	Aroclor-1254	40	ug/kg	UNV	480111.209	1347923.793
A7-HR8	A7-HR8-1-P	18-May-02	0.0	0.5	Aroclor-1260	40	ug/kg	UNV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Cesium-137	0.048	pCi/g	UNV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Gross Alpha	14	pCi/g	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Gross Beta	17	pCi/g	UNV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Radium-226	1.29	pCi/g	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Radium-228	1.11	pCi/g	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Technetium-99	1.8	pCi/g	UNV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Thorium-228	1.13	pCi/g	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Thorium-230	20.8	pCi/g	UNV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Thorium-232	1.11	pCi/g	NV	480111.209	1347923.793
A7-HR8	A7-HR8-1-R	18-May-02	0.0	0.5	Uranium, Total	3.05	ug/g	NV	480111.209	1347923.793
A7-K1	A7-K1-10-M	23-Apr-02	4.5	5.0	Arsenic	6.7	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-10-M	23-Apr-02	4.5	5.0	Beryllium	0.48	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-10-M	23-Apr-02	4.5	5.0	Boron	5.4	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-10-M	23-Apr-02	4.5	5.0	Lead	8.9	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-10-M	23-Apr-02	4.5	5.0	Manganese	261	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-10-M	23-Apr-02	4.5	5.0	Mercury	0.02	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-10-P	23-Apr-02	4.5	5.0	Aroclor-1254	41	ug/kg	UNV	480491.06	1347444.34
A7-K1	A7-K1-10-P	23-Apr-02	4.5	5.0	Aroclor-1260	41	ug/kg	UNV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Cesium-137	0.033	pCi/g	UNV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Radium-226	0.777	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Radium-228	0.524	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Technetium-99	1.8	pCi/g	UNV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Thorium-228	0.495	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Thorium-230	17	pCi/g	UNV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Thorium-232	0.524	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-10-R	23-Apr-02	4.5	5.0	Uranium, Total	2	ug/g	UNV	480491.06	1347444.34
A7-K1	A7-K1-20-M	23-Apr-02	9.5	10.0	Arsenic	3.4	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-20-M	23-Apr-02	9.5	10.0	Beryllium	0.48	mg/kg	NV	480491.06	1347444.34

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K1	A7-K1-20-M	23-Apr-02	9.5	10.0	Boron	6.5	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-20-M	23-Apr-02	9.5	10.0	Lead	8.9	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-20-M	23-Apr-02	9.5	10.0	Manganese	317	mg/kg	NV	480491.06	1347444.34
A7-K1	A7-K1-20-M	23-Apr-02	9.5	10.0	Mercury	0.02	mg/kg	UNV	480491.06	1347444.34
A7-K1	A7-K1-20-P	23-Apr-02	9.5	10.0	Aroclor-1254	41	ug/kg	UNV	480491.06	1347444.34
A7-K1	A7-K1-20-P	23-Apr-02	9.5	10.0	Aroclor-1260	41	ug/kg	UNV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Cesium-137	0.045	pCi/g	UNV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Radium-226	1.13	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Radium-228	0.785	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Technetium-99	1.8	pCi/g	UNV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Thorium-228	0.777	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Thorium-230	22.9	pCi/g	UNV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Thorium-232	0.785	pCi/g	NV	480491.06	1347444.34
A7-K1	A7-K1-20-R	23-Apr-02	9.5	10.0	Uranium, Total	3.03	ug/g	NV	480491.06	1347444.34
A7-K10	A7-K10-10-M	26-May-02	4.5	5.0	Arsenic	7.8	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-10-M	26-May-02	4.5	5.0	Beryllium	0.75	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-10-M	26-May-02	4.5	5.0	Boron	6.2	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-10-M	26-May-02	4.5	5.0	Lead	13.1	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-10-M	26-May-02	4.5	5.0	Manganese	523	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-10-M	26-May-02	4.5	5.0	Mercury	0.03	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-10-P	26-May-02	4.5	5.0	Aroclor-1254	40	ug/kg	UNV	480454.9	1347894.18
A7-K10	A7-K10-10-P	26-May-02	4.5	5.0	Aroclor-1260	40	ug/kg	UNV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Cesium-137	0.048	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Gross Alpha	9.9	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Gross Beta	17	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Radium-226	0.756	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Radium-228	0.607	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Technetium-99	1.7	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Thorium-228	0.596	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Thorium-230	17	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Thorium-232	0.607	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-10-R	26-May-02	4.5	5.0	Uranium, Total	6.74	ug/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-M	26-May-02	9.5	10.0	Arsenic	5.3	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-20-M	26-May-02	9.5	10.0	Beryllium	0.27	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-20-M	26-May-02	9.5	10.0	Boron	6	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-20-M	26-May-02	9.5	10.0	Lead	8	mg/kg	NV	480454.9	1347894.18

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K10	A7-K10-20-M	26-May-02	9.5	10.0	Manganese	295	mg/kg	NV	480454.9	1347894.18
A7-K10	A7-K10-20-M	26-May-02	9.5	10.0	Mercury	0.02	mg/kg	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-P	26-May-02	9.5	10.0	Aroclor-1254	41	ug/kg	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-P	26-May-02	9.5	10.0	Aroclor-1260	41	ug/kg	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Cesium-137	0.037	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Gross Alpha	8.9	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Gross Beta	16	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Radium-226	1.42	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Radium-228	1.11	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Technetium-99	1.9	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Thorium-228	1.09	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Thorium-230	23.3	pCi/g	UNV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Thorium-232	1.11	pCi/g	NV	480454.9	1347894.18
A7-K10	A7-K10-20-R	26-May-02	9.5	10.0	Uranium, Total	4.87	ug/g	NV	480454.9	1347894.18
A7-K11	A7-K11-10-M	25-Apr-02	4.5	5.0	Arsenic	7.9	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-10-M	25-Apr-02	4.5	5.0	Beryllium	0.62	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-10-M	25-Apr-02	4.5	5.0	Boron	1.7	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-10-M	25-Apr-02	4.5	5.0	Lead	15.8	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-10-M	25-Apr-02	4.5	5.0	Manganese	281	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-10-M	25-Apr-02	4.5	5.0	Mercury	0.04	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-10-P	25-Apr-02	4.5	5.0	Aroclor-1254	42	ug/kg	UNV	480477.36	1347944.14
A7-K11	A7-K11-10-P	25-Apr-02	4.5	5.0	Aroclor-1260	42	ug/kg	UNV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Cesium-137	0.049	pCi/g	UNV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Radium-226	1.21	pCi/g	NV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Radium-228	1.01	pCi/g	NV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Technetium-99	1.7	pCi/g	UNV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Thorium-228	0.982	pCi/g	NV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Thorium-230	25.5	pCi/g	UNV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Thorium-232	1.01	pCi/g	NV	480477.36	1347944.14
A7-K11	A7-K11-10-R	25-Apr-02	4.5	5.0	Uranium, Total	3.53	ug/g	NV	480477.36	1347944.14
A7-K11	A7-K11-20-M	25-Apr-02	9.5	10.0	Arsenic	14	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-20-M	25-Apr-02	9.5	10.0	Beryllium	0.49	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-20-M	25-Apr-02	9.5	10.0	Boron	2.7	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-20-M	25-Apr-02	9.5	10.0	Lead	10.8	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-20-M	25-Apr-02	9.5	10.0	Manganese	462	mg/kg	NV	480477.36	1347944.14
A7-K11	A7-K11-20-M	25-Apr-02	9.5	10.0	Mercury	0.02	mg/kg	NV	480477.36	1347944.14

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K11	A7-K11-20-P	25-Apr-02	9.5	10.0	Aroclor-1254	43	ug/kg	UNV	480477.36	1347944.14
A7-K11	A7-K11-20-P	25-Apr-02	9.5	10.0	Aroclor-1260	43	ug/kg	UNV	480477.36	1347944.14
A7-K11	A7-K11-20-R	25-Apr-02	9.5	10.0	Cesium-137	0.063	pCi/g	UNV	480477.36	1347944.14
A7-K11	A7-K11-20-R	25-Apr-02	9.5	10.0	Radium-226	1.16	pCi/g	NV	480477.36	1347944.14
A7-K11	A7-K11-20-R	25-Apr-02	9.5	10.0	Radium-228	0.944	pCi/g	NV	480477.36	1347944.14
A7-K11	A7-K11-20-R	25-Apr-02	9.5	10.0	Technetium-99	1.7	pCi/g	UNV	480477.36	1347944.14
A7-K11	A7-K11-20-R	25-Apr-02	9.5	10.0	Thorium-228	0.944	pCi/g	NV	480477.36	1347944.14
A7-K11	A7-K11-20-R	25-Apr-02	9.5	10.0	Thorium-230	22	pCi/g	UNV	480477.36	1347944.14
A7-K11	A7-K11-20-R	25-Apr-02	9.5	10.0	Thorium-232	0.944	pCi/g	NV	480477.36	1347944.14
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Uranium, Total	3.34	ug/g	NV	480477.36	1347944.14
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Arsenic	7.1	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Beryllium	0.75	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Boron	3.1	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Lead	15	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Manganese	537	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Mercury	0.02	mg/kg	UNV	480451.503	1348012.523
A7-K12	A7-K12-10-P	3-Jun-02	4.5	5.0	Aroclor-1254	40	ug/kg	UNV	480451.503	1348012.523
A7-K12	A7-K12-10-P	3-Jun-02	4.5	5.0	Aroclor-1260	40	ug/kg	UNV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Cesium-137	0.06	pCi/g	UNV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Gross Alpha	9.1	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Gross Beta	15	pCi/g	UNV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Radium-226	1.49	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Radium-228	0.574	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Technetium-99	1.6	pCi/g	UNV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Thorium-228	0.578	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Thorium-230	19.5	pCi/g	UNV	480451.503	1348012.523
A7-K12	A7-K12-10-R	3-Jun-02	4.5	5.0	Thorium-232	0.574	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-10-M	3-Jun-02	4.5	5.0	Uranium, Total	2.7	ug/g	UNV	480451.503	1348012.523
A7-K12	A7-K12-20-M	3-Jun-02	9.5	10.0	Manganese	344	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-20-M	3-Jun-02	9.5	10.0	Arsenic	13.1	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-20-M	3-Jun-02	9.5	10.0	Beryllium	0.57	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-20-M	3-Jun-02	9.5	10.0	Boron	5.3	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-20-M	3-Jun-02	9.5	10.0	Lead	12.9	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-20-M	3-Jun-02	9.5	10.0	Manganese	355	mg/kg	NV	480451.503	1348012.523
A7-K12	A7-K12-20-P	3-Jun-02	9.5	10.0	Mercury	0.02	mg/kg	UNV	480451.503	1348012.523
A7-K12	A7-K12-20-P	3-Jun-02	9.5	10.0	Aroclor-1254	42	ug/kg	UNV	480451.503	1348012.523

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K12	A7-K12-20-P	3-Jun-02	9.5	10.0	Aroclor-1260	42	ug/kg	UNV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Cesium-137	0.049	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Gross Alpha	13	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Gross Beta	15	pCi/g	UNV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Radium-226	3.61	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Radium-228	1.13	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Technetium-99	2.9	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Thorium-228	1.12	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Thorium-230	28	pCi/g	UNV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Thorium-232	1.13	pCi/g	NV	480451.503	1348012.523
A7-K12	A7-K12-20-R	3-Jun-02	9.5	10.0	Uranium, Total	8.65	ug/g	NV	480451.503	1348012.523
A7-K2	A7-K2-10-M	30-Apr-02	4.5	5.0	Arsenic	7.5	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-10-M	30-Apr-02	4.5	5.0	Beryllium	0.2	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-10-M	30-Apr-02	4.5	5.0	Boron	5.6	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-10-M	30-Apr-02	4.5	5.0	Lead	6.2	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-10-M	30-Apr-02	4.5	5.0	Manganese	366	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-10-M	30-Apr-02	4.5	5.0	Mercury	0.02	mg/kg	UNV	480465.86	1347494.34
A7-K2	A7-K2-10-P	30-Apr-02	4.5	5.0	Aroclor-1254	42	ug/kg	UNV	480465.86	1347494.34
A7-K2	A7-K2-10-P	30-Apr-02	4.5	5.0	Aroclor-1260	42	ug/kg	UNV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Cesium-137	0.044	pCi/g	UNV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Radium-226	0.742	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Radium-228	0.572	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Technetium-99	7	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Thorium-228	0.559	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Thorium-230	18.1	pCi/g	UNV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Thorium-232	0.572	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-10-R	30-Apr-02	4.5	5.0	Uranium, Total	5.12	ug/g	NV	480465.86	1347494.34
A7-K2	A7-K2-20-M	30-Apr-02	9.5	10.0	Arsenic	50.4	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-20-M	30-Apr-02	9.5	10.0	Beryllium	0.23	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-20-M	30-Apr-02	9.5	10.0	Boron	6.2	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-20-M	30-Apr-02	9.5	10.0	Lead	6	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-20-M	30-Apr-02	9.5	10.0	Manganese	758	mg/kg	NV	480465.86	1347494.34
A7-K2	A7-K2-20-M	30-Apr-02	9.5	10.0	Mercury	0.02	mg/kg	UNV	480465.86	1347494.34
A7-K2	A7-K2-20-P	30-Apr-02	9.5	10.0	Aroclor-1254	37	ug/kg	UNV	480465.86	1347494.34
A7-K2	A7-K2-20-P	30-Apr-02	9.5	10.0	Aroclor-1260	37	ug/kg	UNV	480465.86	1347494.34
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Cesium-137	0.039	pCi/g	UNV	480465.86	1347494.34

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Radium-226	0.92	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Radium-228	0.564	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Technetium-99	1.7	pCi/g	UNV	480465.86	1347494.34
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Thorium-228	0.547	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Thorium-230	21.7	pCi/g	UNV	480465.86	1347494.34
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Thorium-232	0.564	pCi/g	NV	480465.86	1347494.34
A7-K2	A7-K2-20-R	30-Apr-02	9.5	10.0	Uranium, Total	2.7	ug/g	UNV	480465.86	1347494.34
A7-K3	A7-K3-10-M	24-Apr-02	4.5	5.0	Arsenic	6.1	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-10-M	24-Apr-02	4.5	5.0	Beryllium	0.54	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-10-M	24-Apr-02	4.5	5.0	Boron	4.2	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-10-M	24-Apr-02	4.5	5.0	Lead	11.3	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-10-M	24-Apr-02	4.5	5.0	Manganese	347	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-10-M	24-Apr-02	4.5	5.0	Mercury	0.02	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-10-P	24-Apr-02	4.5	5.0	Aroclor-1254	40	ug/kg	UNV	480488.32	1347544.3
A7-K3	A7-K3-10-P	24-Apr-02	4.5	5.0	Aroclor-1260	40	ug/kg	UNV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Cesium-137	0.063	pCi/g	UNV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Radium-226	1.12	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Radium-228	1.05	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Technetium-99	4.2	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Thorium-228	1.03	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Thorium-230	23.1	pCi/g	UNV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Thorium-232	1.05	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-10-R	24-Apr-02	4.5	5.0	Uranium, Total	3.59	ug/g	NV	480488.32	1347544.3
A7-K3	A7-K3-20-M	24-Apr-02	9.5	10.0	Arsenic	2.9	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-20-M	24-Apr-02	9.5	10.0	Beryllium	0.1	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-20-M	24-Apr-02	9.5	10.0	Boron	3.8	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-20-M	24-Apr-02	9.5	10.0	Lead	3.6	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-20-M	24-Apr-02	9.5	10.0	Manganese	209	mg/kg	NV	480488.32	1347544.3
A7-K3	A7-K3-20-M	24-Apr-02	9.5	10.0	Mercury	0.02	mg/kg	UNV	480488.32	1347544.3
A7-K3	A7-K3-20-P	24-Apr-02	9.5	10.0	Aroclor-1254	41	ug/kg	UNV	480488.32	1347544.3
A7-K3	A7-K3-20-P	24-Apr-02	9.5	10.0	Aroclor-1260	41	ug/kg	UNV	480488.32	1347544.3
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Cesium-137	0.028	pCi/g	UNV	480488.32	1347544.3
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Radium-226	0.65	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Radium-228	0.42	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Technetium-99	1.6	pCi/g	UNV	480488.32	1347544.3
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Thorium-228	0.418	pCi/g	NV	480488.32	1347544.3

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Thorium-230	16.5	pCi/g	UNV	480488.32	1347544.3
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Thorium-232	0.42	pCi/g	NV	480488.32	1347544.3
A7-K3	A7-K3-20-R	24-Apr-02	9.5	10.0	Uranium, Total	3.07	ug/g	NV	480488.32	1347544.3
A7-K4-10	A7-K4-10-M	1-May-02	4.5	5.0	Arsenic	8.5	mg/kg	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-M	1-May-02	4.5	5.0	Beryllium	0.74	mg/kg	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-M	1-May-02	4.5	5.0	Boron	22	mg/kg	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-M	1-May-02	4.5	5.0	Lead	12.1	mg/kg	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-M	1-May-02	4.5	5.0	Manganese	731	mg/kg	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-M	1-May-02	4.5	5.0	Mercury	0.02	mg/kg	UNV	480465.59	1347594.14
A7-K4-10	A7-K4-10-P	1-May-02	4.5	5.0	Aroclor-1254	38	ug/kg	UNV	480465.59	1347594.14
A7-K4-10	A7-K4-10-P	1-May-02	4.5	5.0	Aroclor-1260	38	ug/kg	UNV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Cesium-137	0.04	pCi/g	UNV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Radium-226	1.2	pCi/g	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Radium-228	0.961	pCi/g	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Technetium-99	1.6	pCi/g	UNV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Thorium-228	0.937	pCi/g	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Thorium-230	22.7	pCi/g	UNV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Thorium-232	0.961	pCi/g	NV	480465.59	1347594.14
A7-K4-10	A7-K4-10-R	1-May-02	4.5	5.0	Uranium, Total	4.81	ug/g	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-M	1-May-02	9.5	10.0	Arsenic	5.8	mg/kg	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-M	1-May-02	9.5	10.0	Beryllium	0.87	mg/kg	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-M	1-May-02	9.5	10.0	Boron	27.8	mg/kg	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-M	1-May-02	9.5	10.0	Lead	11.3	mg/kg	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-M	1-May-02	9.5	10.0	Manganese	394	mg/kg	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-M	1-May-02	9.5	10.0	Mercury	0.02	mg/kg	UNV	480465.59	1347594.14
A7-K4-20	A7-K4-20-P	1-May-02	9.5	10.0	Aroclor-1254	43	ug/kg	UNV	480465.59	1347594.14
A7-K4-20	A7-K4-20-P	1-May-02	9.5	10.0	Aroclor-1260	43	ug/kg	UNV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Cesium-137	0.047	pCi/g	UNV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Radium-226	1.18	pCi/g	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Radium-228	0.913	pCi/g	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Technetium-99	1.6	pCi/g	UNV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Thorium-228	0.921	pCi/g	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Thorium-230	25.5	pCi/g	UNV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Thorium-232	0.913	pCi/g	NV	480465.59	1347594.14
A7-K4-20	A7-K4-20-R	1-May-02	9.5	10.0	Uranium, Total	4.55	ug/g	NV	480465.59	1347594.14
A7-K5	A7-K5-10-M	25-Apr-02	4.5	5.0	Arsenic	7	mg/kg	NV	480485.58	1347644.26

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K5	A7-K5-10-M	25-Apr-02	4.5	5.0	Beryllium	0.64	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-10-M	25-Apr-02	4.5	5.0	Boron	4.7	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-10-M	25-Apr-02	4.5	5.0	Lead	9.7	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-10-M	25-Apr-02	4.5	5.0	Manganese	245	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-10-M	25-Apr-02	4.5	5.0	Mercury	0.03	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-10-P	25-Apr-02	4.5	5.0	Aroclor-1254	40	ug/kg	UNV	480485.58	1347644.26
A7-K5	A7-K5-10-P	25-Apr-02	4.5	5.0	Aroclor-1260	40	ug/kg	UNV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Cesium-137	0.06	pCi/g	UNV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Radium-226	1.12	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Radium-228	0.997	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Technetium-99	1.8	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Thorium-228	0.969	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Thorium-230	22.5	pCi/g	UNV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Thorium-232	0.997	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-10-R	25-Apr-02	4.5	5.0	Uranium, Total	5.64	ug/g	NV	480485.58	1347644.26
A7-K5	A7-K5-20-M	25-Apr-02	9.5	10.0	Arsenic	4.7	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-20-M	25-Apr-02	9.5	10.0	Beryllium	0.43	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-20-M	25-Apr-02	9.5	10.0	Boron	5.7	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-20-M	25-Apr-02	9.5	10.0	Lead	10.2	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-20-M	25-Apr-02	9.5	10.0	Manganese	1040	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-20-M	25-Apr-02	9.5	10.0	Mercury	0.02	mg/kg	NV	480485.58	1347644.26
A7-K5	A7-K5-20-P	25-Apr-02	9.5	10.0	Aroclor-1254	41	ug/kg	UNV	480485.58	1347644.26
A7-K5	A7-K5-20-P	25-Apr-02	9.5	10.0	Aroclor-1260	41	ug/kg	UNV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Cesium-137	0.041	pCi/g	UNV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Radium-226	1.16	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Radium-228	0.954	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Technetium-99	1.8	pCi/g	UNV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Thorium-228	0.944	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Thorium-230	21.7	pCi/g	UNV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Thorium-232	0.954	pCi/g	NV	480485.58	1347644.26
A7-K5	A7-K5-20-R	25-Apr-02	9.5	10.0	Uranium, Total	4.08	ug/g	NV	480485.58	1347644.26
A7-K6	A7-K6-10-M	24-Apr-02	4.5	5.0	Arsenic	12.6	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-10-M	24-Apr-02	4.5	5.0	Beryllium	1.2	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-10-M	24-Apr-02	4.5	5.0	Boron	0.96	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-10-M	24-Apr-02	4.5	5.0	Lead	18.9	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-10-M	24-Apr-02	4.5	5.0	Manganese	641	mg/kg	NV	480482.84	1347744.22

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K6	A7-K6-10-M	24-Apr-02	4.5	5.0	Mercury	0.06	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-10-P	24-Apr-02	4.5	5.0	Aroclor-1254	42	ug/kg	UNV	480482.84	1347744.22
A7-K6	A7-K6-10-P	24-Apr-02	4.5	5.0	Aroclor-1260	42	ug/kg	UNV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Cesium-137	0.047	pCi/g	UNV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Radium-226	1.71	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Radium-228	1.22	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Technetium-99	1.8	pCi/g	UNV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Thorium-228	1.18	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Thorium-230	26.8	pCi/g	UNV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Thorium-232	1.22	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-10-R	24-Apr-02	4.5	5.0	Uranium, Total	2.65	ug/g	UNV	480482.84	1347744.22
A7-K6	A7-K6-20-M	24-Apr-02	9.5	10.0	Arsenic	3.4	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-20-M	24-Apr-02	9.5	10.0	Beryllium	0.24	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-20-M	24-Apr-02	9.5	10.0	Boron	5.3	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-20-M	24-Apr-02	9.5	10.0	Lead	7	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-20-M	24-Apr-02	9.5	10.0	Manganese	392	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-20-M	24-Apr-02	9.5	10.0	Mercury	0.02	mg/kg	NV	480482.84	1347744.22
A7-K6	A7-K6-20-P	24-Apr-02	9.5	10.0	Aroclor-1254	41	ug/kg	UNV	480482.84	1347744.22
A7-K6	A7-K6-20-P	24-Apr-02	9.5	10.0	Aroclor-1260	41	ug/kg	UNV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Cesium-137	0.052	pCi/g	UNV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Radium-226	0.818	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Radium-228	0.669	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Technetium-99	1.6	pCi/g	UNV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Thorium-228	0.681	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Thorium-230	18.6	pCi/g	UNV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Thorium-232	0.669	pCi/g	NV	480482.84	1347744.22
A7-K6	A7-K6-20-R	24-Apr-02	9.5	10.0	Uranium, Total	2.63	ug/g	UNV	480482.84	1347744.22
A7-K8	A7-K8-10-M	24-Apr-02	4.5	5.0	Arsenic	2.5	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-10-M	24-Apr-02	4.5	5.0	Beryllium	0.31	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-10-M	24-Apr-02	4.5	5.0	Boron	5.4	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-10-M	24-Apr-02	4.5	5.0	Lead	4.7	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-10-M	24-Apr-02	4.5	5.0	Manganese	229	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-10-M	24-Apr-02	4.5	5.0	Mercury	0.02	mg/kg	UNV	480460.38	1347694.26
A7-K8	A7-K8-10-P	24-Apr-02	4.5	5.0	Aroclor-1254	38	ug/kg	UNV	480460.38	1347694.26
A7-K8	A7-K8-10-P	24-Apr-02	4.5	5.0	Aroclor-1260	38	ug/kg	UNV	480460.38	1347694.26
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Cesium-137	0.039	pCi/g	UNV	480460.38	1347694.26

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Radium-226	1.09	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Radium-228	0.939	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Technetium-99	1.7	pCi/g	UNV	480460.38	1347694.26
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Thorium-228	0.9	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Thorium-230	22.2	pCi/g	UNV	480460.38	1347694.26
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Thorium-232	0.939	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-10-R	24-Apr-02	4.5	5.0	Uranium, Total	3.68	ug/g	NV	480460.38	1347694.26
A7-K8	A7-K8-20-M	24-Apr-02	9.5	10.0	Arsenic	6.9	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-20-M	24-Apr-02	9.5	10.0	Beryllium	0.54	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-20-M	24-Apr-02	9.5	10.0	Boron	6.4	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-20-M	24-Apr-02	9.5	10.0	Lead	9.5	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-20-M	24-Apr-02	9.5	10.0	Manganese	350	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-20-M	24-Apr-02	9.5	10.0	Mercury	0.02	mg/kg	NV	480460.38	1347694.26
A7-K8	A7-K8-20-P	24-Apr-02	9.5	10.0	Aroclor-1254	42	ug/kg	UNV	480460.38	1347694.26
A7-K8	A7-K8-20-P	24-Apr-02	9.5	10.0	Aroclor-1260	42	ug/kg	UNV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Cesium-137	0.045	pCi/g	UNV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Radium-226	1.12	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Radium-228	0.925	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Technetium-99	1.8	pCi/g	UNV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Thorium-228	0.899	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Thorium-230	25.3	pCi/g	UNV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Thorium-232	0.925	pCi/g	NV	480460.38	1347694.26
A7-K8	A7-K8-20-R	24-Apr-02	9.5	10.0	Uranium, Total	2.97	ug/g	NV	480460.38	1347694.26
A7-K9	A7-K9-10-M	26-May-02	4.5	5.0	Arsenic	20.4	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-10-M	26-May-02	4.5	5.0	Beryllium	1.1	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-10-M	26-May-02	4.5	5.0	Boron	7.7	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-10-M	26-May-02	4.5	5.0	Lead	21.2	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-10-M	26-May-02	4.5	5.0	Manganese	1230	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-10-M	26-May-02	4.5	5.0	Mercury	0.03	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-10-P	26-May-02	4.5	5.0	Aroclor-1254	43	ug/kg	UNV	480457.64	1347794.22
A7-K9	A7-K9-10-P	26-May-02	4.5	5.0	Aroclor-1260	43	ug/kg	UNV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Cesium-137	0.043	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Gross Alpha	11	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Gross Beta	16	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Radium-226	1.76	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Radium-228	1.3	pCi/g	NV	480457.64	1347794.22

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Technetium-99	1.8	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Thorium-228	1.25	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Thorium-230	24.6	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Thorium-232	1.3	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-10-R	26-May-02	4.5	5.0	Uranium, Total	4	ug/g	NV	480457.64	1347794.22
A7-K9	A7-K9-20-M	26-May-02	9.5	10.0	Arsenic	6.8	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-20-M	26-May-02	9.5	10.0	Beryllium	0.19	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-20-M	26-May-02	9.5	10.0	Boron	9.1	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-20-M	26-May-02	9.5	10.0	Lead	4.6	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-20-M	26-May-02	9.5	10.0	Manganese	699	mg/kg	NV	480457.64	1347794.22
A7-K9	A7-K9-20-M	26-May-02	9.5	10.0	Mercury	0.02	mg/kg	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-P	26-May-02	9.5	10.0	Aroclor-1254	41	ug/kg	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-P	26-May-02	9.5	10.0	Aroclor-1260	41	ug/kg	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Cesium-137	0.043	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Gross Alpha	9.8	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Gross Beta	18	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Radium-226	1.18	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Radium-228	0.811	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Technetium-99	1.7	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Thorium-228	0.801	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Thorium-230	19.8	pCi/g	UNV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Thorium-232	0.811	pCi/g	NV	480457.64	1347794.22
A7-K9	A7-K9-20-R	26-May-02	9.5	10.0	Uranium, Total	2.48	ug/g	UNV	480457.64	1347794.22
A7-KW1	A7-KW1-1-R	30-May-02	0.0	0.5	Technetium-99	1.7	pCi/g	UNV	480499.55	1347483.22
A7-KW1	A7-KW1-6-R	30-May-02	2.5	3.0	Technetium-99	1.9	pCi/g	UNV	480499.55	1347483.22
A7-KW1	A7-KW1-12-R	30-May-02	5.5	6.0	Technetium-99	1.8	pCi/g	UNV	480499.55	1347483.22
A7-KW2	A7-KW2-1-R	29-May-02	0.0	0.5	Technetium-99	1.7	pCi/g	UNV	480499.55	1347504.43
A7-KW2	A7-KW2-6-R	29-May-02	2.5	3.0	Technetium-99	1.9	pCi/g	UNV	480499.55	1347504.43
A7-KW2	A7-KW2-12-R	29-May-02	5.5	6.0	Technetium-99	2.1	pCi/g	NV	480499.55	1347504.43
A7-KW3	A7-KW3-1-R	30-May-02	0.0	0.5	Technetium-99	1.9	pCi/g	UNV	480492.48	1347490.29
A7-KW3	A7-KW3-6-R	30-May-02	2.5	3.0	Technetium-99	9.8	pCi/g	NV	480492.48	1347490.29
A7-KW3	A7-KW3-12-R	30-May-02	5.5	6.0	Technetium-99	2.5	pCi/g	UNV	480492.48	1347490.29
A7-KW4	A7-KW4-1-R	30-May-02	0.0	0.5	Technetium-99	1.9	pCi/g	UNV	480492.48	1347497.36
A7-KW4	A7-KW4-6-R	30-May-02	2.5	3.0	Technetium-99	2.5	pCi/g	NV	480492.48	1347497.36
A7-KW4	A7-KW4-12-R	30-May-02	5.5	6.0	Technetium-99	1.9	pCi/g	UNV	480492.48	1347497.36
A7-KW5	A7-KW5-1-R	30-May-02	0.0	0.5	Technetium-99	1.8	pCi/g	UNV	480485.4	1347490.29

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-KW5	A7-KW5-6-R	30-May-02	2.5	3.0	Technetium-99	1.8	pCi/g	UNV	480485.4	1347490.29
A7-KW5	A7-KW5-12-R	30-May-02	5.5	6.0	Technetium-99	2.1	pCi/g	UNV	480485.4	1347490.29
A7-KW6	A7-KW6-1-R	30-May-02	0.0	0.5	Technetium-99	2	pCi/g	UNV	480485.4	1347497.36
A7-KW6	A7-KW6-6-R	30-May-02	2.5	3.0	Technetium-99	1.8	pCi/g	UNV	480485.4	1347497.36
A7-KW6	A7-KW6-12-R	30-May-02	5.5	6.0	Technetium-99	1.8	pCi/g	UNV	480485.4	1347497.36
A7-KW7	A7-KW7-1-R	30-May-02	0.0	0.5	Technetium-99	3.9	pCi/g	NV	480488.97	1347493.89
A7-KW7	A7-KW7-6-R	30-May-02	2.5	3.0	Technetium-99	2.3	pCi/g	NV	480488.97	1347493.89
A7-KW7	A7-KW7-12-R	30-May-02	5.5	6.0	Technetium-99	1.8	pCi/g	UNV	480488.97	1347493.89
A7P3-AWWT11	A7P3-AWWT11^1-RMP	12-Jan-04	0.0	0.5	Beryllium	0.564	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^1-RMP	12-Jan-04	0.0	0.5	Aroclor-1254	4.11	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^1-RMP	12-Jan-04	0.0	0.5	Aroclor-1260	4.11	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^1-RMP	12-Jan-04	0.0	0.5	Technetium-99	0.683	pCi/g	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^1-UTH	12-Jan-04	0.0	0.5	Thorium, Total	6.17	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^1-UTH	12-Jan-04	0.0	0.5	Uranium, Total	6.97	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^3-RMP	12-Jan-04	1.0	1.5	Beryllium	0.573	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^3-RMP	12-Jan-04	1.0	1.5	Aroclor-1254	4.18	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^3-RMP	12-Jan-04	1.0	1.5	Aroclor-1260	4.18	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^3-RMP	12-Jan-04	1.0	1.5	Technetium-99	1.02	pCi/g	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^3-UTH	12-Jan-04	1.0	1.5	Thorium, Total	6.07	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^3-UTH	12-Jan-04	1.0	1.5	Uranium, Total	11.4	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^5-RMP	12-Jan-04	2.0	2.5	Beryllium	0.898	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^5-RMP	12-Jan-04	2.0	2.5	Aroclor-1254	4.21	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^5-RMP	12-Jan-04	2.0	2.5	Aroclor-1260	4.21	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^5-RMP	12-Jan-04	2.0	2.5	Technetium-99	0.801	pCi/g	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^5-UTH	12-Jan-04	2.0	2.5	Thorium, Total	5.92	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^5-UTH	12-Jan-04	2.0	2.5	Uranium, Total	4.84	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^7-RMP	12-Jan-04	3.0	3.5	Beryllium	0.777	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^7-RMP	12-Jan-04	3.0	3.5	Aroclor-1254	4.1	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^7-RMP	12-Jan-04	3.0	3.5	Aroclor-1260	4.1	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^7-RMP	12-Jan-04	3.0	3.5	Technetium-99	0.756	pCi/g	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^7-UTH	12-Jan-04	3.0	3.5	Thorium, Total	6.41	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^7-UTH	12-Jan-04	3.0	3.5	Uranium, Total	2.7	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^9-RMP	12-Jan-04	4.0	4.5	Beryllium	0.432	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^9-RMP	12-Jan-04	4.0	4.5	Aroclor-1254	4.31	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^9-RMP	12-Jan-04	4.0	4.5	Aroclor-1260	4.31	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^9-RMP	12-Jan-04	4.0	4.5	Technetium-99	0.828	pCi/g	NV	479428.683	1348171.822

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT11	A7P3-AWWT11^9-UTH	12-Jan-04	4.0	4.5	Thorium, Total	5.38	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^9-UTH	12-Jan-04	4.0	4.5	Uranium, Total	2.97	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^11-RMP	12-Jan-04	5.0	5.5	Beryllium	0.229	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^11-RMP	12-Jan-04	5.0	5.5	Aroclor-1254	3.99	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^11-RMP	12-Jan-04	5.0	5.5	Aroclor-1260	3.99	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^11-RMP	12-Jan-04	5.0	5.5	Technetium-99	0.797	pCi/g	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^11-UTH	12-Jan-04	5.0	5.5	Thorium, Total	3.51	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^11-UTH	12-Jan-04	5.0	5.5	Uranium, Total	1.5	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^13-RMP	12-Jan-04	6.0	6.5	Beryllium	0.206	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^13-RMP	12-Jan-04	6.0	6.5	Aroclor-1254	3.78	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^13-RMP	12-Jan-04	6.0	6.5	Aroclor-1260	3.78	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^13-RMP	12-Jan-04	6.0	6.5	Technetium-99	0.622	pCi/g	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^13-UTH	12-Jan-04	6.0	6.5	Thorium, Total	2.42	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^13-UTH	12-Jan-04	6.0	6.5	Uranium, Total	2.51	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^15-RMP	12-Jan-04	7.0	7.5	Beryllium	0.22	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^15-RMP	12-Jan-04	7.0	7.5	Aroclor-1254	3.72	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^15-RMP	12-Jan-04	7.0	7.5	Aroclor-1260	3.72	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^15-RMP	12-Jan-04	7.0	7.5	Technetium-99	0.607	pCi/g	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^15-UTH	12-Jan-04	7.0	7.5	Thorium, Total	2.56	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^15-UTH	12-Jan-04	7.0	7.5	Uranium, Total	1.72	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^17-RMP	12-Jan-04	8.0	8.5	Beryllium	0.293	mg/kg	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^17-RMP	12-Jan-04	8.0	8.5	Aroclor-1254	3.79	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^17-RMP	12-Jan-04	8.0	8.5	Aroclor-1260	3.79	ug/kg	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^17-RMP	12-Jan-04	8.0	8.5	Technetium-99	0.605	pCi/g	UNV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^17-UTH	12-Jan-04	8.0	8.5	Thorium, Total	3.44	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT11	A7P3-AWWT11^17-UTH	12-Jan-04	8.0	8.5	Uranium, Total	1.32	ug/g dry	NV	479428.683	1348171.822
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Beryllium	1.85	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Aroclor-1254	6.9	ug/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Aroclor-1260	7.61	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Radium-228	1.06	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Technetium-99	0.73	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Thorium-228	1.05	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Thorium-232	1.06	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^1-RMP	13-Jan-04	0.0	0.5	Uranium, Total	10.4	ug/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Beryllium	0.747	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Aroclor-1254	8.03	ug/kg	UNV	479417.111	1348050.18

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Aroclor-1260	8.03	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Radium-228	1.27	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Technetium-99	0.793	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Thorium-228	1.27	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Thorium-232	1.27	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^3-RMP	13-Jan-04	1.0	1.5	Uranium, Total	13.9	ug/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Beryllium	1.05	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Aroclor-1254	8.61	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Aroclor-1260	8.61	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Radium-228	1.31	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Technetium-99	0.78	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Thorium-228	1.3	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Thorium-232	1.31	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^5-RMP	13-Jan-04	2.0	2.5	Uranium, Total	8.81	ug/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Beryllium	0.876	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Aroclor-1254	8.49	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Aroclor-1260	8.49	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Radium-228	1.28	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Technetium-99	0.791	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Thorium-228	1.23	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Thorium-232	1.28	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^7-RMP	13-Jan-04	3.0	3.5	Uranium, Total	13.4	ug/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Beryllium	0.397	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Aroclor-1254	12	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Aroclor-1260	12	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Radium-228	0.904	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Technetium-99	0.656	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Thorium-228	0.885	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Thorium-232	0.904	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^9-RMP	13-Jan-04	4.0	4.5	Uranium, Total	5.84	ug/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Beryllium	0.26	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Aroclor-1254	8	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Aroclor-1260	8	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Radium-228	0.674	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Technetium-99	0.618	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Thorium-228	0.653	pCi/g	NV	479417.111	1348050.18

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Thorium-232	0.674	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^11-RMP	13-Jan-04	5.0	5.5	Uranium, Total	2.91	ug/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Beryllium	0.281	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Aroclor-1254	8.13	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Aroclor-1260	8.13	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Radium-228	0.648	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Technetium-99	0.587	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Thorium-228	0.643	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Thorium-232	0.648	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^13-RMP	13-Jan-04	6.0	6.5	Uranium, Total	2.96	ug/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Beryllium	0.129	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Aroclor-1254	8.09	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Aroclor-1260	8.09	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Radium-228	0.372	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Technetium-99	0.738	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Thorium-228	0.356	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Thorium-232	0.372	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^15-RMP	13-Jan-04	7.0	7.5	Uranium, Total	3.22	ug/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Beryllium	0.189	mg/kg	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Aroclor-1254	7.79	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Aroclor-1260	7.79	ug/kg	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Radium-228	0.456	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Technetium-99	0.599	pCi/g	UNV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Thorium-228	0.474	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Thorium-232	0.456	pCi/g	NV	479417.111	1348050.18
A7P3-AWWT12	A7P3-AWWT12^17-RMP	13-Jan-04	8.0	8.5	Uranium, Total	1.36	ug/g	UNV	479417.111	1348050.18
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Beryllium	0.498	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Aroclor-1254	1.1	ug/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Aroclor-1260	3.79	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Radium-228	1.1	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Technetium-99	0.78	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Thorium-228	1.17	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Thorium-232	1.1	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^1-RMP	7-Jan-04	0.0	0.5	Uranium, Total	6.55	ug/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Beryllium	1.08	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Aroclor-1254	3.8	ug/kg	UNV	479743.097	1348219.736

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Aroclor-1260	3.8	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Radium-228	1.33	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Technetium-99	0.816	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Thorium-228	1.46	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Thorium-232	1.33	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^3-RMP	7-Jan-04	1.0	1.5	Uranium, Total	8.03	ug/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Beryllium	0.675	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Aroclor-1254	3.81	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Aroclor-1260	3.81	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Radium-228	1.3	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Technetium-99	0.932	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Thorium-228	1.39	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Thorium-232	1.3	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^5-RMP	7-Jan-04	2.0	2.5	Uranium, Total	3.02	ug/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Beryllium	0.42	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Aroclor-1254	3.85	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Aroclor-1260	3.85	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Radium-228	0.741	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Technetium-99	0.809	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Thorium-228	0.843	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Thorium-232	0.741	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^7-RMP	7-Jan-04	3.0	3.5	Uranium, Total	3.43	ug/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Beryllium	0.347	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Aroclor-1254	3.99	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Aroclor-1260	3.99	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Radium-228	0.846	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Technetium-99	0.697	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Thorium-228	0.877	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Thorium-232	0.846	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^9-RMP	7-Jan-04	4.0	4.5	Uranium, Total	3.61	ug/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Beryllium	0.243	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Aroclor-1254	3.74	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Aroclor-1260	3.74	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Radium-228	0.591	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Technetium-99	0.738	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Thorium-228	0.582	pCi/g	NV	479743.097	1348219.736

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Thorium-232	0.591	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^11-RMP	7-Jan-04	5.0	5.5	Uranium, Total	2.55	ug/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Beryllium	0.397	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Aroclor-1254	3.39	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Aroclor-1260	3.39	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Radium-228	0.819	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Technetium-99	0.916	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Thorium-228	0.802	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Thorium-232	0.819	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^13-RMP	7-Jan-04	6.0	6.5	Uranium, Total	4.01	ug/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Beryllium	0.582	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Aroclor-1254	3.64	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Aroclor-1260	3.64	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Radium-228	0.906	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Technetium-99	0.686	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Thorium-228	0.877	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Thorium-232	0.906	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^15-RMP	7-Jan-04	7.0	7.5	Uranium, Total	3.17	ug/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Beryllium	0.573	mg/kg	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Aroclor-1254	3.68	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Aroclor-1260	3.68	ug/kg	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Radium-228	0.988	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Technetium-99	0.727	pCi/g	UNV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Thorium-228	0.982	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Thorium-232	0.988	pCi/g	NV	479743.097	1348219.736
A7P3-AWWT15	A7P3-AWWT15^17-RMP	7-Jan-04	8.0	8.5	Uranium, Total	7.26	ug/g	NV	479743.097	1348219.736
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Beryllium	0.559	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Aroclor-1254	7.2	ug/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Aroclor-1260	2.1	ug/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Radium-228	1.56	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Technetium-99	0.668	pCi/g	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Thorium-228	1.58	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Thorium-232	1.56	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^1-RMP	8-Jan-04	0.0	0.5	Uranium, Total	35.8	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Beryllium	0.767	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Aroclor-1254	3.94	ug/kg	UNV	479582.291	1348303.239

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Aroclor-1260	3.94	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Radium-228	1.23	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Technetium-99	2.05	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Thorium-228	1.22	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Thorium-232	1.23	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^3-RMP	8-Jan-04	1.0	1.5	Uranium, Total	52.1	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Beryllium	1.13	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Aroclor-1254	4.11	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Aroclor-1260	4.11	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Radium-228	1.12	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Technetium-99	0.678	pCi/g	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Thorium-228	1.16	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Thorium-232	1.12	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^5-RMP	8-Jan-04	2.0	2.5	Uranium, Total	11.4	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Beryllium	0.888	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Aroclor-1254	4.02	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Aroclor-1260	4.02	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Radium-228	1.1	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Technetium-99	0.715	pCi/g	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Thorium-228	1.08	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Thorium-232	1.1	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^7-RMP	8-Jan-04	3.0	3.5	Uranium, Total	8.3	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Beryllium	0.791	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Aroclor-1254	4.01	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Aroclor-1260	4.01	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Radium-228	1.35	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Technetium-99	0.705	pCi/g	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Thorium-228	1.39	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Thorium-232	1.35	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^9-RMP	8-Jan-04	4.0	4.5	Uranium, Total	10.4	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Beryllium	0.636	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Aroclor-1254	4.04	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Aroclor-1260	4.04	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Radium-228	0.952	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Technetium-99	0.624	pCi/g	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Thorium-228	0.939	pCi/g	NV	479582.291	1348303.239

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Thorium-232	0.952	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^11-RMP	8-Jan-04	5.0	5.5	Uranium, Total	12.6	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Beryllium	0.766	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Aroclor-1254	4.06	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Aroclor-1260	4.06	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Radium-228	1.07	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Technetium-99	1.3	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Thorium-228	1.09	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Thorium-232	1.07	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^13-RMP	8-Jan-04	6.0	6.5	Uranium, Total	11.9	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Beryllium	0.815	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Aroclor-1254	4.04	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Aroclor-1260	4.04	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Radium-228	1.03	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Technetium-99	0.704	pCi/g	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Thorium-228	1.01	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Thorium-232	1.03	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^15-RMP	8-Jan-04	7.0	7.5	Uranium, Total	8.18	ug/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Beryllium	0.685	mg/kg	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Aroclor-1254	4.14	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Aroclor-1260	4.14	ug/kg	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Radium-228	1.09	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Technetium-99	0.628	pCi/g	UNV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Thorium-228	1.16	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Thorium-232	1.09	pCi/g	NV	479582.291	1348303.239
A7P3-AWWT16	A7P3-AWWT16^17-RMP	8-Jan-04	8.0	8.5	Uranium, Total	7.65	ug/g	NV	479582.291	1348303.239
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Arsenic	1.07	mg/kg	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Beryllium	0.66	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Lead	15.6	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Aroclor-1254	3.91	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Aroclor-1260	3.91	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Radium-228	1.01	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Technetium-99	0.719	pCi/g	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Thorium-228	1.03	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Thorium-232	1.01	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^1-RMP	9-Jan-04	0.0	0.5	Uranium, Total	10.9	ug/g	NV	479433.156	1348266.33

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Arsenic	1.1	mg/kg	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Beryllium	0.816	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Lead	12.2	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Aroclor-1254	4.05	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Aroclor-1260	4.05	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Radium-228	1.34	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Technetium-99	1.6	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Thorium-228	1.36	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Thorium-232	1.34	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^3-RMP	9-Jan-04	1.0	1.5	Uranium, Total	9.76	ug/L	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Arsenic	1.12	mg/kg	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Beryllium	0.716	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Lead	11.8	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Aroclor-1254	4.01	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Aroclor-1260	4.01	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Radium-228	1.48	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Technetium-99	0.718	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Thorium-228	1.54	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Thorium-232	1.48	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^5-RMP	9-Jan-04	2.0	2.5	Uranium, Total	8.64	ug/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Arsenic	1.12	mg/kg	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Beryllium	0.784	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Lead	12.7	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Aroclor-1254	4.05	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Aroclor-1260	4.05	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Radium-228	1.41	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Technetium-99	1.56	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Thorium-228	1.49	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Thorium-232	1.41	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^7-RMP	9-Jan-04	3.0	3.5	Uranium, Total	11.3	ug/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Arsenic	1.01	mg/kg	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Beryllium	0.72	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Lead	12.6	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Aroclor-1254	33.8	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Aroclor-1260	33.8	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Radium-228	1.18	pCi/g	NV	479433.156	1348266.33

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Technetium-99	0.713	pCi/g	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Thorium-228	1.15	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Thorium-232	1.18	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^9-RMP	9-Jan-04	4.0	4.5	Uranium, Total	5.53	ug/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Arsenic	1.08	mg/kg	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Beryllium	0.803	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Lead	12.8	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Aroclor-1254	11	ug/kg	J	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Aroclor-1260	4.32	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Radium-228	1.04	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Technetium-99	0.886	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Thorium-228	1.11	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Thorium-232	1.04	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^11-RMP	9-Jan-04	5.0	5.5	Uranium, Total	7.46	ug/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^13-RMP	9-Jan-04	6.0	6.5	Radium-228	1.22	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^13-RMP	9-Jan-04	6.0	6.5	Technetium-99	0.747	pCi/g	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^13-RMP	9-Jan-04	6.0	6.5	Thorium-228	1.24	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^13-RMP	9-Jan-04	6.0	6.5	Thorium-232	1.22	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^13-RMP	9-Jan-04	6.0	6.5	Uranium, Total	6.61	ug/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Arsenic	1.64	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Beryllium	0.509	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Lead	9.61	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Aroclor-1254	5.29	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Aroclor-1260	5.29	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Radium-228	0.882	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Technetium-99	0.654	pCi/g	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Thorium-228	0.905	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Thorium-232	0.882	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^15-RMP	9-Jan-04	7.0	7.5	Uranium, Total	5.47	ug/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Arsenic	1.09	mg/kg	UNV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Beryllium	0.142	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Lead	5.87	mg/kg	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Aroclor-1254	4.04	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Aroclor-1260	4.04	ug/kg	U	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Radium-228	0.4	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Technetium-99	0.605	pCi/g	UNV	479433.156	1348266.33

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Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Thorium-228	0.399	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Thorium-232	0.4	pCi/g	NV	479433.156	1348266.33
A7P3-AWWT17	A7P3-AWWT17^17-RMP	9-Jan-04	8.0	8.5	Uranium, Total	2.65	ug/g	UNV	479433.156	1348266.33
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Arsenic	7.93	mg/kg	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.604	mg/kg	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	4.3	ug/kg	UNV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	4.3	ug/kg	UNV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Radium-226	0.987	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Radium-228	1.21	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	1.22	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	1.21	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	6.99	ug/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Arsenic	14.3	mg/kg	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Beryllium	0.987	mg/kg	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	3.9	ug/kg	UNV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	3.9	ug/kg	UNV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Radium-226	1.46	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Radium-228	1.22	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	1.24	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	1.22	pCi/g	NV	479156.28	1347806.95
A7P3-FIELD1	A7P3-FIELD1-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	4.88	ug/g	NV	479156.28	1347806.95
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Arsenic	8.09	mg/kg	NV	478852.221	1348236.5
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Beryllium	0.511	mg/kg	NV	478852.221	1348236.5
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1254	9.9	ug/kg	UNV	478852.221	1348236.5
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1260	9.9	ug/kg	UNV	478852.221	1348236.5
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Radium-228	1.07	pCi/g	NV	478852.221	1348236.5
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Thorium-228	1.11	pCi/g	NV	478852.221	1348236.5
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Thorium-232	1.07	pCi/g	NV	478852.221	1348236.5
A7P3-FIELD10	A7P3-FIELD10^1-RMP	4-Feb-04	0.0	0.5	Uranium, Total	11.7	ug/g	NV	478852.221	1348236.5
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Arsenic	8.75	mg/kg	NV	478898.791	1348311.747
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Beryllium	0.684	mg/kg	NV	478898.791	1348311.747
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1254	10.2	ug/kg	UNV	478898.791	1348311.747
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1260	10.2	ug/kg	UNV	478898.791	1348311.747
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Radium-228	0.984	pCi/g	NV	478898.791	1348311.747
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Thorium-228	1.05	pCi/g	NV	478898.791	1348311.747
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Thorium-232	0.984	pCi/g	NV	478898.791	1348311.747

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-FIELD11	A7P3-FIELD11^1-RMP	4-Feb-04	0.0	0.5	Uranium, Total	17.9	ug/g	NV	478898.791	1348311.747
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Arsenic	9.04	mg/kg	NV	478988.705	1348291.99
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Beryllium	0.638	mg/kg	NV	478988.705	1348291.99
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1254	8.25	ug/kg	UNV	478988.705	1348291.99
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1260	8.25	ug/kg	UNV	478988.705	1348291.99
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Radium-228	0.988	pCi/g	NV	478988.705	1348291.99
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Thorium-228	0.998	pCi/g	NV	478988.705	1348291.99
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Thorium-232	0.988	pCi/g	NV	478988.705	1348291.99
A7P3-FIELD12	A7P3-FIELD12^1-RMP	4-Feb-04	0.0	0.5	Uranium, Total	10.2	ug/g	NV	478988.705	1348291.99
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Arsenic	7.6	mg/kg	NV	479056.47	1348239.948
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Beryllium	0.547	mg/kg	NV	479056.47	1348239.948
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1254	5.7	ug/kg	NV	479056.47	1348239.948
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Aroclor-1260	7.85	ug/kg	UNV	479056.47	1348239.948
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Radium-228	0.835	pCi/g	NV	479056.47	1348239.948
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Thorium-228	0.808	pCi/g	NV	479056.47	1348239.948
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Thorium-232	0.835	pCi/g	NV	479056.47	1348239.948
A7P3-FIELD13	A7P3-FIELD13^1-RMP	4-Feb-04	0.0	0.5	Uranium, Total	11.3	ug/g	NV	479056.47	1348239.948
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Arsenic	7.36	mg/kg	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.703	mg/kg	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	6.2	ug/kg	UNV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	6.2	ug/kg	UNV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Radium-226	1.11	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Radium-228	0.984	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	0.946	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	0.984	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	4.85	ug/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Arsenic	7.15	mg/kg	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Beryllium	1.25	mg/kg	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	4	ug/kg	UNV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	4	ug/kg	UNV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Radium-226	1.3	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Radium-228	0.84	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	0.836	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	0.84	pCi/g	NV	478921.32	1347902.82
A7P3-FIELD2	A7P3-FIELD2-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	11.5	ug/g	NV	478921.32	1347902.82
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Arsenic	6.03	mg/kg	NV	478823.416	1348159.952

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.646	mg/kg	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	6.6	ug/kg	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	4.1	ug/kg	UNV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Radium-226	1.02	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Radium-228	1.01	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	1.01	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	1.01	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	17.6	ug/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Arsenic	4.72	mg/kg	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Beryllium	0.455	mg/kg	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	3.9	ug/kg	UNV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	3.9	ug/kg	UNV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Radium-226	1.08	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Radium-228	0.966	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	0.972	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	0.966	pCi/g	NV	478823.416	1348159.952
A7P3-FIELD3	A7P3-FIELD3-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	8	ug/g	NV	478823.416	1348159.952
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Arsenic	4.55	mg/kg	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.362	mg/kg	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	4.2	ug/kg	UNV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	4.2	ug/kg	UNV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Radium-226	0.922	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Radium-228	0.842	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	0.846	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	0.842	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	24.1	ug/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Arsenic	9.75	mg/kg	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Beryllium	0.673	mg/kg	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	4	ug/kg	UNV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	4	ug/kg	UNV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Radium-226	1.29	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Radium-228	0.956	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	0.959	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	0.956	pCi/g	NV	479077.76	1347947.76
A7P3-FIELD4	A7P3-FIELD4-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	24.6	ug/g	NV	479077.76	1347947.76
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Arsenic	5.89	mg/kg	NV	479099.456	1348153.462

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.572	mg/kg	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	10.2	ug/kg	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	1.9	ug/kg	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Radium-226	0.873	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Radium-228	1.15	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	1.34	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	1.15	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	7.04	ug/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Arsenic	6.27	mg/kg	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Beryllium	0.77	mg/kg	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	3.7	ug/kg	UNV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	3.7	ug/kg	UNV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Radium-226	1	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Radium-228	1.02	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	1.03	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	1.02	pCi/g	NV	479099.456	1348153.462
A7P3-FIELD5	A7P3-FIELD5-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	19.2	ug/g	NV	479099.456	1348153.462
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Arsenic	6.89	mg/kg	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.631	mg/kg	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	3.9	ug/kg	UNV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	3.9	ug/kg	UNV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Radium-226	0.921	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Radium-228	0.793	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	0.795	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	0.793	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	6.8	ug/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Arsenic	6.46	mg/kg	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Beryllium	0.741	mg/kg	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	3.8	ug/kg	UNV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	3.8	ug/kg	UNV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Radium-226	0.96	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Radium-228	0.922	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	0.921	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	0.922	pCi/g	NV	478987.754	1348128.752
A7P3-FIELD6	A7P3-FIELD6-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	4.69	ug/g	NV	478987.754	1348128.752
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Arsenic	6.06	mg/kg	NV	478920.99	1348248.09

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.782	mg/kg	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	4.1	ug/kg	UNV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	4.1	ug/kg	UNV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Radium-226	1.08	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Radium-228	0.933	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	0.939	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	0.933	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	12.4	ug/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Arsenic	6.05	mg/kg	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Beryllium	0.935	mg/kg	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	4	ug/kg	UNV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	4	ug/kg	UNV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Radium-226	1.07	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Radium-228	0.92	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	0.895	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	0.92	pCi/g	NV	478920.99	1348248.09
A7P3-FIELD7	A7P3-FIELD7-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	5.68	ug/g	NV	478920.99	1348248.09
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Arsenic	4.95	mg/kg	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Beryllium	0.454	mg/kg	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1254	4	ug/kg	UNV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Aroclor-1260	4	ug/kg	UNV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Radium-226	1.07	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Radium-228	1.02	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Thorium-228	1.06	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Thorium-232	1.02	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-1-RMP	6-Jan-03	0.0	0.5	Uranium, Total	11.4	ug/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Arsenic	7.16	mg/kg	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Beryllium	1.37	mg/kg	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1254	3.9	ug/kg	UNV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Aroclor-1260	3.9	ug/kg	UNV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Radium-226	1.31	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Radium-228	1.24	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Thorium-228	1.26	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Thorium-232	1.24	pCi/g	NV	478832.298	1348280.424
A7P3-FIELD8	A7P3-FIELD8-6-RMP	6-Jan-03	2.5	3.0	Uranium, Total	6.33	ug/g	NV	478832.298	1348280.424
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Arsenic	6.18	mg/kg	NV	478945.29	1348994.249

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Beryllium	0.971	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Lead	24	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Manganese	1160	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Aroclor-1254	2.2	ug/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Aroclor-1260	9.52	ug/kg	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Dieldrin	0.00061	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Radium-228	1.02	pCi/g	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Technetium-99	0.62	pCi/g	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Thorium-228	1.07	pCi/g	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Thorium-230	18.2	pCi/g	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Thorium-232	1.02	pCi/g	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^1-RMP	5-Mar-04	0.0	0.5	Uranium, Total	11.3	ug/g	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Arsenic	16.6	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Beryllium	0.913	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Lead	19	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Manganese	736	mg/kg	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Aroclor-1254	10.4	ug/kg	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Aroclor-1260	10.4	ug/kg	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Dieldrin	0.000829	mg/kg	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Radium-228	1.29	pCi/g	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Technetium-99	0.693	pCi/g	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Thorium-228	1.35	pCi/g	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Thorium-230	21.7	pCi/g	UNV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Thorium-232	1.29	pCi/g	NV	478945.29	1348994.249
A7P3-NFFPD	A7P3-NFFPD^6-RMP	5-Mar-04	2.5	3.0	Uranium, Total	3.21	ug/g	NV	478945.29	1348994.249
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Arsenic	2.25	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Beryllium	0.337	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Lead	7.67	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Manganese	303	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Aroclor-1254	36.2	ug/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Aroclor-1260	6.9	ug/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Dieldrin	0.0032	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Radium-228	0.437	pCi/g	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Technetium-99	0.659	pCi/g	UNV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Thorium-228	0.448	pCi/g	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Thorium-230	14.2	pCi/g	UNV	478924.574	1349194.683

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Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Thorium-232	0.437	pCi/g	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^1-RMP	4-Mar-04	0.0	0.5	Uranium, Total	2.5	ug/g	UNV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Arsenic	5.87	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Beryllium	0.621	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Lead	12.1	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Manganese	566	mg/kg	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Aroclor-1254	10	ug/kg	UNV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Aroclor-1260	10	ug/kg	UNV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Dieldrin	0.000803	mg/kg	UNV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Radium-228	0.964	pCi/g	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Technetium-99	0.656	pCi/g	UNV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Thorium-228	0.907	pCi/g	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Thorium-230	21.4	pCi/g	UNV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Thorium-232	0.964	pCi/g	NV	478924.574	1349194.683
A7P3-SPIT7	A7P3-SPIT7^6-RMP	4-Mar-04	2.5	3.0	Uranium, Total	4.29	ug/g	NV	478924.574	1349194.683
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Arsenic	6	mg/kg	-	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Beryllium	0.555	mg/kg	-	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Aroclor-1254	152	ug/kg	-	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Aroclor-1260	55.3	ug/kg	J	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Radium-226	1.01	pCi/g	-	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Radium-228	0.858	pCi/g	-	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Thorium-228	0.869	pCi/g	-	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Thorium-232	0.858	pCi/g	-	478840.98	1349849.082
A7P3-SWC-1	A7P3-SWC-1^1-RMP	19-Feb-04	0.0	0.5	Uranium, Total	9.24	ug/g	-	478840.98	1349849.082
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Arsenic	14.8	mg/kg	-	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Beryllium	0.717	mg/kg	-	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Aroclor-1254	70.2	ug/kg	-	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Aroclor-1260	17.6	ug/kg	J	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Radium-226	0.874	pCi/g	-	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Radium-228	0.806	pCi/g	-	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Thorium-228	0.808	pCi/g	-	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Thorium-232	0.806	pCi/g	-	478869.49	1349819.667
A7P3-SWC-2	A7P3-SWC-2^1-RMP	19-Feb-04	0.0	0.5	Uranium, Total	7.05	ug/g	-	478869.49	1349819.667
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Arsenic	7.55	mg/kg	-	478912.159	1349785.557
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Beryllium	0.639	mg/kg	-	478912.159	1349785.557
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Aroclor-1254	67.4	ug/kg	-	478912.159	1349785.557

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Aroclor-1260	14.8	ug/kg	J	478912.159	1349785.557
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Radium-226	0.865	pCi/g	-	478912.159	1349785.557
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Radium-228	0.698	pCi/g	-	478912.159	1349785.557
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Thorium-228	0.718	pCi/g	-	478912.159	1349785.557
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Thorium-232	0.698	pCi/g	-	478912.159	1349785.557
A7P3-SWC-3	A7P3-SWC-3^1-RMP	19-Feb-04	0.0	0.5	Uranium, Total	5.52	ug/g	-	478912.159	1349785.557
A7-PC1	A7-PC1-1-M	14-Oct-02	0.0	0.5	Arsenic	9.7	mg/kg	NV	480486.2	1347920.2
A7-PC2	A7-PC2-1A-M	9-Oct-02	0.0	0.5	Arsenic	2.4	mg/kg	NV	480575.3	1347880.8
A7-PC2	A7-PC2-1-M	11-Sep-02	0.0	0.5	Arsenic	12.8	mg/kg	NV	480575.3	1347880.8
A7-PC3	A7-PC3-1-M	11-Sep-02	0.0	0.5	Arsenic	11.9	mg/kg	NV	480300	1347600.1
A7-PC4	A7-PC4-1-M	11-Sep-02	0.0	0.5	Arsenic	8.6	mg/kg	NV	480389.99	1347500.1
A7-PC5	A7-PC5-1-M	11-Sep-02	0.0	0.5	Arsenic	8.7	mg/kg	NV	480400	1347600.1
A7-PC8	A7-PC8-1-M	14-Oct-02	0.0	0.5	Arsenic	8.4	mg/kg	NV	480476.01	1347959.95
A7-SA1-15	A7-SA1-15^1-RM	29-Dec-04	0.0	0.5	Arsenic	3.18	mg/kg	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^1-RM	29-Dec-04	0.0	0.5	Radium-226	1.45	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^1-RM	29-Dec-04	0.0	0.5	Radium-228	0.374	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^1-RM	29-Dec-04	0.0	0.5	Thorium-228	0.401	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^1-RM	29-Dec-04	0.0	0.5	Thorium-232	0.374	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^1-RM	29-Dec-04	0.0	0.5	Uranium, Total	5.03	ug/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^3-RM	29-Dec-04	1.0	1.5	Arsenic	6.59	mg/kg	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^3-RM	29-Dec-04	1.0	1.5	Radium-226	1.23	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^3-RM	29-Dec-04	1.0	1.5	Radium-228	1.22	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^3-RM	29-Dec-04	1.0	1.5	Thorium-228	1.23	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^3-RM	29-Dec-04	1.0	1.5	Thorium-232	1.22	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^3-RM	29-Dec-04	1.0	1.5	Uranium, Total	4.25	ug/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^6-RM	29-Dec-04	2.5	3.0	Arsenic	9.12	mg/kg	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^6-RM	29-Dec-04	2.5	3.0	Radium-226	1.27	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^6-RM	29-Dec-04	2.5	3.0	Radium-228	1.06	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^6-RM	29-Dec-04	2.5	3.0	Thorium-228	1.06	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^6-RM	29-Dec-04	2.5	3.0	Thorium-232	1.06	pCi/g	NV	480647.753	1347334.301
A7-SA1-15	A7-SA1-15^6-RM	29-Dec-04	2.5	3.0	Uranium, Total	3.7	ug/g	NV	480647.753	1347334.301
A7-SA1-16	A7-SA1-16^1-RM	29-Dec-04	0.0	0.5	Arsenic	10.7	mg/kg	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^1-RM	29-Dec-04	0.0	0.5	Radium-226	3.27	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^1-RM	29-Dec-04	0.0	0.5	Radium-228	0.939	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^1-RM	29-Dec-04	0.0	0.5	Thorium-228	0.93	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^1-RM	29-Dec-04	0.0	0.5	Thorium-232	0.939	pCi/g	NV	480620.724	1347334.322

006201

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA1-16	A7-SA1-16^1-RM	29-Dec-04	0.0	0.5	Uranium, Total	16.5	ug/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^3-RM	29-Dec-04	1.0	1.5	Arsenic	8.57	mg/kg	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^3-RM	29-Dec-04	1.0	1.5	Radium-226	1.41	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^3-RM	29-Dec-04	1.0	1.5	Radium-228	1.26	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^3-RM	29-Dec-04	1.0	1.5	Thorium-228	1.26	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^3-RM	29-Dec-04	1.0	1.5	Thorium-232	1.26	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^3-RM	29-Dec-04	1.0	1.5	Uranium, Total	8.97	ug/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^6-RM	29-Dec-04	2.5	3.0	Arsenic	10.5	mg/kg	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^6-RM	29-Dec-04	2.5	3.0	Radium-226	1.61	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^6-RM	29-Dec-04	2.5	3.0	Radium-228	1.33	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^6-RM	29-Dec-04	2.5	3.0	Thorium-228	1.33	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^6-RM	29-Dec-04	2.5	3.0	Thorium-232	1.33	pCi/g	NV	480620.724	1347334.322
A7-SA1-16	A7-SA1-16^6-RM	29-Dec-04	2.5	3.0	Uranium, Total	7.28	ug/g	NV	480620.724	1347334.322
A7-SA1-17	A7-SA1-17^1-RM	4-May-05	0.0	0.5	Arsenic	3.47	mg/kg	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^1-RM	4-May-05	0.0	0.5	Radium-226	0.994	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^1-RM	4-May-05	0.0	0.5	Radium-228	0.98	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^1-RM	4-May-05	0.0	0.5	Thorium-228	0.96	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^1-RM	4-May-05	0.0	0.5	Thorium-232	0.98	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^1-RM	4-May-05	0.0	0.5	Uranium, Total	19.2	ug/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^3-RM	4-May-05	1.0	1.5	Arsenic	10.5	mg/kg	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^3-RM	4-May-05	1.0	1.5	Radium-226	1.34	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^3-RM	4-May-05	1.0	1.5	Radium-228	1.16	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^3-RM	4-May-05	1.0	1.5	Thorium-228	1.16	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^3-RM	4-May-05	1.0	1.5	Thorium-232	1.16	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^3-RM	4-May-05	1.0	1.5	Uranium, Total	3.4	ug/g	UNV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^6-RM	4-May-05	2.5	3.0	Arsenic	9.46	mg/kg	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^6-RM	4-May-05	2.5	3.0	Radium-226	1.42	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^6-RM	4-May-05	2.5	3.0	Radium-228	1.27	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^6-RM	4-May-05	2.5	3.0	Thorium-228	1.28	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^6-RM	4-May-05	2.5	3.0	Thorium-232	1.27	pCi/g	NV	480666.771	1347490.718
A7-SA1-17	A7-SA1-17^6-RM	4-May-05	2.5	3.0	Uranium, Total	6.39	ug/g	NV	480666.771	1347490.718
A7-SA1-18	A7-SA1-18^1-RM	4-May-05	0.0	0.5	Arsenic	10.4	mg/kg	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^1-RM	4-May-05	0.0	0.5	Radium-226	1.69	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^1-RM	4-May-05	0.0	0.5	Radium-228	1.26	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^1-RM	4-May-05	0.0	0.5	Thorium-228	1.25	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^1-RM	4-May-05	0.0	0.5	Thorium-232	1.26	pCi/g	NV	480626.771	1347491.029

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA1-18	A7-SA1-18^1-RM	4-May-05	0.0	0.5	Uranium, Total	18.5	ug/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^3-RM	4-May-05	1.0	1.5	Arsenic	10.7	mg/kg	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^3-RM	4-May-05	1.0	1.5	Radium-226	1.44	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^3-RM	4-May-05	1.0	1.5	Radium-228	1.35	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^3-RM	4-May-05	1.0	1.5	Thorium-228	1.29	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^3-RM	4-May-05	1.0	1.5	Thorium-232	1.35	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^3-RM	4-May-05	1.0	1.5	Uranium, Total	5.88	ug/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^6-RM	4-May-05	2.5	3.0	Arsenic	10.6	mg/kg	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^6-RM	4-May-05	2.5	3.0	Radium-226	1.2	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^6-RM	4-May-05	2.5	3.0	Radium-228	1.22	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^6-RM	4-May-05	2.5	3.0	Thorium-228	1.2	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^6-RM	4-May-05	2.5	3.0	Thorium-232	1.22	pCi/g	NV	480626.771	1347491.029
A7-SA1-18	A7-SA1-18^6-RM	4-May-05	2.5	3.0	Uranium, Total	5.04	ug/g	NV	480626.771	1347491.029
A7-SA1-19	A7-SA1-19^1-RMP	22-Dec-04	0.0	0.5	Beryllium	0.859	mg/kg	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^1-RMP	22-Dec-04	0.0	0.5	Aroclor-1254	0.0041	mg/kg	UNV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^1-RMP	22-Dec-04	0.0	0.5	Radium-226	1.27	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^1-RMP	22-Dec-04	0.0	0.5	Radium-228	0.961	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^1-RMP	22-Dec-04	0.0	0.5	Thorium-228	1.05	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^1-RMP	22-Dec-04	0.0	0.5	Thorium-232	0.961	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^1-RMP	22-Dec-04	0.0	0.5	Uranium, Total	5.86	ug/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^3-RMP	22-Dec-04	1.0	1.5	Beryllium	0.691	mg/kg	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^3-RMP	22-Dec-04	1.0	1.5	Aroclor-1254	0.0043	mg/kg	UNV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^3-RMP	22-Dec-04	1.0	1.5	Radium-226	1.36	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^3-RMP	22-Dec-04	1.0	1.5	Radium-228	1.03	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^3-RMP	22-Dec-04	1.0	1.5	Thorium-228	0.994	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^3-RMP	22-Dec-04	1.0	1.5	Thorium-232	1.03	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^3-RMP	22-Dec-04	1.0	1.5	Uranium, Total	6.25	ug/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^6-RMP	22-Dec-04	2.5	3.0	Beryllium	0.733	mg/kg	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^6-RMP	22-Dec-04	2.5	3.0	Aroclor-1254	0.0043	mg/kg	UNV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^6-RMP	22-Dec-04	2.5	3.0	Radium-226	1.46	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^6-RMP	22-Dec-04	2.5	3.0	Radium-228	1.29	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^6-RMP	22-Dec-04	2.5	3.0	Thorium-228	1.32	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^6-RMP	22-Dec-04	2.5	3.0	Thorium-232	1.29	pCi/g	NV	480709.63	1347738.747
A7-SA1-19	A7-SA1-19^6-RMP	22-Dec-04	2.5	3.0	Uranium, Total	6.4	ug/g	NV	480709.63	1347738.747
A7-SA1-20	A7-SA1-20^1-RMP	21-Dec-04	0.0	0.5	Beryllium	0.61	mg/kg	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^1-RMP	21-Dec-04	0.0	0.5	Aroclor-1254	0.0039	mg/kg	UNV	480672.654	1347741.396

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA1-20	A7-SA1-20^1-RMP	21-Dec-04	0.0	0.5	Radium-226	0.906	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^1-RMP	21-Dec-04	0.0	0.5	Radium-228	0.757	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^1-RMP	21-Dec-04	0.0	0.5	Thorium-228	0.777	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^1-RMP	21-Dec-04	0.0	0.5	Thorium-232	0.757	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^1-RMP	21-Dec-04	0.0	0.5	Uranium, Total	3.06	ug/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^3-RMP	21-Dec-04	1.0	1.5	Beryllium	0.625	mg/kg	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^3-RMP	21-Dec-04	1.0	1.5	Aroclor-1254	0.0041	mg/kg	UNV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^3-RMP	21-Dec-04	1.0	1.5	Radium-226	1.26	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^3-RMP	21-Dec-04	1.0	1.5	Radium-228	1.21	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^3-RMP	21-Dec-04	1.0	1.5	Thorium-228	1.23	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^3-RMP	21-Dec-04	1.0	1.5	Thorium-232	1.21	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^3-RMP	21-Dec-04	1.0	1.5	Uranium, Total	6.25	ug/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^6-RMP	21-Dec-04	2.5	3.0	Beryllium	0.648	mg/kg	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^6-RMP	21-Dec-04	2.5	3.0	Aroclor-1254	0.0042	mg/kg	UNV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^6-RMP	21-Dec-04	2.5	3.0	Radium-226	1.26	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^6-RMP	21-Dec-04	2.5	3.0	Radium-228	1.1	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^6-RMP	21-Dec-04	2.5	3.0	Thorium-228	1.17	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^6-RMP	21-Dec-04	2.5	3.0	Thorium-232	1.1	pCi/g	NV	480672.654	1347741.396
A7-SA1-20	A7-SA1-20^6-RMP	21-Dec-04	2.5	3.0	Uranium, Total	5.11	ug/g	NV	480672.654	1347741.396
A7-SA1-21	A7-SA1-21^1-RMP	4-May-05	0.0	0.5	Beryllium	0.735	mg/kg	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^1-RMP	4-May-05	0.0	0.5	Aroclor-1254	0.00072	mg/kg	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^1-RMP	4-May-05	0.0	0.5	Radium-226	1.58	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^1-RMP	4-May-05	0.0	0.5	Radium-228	1.13	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^1-RMP	4-May-05	0.0	0.5	Thorium-228	1.22	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^1-RMP	4-May-05	0.0	0.5	Thorium-232	1.13	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^1-RMP	4-May-05	0.0	0.5	Uranium, Total	8.93	ug/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^3-RMP	4-May-05	1.0	1.5	Beryllium	0.49	mg/kg	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^3-RMP	4-May-05	1.0	1.5	Aroclor-1254	0.0026	mg/kg	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^3-RMP	4-May-05	1.0	1.5	Radium-226	1.31	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^3-RMP	4-May-05	1.0	1.5	Radium-228	1	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^3-RMP	4-May-05	1.0	1.5	Thorium-228	1.01	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^3-RMP	4-May-05	1.0	1.5	Thorium-232	1	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^3-RMP	4-May-05	1.0	1.5	Uranium, Total	9.59	ug/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^6-RMP	4-May-05	2.5	3.0	Beryllium	0.583	mg/kg	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^6-RMP	4-May-05	2.5	3.0	Aroclor-1254	0.0044	mg/kg	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^6-RMP	4-May-05	2.5	3.0	Radium-226	1.23	pCi/g	NV	480719.704	1347924.513

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA1-21	A7-SA1-21^6-RMP	4-May-05	2.5	3.0	Radium-228	0.874	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^6-RMP	4-May-05	2.5	3.0	Thorium-228	0.849	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^6-RMP	4-May-05	2.5	3.0	Thorium-232	0.874	pCi/g	NV	480719.704	1347924.513
A7-SA1-21	A7-SA1-21^6-RMP	4-May-05	2.5	3.0	Uranium, Total	7.65	ug/g	NV	480719.704	1347924.513
A7-SA1-24	A7-SA1-24^1-RMP	23-Feb-05	0.0	0.5	Beryllium	0.459	mg/kg	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^1-RMP	23-Feb-05	0.0	0.5	Aroclor-1254	0.0064	mg/kg	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^1-RMP	23-Feb-05	0.0	0.5	Radium-226	1.53	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^1-RMP	23-Feb-05	0.0	0.5	Radium-228	0.992	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^1-RMP	23-Feb-05	0.0	0.5	Thorium-228	1.02	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^1-RMP	23-Feb-05	0.0	0.5	Thorium-232	0.992	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^1-RMP	23-Feb-05	0.0	0.5	Uranium, Total	17.5	ug/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^3-RMP	23-Feb-05	1.0	1.5	Beryllium	0.48	mg/kg	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^3-RMP	23-Feb-05	1.0	1.5	Aroclor-1254	0.0054	mg/kg	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^3-RMP	23-Feb-05	1.0	1.5	Radium-226	1.49	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^3-RMP	23-Feb-05	1.0	1.5	Radium-228	1.06	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^3-RMP	23-Feb-05	1.0	1.5	Thorium-228	1.03	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^3-RMP	23-Feb-05	1.0	1.5	Thorium-232	1.06	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^3-RMP	23-Feb-05	1.0	1.5	Uranium, Total	16.2	ug/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^6-RMP	23-Feb-05	2.5	3.0	Beryllium	0.835	mg/kg	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^6-RMP	23-Feb-05	2.5	3.0	Aroclor-1254	0.0012	mg/kg	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^6-RMP	23-Feb-05	2.5	3.0	Radium-226	1.47	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^6-RMP	23-Feb-05	2.5	3.0	Radium-228	1.19	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^6-RMP	23-Feb-05	2.5	3.0	Thorium-228	1.16	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^6-RMP	23-Feb-05	2.5	3.0	Thorium-232	1.19	pCi/g	NV	480779.159	1348329.628
A7-SA1-24	A7-SA1-24^6-RMP	23-Feb-05	2.5	3.0	Uranium, Total	9.05	ug/g	NV	480779.159	1348329.628
A7-SA1-25	A7-SA1-25^1-R	4-May-05	0.0	0.5	Thorium-232	0.788	pCi/g	NV	480009.542	1348007.58
A7-SA1-25	A7-SA1-25^5-R	4-May-05	2.0	2.5	Thorium-232	1.09	pCi/g	NV	480009.542	1348007.58
A7-SA1-25	A7-SA1-25^11-R	4-May-05	5.0	5.5	Thorium-232	0.843	pCi/g	NV	480009.542	1348007.58
A7-SA1-25	A7-SA1-25^21-R	4-May-05	10.0	10.5	Thorium-232	0.805	pCi/g	NV	480009.542	1348007.58
A7-SA1-25	A7-SA1-25^31-R	4-May-05	15.0	15.5	Thorium-232	0.391	pCi/g	NV	480009.542	1348007.58
A7-SA1-25	A7-SA1-25^32-R	4-May-05	15.5	16.0	Thorium-232	0.442	pCi/g	NV	480009.542	1348007.58
A7-SA1-26	A7-SA1-26^1-R	4-May-05	0.0	0.5	Radium-226	1.3	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^1-R	4-May-05	0.0	0.5	Radium-228	0.866	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^1-R	4-May-05	0.0	0.5	Thorium-228	0.857	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^1-R	4-May-05	0.0	0.5	Thorium-232	0.866	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^1-R	4-May-05	0.0	0.5	Uranium, Total	7.27	ug/g	NV	480279.416	1347780.562

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA1-26	A7-SA1-26^3-R	4-May-05	1.0	1.5	Radium-226	0.719	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^3-R	4-May-05	1.0	1.5	Radium-228	0.643	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^3-R	4-May-05	1.0	1.5	Thorium-228	0.636	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^3-R	4-May-05	1.0	1.5	Thorium-232	0.643	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^3-R	4-May-05	1.0	1.5	Uranium, Total	3.32	ug/g	UNV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^6-R	4-May-05	2.5	3.0	Radium-226	1.04	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^6-R	4-May-05	2.5	3.0	Radium-228	0.72	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^6-R	4-May-05	2.5	3.0	Thorium-228	0.723	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^6-R	4-May-05	2.5	3.0	Thorium-232	0.72	pCi/g	NV	480279.416	1347780.562
A7-SA1-26	A7-SA1-26^6-R	4-May-05	2.5	3.0	Uranium, Total	4.13	ug/g	NV	480279.416	1347780.562
A7-SA1-27	A7-SA1-27^1-R	2-Mar-05	0.0	0.5	Thorium-232	0.774	pCi/g	NV	480029.441	1347530.682
A7-SA1-27	A7-SA1-27^3-R	2-Mar-05	1.0	1.5	Thorium-232	0.808	pCi/g	NV	480029.441	1347530.682
A7-SA1-27	A7-SA1-27^6-R	2-Mar-05	2.5	3.0	Thorium-232	0.349	pCi/g	NV	480029.441	1347530.682
A7-SA1-29	A7-SA1-29^1-R	4-May-05	0.0	0.5	Technetium-99	0.899	pCi/g	UNV	480494.57	1347227.05
A7-SA1-29	A7-SA1-29^1-R	4-May-05	0.0	0.5	Uranium, Total	4.64	ug/g	NV	480494.57	1347227.05
A7-SA1-29	A7-SA1-29^13-R	4-May-05	6.0	6.5	Technetium-99	0.855	pCi/g	UNV	480494.57	1347227.05
A7-SA1-29	A7-SA1-29^13-R	4-May-05	6.0	6.5	Uranium, Total	3.14	ug/g	NV	480494.57	1347227.05
A7-SA1-47	A7-SA1-47^1-R	3-Jun-05	0.0	0.5	Radium-226	2.13	pCi/g	NV	480106.09	1347767.76
A7-SA1-48	A7-SA1-48^1-R	3-Jun-05	0.0	0.5	Radium-226	3.42	pCi/g	NV	480101.09	1347772.76
A7-SA1-49	A7-SA1-49^1-R	3-Jun-05	0.0	0.5	Radium-226	1.05	pCi/g	NV	480096.09	1347767.76
A7-SA1-50	A7-SA1-50^1-R	3-Jun-05	0.0	0.5	Radium-226	0.934	pCi/g	NV	480101.09	1347762.76
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Arsenic	5.9	mg/kg	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Beryllium	0.489	mg/kg	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Aroclor-1254	0.0044	mg/kg	UNV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Aroclor-1260	0.0044	mg/kg	UNV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Radium-226	1.01	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Radium-228	0.761	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Thorium-228	0.771	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Thorium-232	0.761	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^1-RMP	21-Dec-04	0.0	0.5	Uranium, Total	5.63	ug/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Arsenic	4.17	mg/kg	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Beryllium	1.36	mg/kg	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Aroclor-1254	0.0013	mg/kg	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Aroclor-1260	0.0042	mg/kg	UNV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Radium-226	1.27	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Radium-228	0.722	pCi/g	NV	480106.361	1347433.146

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Thorium-228	0.738	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Thorium-232	0.722	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^3-RMP	21-Dec-04	1.0	1.5	Uranium, Total	5.43	ug/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Arsenic	6.06	mg/kg	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Beryllium	0.464	mg/kg	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Aroclor-1254	0.0042	mg/kg	UNV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Aroclor-1260	0.0042	mg/kg	UNV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Radium-226	0.935	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Radium-228	0.694	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Thorium-228	0.671	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Thorium-232	0.694	pCi/g	NV	480106.361	1347433.146
A7-SA1-7	A7-SA1-7^6-RMP	21-Dec-04	2.5	3.0	Uranium, Total	3.9	ug/g	NV	480106.361	1347433.146
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Arsenic	15.5	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Beryllium	0.683	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Aroclor-1254	0.002	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Aroclor-1260	0.0012	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Radium-226	1.88	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Radium-228	1.17	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Thorium-228	1.12	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Thorium-232	1.17	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^1-RMP	29-Apr-05	0.0	0.5	Uranium, Total	22.2	ug/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Arsenic	9.16	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Beryllium	1.24	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Aroclor-1254	0.00402	mg/kg	UNV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Aroclor-1260	0.00402	mg/kg	UNV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Radium-226	1.48	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Radium-228	1.4	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Thorium-228	1.38	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Thorium-232	1.4	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^3-RMP	29-Apr-05	1.0	1.5	Uranium, Total	7.52	ug/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Arsenic	16.5	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Beryllium	0.594	mg/kg	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Aroclor-1254	0.00404	mg/kg	UNV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Aroclor-1260	0.00404	mg/kg	UNV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Radium-226	1.07	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Radium-228	1.11	pCi/g	NV	480101.085	1347767.764

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Thorium-228	1.03	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Thorium-232	1.11	pCi/g	NV	480101.085	1347767.764
A7-SA1-8	A7-SA1-8^6-RMP	29-Apr-05	2.5	3.0	Uranium, Total	5.13	ug/g	NV	480101.085	1347767.764
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Arsenic	6.85	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Beryllium	0.483	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Aroclor-1254	0.0045	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Aroclor-1260	0.0034	mg/kg	UNV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Radium-226	0.859	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Radium-228	0.718	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Thorium-228	0.729	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Thorium-232	0.718	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^1-RMP	10-May-05	0.0	0.5	Uranium, Total	7.1	ug/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Arsenic	4.54	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Beryllium	0.549	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Aroclor-1254	0.0058	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Aroclor-1260	0.0037	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Radium-226	1.18	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Radium-228	1.12	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Thorium-228	1.11	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Thorium-232	1.12	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^3-RMP	10-May-05	1.0	1.5	Uranium, Total	19.6	ug/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Arsenic	12.8	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Beryllium	0.654	mg/kg	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Aroclor-1254	0.00424	mg/kg	UNV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Aroclor-1260	0.00424	mg/kg	UNV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Radium-226	1.43	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Radium-228	1.33	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Thorium-228	1.31	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Thorium-232	1.33	pCi/g	NV	479876.98	1347881.456
A7-SA1-9	A7-SA1-9^6-RMP	10-May-05	2.5	3.0	Uranium, Total	3.08	ug/g	UNV	479876.98	1347881.456
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Arsenic	2.53	mg/kg	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Beryllium	0.672	mg/kg	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Aroclor-1254	0.00405	mg/kg	UNV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Aroclor-1260	0.00405	mg/kg	UNV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Radium-228	1.15	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Thorium-228	1.15	pCi/g	NV	479328.295	1348187.676

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Thorium-232	1.15	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^1-RMP	29-Apr-05	0.0	0.5	Uranium, Total	14.4	ug/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Arsenic	6.36	mg/kg	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Beryllium	0.751	mg/kg	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Aroclor-1254	0.00419	mg/kg	UNV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Aroclor-1260	0.00419	mg/kg	UNV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Radium-228	1.03	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Thorium-228	1	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Thorium-232	1.03	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^3-RMP	29-Apr-05	1.0	1.5	Uranium, Total	5.43	ug/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Arsenic	10.1	mg/kg	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Beryllium	0.93	mg/kg	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Aroclor-1254	0.0042	mg/kg	UNV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Aroclor-1260	0.0042	mg/kg	UNV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Radium-228	1.25	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Thorium-228	1.25	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Thorium-232	1.25	pCi/g	NV	479328.295	1348187.676
A7-SA2-1	A7-SA2-1^6-RMP	29-Apr-05	2.5	3.0	Uranium, Total	8.69	ug/g	NV	479328.295	1348187.676
A7-SA2-25	A7-SA2-25^1-M	7-Apr-05	0.0	0.5	Beryllium	0.58	mg/kg	NV	479422.163	1348050.141
A7-SA2-25	A7-SA2-25^3-M	7-Apr-05	1.0	1.5	Beryllium	0.642	mg/kg	NV	479422.163	1348050.141
A7-SA2-25	A7-SA2-25^7-M	7-Apr-05	3.0	3.5	Beryllium	0.727	mg/kg	NV	479422.163	1348050.141
A7-SA2-26	A7-SA2-26^1-M	7-Apr-05	0.0	0.5	Beryllium	0.515	mg/kg	NV	479417.204	1348044.983
A7-SA2-26	A7-SA2-26^3-M	7-Apr-05	1.0	1.5	Beryllium	0.625	mg/kg	NV	479417.204	1348044.983
A7-SA2-26	A7-SA2-26^7-M	7-Apr-05	3.0	3.5	Beryllium	0.779	mg/kg	NV	479417.204	1348044.983
A7-SA2-27	A7-SA2-27^1-M	7-Apr-05	0.0	0.5	Beryllium	0.572	mg/kg	NV	479412.055	1348050.063
A7-SA2-27	A7-SA2-27^3-M	7-Apr-05	1.0	1.5	Beryllium	0.874	mg/kg	NV	479412.055	1348050.063
A7-SA2-27	A7-SA2-27^7-M	7-Apr-05	3.0	3.5	Beryllium	0.635	mg/kg	NV	479412.055	1348050.063
A7-SA2-28	A7-SA2-28^1-M	7-Apr-05	0.0	0.5	Beryllium	0.861	mg/kg	NV	479417.184	1348055.112
A7-SA2-28	A7-SA2-28^3-M	7-Apr-05	1.0	1.5	Beryllium	0.962	mg/kg	NV	479417.184	1348055.112
A7-SA2-28	A7-SA2-28^7-M	7-Apr-05	3.0	3.5	Beryllium	0.587	mg/kg	NV	479417.184	1348055.112
A7-SA2-29	A7-SA2-29^1-R	1-Aug-05			Uranium, Total	8.33	ug/g	NV	479279.377	1348280.937
A7-SA2-31	A7-SA2-31^1-R	28-Jun-05	0.0	0.5	Thorium-232	0.711	pCi/g	NV	479657.26	1348299.14
A7-SA2-31	A7-SA2-31^1-R	28-Jun-05	0.0	0.5	Uranium, Total	15.4	ug/g	NV	479657.26	1348299.14
A7-SA2-31	A7-SA2-31^3-R	28-Jun-05	1.0	1.5	Thorium-232	0.992	pCi/g	NV	479657.26	1348299.14
A7-SA2-31	A7-SA2-31^3-R	28-Jun-05	1.0	1.5	Uranium, Total	30.7	ug/g	NV	479657.26	1348299.14
A7-SA2-31	A7-SA2-31^6-R	28-Jun-05	2.5	3.0	Thorium-232	1.29	pCi/g	NV	479657.26	1348299.14

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA2-31	A7-SA2-31^6-R	28-Jun-05	2.5	3.0	Uranium, Total	22.3	ug/g	NV	479657.26	1348299.14
A7-SA2-31	A7-SA2-31^7-R	16-Aug-05	3.0	3.5	Uranium, Total	16.4	ug/g	NV	479657.26	1348299.14
A7-SA2-31	A7-SA2-31^8-R	16-Aug-05	3.5	4.0	Uranium, Total	13.5	ug/g	NV	479657.26	1348299.14
A7-SA2-32	A7-SA2-32^1-R	1-Mar-05	0.0	0.5	Thorium-232	20.4	pCi/g	NV	479656.872	1348467.767
A7-SA2-32	A7-SA2-32^1-R	1-Mar-05	0.0	0.5	Uranium, Total	180	ug/g	NV	479656.872	1348467.767
A7-SA2-32	A7-SA2-32^3-R	1-Mar-05	1.0	1.5	Thorium-232	1.24	pCi/g	NV	479656.872	1348467.767
A7-SA2-32	A7-SA2-32^3-R	1-Mar-05	1.0	1.5	Uranium, Total	44.6	ug/g	NV	479656.872	1348467.767
A7-SA2-32	A7-SA2-32^6-R	1-Mar-05	2.5	3.0	Thorium-232	1.04	pCi/g	NV	479656.872	1348467.767
A7-SA2-32	A7-SA2-32^6-R	1-Mar-05	2.5	3.0	Uranium, Total	9.34	ug/g	NV	479656.872	1348467.767
A7-SA2-33	A7-SA2-33^1-R	1-Mar-05	0.0	0.5	Thorium-232	1.74	pCi/g	NV	479558.272	1348464.119
A7-SA2-33	A7-SA2-33^1-R	1-Mar-05	0.0	0.5	Uranium, Total	41.8	ug/g	NV	479558.272	1348464.119
A7-SA2-33	A7-SA2-33^3-R	1-Mar-05	1.0	1.5	Thorium-232	0.798	pCi/g	NV	479558.272	1348464.119
A7-SA2-33	A7-SA2-33^3-R	1-Mar-05	1.0	1.5	Uranium, Total	4.76	ug/g	UNV	479558.272	1348464.119
A7-SA2-33	A7-SA2-33^6-R	1-Mar-05	2.5	3.0	Thorium-232	1.01	pCi/g	NV	479558.272	1348464.119
A7-SA2-33	A7-SA2-33^6-R	1-Mar-05	2.5	3.0	Uranium, Total	5.25	ug/g	UNV	479558.272	1348464.119
A7-SA2-34	A7-SA2-34^1-RM	22-Jun-05	0.0	0.5	Selenium	0.00238	mg/L	UNV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^1-RM	22-Jun-05	0.0	0.5	Selenium	22.2	mg/kg	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^1-RM	22-Jun-05	0.0	0.5	Thorium-228	0.908	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^1-RM	22-Jun-05	0.0	0.5	Thorium-232	0.875	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^1-RM	22-Jun-05	0.0	0.5	Uranium, Total	3.31	ug/g	UNV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^4-RM	22-Jun-05	1.5	2.0	Selenium	13	mg/kg	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^4-RM	22-Jun-05	1.5	2.0	Thorium-228	1.15	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^4-RM	22-Jun-05	1.5	2.0	Thorium-232	1.17	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^4-RM	22-Jun-05	1.5	2.0	Uranium, Total	3.88	ug/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^6-RM	22-Jun-05	2.5	3.0	Selenium	19.9	mg/kg	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^6-RM	22-Jun-05	2.5	3.0	Thorium-228	1.15	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^6-RM	22-Jun-05	2.5	3.0	Thorium-232	1.15	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^6-RM	22-Jun-05	2.5	3.0	Uranium, Total	3.86	ug/g	UNV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^8-RM	22-Jun-05	3.5	4.0	Selenium	10.4	mg/kg	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^8-RM	22-Jun-05	3.5	4.0	Thorium-228	0.784	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^8-RM	22-Jun-05	3.5	4.0	Thorium-232	0.791	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^8-RM	22-Jun-05	3.5	4.0	Uranium, Total	3.86	ug/g	UNV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^10-RM	22-Jun-05	4.5	5.0	Selenium	16.5	mg/kg	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^10-RM	22-Jun-05	4.5	5.0	Thorium-228	0.773	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^10-RM	22-Jun-05	4.5	5.0	Thorium-232	0.838	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^10-RM	22-Jun-05	4.5	5.0	Uranium, Total	3.85	ug/g	UNV	479534.472	1348243.506

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA2-34	A7-SA2-34^12-RM	22-Jun-05	5.5	6.0	Selenium	6.43	mg/kg	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^12-RM	22-Jun-05	5.5	6.0	Thorium-228	0.626	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^12-RM	22-Jun-05	5.5	6.0	Thorium-232	0.604	pCi/g	NV	479534.472	1348243.506
A7-SA2-34	A7-SA2-34^12-RM	22-Jun-05	5.5	6.0	Uranium, Total	2.83	ug/g	UNV	479534.472	1348243.506
A7-SA2-36	A7-SA2-36^1-R	22-Jun-05	0.0	0.5	Thorium-228	1.14	pCi/g	NV	479442.498	1348240.378
A7-SA2-36	A7-SA2-36^1-R	22-Jun-05	0.0	0.5	Thorium-232	1.13	pCi/g	NV	479442.498	1348240.378
A7-SA2-36	A7-SA2-36^4-R	22-Jun-05	1.5	2.0	Thorium-228	1.08	pCi/g	NV	479442.498	1348240.378
A7-SA2-36	A7-SA2-36^4-R	22-Jun-05	1.5	2.0	Thorium-232	1.05	pCi/g	NV	479442.498	1348240.378
A7-SA2-36	A7-SA2-36^6-R	22-Jun-05	2.5	3.0	Thorium-228	0.979	pCi/g	NV	479442.498	1348240.378
A7-SA2-36	A7-SA2-36^6-R	22-Jun-05	2.5	3.0	Thorium-232	0.962	pCi/g	NV	479442.498	1348240.378
A7-SA2-36	A7-SA2-36^8-R	22-Jun-05	3.5	4.0	Thorium-228	0.789	pCi/g	NV	479442.498	1348240.378
A7-SA2-36	A7-SA2-36^8-R	22-Jun-05	3.5	4.0	Thorium-232	0.824	pCi/g	NV	479442.498	1348240.378
A7-SA2-37	A7-SA2-37^1-RM	28-Jun-05	0.0	0.5	Arsenic	7.8	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^1-RM	28-Jun-05	0.0	0.5	Beryllium	0.522	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^1-RM	28-Jun-05	0.0	0.5	Selenium	1.36	mg/kg	UNV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^1-RM	28-Jun-05	0.0	0.5	Radium-228	1.1	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^1-RM	28-Jun-05	0.0	0.5	Thorium-228	1.06	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^1-RM	28-Jun-05	0.0	0.5	Thorium-232	1.1	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^1-RM	28-Jun-05	0.0	0.5	Uranium, Total	16.2	ug/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^4-RM	28-Jun-05	1.5	2.0	Arsenic	3.26	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^4-RM	28-Jun-05	1.5	2.0	Beryllium	0.677	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^4-RM	28-Jun-05	1.5	2.0	Selenium	1.55	mg/kg	UNV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^4-RM	28-Jun-05	1.5	2.0	Radium-228	0.857	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^4-RM	28-Jun-05	1.5	2.0	Thorium-228	0.875	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^4-RM	28-Jun-05	1.5	2.0	Thorium-232	0.857	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^4-RM	28-Jun-05	1.5	2.0	Uranium, Total	11.2	ug/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^6-RM	28-Jun-05	2.5	3.0	Arsenic	3.27	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^6-RM	28-Jun-05	2.5	3.0	Beryllium	0.83	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^6-RM	28-Jun-05	2.5	3.0	Selenium	1.76	mg/kg	UNV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^6-RM	28-Jun-05	2.5	3.0	Radium-228	1.17	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^6-RM	28-Jun-05	2.5	3.0	Thorium-228	1.11	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^6-RM	28-Jun-05	2.5	3.0	Thorium-232	1.17	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^6-RM	28-Jun-05	2.5	3.0	Uranium, Total	3.54	ug/g	UNV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^8-RM	28-Jun-05	3.5	2.0	Arsenic	3.54	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^8-RM	28-Jun-05	3.5	2.0	Beryllium	0.75	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^8-RM	28-Jun-05	3.5	2.0	Selenium	1.66	mg/kg	UNV	479542.09	1348290.895

006201

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA2-37	A7-SA2-37^8-RM	28-Jun-05	3.5	2.0	Radium-228	1.13	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^8-RM	28-Jun-05	3.5	2.0	Thorium-228	1.12	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^8-RM	28-Jun-05	3.5	2.0	Thorium-232	1.13	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^8-RM	28-Jun-05	3.5	2.0	Uranium, Total	6.03	ug/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^10-RM	28-Jun-05	4.5	5.0	Arsenic	4.7	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^10-RM	28-Jun-05	4.5	5.0	Beryllium	0.706	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^10-RM	28-Jun-05	4.5	5.0	Selenium	1.63	mg/kg	UNV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^10-RM	28-Jun-05	4.5	5.0	Radium-228	1.27	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^10-RM	28-Jun-05	4.5	5.0	Thorium-228	1.26	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^10-RM	28-Jun-05	4.5	5.0	Thorium-232	1.27	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^10-RM	28-Jun-05	4.5	5.0	Uranium, Total	7.03	ug/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^12-RM	28-Jun-05	5.5	6.0	Arsenic	3.81	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^12-RM	28-Jun-05	5.5	6.0	Beryllium	0.674	mg/kg	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^12-RM	28-Jun-05	5.5	6.0	Selenium	1.48	mg/kg	UNV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^12-RM	28-Jun-05	5.5	6.0	Radium-228	1.18	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^12-RM	28-Jun-05	5.5	6.0	Thorium-228	1.12	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^12-RM	28-Jun-05	5.5	6.0	Thorium-232	1.18	pCi/g	NV	479542.09	1348290.895
A7-SA2-37	A7-SA2-37^12-RM	28-Jun-05	5.5	6.0	Uranium, Total	7.41	ug/g	NV	479542.09	1348290.895
A7-SA2-39	A7-SA2-39^1-RM	28-Jun-05	0.0	0.5	Arsenic	4.93	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^1-RM	28-Jun-05	0.0	0.5	Beryllium	0.446	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^1-RM	28-Jun-05	0.0	0.5	Selenium	1.38	mg/kg	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^1-RM	28-Jun-05	0.0	0.5	Radium-228	1.04	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^1-RM	28-Jun-05	0.0	0.5	Thorium-228	1.05	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^1-RM	28-Jun-05	0.0	0.5	Thorium-232	1.04	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^1-RM	28-Jun-05	0.0	0.5	Uranium, Total	3.36	ug/g	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^4-RM	28-Jun-05	1.5	2.0	Arsenic	6.2	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^4-RM	28-Jun-05	1.5	2.0	Beryllium	0.36	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^4-RM	28-Jun-05	1.5	2.0	Selenium	1.6	mg/kg	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^4-RM	28-Jun-05	1.5	2.0	Radium-228	0.782	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^4-RM	28-Jun-05	1.5	2.0	Thorium-228	0.737	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^4-RM	28-Jun-05	1.5	2.0	Thorium-232	0.782	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^4-RM	28-Jun-05	1.5	2.0	Uranium, Total	3.07	ug/g	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^6-RM	28-Jun-05	2.5	3.0	Arsenic	4.13	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^6-RM	28-Jun-05	2.5	3.0	Beryllium	0.294	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^6-RM	28-Jun-05	2.5	3.0	Selenium	1.73	mg/kg	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^6-RM	28-Jun-05	2.5	3.0	Radium-228	0.718	pCi/g	NV	479445.52	1348090.309

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA2-39	A7-SA2-39^6-RM	28-Jun-05	2.5	3.0	Thorium-228	0.668	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^6-RM	28-Jun-05	2.5	3.0	Thorium-232	0.718	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^6-RM	28-Jun-05	2.5	3.0	Uranium, Total	3.27	ug/g	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^8-RM	28-Jun-05	3.5	4.0	Arsenic	3.51	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^8-RM	28-Jun-05	3.5	4.0	Beryllium	0.219	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^8-RM	28-Jun-05	3.5	4.0	Selenium	1.7	mg/kg	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^8-RM	28-Jun-05	3.5	4.0	Radium-228	0.571	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^8-RM	28-Jun-05	3.5	4.0	Thorium-228	0.542	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^8-RM	28-Jun-05	3.5	4.0	Thorium-232	0.571	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^8-RM	28-Jun-05	3.5	4.0	Uranium, Total	2.63	ug/g	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^10-RM	28-Jun-05	4.5	5.0	Arsenic	3.08	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^10-RM	28-Jun-05	4.5	5.0	Beryllium	0.161	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^10-RM	28-Jun-05	4.5	5.0	Selenium	1.48	mg/kg	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^10-RM	28-Jun-05	4.5	5.0	Radium-228	0.526	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^10-RM	28-Jun-05	4.5	5.0	Thorium-228	0.516	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^10-RM	28-Jun-05	4.5	5.0	Thorium-232	0.526	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^10-RM	28-Jun-05	4.5	5.0	Uranium, Total	4.14	ug/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^12-RM	28-Jun-05	5.5	6.0	Arsenic	2.99	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^12-RM	28-Jun-05	5.5	6.0	Beryllium	0.181	mg/kg	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^12-RM	28-Jun-05	5.5	6.0	Selenium	1.58	mg/kg	UNV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^12-RM	28-Jun-05	5.5	6.0	Radium-228	0.582	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^12-RM	28-Jun-05	5.5	6.0	Thorium-228	0.583	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^12-RM	28-Jun-05	5.5	6.0	Thorium-232	0.582	pCi/g	NV	479445.52	1348090.309
A7-SA2-39	A7-SA2-39^12-RM	28-Jun-05	5.5	6.0	Uranium, Total	4.08	ug/g	NV	479445.52	1348090.309
A7-SA2-40	A7-SA2-40^1-RM	23-Jun-05	0.0	0.5	Arsenic	4.99	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^1-RM	23-Jun-05	0.0	0.5	Beryllium	0.669	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^1-RM	23-Jun-05	0.0	0.5	Selenium	1.63	mg/kg	UNV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^1-RM	23-Jun-05	0.0	0.5	Radium-228	1.4	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^1-RM	23-Jun-05	0.0	0.5	Thorium-228	1.39	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^1-RM	23-Jun-05	0.0	0.5	Thorium-232	1.4	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^1-RM	23-Jun-05	0.0	0.5	Uranium, Total	10.2	ug/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^4-RM	23-Jun-05	1.5	2.0	Arsenic	4.61	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^4-RM	23-Jun-05	1.5	2.0	Beryllium	0.635	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^4-RM	23-Jun-05	1.5	2.0	Selenium	1.72	mg/kg	UNV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^4-RM	23-Jun-05	1.5	2.0	Radium-228	1.23	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^4-RM	23-Jun-05	1.5	2.0	Thorium-228	1.22	pCi/g	NV	479440.369	1348280.71

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA2-40	A7-SA2-40^4-RM	23-Jun-05	1.5	2.0	Thorium-232	1.23	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^4-RM	23-Jun-05	1.5	2.0	Uranium, Total	9.94	ug/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^6-RM	23-Jun-05	2.5	3.0	Arsenic	4.04	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^6-RM	23-Jun-05	2.5	3.0	Beryllium	0.722	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^6-RM	23-Jun-05	2.5	3.0	Selenium	1.69	mg/kg	UNV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^6-RM	23-Jun-05	2.5	3.0	Radium-228	1.23	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^6-RM	23-Jun-05	2.5	3.0	Thorium-228	1.22	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^6-RM	23-Jun-05	2.5	3.0	Thorium-232	1.23	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^6-RM	23-Jun-05	2.5	3.0	Uranium, Total	6.35	ug/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^8-RM	23-Jun-05	3.5	4.0	Arsenic	4.58	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^8-RM	23-Jun-05	3.5	4.0	Beryllium	0.718	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^8-RM	23-Jun-05	3.5	4.0	Selenium	1.81	mg/kg	UNV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^8-RM	23-Jun-05	3.5	4.0	Radium-228	1.18	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^8-RM	23-Jun-05	3.5	4.0	Thorium-228	1.3	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^8-RM	23-Jun-05	3.5	4.0	Thorium-232	1.18	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^8-RM	23-Jun-05	3.5	4.0	Uranium, Total	11	ug/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^10-RM	23-Jun-05	4.5	5.0	Arsenic	3.36	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^10-RM	23-Jun-05	4.5	5.0	Beryllium	0.756	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^10-RM	23-Jun-05	4.5	5.0	Selenium	1.78	mg/kg	UNV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^10-RM	23-Jun-05	4.5	5.0	Radium-228	1.14	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^10-RM	23-Jun-05	4.5	5.0	Thorium-228	1.15	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^10-RM	23-Jun-05	4.5	5.0	Thorium-232	1.14	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^10-RM	23-Jun-05	4.5	5.0	Uranium, Total	6.71	ug/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^12-RM	23-Jun-05	5.5	6.0	Arsenic	5.69	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^12-RM	23-Jun-05	5.5	6.0	Beryllium	0.778	mg/kg	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^12-RM	23-Jun-05	5.5	6.0	Selenium	1.48	mg/kg	UNV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^12-RM	23-Jun-05	5.5	6.0	Radium-228	1.15	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^12-RM	23-Jun-05	5.5	6.0	Thorium-228	1.11	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^12-RM	23-Jun-05	5.5	6.0	Thorium-232	1.15	pCi/g	NV	479440.369	1348280.71
A7-SA2-40	A7-SA2-40^12-RM	23-Jun-05	5.5	6.0	Uranium, Total	6.19	ug/g	NV	479440.369	1348280.71
A7-SA2-50	A7-SA2-50^1-R	16-Aug-05	0.0	0.5	Uranium, Total	101	ug/g	NV	479659.907	1348293.963
A7-SA2-50	A7-SA2-50^4-R	16-Aug-05	1.5	2.0	Uranium, Total	1.8	ug/g	NV	479659.907	1348293.963
A7-SA2-51	A7-SA2-51^1-R	22-Aug-05			Uranium, Total	36.6	ug/g	NV	479666.526	1348278.992
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Arsenic	7.01	mg/kg	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Beryllium	0.631	mg/kg	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Aroclor-1254	0.004	mg/kg	UNV	478393.137	1349989.325

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Aroclor-1260	0.004	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Dieldrin	0.00161	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Radium-228	0.976	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Thorium-228	0.949	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Thorium-232	0.976	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^1-RMP	24-Jan-05	0.0	0.5	Uranium, Total	10.2	ug/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Arsenic	11.2	mg/kg	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Beryllium	0.973	mg/kg	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Aroclor-1254	0.0041	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Aroclor-1260	0.0041	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Dieldrin	0.00166	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Radium-228	1.46	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Thorium-228	1.47	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Thorium-232	1.46	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^3-RMP	24-Jan-05	1.0	1.5	Uranium, Total	4.03	ug/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Arsenic	9.89	mg/kg	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Beryllium	0.972	mg/kg	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Aroclor-1254	0.0064	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Aroclor-1260	0.0064	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Dieldrin	0.00255	mg/kg	UNV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Radium-228	1.14	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Thorium-228	1.1	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Thorium-232	1.14	pCi/g	NV	478393.137	1349989.325
A7-SA5-1	A7-SA5-1^6-RMP	24-Jan-05	2.5	3.0	Uranium, Total	6.9	ug/g	NV	478393.137	1349989.325
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Arsenic	3.52	mg/kg	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Beryllium	0.233	mg/kg	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Aroclor-1254	0.004	mg/kg	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Aroclor-1260	0.0021	mg/kg	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Dieldrin	0.0016	mg/kg	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Radium-228	0.629	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Thorium-228	0.662	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Thorium-232	0.629	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^1-RMP	25-Feb-05	0.0	0.5	Uranium, Total	7.72	ug/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Arsenic	6.94	mg/kg	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Beryllium	0.589	mg/kg	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Aroclor-1254	0.004	mg/kg	UNV	477766.317	1350187.782

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Aroclor-1260	0.004	mg/kg	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Dieldrin	0.00162	mg/kg	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Radium-228	1.02	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Thorium-228	1.01	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Thorium-232	1.02	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^3-RMP	25-Feb-05	1.0	1.5	Uranium, Total	3.27	ug/g	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Arsenic	9.82	mg/kg	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Beryllium	0.907	mg/kg	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Aroclor-1254	0.0042	mg/kg	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Aroclor-1260	0.0042	mg/kg	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Dieldrin	0.00168	mg/kg	UNV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Radium-228	1	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Thorium-228	1.04	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Thorium-232	1	pCi/g	NV	477766.317	1350187.782
A7-SA5-2	A7-SA5-2^6-RMP	25-Feb-05	2.5	3.0	Uranium, Total	3.48	ug/g	UNV	477766.317	1350187.782
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Arsenic	5.86	mg/kg	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Beryllium	0.432	mg/kg	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Aroclor-1254	0.00499	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Aroclor-1260	0.00499	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Dieldrin	0.00164	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Radium-228	0.844	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Thorium-228	0.818	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Thorium-232	0.844	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^1-RMP	8-Mar-05	0.0	0.5	Uranium, Total	4.61	ug/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Arsenic	11.1	mg/kg	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Beryllium	1.77	mg/kg	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Aroclor-1254	0.0224	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Aroclor-1260	0.0224	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Dieldrin	0.00167	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Radium-228	1.47	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Thorium-228	1.53	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Thorium-232	1.47	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^3-RMP	8-Mar-05	1.0	1.5	Uranium, Total	8.53	ug/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Arsenic	8.81	mg/kg	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Beryllium	0.615	mg/kg	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Aroclor-1254	0.00412	mg/kg	UNV	476673.785	1350522.899

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Aroclor-1260	0.00412	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Dieldrin	0.00165	mg/kg	UNV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Radium-228	0.901	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Thorium-228	0.877	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Thorium-232	0.901	pCi/g	NV	476673.785	1350522.899
A7-SA5-3	A7-SA5-3^6-RMP	8-Mar-05	2.5	3.0	Uranium, Total	1.99	ug/g	UNV	476673.785	1350522.899
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Arsenic	7.7	mg/kg	-	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Beryllium	0.56	mg/kg	-	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Lead	12.4	mg/kg	J	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Manganese	516	mg/kg	J	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Aroclor-1254	0.0037	mg/kg	UJ	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Aroclor-1260	0.0037	mg/kg	UJ	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Dieldrin	0.0015	mg/kg	UJ	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Cesium-137	0.0554	pCi/g	U	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Lead-210	0.861	pCi/g	-	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Radium-226	0.978	pCi/g	-	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Radium-228	0.814	pCi/g	-	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Technetium-99	0.985	pCi/g	U	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Thorium-228	0.814	pCi/g	-	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Thorium-230	2.23	pCi/g	J	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Thorium-232	0.814	pCi/g	-	480266.6	1347223.6
A7-TTA-HB1-1	A7-TTA-HB1-1^1-RMP	14-Jul-04	0.0	0.5	Uranium, Total	7.17	ug/g	-	480266.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Arsenic	5.7	mg/kg	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Beryllium	0.63	mg/kg	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Lead	14.8	mg/kg	J	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Manganese	466	mg/kg	J	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Aroclor-1254	0.004	mg/kg	UJ	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Aroclor-1260	0.004	mg/kg	UJ	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	UJ	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Cesium-137	0.0775	pCi/g	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Lead-210	0.998	pCi/g	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Radium-226	1.13	pCi/g	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Radium-228	0.967	pCi/g	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Technetium-99	0.921	pCi/g	U	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Thorium-228	0.96	pCi/g	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Thorium-230	2.16	pCi/g	J	480299.6	1347223.6

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Thorium-232	0.967	pCi/g	-	480299.6	1347223.6
A7-TTA-HB1-2	A7-TTA-HB1-2^1-RMP	14-Jul-04	0.0	0.5	Uranium, Total	9.64	ug/g	-	480299.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Arsenic	8	mg/kg	-	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Beryllium	0.53	mg/kg	-	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Lead	14	mg/kg	J	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Manganese	461	mg/kg	J	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Aroclor-1254	0.0039	mg/kg	UJ	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Aroclor-1260	0.0039	mg/kg	UJ	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	UJ	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Cesium-137	0.0768	pCi/g	-	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Lead-210	1.09	pCi/g	U	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Radium-226	1.39	pCi/g	-	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Radium-228	1.06	pCi/g	-	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Technetium-99	0.962	pCi/g	U	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Thorium-228	1.05	pCi/g	-	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Thorium-230	1.18	pCi/g	J	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Thorium-232	1.06	pCi/g	-	480365.6	1347223.6
A7-TTA-HB1-3	A7-TTA-HB1-3^1-RMP	14-Jul-04	0.0	0.5	Uranium, Total	8.73	ug/g	-	480365.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Arsenic	8.7	mg/kg	-	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Beryllium	0.67	mg/kg	-	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Lead	12.6	mg/kg	J	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Manganese	703	mg/kg	J	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Aroclor-1254	0.0041	mg/kg	UJ	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Aroclor-1260	0.0041	mg/kg	UJ	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	UJ	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Cesium-137	0.12	pCi/g	U	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Lead-210	1.03	pCi/g	U	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Radium-226	0.952	pCi/g	-	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Radium-228	0.717	pCi/g	-	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Technetium-99	1.1	pCi/g	U	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Thorium-228	0.686	pCi/g	-	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Thorium-230	1.13	pCi/g	J	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Thorium-232	0.717	pCi/g	-	480398.6	1347223.6
A7-TTA-HB1-4	A7-TTA-HB1-4^1-RMP	15-Jul-04	0.0	0.5	Uranium, Total	3.6	ug/g	U	480398.6	1347223.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Arsenic	5.9	mg/kg	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Arsenic	3.5	mg/kg	J	480264	1347249.6

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Beryllium	0.5	mg/kg	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Beryllium	0.33	mg/kg	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Lead	11	mg/kg	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Lead	6.8	mg/kg	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Manganese	857	mg/kg	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Manganese	991	mg/kg	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Aroclor-1254	0.0022	mg/kg	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Aroclor-1254	0.0039	mg/kg	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Aroclor-1260	0.0037	mg/kg	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Aroclor-1260	0.0039	mg/kg	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Dieldrin	0.0015	mg/kg	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Cesium-137	0.123	pCi/g	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Cesium-137	0.052	pCi/g	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Lead-210	1.06	pCi/g	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Lead-210	1.11	pCi/g	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Radium-226	0.71	pCi/g	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Radium-226	0.967	pCi/g	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Radium-228	0.593	pCi/g	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Radium-228	0.638	pCi/g	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Technetium-99	0.842	pCi/g	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Technetium-99	0.847	pCi/g	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Thorium-228	0.583	pCi/g	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Thorium-228	0.662	pCi/g	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Thorium-230	0.989	pCi/g	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Thorium-230	1.72	pCi/g	J	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Thorium-232	0.593	pCi/g	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Thorium-232	0.638	pCi/g	-	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP	15-Jul-04	0.0	0.5	Uranium, Total	3.89	ug/g	U	480264	1347249.6
A7-TTA-HB2-1	A7-TTA-HB2-1^1-RMP-D	15-Jul-04	0.0	0.5	Uranium, Total	4.91	ug/g	-	480264	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Arsenic	9.1	mg/kg	J	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Beryllium	0.85	mg/kg	J	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Lead	17.8	mg/kg	J	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Manganese	581	mg/kg	-	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Aroclor-1254	0.004	mg/kg	U	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Aroclor-1260	0.004	mg/kg	U	480313	1347249.6

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Cesium-137	0.0658	pCi/g	U	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Lead-210	1.1	pCi/g	U	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Radium-226	1.73	pCi/g	-	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Radium-228	1.16	pCi/g	-	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Technetium-99	0.899	pCi/g	U	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Thorium-228	1.15	pCi/g	-	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Thorium-230	2.76	pCi/g	J	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Thorium-232	1.16	pCi/g	-	480313	1347249.6
A7-TTA-HB2-2	A7-TTA-HB2-2^1-RMP	15-Jul-04	0.0	0.5	Uranium, Total	8.3	ug/g	-	480313	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Arsenic	5.2	mg/kg	J	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Beryllium	0.38	mg/kg	J	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Lead	7.3	mg/kg	J	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Manganese	602	mg/kg	-	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Aroclor-1254	0.004	mg/kg	U	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Aroclor-1260	0.004	mg/kg	U	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Cesium-137	0.0353	pCi/g	U	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Lead-210	1.08	pCi/g	U	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Radium-226	0.953	pCi/g	J	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Radium-228	0.525	pCi/g	-	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Technetium-99	0.885	pCi/g	U	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Thorium-228	0.535	pCi/g	-	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Thorium-230	0.787	pCi/g	J	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Thorium-232	0.525	pCi/g	-	480343	1347249.6
A7-TTA-HB2-3	A7-TTA-HB2-3^1-RMP	16-Jul-04	0.0	0.5	Uranium, Total	1.6	ug/g	-	480343	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Arsenic	12.4	mg/kg	J	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Beryllium	0.98	mg/kg	J	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Lead	15.3	mg/kg	J	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Manganese	735	mg/kg	-	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Aroclor-1254	0.0042	mg/kg	U	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Aroclor-1260	0.0042	mg/kg	U	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Dieldrin	0.0017	mg/kg	U	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Cesium-137	0.0551	pCi/g	U	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Lead-210	1.1	pCi/g	U	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Radium-226	1.16	pCi/g	J	480405	1347249.6

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Radium-228	0.856	pCi/g	-	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Technetium-99	0.94	pCi/g	U	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Thorium-228	0.849	pCi/g	-	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Thorium-230	2.19	pCi/g	J	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Thorium-232	0.856	pCi/g	-	480405	1347249.6
A7-TTA-HB2-4	A7-TTA-HB2-4^1-RMP	16-Jul-04	0.0	0.5	Uranium, Total	4.7	ug/g	-	480405	1347249.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Arsenic	7.6	mg/kg	J	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Beryllium	0.76	mg/kg	J	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Lead	12.1	mg/kg	J	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Manganese	480	mg/kg	-	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Aroclor-1254	0.004	mg/kg	U	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Aroclor-1260	0.004	mg/kg	U	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Cesium-137	0.0523	pCi/g	U	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Lead-210	0.978	pCi/g	U	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Radium-226	1.03	pCi/g	J	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Radium-228	0.877	pCi/g	-	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Technetium-99	0.843	pCi/g	U	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Thorium-228	0.869	pCi/g	-	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Thorium-230	1.09	pCi/g	J	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Thorium-232	0.877	pCi/g	-	480293	1347288.6
A7-TTA-HB3-1	A7-TTA-HB3-1^1-RMP	16-Jul-04	0.0	0.5	Uranium, Total	7.72	ug/g	-	480293	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Arsenic	7.6	mg/kg	J	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Beryllium	0.81	mg/kg	J	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Lead	9.7	mg/kg	J	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Manganese	283	mg/kg	J	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Aroclor-1254	0.004	mg/kg	U	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Aroclor-1260	0.004	mg/kg	U	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Cesium-137	0.075	pCi/g	U	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Lead-210	1.44	pCi/g	-	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Radium-226	1.69	pCi/g	J	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Radium-228	1.34	pCi/g	-	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Technetium-99	0.819	pCi/g	U	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Thorium-228	1.38	pCi/g	-	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Thorium-230	1.55	pCi/g	J	480326	1347288.6

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Thorium-232	1.34	pCi/g	-	480326	1347288.6
A7-TTA-HB3-2	A7-TTA-HB3-2^1-RMP	17-Jul-04	0.0	0.5	Uranium, Total	3.92	ug/g	-	480326	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Arsenic	12.2	mg/kg	J	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Beryllium	0.578	mg/kg	J	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Lead	10.1	mg/kg	J	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Manganese	379	mg/kg	J	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Aroclor-1254	0.0041	mg/kg	U	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Aroclor-1260	0.0041	mg/kg	U	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Cesium-137	0.0333	pCi/g	U	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Lead-210	1.1	pCi/g	U	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Radium-226	0.531	pCi/g	J	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Radium-228	0.398	pCi/g	-	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Technetium-99	0.823	pCi/g	U	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Thorium-228	0.389	pCi/g	-	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Thorium-230	1.04	pCi/g	J	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Thorium-232	0.398	pCi/g	-	480347	1347288.6
A7-TTA-HB3-3	A7-TTA-HB3-3^1-RMP	17-Jul-04	0.0	0.5	Uranium, Total	1.5	ug/g	-	480347	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Arsenic	15.2	mg/kg	J	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Beryllium	0.96	mg/kg	-	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Lead	16.1	mg/kg	J	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Manganese	736	mg/kg	J	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Aroclor-1254	0.004	mg/kg	U	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Aroclor-1260	0.004	mg/kg	U	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Cesium-137	0.0437	pCi/g	UNV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Lead-210	0.686	pCi/g	NV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Radium-226	1.1	pCi/g	NV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Radium-228	0.943	pCi/g	NV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Technetium-99	1.76	pCi/g	UNV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Thorium-228	0.929	pCi/g	NV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Thorium-230	1.61	pCi/g	NV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Thorium-232	0.943	pCi/g	NV	480383	1347288.6
A7-TTA-HB3-4	A7-TTA-HB3-4^1-RMP	19-Jul-04	0.0	0.5	Uranium, Total	3.25	ug/g	NV	480383	1347288.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Arsenic	7	mg/kg	J	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Beryllium	0.84	mg/kg	-	480285.74	1347336.6

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Lead	18.9	mg/kg	J	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Manganese	430	mg/kg	J	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1254	0.0041	mg/kg	U	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1260	0.0041	mg/kg	U	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Cesium-137	0.0382	pCi/g	UNV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Lead-210	0.828	pCi/g	NV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Radium-226	1.71	pCi/g	NV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Radium-228	1.26	pCi/g	NV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Technetium-99	1.15	pCi/g	UNV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Thorium-228	1.18	pCi/g	NV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Thorium-230	1.85	pCi/g	NV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Thorium-232	1.26	pCi/g	NV	480285.74	1347336.6
A7-TTA-HB4-1	A7-TTA-HB4-1^1-RMP	20-Jul-04	0.0	0.5	Uranium, Total	3.58	ug/g	NV	480285.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Arsenic	9.5	mg/kg	J	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Beryllium	0.85	mg/kg	-	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Lead	15.9	mg/kg	J	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Manganese	564	mg/kg	J	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1254	0.0024	mg/kg	J	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1260	0.0047	mg/kg	U	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Dieldrin	0.0019	mg/kg	U	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Cesium-137	0.0432	pCi/g	UNV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Lead-210	0.801	pCi/g	NV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Radium-226	1.12	pCi/g	NV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Radium-228	0.761	pCi/g	NV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Technetium-99	1.02	pCi/g	UNV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Thorium-228	0.77	pCi/g	NV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Thorium-230	1.74	pCi/g	NV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Thorium-232	0.761	pCi/g	NV	480311.74	1347336.6
A7-TTA-HB4-2	A7-TTA-HB4-2^1-RMP	20-Jul-04	0.0	0.5	Uranium, Total	2.3	ug/g	UNV	480311.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Arsenic	6.4	mg/kg	J	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Beryllium	1.1	mg/kg	-	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Lead	15.9	mg/kg	J	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Manganese	151	mg/kg	J	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1254	0.0042	mg/kg	U	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1260	0.0042	mg/kg	U	480368.74	1347336.6

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PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Dieldrin	0.0017	mg/kg	U	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Cesium-137	0.0538	pCi/g	UNV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Lead-210	0.787	pCi/g	NV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Radium-226	1.62	pCi/g	NV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Radium-228	1.28	pCi/g	NV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Technetium-99	1.22	pCi/g	UNV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Thorium-228	1.27	pCi/g	NV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Thorium-230	1.91	pCi/g	NV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Thorium-232	1.28	pCi/g	NV	480368.74	1347336.6
A7-TTA-HB4-3	A7-TTA-HB4-3^1-RMP	20-Jul-04	0.0	0.5	Uranium, Total	9.15	ug/g	NV	480368.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Arsenic	16	mg/kg	J	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Beryllium	1.3	mg/kg	-	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Lead	17.6	mg/kg	J	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Manganese	1280	mg/kg	J	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1254	0.0041	mg/kg	U	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Aroclor-1260	0.0041	mg/kg	U	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Dieldrin	0.0016	mg/kg	U	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Cesium-137	0.0687	pCi/g	UNV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Lead-210	0.912	pCi/g	NV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Radium-226	1.71	pCi/g	NV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Radium-228	1.39	pCi/g	NV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Technetium-99	1.11	pCi/g	UNV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Thorium-228	1.42	pCi/g	NV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Thorium-230	1.81	pCi/g	NV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Thorium-232	1.39	pCi/g	NV	480390.74	1347336.6
A7-TTA-HB4-4	A7-TTA-HB4-4^1-RMP	20-Jul-04	0.0	0.5	Uranium, Total	6.66	ug/g	NV	480390.74	1347336.6
A7-WPR8-1	A7-WPR8-1-9-R	25-Apr-00	4.0	4.5	Technetium-99	1.3	pCi/g dry	UNV	480724.3	1347981.3
A7-WPR8-1	A7-WPR8-1-9-R	25-Apr-00	4.0	4.5	Uranium, Total	3.74	ug/g dry	NV	480724.3	1347981.3
A7-WPR8-2	A7-WPR8-2-19-R	25-Apr-00	9.0	9.5	Technetium-99	1.5	pCi/g dry	UNV	480715.3	1347927
A7-WPR8-2	A7-WPR8-2-19-R	25-Apr-00	9.0	9.5	Uranium, Total	5.33	ug/g dry	NV	480715.3	1347927
A7-WPR8-3	A7-WPR8-3-7-R	25-Apr-00	3.0	3.5	Technetium-99	1.3	pCi/g dry	UNV	480712	1347891.4
A7-WPR8-3	A7-WPR8-3-7-R	25-Apr-00	3.0	3.5	Uranium, Total	4.28	ug/g dry	NV	480712	1347891.4
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Arsenic	14.5	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Beryllium	0.78	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Lead	23.9	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Manganese	1110	mg/kg	NV	480406.28	1347189

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Aroclor-1254	0.00999	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Aroclor-1260	0.00999	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Dieldrin	0.000799	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Cesium-137	0.0539	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Lead-210	0.993	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Radium-226	2.37	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Radium-228	1.12	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Technetium-99	1.6	pCi/g dry	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Technetium-99	77.4	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Thorium-228	1.12	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Thorium-230	18.6	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Thorium-232	1.22	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^1-RMP	15-Mar-04	0.0	0.5	Uranium, Total	3.85	ug/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Arsenic	14.5	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Beryllium	0.928	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Lead	22.4	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Manganese	743	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Aroclor-1254	0.00997	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Aroclor-1260	0.00997	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Dieldrin	0.000797	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Cesium-137	0.0502	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Lead-210	0.881	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Radium-226	2.23	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Radium-228	0.834	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Technetium-99	2.96	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Thorium-228	0.823	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Thorium-230	17.8	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Thorium-232	0.807	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^5-RMP	15-Mar-04	2.0	2.5	Uranium, Total	3.51	ug/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Arsenic	7.65	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Beryllium	0.565	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Lead	9.62	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Manganese	485	mg/kg	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Aroclor-1254	0.0101	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Aroclor-1260	0.0101	mg/kg	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Dieldrin	0.00081	mg/kg	UNV	480406.28	1347189

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APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Cesium-137	0.0528	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Lead-210	0.967	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Radium-226	2.08	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Radium-228	0.807	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Technetium-99	0.634	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Thorium-228	0.791	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Thorium-230	18.7	pCi/g	UNV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Thorium-232	0.843	pCi/g	NV	480406.28	1347189
A7-WTTA1	A7-WTTA1^11-RMP	15-Mar-04	5.0	5.5	Uranium, Total	3.45	ug/g	NV	480406.28	1347189
A7-WTTA1A	A7-WTTA1A^1-T	20-Apr-04	0.0	0.5	Technetium-99	1.5	pCi/g dry	UNV	480406.3	1347189
A7-WTTA1A	A7-WTTA1A^5-T	20-Apr-04	2.0	7.5	Technetium-99	1.3	pCi/g dry	UNV	480406.3	1347189
A7-WTTA1A	A7-WTTA1A^11-T	20-Apr-04	5.0	5.5	Technetium-99	1.6	pCi/g dry	UNV	480406.3	1347189
A7-WTTA1A	A7-WTTA1A^13-T	20-Apr-04	6.0	6.5	Technetium-99	1.3	pCi/g dry	UNV	480406.3	1347189
A7-WTTA1A	A7-WTTA1A^15-T	20-Apr-04	7.0	7.5	Technetium-99	1.7	pCi/g dry	UNV	480406.3	1347189
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Arsenic	5.13	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Beryllium	0.491	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Lead	11	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Manganese	401	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Aroclor-1254	0.0021	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Aroclor-1260	0.00952	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Dieldrin	0.000761	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Cesium-137	0.138	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Lead-210	1.45	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Radium-226	1.96	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Radium-228	0.679	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Technetium-99	3.11	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Thorium-228	0.659	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Thorium-230	14.9	pCi/g	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Thorium-232	0.686	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^1-RMP	15-Mar-04	0.0	0.5	Uranium, Total	3.98	ug/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Arsenic	13.8	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Beryllium	0.653	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Lead	16.8	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Manganese	564	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Aroclor-1254	0.0101	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Aroclor-1260	0.0101	mg/kg	UNV	480346.3	1347197.64

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Dieldrin	0.000812	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Cesium-137	0.0475	pCi/g	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Lead-210	1.54	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Radium-226	2.21	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Radium-228	0.951	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Technetium-99	0.76	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Thorium-228	1.3	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Thorium-230	8.64	pCi/g	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Thorium-232	0.921	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^5-RMP	15-Mar-04	2.0	2.5	Uranium, Total	3.38	ug/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Arsenic	11.4	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Beryllium	0.747	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Lead	13.1	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Manganese	566	mg/kg	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Aroclor-1254	0.0108	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Aroclor-1260	0.0108	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Dieldrin	0.00086	mg/kg	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Cesium-137	0.0571	pCi/g	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Lead-210	0.828	pCi/g	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Radium-226	1.77	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Radium-228	0.917	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Technetium-99	1.4	pCi/g dry	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Technetium-99	41.8	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Thorium-228	0.936	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Thorium-230	19.7	pCi/g	UNV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Thorium-232	0.896	pCi/g	NV	480346.3	1347197.64
A7-WTTA2	A7-WTTA2^11-RMP	15-Mar-04	5.0	5.5	Uranium, Total	3.34	ug/g	UNV	480346.3	1347197.64
A7-WTTA2A	A7-WTTA2A^1-T	20-Apr-04	0.0	0.5	Technetium-99	1.5	pCi/g dry	UNV	480346.3	1347198
A7-WTTA2A	A7-WTTA2A^5-T	20-Apr-04	2.0	2.5	Technetium-99	1.9	pCi/g dry	UNV	480346.3	1347198
A7-WTTA2A	A7-WTTA2A^11-T	20-Apr-04	5.0	5.5	Technetium-99	1.6	pCi/g dry	UNV	480346.3	1347198
A7-WTTA2A	A7-WTTA2A^13-T	20-Apr-04	6.0	6.5	Technetium-99	1.5	pCi/g dry	UNV	480346.3	1347198
A7-WTTA2A	A7-WTTA2A^15-T	20-Apr-04	7.0	7.5	Technetium-99	1.4	pCi/g dry	UNV	480346.3	1347198
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Arsenic	6.71	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Beryllium	0.657	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Lead	18.7	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Manganese	440	mg/kg	NV	480271.33	1347195.83

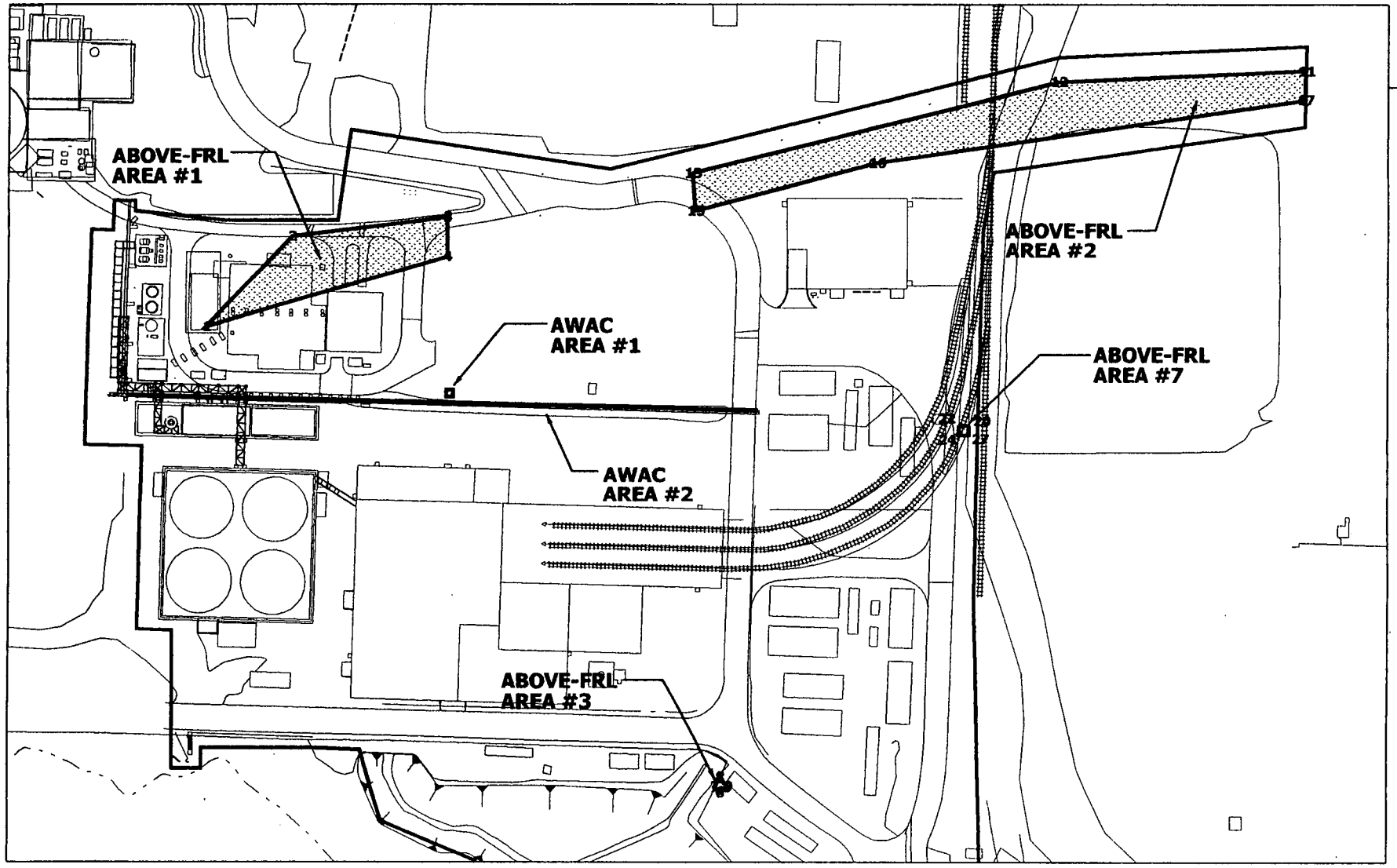
APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Aroclor-1254	0.00312	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Aroclor-1260	0.00992	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Dieldrin	0.000793	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Cesium-137	0.0263	pCi/g	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Lead-210	0.533	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Radium-226	2.86	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Radium-228	0.839	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Technetium-99	1.46	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Thorium-228	0.84	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Thorium-230	12.8	pCi/g	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Thorium-232	0.985	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^1-RMP	15-Mar-04	0.0	0.5	Uranium, Total	5.75	ug/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Arsenic	9.31	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Beryllium	0.604	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Lead	13.4	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Manganese	527	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Aroclor-1254	0.00972	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Aroclor-1260	0.00972	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Dieldrin	0.000777	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Cesium-137	0.0444	pCi/g	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Lead-210	0.805	pCi/g	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Radium-226	3.32	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Radium-228	0.822	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Technetium-99	1.6	pCi/g dry	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Technetium-99	30.8	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Thorium-228	0.897	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Thorium-230	13	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Thorium-232	0.816	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^5-RMP	15-Mar-04	2.0	2.5	Uranium, Total	6.4	ug/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Arsenic	7.98	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Beryllium	0.217	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Lead	11.4	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Manganese	281	mg/kg	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Aroclor-1254	0.00921	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Aroclor-1260	0.00921	mg/kg	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Dieldrin	0.000737	mg/kg	UNV	480271.33	1347195.83

APPENDIX A
PREDESIGN CHARACTERIZATION DATA FOR AREA 7 SUPPORT AND SILOS PROCESS AREAS

Boring	Sample ID	Sample Date	Sample Depth (feet)		Parameter	Result	Units	Qualifier	Northing	Easting
			Top	Bottom						
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Cesium-137	0.024	pCi/g	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Lead-210	0.988	pCi/g	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Radium-226	1.49	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Radium-228	0.468	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Technetium-99	1.5	pCi/g dry	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Technetium-99	19.4	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Thorium-228	0.466	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Thorium-230	10.9	pCi/g	UNV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Thorium-232	0.472	pCi/g	NV	480271.33	1347195.83
A7-WTTA3	A7-WTTA3^11-RMP	15-Mar-04	5.0	5.5	Uranium, Total	2.56	ug/g	NV	480271.33	1347195.83
A7-WTTA3A	A7-WTTA3A^1-T	20-Apr-04	0.0	0.5	Technetium-99	2	pCi/g dry	UNV	480271.3	1347195.83
A7-WTTA3A	A7-WTTA3A^5-T	20-Apr-04	2.0	2.5	Technetium-99	2.2	pCi/g dry	UNV	480271.3	1347195.83
A7-WTTA3A	A7-WTTA3A^11-T	20-Apr-04	5.0	5.5	Technetium-99	1.8	pCi/g dry	UNV	480271.3	1347195.83
A7-WTTA3A	A7-WTTA3A^13-T	20-Apr-04	6.0	6.5	Technetium-99	1.7	pCi/g dry	UNV	480271.3	1347195.83
A7-WTTA3A	A7-WTTA3A^15-T	20-Apr-04	7.0	7.5	Technetium-99	1.4	pCi/g dry	UNV	480271.3	1347195.83

006201



LEGEND:

SCALE

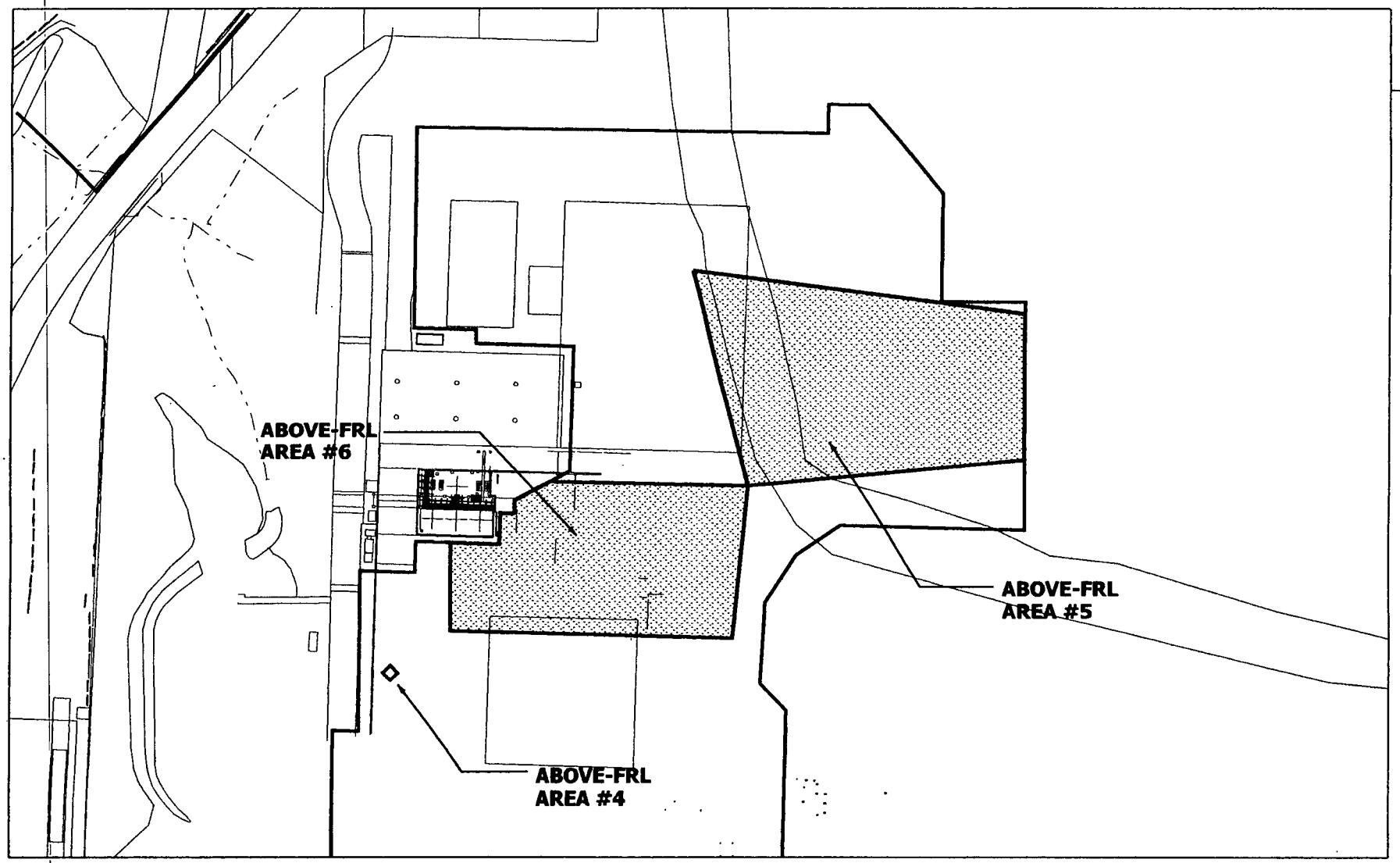
150 75 0 150 FEET

v:\2fm12\dgn\a7_silos_frl.dgn
STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 2-8. SILOS SUPPORT AREA ABOVE-WAC/ABOVE-FRL EXCAVATION AREAS

28-MAR-2006

006201



LEGEND:

SCALE

10 5 0 100 FEET

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STATE PLANAR COORDINATE SYSTEM 1983

28-MAR-2006

FIGURE 2-9. CAWWT ABOVE-FRL EXCAVATION AREAS

3.0 REMEDIAL APPROACH

3.1 INTRODUCTION

This section describes the technical approach to remediation of Remediation Area 7 Support and Silos Process Areas. The remedial action approach discussed in this Excavation Plan follows the general guidance provided in Sections 3.0 and 4.0 and Appendix F of the SEP. Construction drawings and technical specifications comprise part of the documentation governing remedial construction activities (see Appendix C). Construction activities will be further governed by Construction Traveler (CT) Packages that detail general construction practices, as well as health and safety requirements, for soil excavation and remediation projects at the FCP.

Remedial actions in Area 7 Support and Silos Process Areas will begin with site preparation activities, progress into above-WAC soil excavation and at-grade debris removal, and finish with mass excavation of debris and soil exceeding the established FRLs.

3.2 SITE PREPARATION

Site preparation activities associated with this work include isolation, protection, and installation of utilities, surveying, installation of construction fence, establishment of erosion and sediment controls, and designation of haul routes. Real-time scanning may be required if site preparation activities involve soil disturbance below a depth of 6 inches. Additional details are provided in the following text and in referenced construction drawings and technical specifications.

3.2.1 Utility Isolation/Protection/Installation

Isolation trenching at the limits of Area 7 Support and Silos Process Areas excavations is not required because the vast majority of utility feeds into the areas were previously isolated during Area 3A, 4A, 3B, and 4B isolation trenching. Individual utilities will require isolation at the limit of excavation as identified during design and required for penetration permitting. Research into potentially energized utilities entering the excavation areas will be performed during design and during the penetration permitting process. If active/energized utilities are discovered when searching historical information or during field activities, utility engineers will be consulted on utility removal, isolation, and/or protection. Documentation of utility removal, isolation, and protection will be made available to the Construction Manager and will be as-built on the master FCP underground utility grid drawings for reference during excavation. Penetration permitting will focus primarily on ensuring isolation from the Main Electrical Substation, as well as, isolation from pressurized water and gas lines.

Site preparation activities will not involve utility installation, unless culvert installation is necessary at the intersection of personnel or equipment traffic routes and drainage ditches.

3.2.2 Remaining Utilities

To support the OU5 remediation of groundwater under the site, various extraction wells throughout the site are to remain operational after remediation (post-closure) of the nine remediation areas. As such, some existing utilities will remain in place to support this long-term remediation. Specifically, there are various overhead electrical lines, underground natural gas lines, underground groundwater extraction lines, OSDF leachate conveyance system line, 24-inch force main (post-treatment water), and outfall line.

3.2.3 Surveying

Surveys will be performed to establish excavation boundaries for above-WAC, and FRL areas and to determine soil volumes hauled to the OSDF. There are no known HWMU or USTs in the Area 7 Support and Silos Process Areas excavation area. The individual Area 7 Support and Silos Process Areas Grading Plans (see Drawing 99X-5500-G-00903 for listing) illustrates locations of above-WAC, and general FRL excavation areas. The Construction Manager or his designated representative will field locate support facilities, such as laydown areas, cool-down trailers, soil dewatering areas, haul routes, fuel transfer points, and Special Materials Transfer Areas (SMTAs), as needed.

3.2.4 Construction Fencing

Existing radiological control barriers and fencing will remain in place until project boundary fence is established during site preparation activities. Construction safety fence will be installed at the approximate limit of excavation, where existing fence cannot be used, in order to control access into the active work area. Personnel entering and leaving contamination areas will pass through a radiological checkpoint located in the change-out facilities. Vehicles exiting contamination areas will use contaminated haul routes to reach the decontamination and free-release station located near the southern limit of the OSDF.

3.2.5 Erosion and Sediment Control

Prior to soil disturbance, silt fence will be installed down gradient of the proposed excavation area where necessary to provide sediment control during storm events in addition to surrounding vegetation. Excavation water, the combination of surface water and perched groundwater, will be collected in various locations within the excavation throughout Area 7 Support and Silos Process Areas. To help minimize surface water entering the excavation, the topographic surface outside excavations will be sloped away from the excavation area, where appropriate. Excavation water will be managed as discussed in Section 3.3 Storm Water Management.

3.2.6 Haul Routes

Haul routes to the OSDF and Soil Stockpile (SP) 7 will be as shown on the Area 7 Proposed Haul Route Drawing (99X-5500-G-00925). Haul routes to the OSDF will be from approved access points at the

perimeter of the excavation. Until OU4 Remediation is completed per the OU4 ROD (DOE 1994), hauling operations that are routed across the route from the site entrance at the Main Access Road to the OU4 Remediation Area and Biodenitrification Surge Lagoon Parking Area (see Drawing 99X-5500-G-00903), must be performed as a "clean" haul to prevent cross contamination.

3.3 STORM WATER MANAGEMENT

During the removal of debris and impacted soil from the Area 7 Support and Silos Process Areas, surface water will be managed primarily from four subareas:

- Silos Process Area (see Drawings 99X-5500-G-00904, 99X-5500-G-00905, and 99X-5500-G-00906)
- CAWWT Area (see Drawings 99X-5500-G-00907)
- Silos Truck Staging Area (see Drawing 99X-5500-G-00907 and 99X-5500-G-00908)
- Area North of Storm Water Retention Basin (see Drawing 99X-5500-G-00909)

The following subsections serve as the Area 7 Support and Silos Process Areas Water Management Plan.

3.3.1 Silos Process Area

During remediation, storm water runoff from the Silos Process Area will flow as it has during OU4 remediation. The water will flow through the OU4 storm sewer system that discharges directly and indirectly (through the OU4 Retention Basin) to Paddys Run via the Pilot Plant Drainage Ditch (PPDD). However, the catch basins and other inlets structures draining into the OU4 storm sewer system will be protected by installing silt fence around catch basins and in front of other inlet structures. In addition at the two locations where the OU4 storm sewer system discharges into the PPDD (one directly and one via the OU4 Retention Basin), a check dam will be constructed in the PPDD just downstream of the OU4 storm sewer system discharge location. The discharge in the PPDD will flow through FEMP NPDES Permitted Stormwater Outfall STRM 4005 (see Figure 3-1).

Construction water collected within the FRL excavation as depicted by control points 1 through 12 as shown on Drawing 99X-5500-G-00905, will drain or be pumped into the former Lime Sludge Ponds basin for subsequent discharge to Paddys Run or CAWWT treatment based on the periodical sampling of pond water.

Construction water collected within above-WAC excavations will be pumped to either the SWRB via the site storm sewer system (not to be confused with the OU4 storm sewer system) or to the Silos Wastewater Treatment Facility once the SWRB is taken out of service.

3.3.2 CAWWT Area

Construction water collected around excavations in the vicinity of the CAWWT Facility will be pumped to either the SWRB via the site storm sewer system (not to be confused with the OU4 storm sewer system) or to the CAWWT Backwash Basin once operational. This water will subsequently be treated at the CAWWT Facility prior to being discharged to the Great Miami River via an outfall line.

3.3.3 Silos Truck Staging Area

The Silos Truck Staging Area does not drain readily. It was constructed in an area that tended to hold water and no drainage system was installed during construction. Since the Silos Truck Staging Area was certified prior to construction, construction water collected within the Silos Truck Staging Area will be pumped to the PPDD or will be left to pond in the area. Discharge will flow through FEMP NPDES Permitted Stormwater Outfall STRM 4005.

3.3.4 Area North of Storm Water Retention Basin

Prior to the SWRB being removed from service, water contained within the excavation required to remove the majority of the 60-inch storm sewer line will be discharged into the SWRB and subsequently treated at the CAWWT Facility prior to being discharged to the Great Miami River via an outfall line.

Prior to beginning the excavation of the east chamber of the SWRB, the site's storm water sewer system must be removed from service and remedial excavations outside the Silos area and the OSDF Cell 8 haul ramp must be completed. Water collected from the OSDF Cell 8 haul ramp will be redirected to the OSDF Access Control Facility Manhole for subsequent CAWWT treatment via the OSDF Leachate Conveyance System Line. See Section 3.3.1 for storm water management in the Silos Process Area.

Construction water collected within the buried asbestos area located just to the north east of the eastern chamber of the SWRB will be pumped back to the SWRB for subsequent treatment at the CAWWT Facility prior to being discharged to the Great Miami River via an outfall line.

Runoff from the excavations required to remove other underground utilities within this area and superficial pavement around the north end of the Main Access Road will be controlled using silt fence placed down grade of the excavations or contained and pumped for treatment as required.

A portion of the existing 60-inch storm sewer line will remain in-place post closure (see Section 3.5.5).

3.4 Site Storm Water Treatment Capacity

The CAWWT project has recently modified the AWWT Expansion System to provide a stormwater/and remediation wastewater treatment system capable of being operated at a maximum of 600 gallons per