

N00207.AR.003535
NAS JACKSONVILLE
5090.3a

FINAL CONSTRUCTION REPORT FOR INTERIM REMEDIAL ACTION AT FORMER PLATING
SHOP NAS JACKSONVILLE FL
2/1/1996
FOSTER WHEELER

NAVY CONTRACT NUMBER N47408-92-D-3059
EBASCO ENVIRONMENTAL DIVISION

**FINAL CONSTRUCTION REPORT
FOR
INTERIM REMEDIAL ACTION
NADEP'S FORMER PLATING SHOP
NAS JACKSONVILLE, FLORIDA**

FEBRUARY 1996

Prepared by:
Foster Wheeler Environmental Corporation
(Formerly Ebasco Environmental Services, Inc.)
611 Anton Boulevard
Suite 800
Costa Mesa, California 92626

Prepared for:
Southern Division Naval Facilities Engineering Command
Dana D. Gaskins, EIC/RPM
2155 Eagle Drive
North Charleston, South Carolina 29418

TABLE OF CONTENTS

Section	Topic	Page
1.	Site History	1
2.	Construction Activities and Facilities.....	5
3.	Waste Streams & Sampling	13
4.	Contract Data Requirements List (CDRL) Status	14

FIGURES

Figure 1	2
Figure 2	3
Figure 3	4
Figure 4	12

TABLES

Table 1	6 & 7
Table 2.....	8 & 9

ATTACHMENTS

Attachment A	Project Schedule	15 - 29
Attachment B	CDRL Delivery Log	30 - 34

1. Site History

The Naval Air Station - Jacksonville (NAS-JAX) is on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priority List (NPL). The Navy, as the lead agency, is addressing its responsibility, as identified in CERCLA, at NAS-JAX under its Installation Restoration Program (IRP). After placement of the station on the NPL, the Navy, the State of Florida Department of Environmental Protection (FDEP), and the Environmental Protection Agency (EPA) entered into a Federal Facilities Agreement (FFA). The FFA details the manner and means in which FDEP and EPA will interact with the Navy as the Navy implements the IRP at NAS-JAX.

The industrial area at NAS-JAX is part of an area designated as Operational Unit 3 (OU3) in the IRP. The Area of Contamination (AOC) has been established and Remedial Investigation and Feasibility Study (RI/FS) activities planned for OU3. The old plating facility is located within Potential Source of Contamination (PSC) 11, (Building 101) of OU3. Figure 1 presents the location of Building 101 and the old plating shop within the industrial area of OU3.

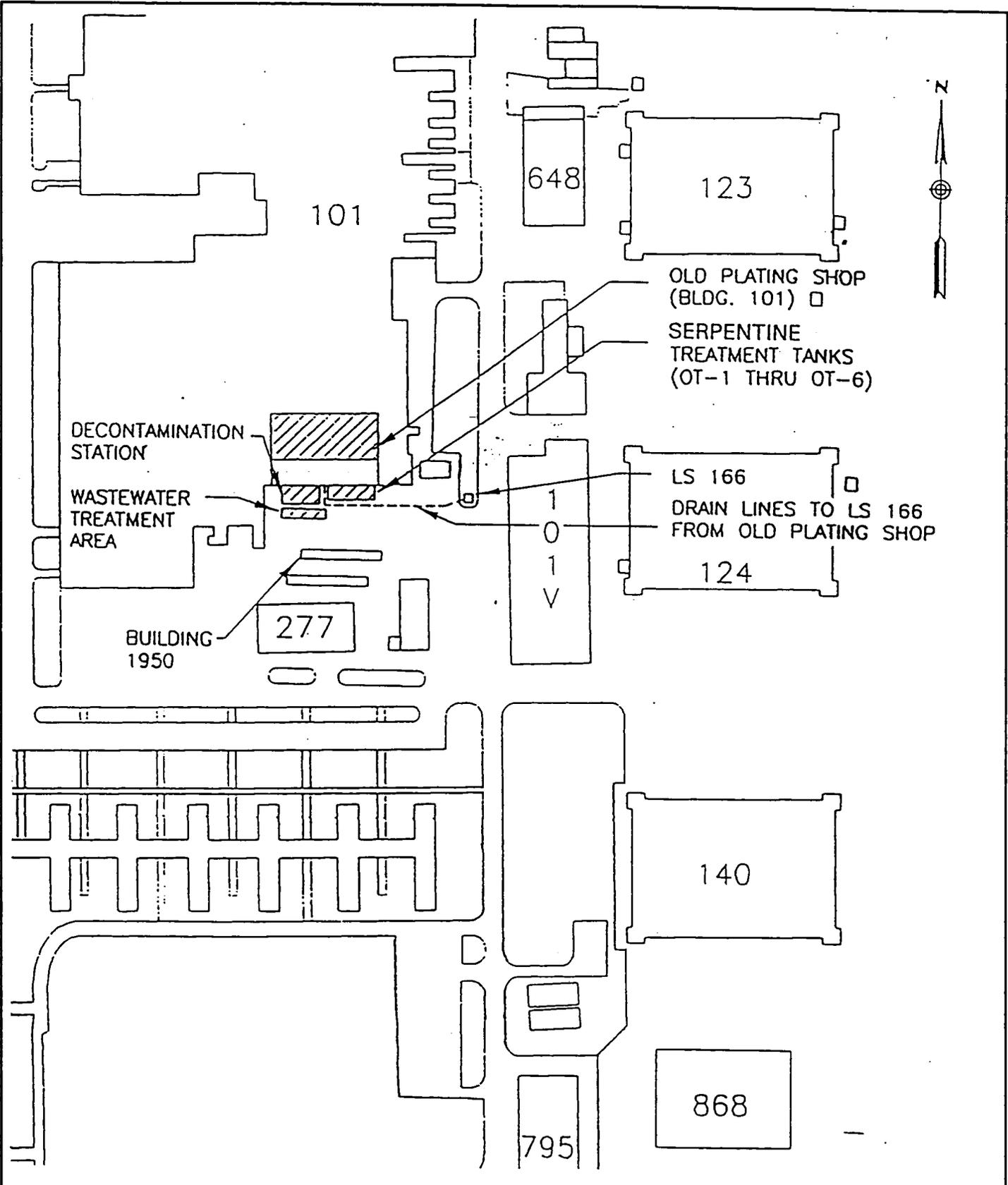
The NAS-JAX conducted this Interim Remedial Action (IRA) to address issues about hazardous substances which, if released, would pose a threat to public health or the environment. This action did not include the remediation of groundwater. A pre-determined amount of soil was removed from the site; however, all remaining environmental media will be addressed by the OU3 RI/FS.

This IRA was conducted in compliance with the Application for Closure Permit titled "OLD PLATING FACILITY - BUILDING 101 AND WASTE OIL TANK 101-3" submitted to FDEP in April 1993. All activities of this IRA that affected the CERCLA studies of OU3 were performed following all applicable, relevant, and appropriate requirements for such studies.

The Old Plating Facility began operations in the early 1940's and continued through 1985, at which time a new plating shop was constructed. Plating activities at the old facility continued until operations ceased around February 1990.

All of the areas that were included in the IRA are shown within the project boundary presented on Figure 2. The Northeast (NE) Chrome Room shown on Figure 2 was historically used for plating operations, and, as indicated in the figure, was also included in the IRA. Figure 3 presents the site layout of the tanks as found in the rooms of the old plating shop. Significant deterioration had occurred in all three rooms of the facility, and numerous tanks, platform steel, and gratings were corroded. Concrete flooring had also degraded, asbestos-containing pipe insulation had become contaminated and friable, and small sections of the roof had collapsed.

PLOT DATE JAN 8, 1996 C:\39870003\9904\20000-01.DWG



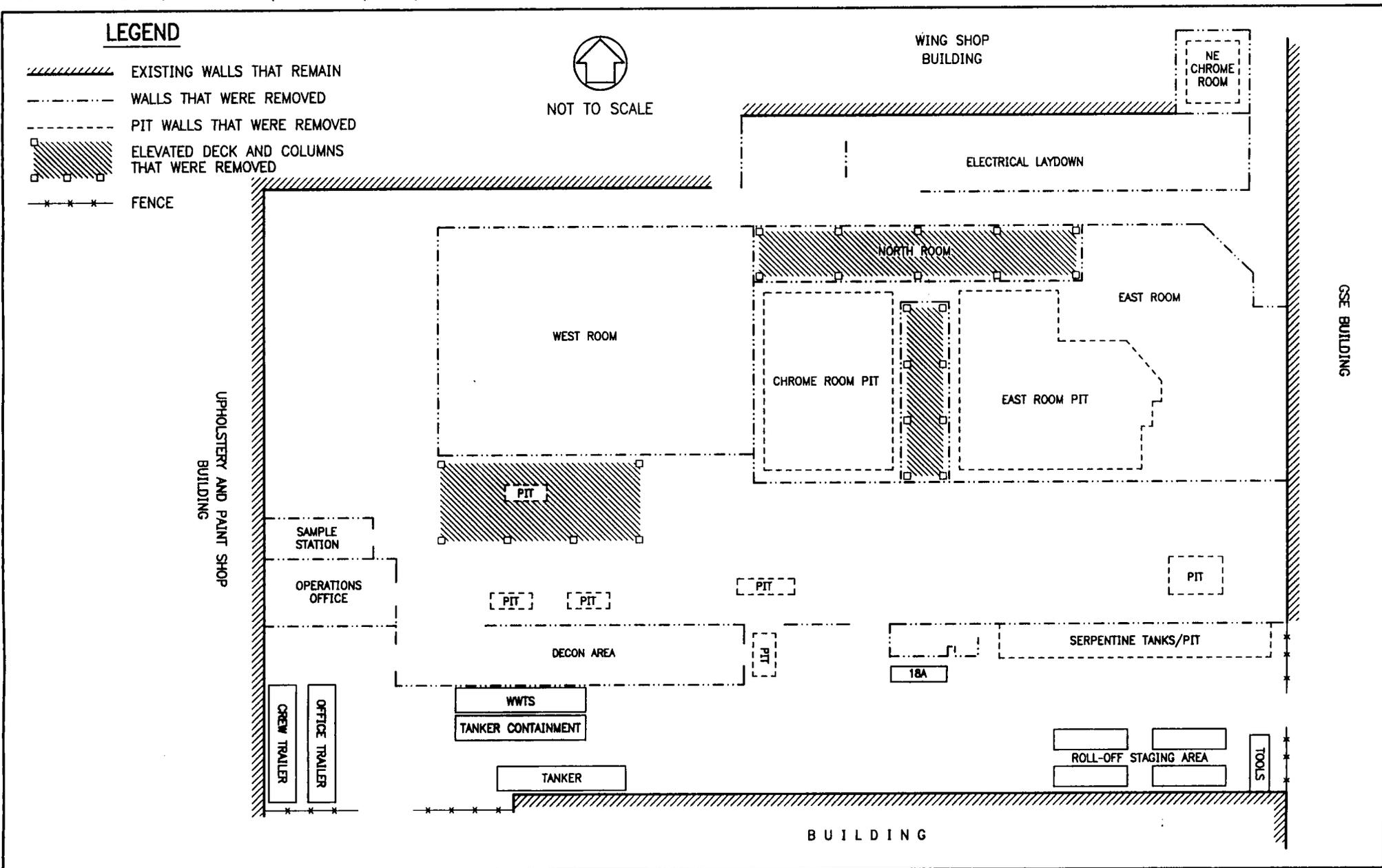
0 100 200 300 400
 GRAPHIC SCALE IN FEET

SOURCE: Application for Closure Permit
 Attachment T, Part 1, Figure T-2, page T-33
 Cut Sheet



BUILDING 101 - OLD PLATING SHOP
SITE LAYOUT PLAN
 NAS JACKSONVILLE, FLORIDA

Figure
1



BUILDING 101 - OLD PLATING SHOP PROJECT BOUNDARIES

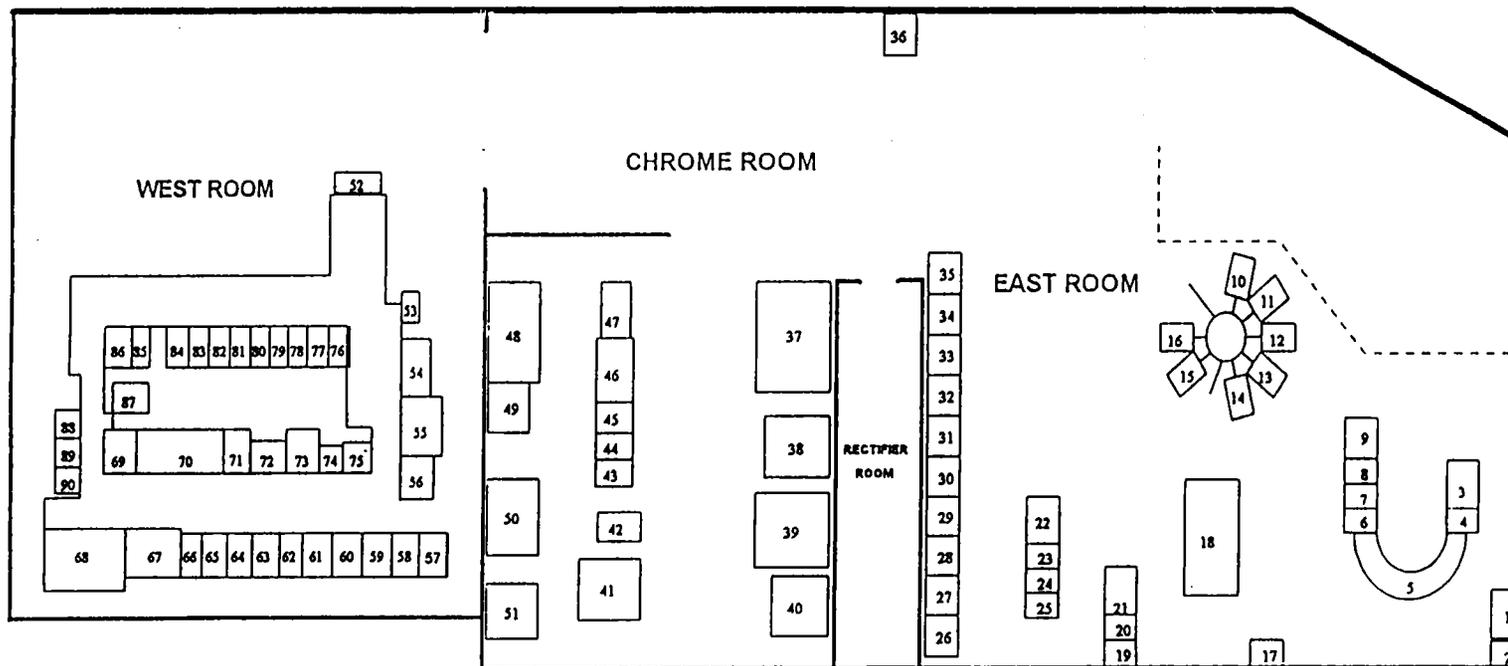
NAS JACKSONVILLE, FLORIDA

Figure

2



NOT TO SCALE



BUILDING 101 - OLD PLATING SHOP
TANK LAYOUT

NAS JACKSONVILLE, FLORIDA

Figure

3

Fifty-six of the ninety tanks shown in this figure contained hazardous wastes. The tanks located in the NE Chrome Room were removed prior to this IRA. In addition to the NE Chrome Room, West Room, Chrome Room, and East Room, there were six tanks in the abandoned serpentine wastewater treatment system located next to the southeast corner of the building (shown on Figure 2). This tank was removed and the resulting excavation backfilled.

During an emergency response removal action conducted in August 1992, waste remaining in the tanks was analyzed for ignitability, toxicity, pH, and the presence of reactive sulfide or cyanide. Samples were taken from the 56 tanks containing waste that were previously designated as hazardous based on the plating process. Liquid samples were subjected to total metals analysis, and solid samples were analyzed using the Toxicity Characteristic Leaching Procedure (TCLP). As a result of this removal action, ABB Environmental Services submitted the *Health Threat Evaluation for the Old Engine Processing Facility, Building 101*, to the Navy and FDEP for use in addressing remedial actions necessary to close the plating facility.

In January 1993, liquids and sludges were removed from the plating tanks, and most of the friable asbestos pipe insulation was wrapped in plastic. A large quantity of the waste was removed from the tanks and properly disposed of during the emergency response removal action. Only residual wastes remained in the tanks. Table 1 summarizes the results of the hazardous waste analyses for the tanks from Building 101 as reported in the Health Threat Evaluation (HTE). Table 2 presents the RCRA Waste Codes (40 CFR Part 261) applied to the remaining residual waste and tanks that were removed during this IRA.

2. Construction Activities and Facilities

Mobilization at the Naval Air Station, Jacksonville, Florida commenced on May 7, 1993. Following an onsite preconstruction meeting with the client, a project office was set up and the project perimeter was fenced and secured. Two six-thousand gallon tankers and a portable WWTS were secured, plumbed and secondarily contained. Remediation work began with chemically contaminated asbestos removal from plating process pipe and walls within the previously operational shop area. Following asbestos removal trenches were dewatered and desludged. All hazardous solid wastes were containerized/analyzed and turned over to the client for disposal. Two hydraulic lift stations were removed and the associated pits (approximately 10'x10'x16') were backfilled and concrete capped. Ancillary piping, ventilation ducts and 90 tanks of varying sizes were removed from the shop. These items were segregated into two groups according to their previous operational contents, and then triple rinsed, via high pressure wash, or disposed of directly as hazardous waste. Primary electrical, steam, and compressed air utilities were then rerouted, along with potable water and fire protection lines, to allow main structure demolition. Process ventilation systems, asbestos panels, and contaminated stone and/or rock were then removed from the roof.

**TABLE 1
SUMMARY OF BUILDING 101 WASTE ANALYSES**

Tank	Group A or B Tank (1)	RCRA Characteristic Hazardous Waste Parameters (2)											
		TCLP Metals (mg/l)								Ignitability (Reg. F)	Reactivity (mg/Kg)		Corrosivity pH
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silica	Selenium		Sulfide	Cyanide	
1	B	ND	0.54	NC	ND	ND	ND	ND	ND	>200	ND	ND	9.80
2	B	ND	0.79	NC	ND	0.17	ND	ND	ND	>200	ND	ND	10.30
5*	A	ND	ND	1.3	ND	0.30	ND	ND	ND	NA	NA	NA	8.80
6*	B	ND	ND	ND	ND	4.4	ND	ND	ND	NA	NA	NA	8.10
9	B	ND	1.1	0.014	ND	ND	ND	ND	ND	>200	ND	ND	8.60
11	A	ND	0.52	ND	ND	8.8	0.0028	ND	ND	>200	1.89	ND	9.80
12	A	ND	0.96	5.3	ND	0.05	0.0066	ND	ND	>200	5.36	ND	9.60
14*	B	0.41	ND	4.1	17.1	15.1	ND	ND	ND	NA	NA	NA	NA
15	B	ND	0.70	ND	0.33	ND	0.0033	ND	ND	>200	ND	ND	9.50
16	B	ND	0.76	0.70	ND	0.13	ND	ND	ND	>200	ND	ND	8.90
17*	A	0.84	ND	61,800	17.7	217	ND	ND	ND	NA	NA	NA	NA
22	A	ND	0.66	0.38	2.0	318	0.00092	0.44	ND	>200	8.78	ND	0.80
23	A	ND	0.70	0.086	0.014	76.6	ND	0.042	ND	>200	11.1	14.2	5.80
24*	A	ND	ND	27.0	78.6	13,900	ND	ND	ND	NA	NA	NA	NA
25*	A	6.0	ND	45.8	473	1,200	0.56	18.8	0.36	NA	NA	NA	NA
29	A	ND	0.68	ND	1.8	ND	ND	54.0	ND	>200	6.78	3.3	9.40
30	A	ND	0.29	NC	ND	ND	ND	4.8	ND	>200	7.18	12.1	9.20
33	A	ND	1.1	9.6	0.46	1.5	0.15	0.34	ND	>200	5.84	ND	4.60
38	A	ND	2.1	1.3	0.16	429	0.0014	ND	ND	>200	5.42	ND	8.40
39*	A	ND	ND	1.1	1,960	42.1	ND	ND	ND	NA	NA	NA	2.10
40*	A	0.079	ND	8.2	6,860	87.4	ND	ND	ND	NA	NA	NA	NA
41*	A	ND	ND	1.9	1,310	3.8	ND	ND	ND	NA	NA	NA	2.30
42*	B	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	7.50
43	B	ND	1.1	0.025	-/93	0.93	ND	ND	ND	>200	3.03	ND	7.00
44	A	ND	0.64	ND	45.4	17.2	ND	ND	ND	>200	6.51	ND	9.90
45*	A	0.37	ND	14.1	1,240	2,140	ND	ND	ND	NA	NA	NA	NA
46	A	ND	0.61	0.58	ND	791	ND	ND	ND	>200	5.83	14.9	6.80
47*	A	ND	ND	89.8	433,000	ND	ND	ND	ND	NA	NA	NA	NA
50*	A	ND	ND	ND	97.4	ND	ND	ND	ND	NA	ND	ND	4.40
Regulatory Level		5.0	100.0	1.0	5.0	5.0	02	5.0	1.0	<140F	500 (4)	260 (4)	<2.0 or >12.5

SEE NOTES AT END OF TABLE

SOURCE: ABB Environmental Services, Inc.

PAGE 1 OF 2

**TABLE 1 (continued)
SUMMARY OF BUILDING 101 WASTE ANALYSES**

Tank	Group A or B Tank (1)	RCRA Characteristic Hazardous Waste Parameters (2)											
		TCLP Metals (mg/l)								Ignitability (Degree F)	Reactivity (mg/Kg)		Corrosivity pH
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium		Sulfide	Cyanide	
51*	A	0.91	ND	12.8	69,700	272	ND	ND	ND	NA	NA	NA	NA
55	B	ND	0.79	0.40	ND	0.071	ND	ND	ND	>200	5.31	ND	7.70
57	A	ND	0.40	0.055	1.3	ND	ND	ND	ND	>200	3.32	7.8	9.50
59*	A	10.6	ND	693	315	393	ND	22.6	ND	NA	NA	NA	NA
61*	A	ND	1ND	13.7	8.4	13.7	ND	ND	ND	NA	NA	NA	2.80
62	A	ND	0.58	0.070	0.17	ND	0.0009	ND	ND	>200	3.21	ND	10.40
64	A	ND	0.70	ND	ND	ND	0.063	ND	ND	>200	ND	11.1	9.50
68	A	ND	0.48	2.7	0.14	ND	ND	0.16	ND	>200	4.66	15.5	2.50
69	A	ND	0.31	2.2	1,730	ND	0.012	ND	ND	>200	ND	ND	1.00
70	A	ND	0.86	0.53	50.4	ND	0.00021	0.066	ND	>200	3.85	ND	3.70
71*	B	ND	0.70	ND	0.17	ND	0.005	ND	ND	>200	2.38	ND	9.90
72	A	ND	0.76	4.0	ND	ND	ND	ND	ND	>200	5.36	ND	8.40
74	A	ND	0.66	1.3	0.33	1.2	ND	0.65	ND	>200	9.91	ND	9.50
77	A	ND	0.58	0.24	ND	3.6	0.40	0.11	ND	>200	4.50	ND	7.90
79	A (3)	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB
82	A	ND	1.3	21.0	0.74	0.34	ND	2.9	ND	>200	7.03	1.3	3.40
84	A	ND	ND	1.1	ND	5.7	ND	ND	ND	>200	5.65	ND	4.30
85	A	ND	0.60	55.2	ND	808	ND	0.52	ND	>200	6.38	ND	2.60
88	A	ND	0.84	26.2	2.4	194	0.017	0.87	ND	>200	ND	28.2	2.70
91*	B	ND	ND	ND	ND	5.1	ND	ND	ND	NA	NA	NA	5.80
92	A	ND	0.42	1,090	7.6	9.0	0.032	0.65	ND	>200	17.4	32.5	1.40
OT-1*	A	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
OT-2*	A	ND	ND	ND	11.0	ND	ND	ND	ND	NA	NA	NA	NA
OT-3*	A	ND	ND	ND	10.2	ND	ND	ND	ND	NA	NA	NA	NA
OT-4*	A	ND	ND	1.4	5.2	1.1	ND	ND	ND	NA	NA	NA	NA
OT-5*	A	ND	ND	4.2	18.7	20.6	ND	ND	ND	NA	NA	NA	NA
OT-6*	A	0.058	ND	5.3	40.5	15.9	ND	ND	ND	NA	NA	NA	NA
Regulatory Level		5.0	100.0	1.0	5.0	5.0	0.2	5.0	1.0	<140F	500 (4)	250 (4)	<2.0 or >12.6

NOTES:

NA - Not Analyzed
 ND - Not Detected
 NB - No Backup Data Available
 OT - Outside Tank

 - Exceeds Regulatory Limit

- (1) - "DDDD Plan Concept, U.S. Navy Remedial Action Contract for Remediation of Sites Contaminated with Acids, Metals, and Bases", - Ebasco Environmental
- (2) September 1992 emergency response removal action - analytical data reports
- (3) Not included in Appendix B of Building 101 Health Threat Evaluation(2)...No Backup Data Available
- (4) Reactivity Advisory Limits for Cyanide and Sulfide (SW846, 3rd Edition; September 1986)
- * Denotes results derived from Total Metals analysis and not TCLP metals

SOURCE: ABB Environmental Services, Inc.

TABLE 2: TANK SYSTEMS, HAZARDOUS WASTE CODES, AND ANALYSES

TANK SYSTEMS	APPLICABLE WASTE CODES	PARAMETERS	EPA/SW-846 METHOD	PRACTICAL QUANTITATION LIMIT
Tanks: 17, 22, 24, 25, 40, 45, 51, 59, 69, 92; below floor piping; and floor sumps	D002	pH TOC TOX	150.1 415.2/9060 450.1/9020	N/A 1 mg/L 0.01 mg/L
Tanks: 25, 59; below floor piping; and floor sumps	D004	Arsenic TOC TOX	206.2 415.2/9060 450.1/9020	10 ug/l 1 mg/L 0.01 mg/L
Tanks: 5, 12, 17, 18, 24, 25, 33, 38, 39, 40, 41, 45, 51, 59, 61, 66, 68, 69, 72, 74, 82, 84, 85, 88, 92 and outside tanks 4, 5, and 6; and below floor piping; and floor sumps	D006	Cadmium TOC TOX	200.7 415.2/9060 450.1/9020	1 ug/l 1 mg/L 0.01 mg/L
Tanks: 17, 24, 25, 37, 39, 40, 41, 44, 45, 47, 48, 50, 51, 59, 61, 69, 70, 92, outside tanks 2, 3, 4, 5, & 6; below floor piping; and floor sumps	D007	Chromium TOC TOX	200.7 415.2/9060 450.1/9020	10 ug/l 1 mg/L 0.01 mg/L
Tanks: 11, 17, 22, 23, 24, 25, 38, 39, 40, 45, 46, 47, 51, 59, 61, 84, 85, 88, 92, outside tank 5 & 6; below floor piping; and floor sumps	D008	Lead TOC TOX	239.2 415.2/9060 450.1/9020	5 ug/l 1 mg/L 0.01 mg/L
Tanks: 77, 85, 25; below floor piping; and floor sumps	D009	Mercury TOC TOX	245.1 415.2/9060 450.1/9020	0.2 ug/l 1 mg/L 0.01 mg/L

TABLE 2: TANK SYSTEMS, HAZARDOUS WASTE CODES, AND ANALYSES

TANK SYSTEMS	APPLICABLE WASTE CODES	PARAMETERS	EPA/SW-846 METHOD	PRACTICAL QUANTITATION LIMIT
Tanks: 25, 27, 28, 29, 31, 59, 76, 78, 79; below floor piping; and floor sumps	D011	Silver TOC TOX	200.7 or 272.2 415.2/9060 450.1/9020	1 ug/L 1 mg/L 0.01 mg/L
Tank: 92	F001	Tetrachloroethylene Trichloroethylene Methylene Chloride 1,1,1-trichloroethane Carbon Tetrachloride Chlorinated Fluorocarbons TOC TOX	624/8240 624/8240 624/8240 624/8240 624/8240 624/8240 624/8240 415.2/9060 450.1/9020	5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L * 1 mg/L 0.01 mg/L
Tanks: Outside Tanks 1, 2, 3, 4, 5, & 6	F006	Cyanide (total) Cyanide (free) Chromium Lead Nickel TOC TOX	335.2 412H 200.7 239.2 200.7 415.2/9060 450.1/9020	10 ug/L 10 ug/L 10 ug/L 5 ug/L 40 ug/L 1 mg/L 0.01 mg/L
Tank: 5	F007	Cyanide (total) Cyanide (free) Chromium Lead Nickel TOC TOX	335.2 412H 200.7 239.2 200.7 415.2/9060 450.1/9020	10 ug/L 10 ug/L 10 ug/L 5 ug/L 40 ug/L 1 mg/L 0.01 mg/L
Tanks: 3, 17, 18, 23, 27, 28, 29, 30, 31, 46, 54, 57, 62, 64, 66, 68, 76, 78, 79, 80, 82, 88 and 92	F008	Cyanide (total) Cyanide (free) Chromium Lead Nickel TOC TOX	335.2 412H 200.7 239.2 200.7 415.2/9060 450.1/9020	10 ug/L 10 ug/L 10 ug/L 5 ug/L 40 ug/L 1 mg/L 0.01 mg/L

* See Appendix A for analyte detection limits

After removing the roof, main truss demolition began with the use of a crane and clamshell rig. This was a delicate phase of the work since three of the four existing walls, which were a part of adjacent buildings, were to be left intact.

Following building demolition, grid sampling parameters were used to establish excavation limits. The established boundaries were marked, sawcut and excavated to groundwater. Groundwater was encountered at approximately five feet below grade. The excavated area was then backfilled and compacted, in 1' lifts, to grade.

Following backfill activities, sheetpile was installed to a depth of approximately 28 feet to encompass the 20'x40'x10' concrete serpentine treatment tank located to the exterior of the preexisting facility. The serpentine tank was then demolished, excavated, and disposed of as hazardous waste. This area was then hydraulically backfilled to minimize wellpoint and water treatment costs. The sheetpile was abandoned in place. During this same phase of the project a smoke test was performed to identify any/all remaining lines associated with the old plating process. These lines were then triple rinsed and grouted end to end.

The project effort also included mechanical and electrical installations and modifications that occurred primarily in the last year of the project. This work was required to reconnect those portions of the existing electrical and piping utilities that were rendered inoperable as a part of demolition activities and to reestablish system integrity.

The mechanical installation involved the on and off site fabrication of pipe supports and support assemblies, the erection of these supports, the modification of the existing facilities to accommodate and interface with new pipe and supports, and the fabrications/erection of new pipe for three primary systems. These systems were high pressure steam (6" and 10" sch 40 pipe), condensate return (3" and 5" sch 80 pipe) and compressed air (4" and 6" sch 40 pipe). Other more minor mechanical efforts were the rerouting of potable water and fire water piping and the application of insulation (thermal and freeze protection) on a portion of the installed pipe.

The electrical effort encompassed the rework of existing utilities and the installation of new raceway and cabling networks that reconnected an existing network that was partially removed during demolition. These utility interconnects were for the 120/208 volt and 480 volt primary electrical distribution in this part of the industrial area. This work included both above and below ground installations.

All of these electrical and mechanical systems were subjected to post installation testing to insure their integrity. Closely coordinated shutdowns, or outages, of the adjacent operational facilities were performed to allow for the tie in of the new systems after installation and testing was complete. Figure 4 provides a sketch of the routing for these systems.

The overall project effort encompassed approximately two years. Attachment A to this report provides the Project Schedule. Critical activities occurred as follows:

Site Mobilization	May 1993
Tank Removal	August 1993 to February 1994
Building Demolition	
Internal	August 1993 to December 1994
External	January 1995 to March 1995
Piping Installation	September 1994 to June 1995
Electrical Installation	July 1994 to May 1995
Demobilization	August 1995

In addition, the Project encountered a three month shutdown (May 1994 to July 1994) to allow work scope and funding adjustments. This schedule was updated each month and submitted to the Navy as part of the Monthly Progress Report.

Finally, site utilities and weather closures were re-established, water treatment equipment was decontaminated, and the project effort was demobilized.

The average staff level was 7 non-manual and 30 manual personnel. Four thousand eighty-seven tons of waste were removed from the site. Two thousand seven hundred eighty cubic yards of soil was backfilled. Sixty thousand gallons of waste water was treated.

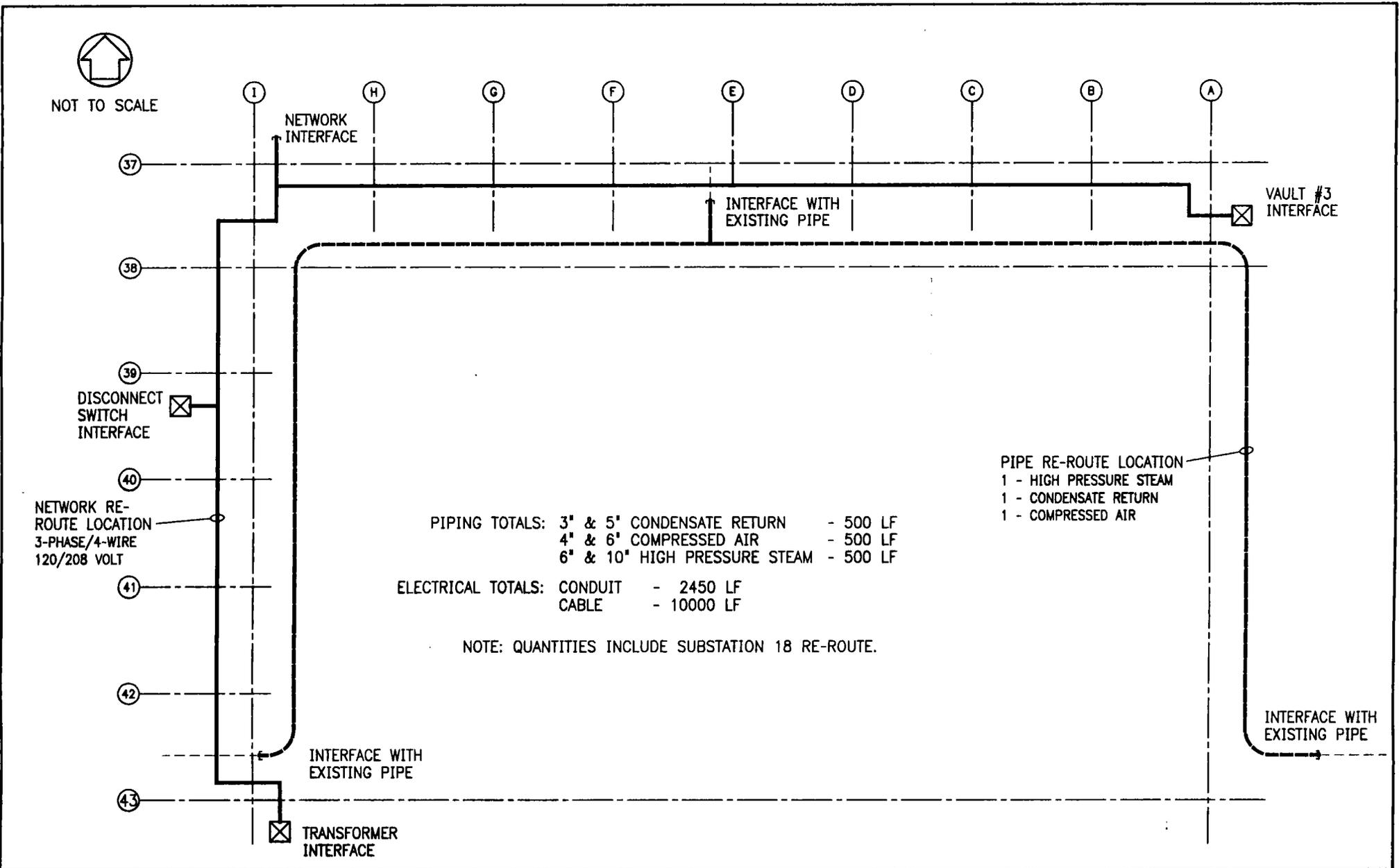
A project labor agreement was negotiated with the international labor unions as well as the participating locals. This provided an effective, trained and experienced labor source. Davis Bacon wage rates were utilized and verified by certified payroll.

The temporary construction facilities consisted of one 12'x60' craft trailer for 40 craftsmen, safety meetings and lunch and one 12'x60' non-manual trailer for the HSO, QC Engineer, Cost and Schedule Engineer, Project Accountant, two Field Supervisors, Field Secretary, and Project Superintendent. Other buildings consisted of two 8'x20' connex's for use as tool storage and one 6'x12' pre-engineered building for use as a field drawing station and sampling equipment storage area.

Temporary electricity was supplied by the Navy's NADEP Facility. Ebasco utilized/relocated a 10Kva transformer from the plating shop to supply electrical power to the trailers. Electricity, compressed air, and potable water were made available from the surrounding NADEP building operations.

Telephone service was provided by a private off base utility and was coordinated with the NAS/JAX communications section. Upon demobilization, Ebasco left temporary electricity drops and telephone lines in place as agreed with the ROICC for "follow on" construction.

Figure 4



**BUILDING 101 - OLD PLATING SHOP
 UTILITIES RE-ROUTING**

NAS JACKSONVILLE, FLORIDA

Figure
 4

3. Waste Streams & Sampling

Waste Streams for the site were handled as follows:

DESCRIPTION OF WASTE	MODE OF DISPOSAL
Solid Hazardous Debris	Roll-offs provided by Navy/DRMO
Highly Concentrated Hazardous Liquids/Sludges	Drums provided by Navy/PWC
Contaminated Water (e.g., decon/dewatering)	Treated onsite by Ebasco and discharged to Navy's sanitary sewer
Chemically Contaminated Asbestos	Roll-offs provided by Navy/DRMO
Solid Non-Hazardous Debris	Roll-offs provided by Navy/DRMO and Ebasco 40 yard dumptrucks provided by Ebasco Scrap metal and equipment was delivered by Ebasco to NADEP/DRMO
Liquid Non-Hazardous Waste	Disposal provided by Navy/NADEP

Sampling:

Below are listed the total number of samples taken by Ebasco over the course of the project.

MATRIX (Type of Material)	NO. OF SAMPLES
Soil	180
Concrete	9
Treated Water	227
Other	37

4. Contract Data Requirements List (CDRL) Status

A complete list of all CDRL Requirements and the latest status of all submittals is provided in Attachment B. Deliverables have been distributed in accordance with the contract requirements.

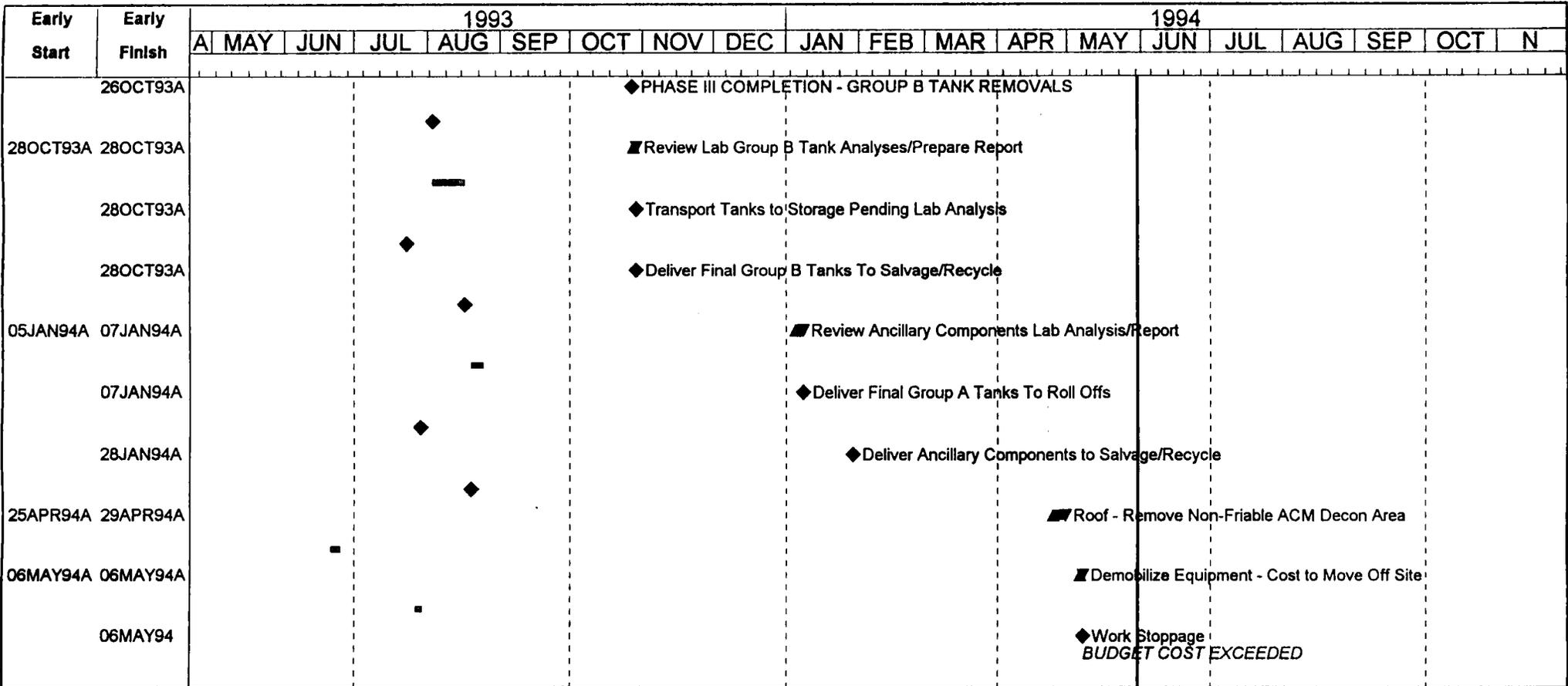
Deliverables not completed will be sent as soon as available and an updated report will be provided.

Attachment A

Project Schedule

The Project Schedule is provided in three parts:

	Page
Part 1 Base and MOD 1.....April 1993 thru May 1994	16 - 22
Part 2 MOD 2	September 1993 thru May 1994 23
Part 3 Bldg. 101 Demo Schedule.....July 1994 thru August 1995.....	24 - 29

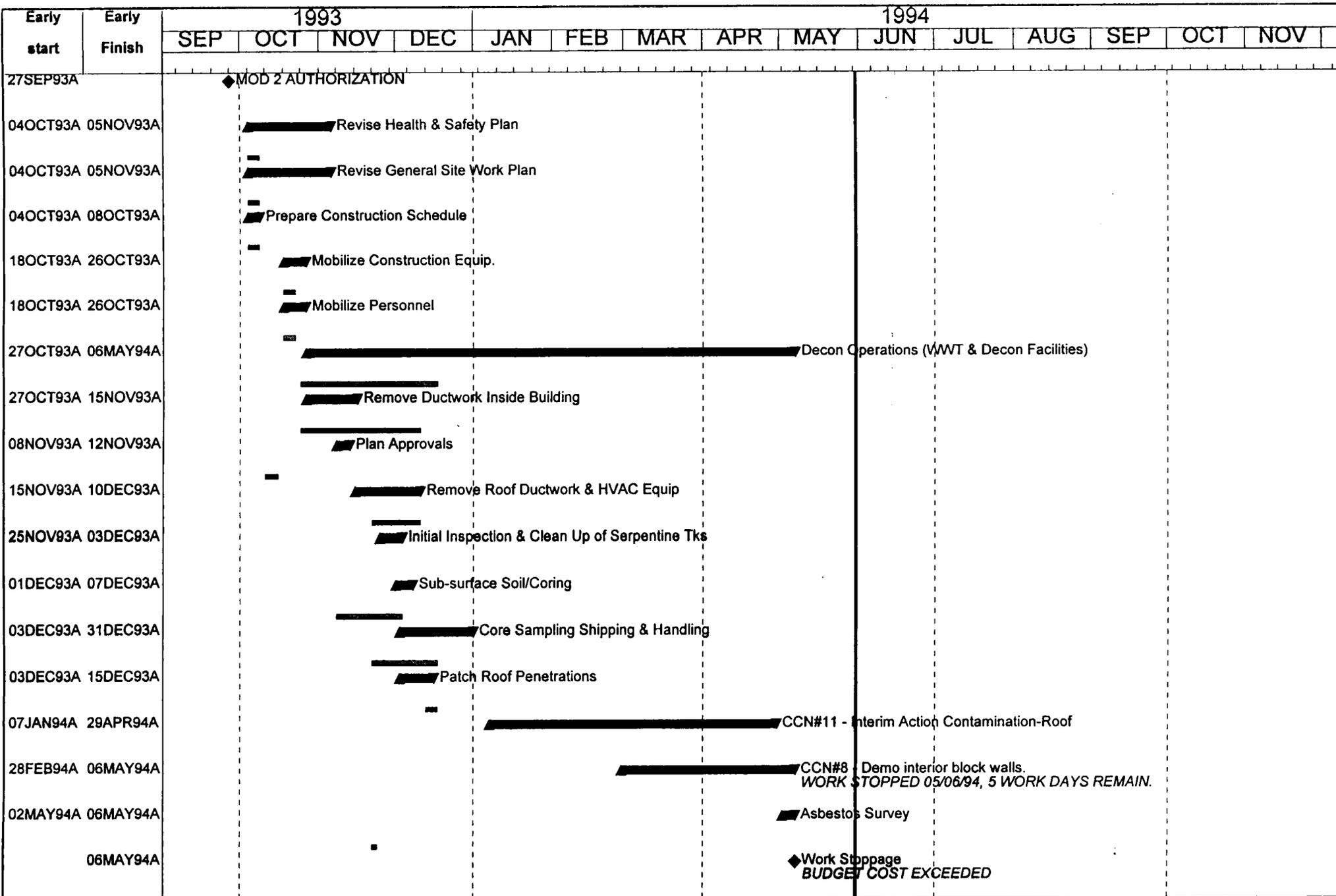


Project Start 22APR83
 Project Finish 11JUL84
 Data Date 31MAY94
 Plot Date 04JAN88

Early Bar
 Target Early B
 Progress Bar
 Critical Activity

NASJ

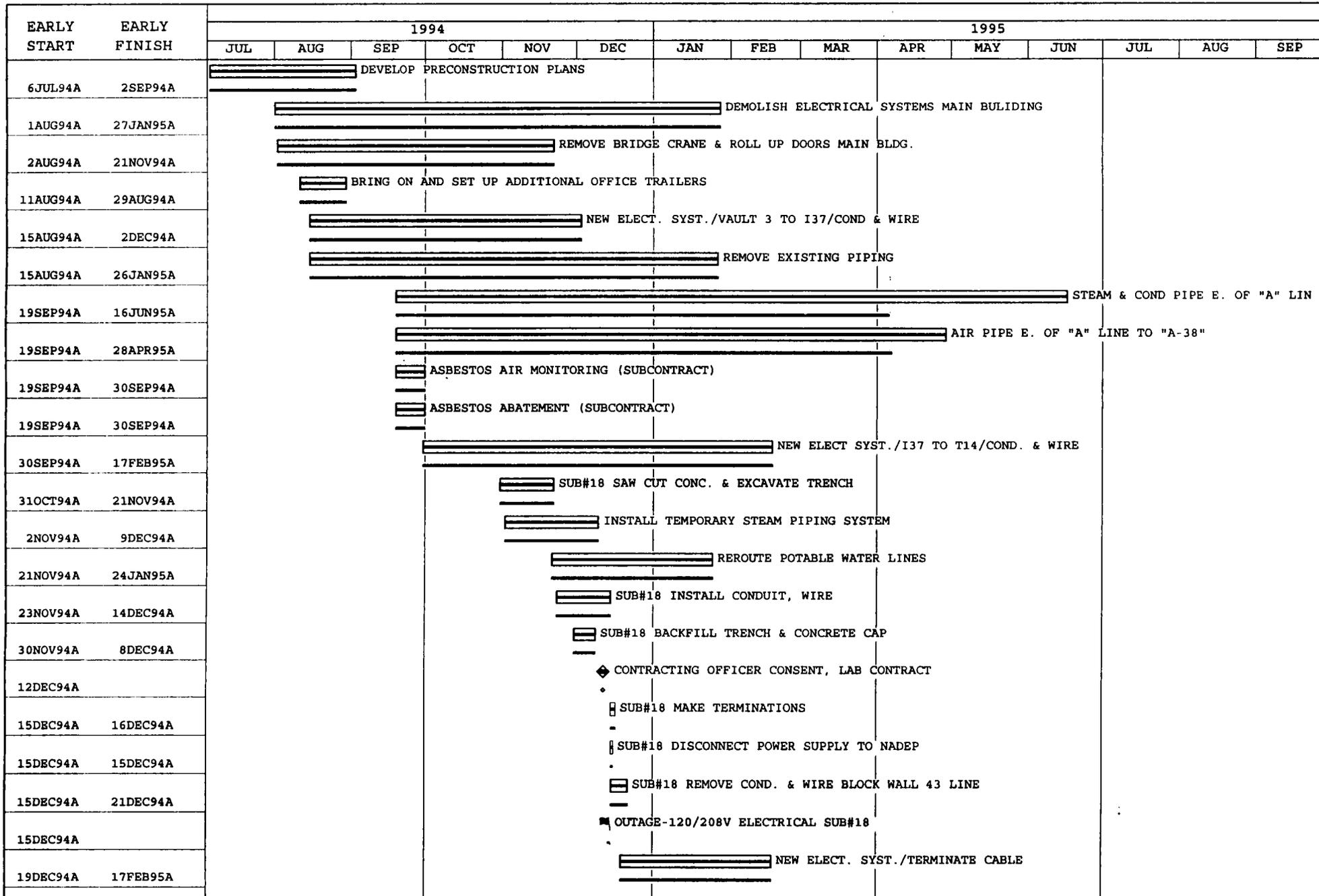
JACKSONVILLE NAVAL AIR STATION
 OLD PLATING SHOP DDDD
 BAR CHART - BASE & MOD1



Project Start	04OCT93	▬ Early Bar	MOD2
Project Finish	25JUL94	▬ Target Early B	
Data Date	31MAY94	▬ Progress Bar	
Plot Date	04JAN96	▬ Critical Activity	

© Primavera Systems, Inc.

NAVAL AIR STATION - JACKSONVILLE
 OLD PLATING SHOP DDDD
 BAR CHART - MOD2



Target Date 3APR95
 Plot Date 30NOV95
 Data Date 29SEP95
 Project Start 6JUL94
 Project Finish 29SEP95

Activity Bar/Early Dates
 Critical Activity
 Progress Bar
 Target Dates
 Milestone/Flag Activity

FOSTER WHEELER ENVIRONMENTAL CORP.
 BLDG 101 DEMO SCHEDULE
 CURRENT SCHEDULE VS. TARGET

Date	Revision	Checked	Approved

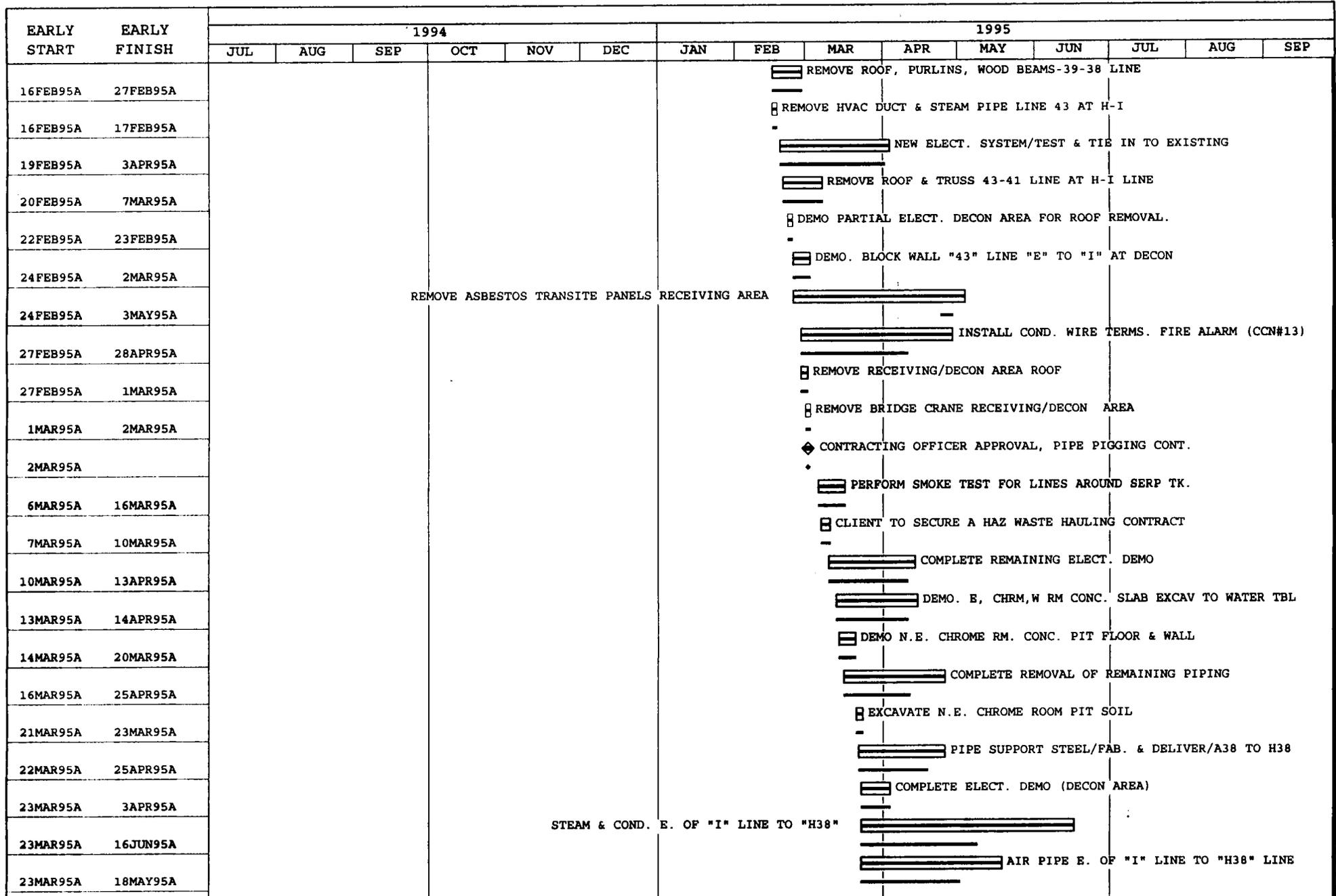
EARLY START	EARLY FINISH	1994						1995								
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
27DEC94A	25JAN95A							=====	AT "A" LINE: DRILL HOLES/SET ANCHORS/INST. PLATE							
27DEC94A	13JAN95A							=====	REROUTE OF FIRE LINE TO TIE IN OUTAGE							
27DEC94A	29DEC94A							☐	REMOVE OFFICE HVAC SYSTEM							
3JAN95A	25JAN95A							=====	INSTALL STIFFENER PLATES COLUMN LINE "A"							
9JAN95A	9JAN95A							☐	DEMO. CONC. BLOCK WALLS "43" LINE DOOR AREA							
12JAN95A	3FEB95A							=====	INSTALL STIFFENER PLATES COLUMN LINE "I"							
	13JAN95A							☐	OUTAGE-FIRE DETECTION FCN#38							
16JAN95A	25JAN95A							=====	TRIM OUT FIRE LINE AFTER TIE IN OUTAGE							
16JAN95A	3FEB95A							=====	DEMOLISH 4" BRICK WALLS							
17JAN95A	6FEB95A							=====	AT "I" LINE: DRILL & SET ANCHORS/INSTALL PLATES							
	24JAN95A							☐	OUTAGE POTABLE WATER CCN#39							
2FEB95A	6FEB95A							☐	TOUCH UP PAINT, "A&I" LINE PLATE INST. AREAS							
2FEB95A	7FEB95A							☐	REMOVE R/P/WB, 43-42 LINE AT A-H LINE							
2FEB95A	6FEB95A							☐	DEMO 43 LINE A-E BLOCK WALLS							
6FEB95A	8FEB95A							☐	REMOVE R/P/WB 42-41 LINE AT A-H LINE							
7FEB95A	9FEB95A							☐	REMOVE WOOD TRUSS AT 42 LINE AT A-H LINE							
9FEB95A	15FEB95A							☐	REMOVE ROOF, PURLINS, WOOD BEAMS-41-40 LINE							
9FEB95A	15FEB95A							☐	REMOVE TRUSS AT 41 LINE AT A-H LINE							
10FEB95A	16FEB95A							☐	REMOVE TRUSS AT 40 LINE							
10FEB95A	16FEB95A							☐	REMOVE ROOF, PURLINS, WOOD BEAMS-40-39 LINE							
15FEB95A	7APR95A							=====	INSTALL PIPE SUPPORT FDNS. N. OF "38" LINE							
16FEB95A	27FEB95A							=====	REMOVE TRUSS AT 39 LINE							

Target Date 3APR95
Plot Date 10NOV95
Date Date 29SEP95
Project Start 6JUL94
Project Finish 29SEP95

Activity Bar/Early Dates
Critical Activity
Progress Bar
Target Dates
Milestone/Flag Activity

FOSTER WHEELER ENVIRONMENTAL CORP.
BLDG 101 DEMO SCHEDULE
CURRENT SCHEDULE VS. TARGET

Date	Revision	Checked	Approved

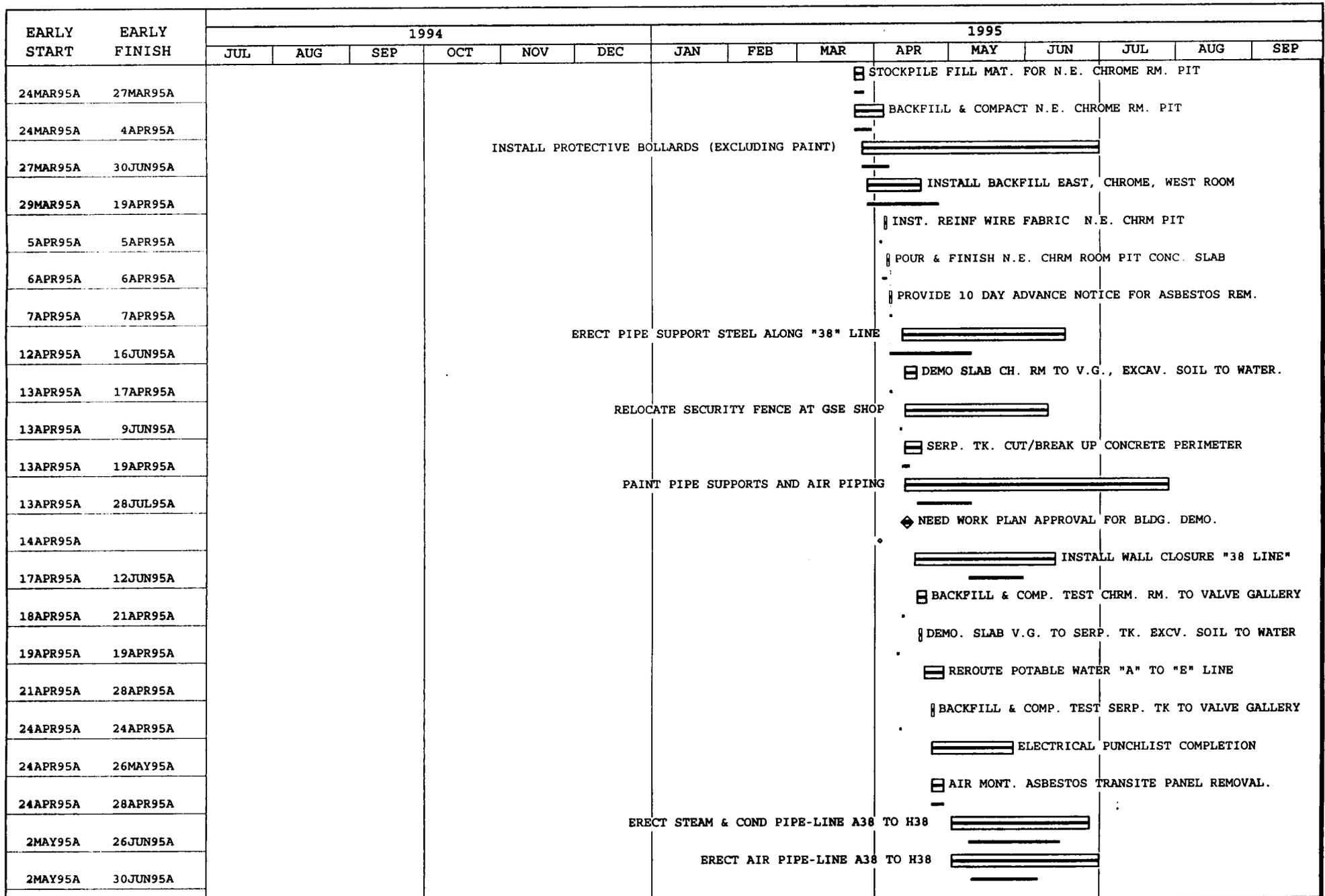


Target Date 3APR95
 Plot Date 30NOV95
 Data Date 29SEP95
 Project Start 6JUL94
 Project Finish 29SEP95

Activity Bar/Early Dates
 Critical Activity
 Progress Bar
 Target Dates
 Milestone/Flag Activity

FOSTER WHEELER ENVIRONMENTAL CORP.
 BLDG 101 DEMO SCHEDULE
 CURRENT SCHEDULE VS. TARGET

Date	Revision	Checked	Approved



Target Date 3APR95
Plot Date 10NOV95
Data Date 29SEP95
Project Start 6JUL94
Project Finish 29SEP95

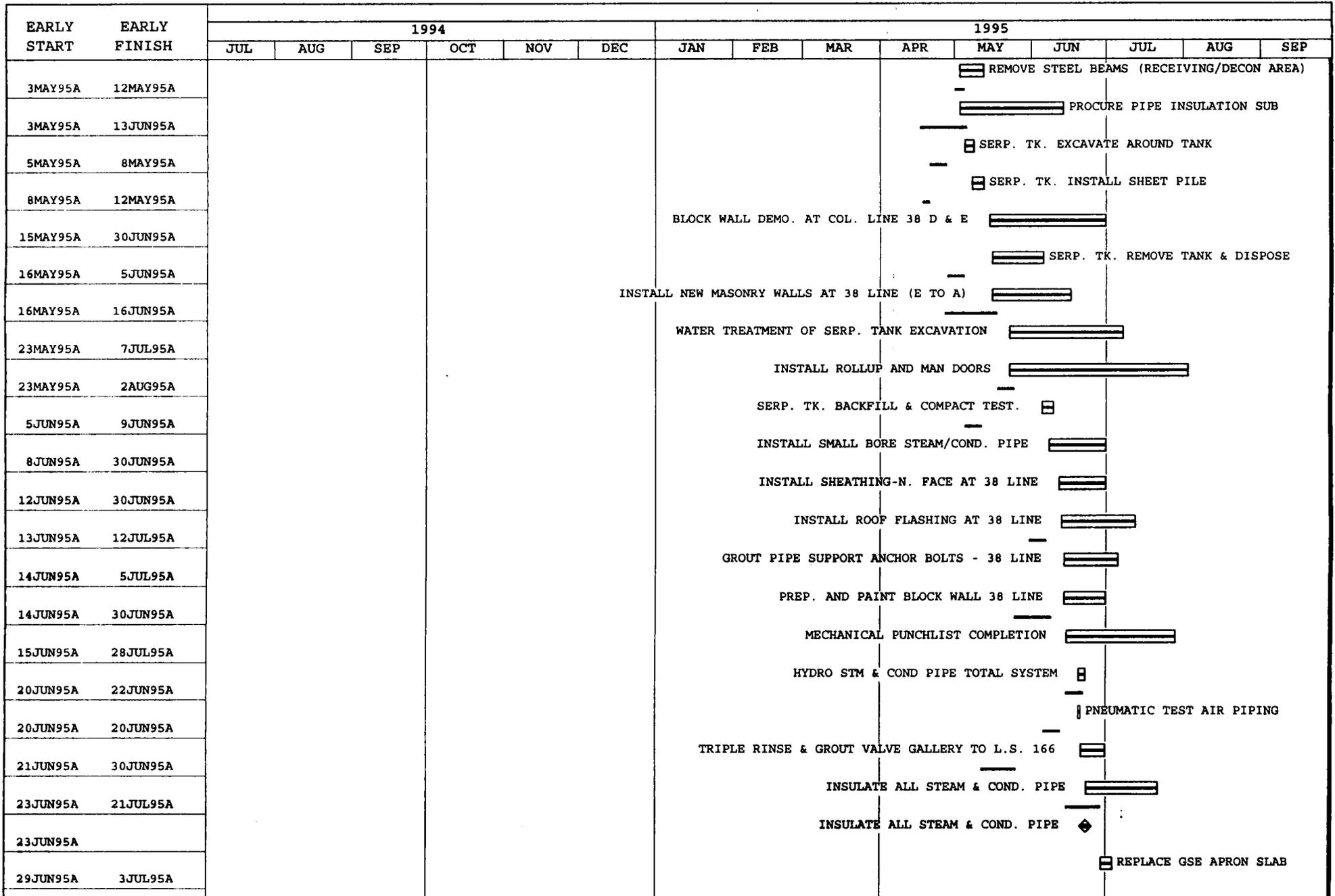
Activity Bar/Early Dates
Critical Activity
Progress Bar
Target Dates
Milestone/Flag Activity

CCMR

FOSTER WHEELER ENVIRONMENTAL CORP.
BLDG 101 DEMO SCHEDULE
CURRENT SCHEDULE VS. TARGET

Sheet 4 of 6

Date	Revision	Checked	Approved



Target Date 3APR95
 Plot Date 30NOV95
 Data Date 29SEP95
 Project Start 6JUL94
 Project Finish 29SEP95

Activity Bar/Early Dates
 Critical Activity
 Progress Bar
 Target Dates
 Milestone/Flag Activity

CCB

FOSTER WHEELER ENVIRONMENTAL CORP.
 BLDG 101 DEMO SCHEDULE
 CURRENT SCHEDULE VS. TARGET

Sheet 5 of 4

Date	Revision	Checked	Approved

EARLY START	EARLY FINISH	1994						1995										
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
10JUL95A	21AUG95A																INSTALL ELECTRIC SERVICE TO DOORS	=====
10JUL95A	19JUL95A																REMOVAL OF TEMPORARY N.E. CHROME ROOM WALL	=====
13JUL95A	21AUG95A																PAINT NEW DOORS	=====
17JUL95A	17AUG95A																FINISH COAT PIPE SUPPORTS	=====
17JUL95A	28JUL95A																DEMO/REMOVE/BACKFILL DEGREASER PIT	=====
19JUL95A	24JUL95A																INSTALL I-LINE & A-LINE ANCHORS	=====
20JUL95A	3AUG95A																TRIPLE RINSE & GROUT ADDITIONAL PIPE	=====
2AUG95A	29AUG95A																FINAL EQUIP. DECON & SITE DEMOBILIZATION	=====
10AUG95A	25AUG95A																REMOVE TANKER & LICON SHEDS	=====
10AUG95A	18AUG95A																BREAK OUT CONTAINMENT WALLS & PLUG DOWELS	=====
10AUG95A	24AUG95A																DECON/DEMOB TANKER #2	=====
18AUG95A	24AUG95A																DECON/DEMOB TANKER #1 & #3	=====
21AUG95A	23AUG95A																FINAL MECHANICAL SYSTEM WALKDOWN/INSP. W/ CLIENT	=====
21AUG95A	25AUG95A																FINALIZE PROJECT RECORD-TURNOVER TO CLIENT	=====
21AUG95A	25AUG95A																DEMOB OFFICE TRAILER	=====
23AUG95A	23AUG95A																FINAL ELECT. SYST. WALKDOWN/INSP. WITH CLIENT	=====
23AUG95A																	FINAL WALKDOWN/INSPECTION W/ CLIENT	=====

Target Date 3APR95
Plot Date 30NOV95
Date Date 29SEP95
Project Start 6JUL94
Project Finish 29SEP95

Activity Bar/Early Dates
Critical Activity
Progress Bar
Target Dates
Milestone/Flag Activity

◇ / #

CCME

FOSTER WHEELER ENVIRONMENTAL CORP.
BLDG 101 DEMO SCHEDULE
CURRENT SCHEDULE VS. TARGET

Sheet 6 of 6

Date	Revision	Checked	Approved

Attachment B

Contract Data Requirements List Delivery Log

Pages 31 - 34

**Contract N47408-92-D-3059
Contract Data Requirements List (CDRL) Delivery Log**

Date: 31-Jan-96

Del. Order No.	CDRL	Title of Data Item	Due Date	Qty	Addressee	Date Delivered	Transmittal Cover
0003	A001	Work Plan	7 May 93	1	NEESA, G. Fanning, Code 112E4	7 May 93	DD Form 250
					Ltr only - NAVFACCO, Code 2723		
				2	RPM, J. Murphy, SouthDiv		
				3	NTR, M. Wadel, ROICC NAS Jack'ville		
				4	Envir. Coordination, NAS Jack'ville		
Comments: Navy comments to be provided NLT 15 calendar days after receipt of Draft. Final submittal (incorporated comments) NLT 15 calendar days after Navy acceptance of response to comments.							
0003	A002	Site Health and Safety Plan	7 May 93	1	NEESA, G. Fanning, Code 112E4	7 May 93	DD Form 250
					Ltr only - NAVFACCO, Code 2723		
				2	RPM, J. Murphy, SouthDiv		
				3	NTR, M. Wadel, ROICC NAS Jack'ville		
				4	Envir. Coordination, NAS Jack'ville		
Comments: Navy comments to be provided NLT 15 calendar days after receipt of Draft. Final submittal (incorporated comments) NLT 15 calendar days after Navy acceptance of response to comments.							
0003	A003	Contract Quality Control Plan Addendum	7 May 93	1	NEESA, G. Fanning, Code 112E4	7 May 93	DD Form 250
					Ltr only - NAVFACCO, Code 2723		
				2	RPM, J. Murphy, SouthDiv		
				2	NTR, M. Wadel, ROICC NAS Jack'ville		
Comments: Navy comments to be provided NLT 15 calendar days after receipt of Draft. Final submittal (incorporated comments) NLT 15 calendar days after Navy acceptance of response to comments.							
0003	A004	Asbestos Notification		1	NTR, M. Wadel, ROICC NAS Jack'ville	5 May 93	Ltr Transmittal
				1	Envir. Coordination, NAS Jack'ville		
Comments: Submitted as required.							
0003	A005	MIS Reports	Monthly 21st each month	1	NEESA, G. Fanning, Code 112E4	May 1993 thru Present	Ltr Transmittal
				1	Ltr only - NAVFACCO, Code 2723		
				2	RPM, J. Murphy, SouthDiv		
				2	NTR, M. Wadel, ROICC NAS Jack'ville		

**Contract N47408-92-D-3059
Contract Data Requirements List (CDRL) Delivery Log**

Date: 31-Jan-96

Del. Order No.	CDRL	Title of Data Item	Due Date	Qty	Addressee	Date Delivered	Transmittal Cover
0003	A006	CQC/Status Meeting Minutes	Submitted weekly starting 1st week in field	1	NEESA, G. Fanning, Code 112E4	Included in Weekly Minute Notes	Ltr Transmittal
					Ltr only - NAVFACCO, Code 2723		
				1	RPM, J. Murphy, SouthDiv		
				1	NTR, M. Wadel, ROICC NAS Jack'ville		
			1	Envir. Coordination, NAS Jack'ville			
0003	A007	Network Analysis Diagram	20 days after award	1	NEESA, G. Fanning, Code 112E4	29 Apr 93	DD Form 250
				1	NAVFACCO, Code 2723		
				1	RPM, J. Murphy, SouthDiv		
				1	NTR, M. Wadel, ROICC NAS Jack'ville		
				1	Envir. Coordination, NAS Jack'ville		
0003	A008	As-Built Records	30 days after completion of field wk		Ltr only - NAVFACCO, Code 2723	1 Dec 95	DD Form 250
				2	RPM, J. Murphy, SouthDiv		
				1	NTR, M. Wadel, ROICC NAS Jack'ville		
0003	A009	Testing Laboratory Qualifications	30 days after award		Ltr only - NAVFACCO, Code 2723	Not Applicable	DD Form 250
				2	RPM, J. Murphy, SouthDiv		
				1	NTR, M. Wadel, ROICC NAS Jack'ville		
0003	A010	Daily CQC Reports	Submitted daily fm 1st day in field	1	NTR, M. Wadel, ROICC NAS Jack'ville	Included in Daily Logs	Ltr Transmittal
0003	A011	Submittal Status Log	Submitted by 21st of each month	1	NEESA, G. Fanning, Code 112E4	Included in Monthly Progress Report	Ltr Transmittal
				1	NAVFACCO, Code 2723		
				1	RPM, J. Murphy, SouthDiv		
				1	NTR, M. Wadel, ROICC NAS Jack'ville		

Contract N47408-92-D-3059
Contract Data Requirements List (CDRL) Delivery Log

Date: 31-Jan-96

Del. Order No.	CDRL	Title of Data Item	Due Date	Qty	Addressee	Date Delivered	Transmittal Cover
0003	A012	Hot Permit	Prior to field work	1	NTR, M. Wadel, ROICC NAS Jack'ville	As Required	Ltr Transmittal
0003	A013	Close Out Report	45 days after completion of field work		Ltr only - NEESA, G. Fanning		Ltr Transmittal
					Ltr only - NAVFACCO, Code 2723		
				3	RPM, J. Murphy, SouthDiv		
				3/10	NTR, M. Wadel, ROICC NAS Jack'ville		
Note: 3 copies of draft and final to SDIV; 3 copies draft & 10 copies final to ROICC.							
0003	A014	Updated work plan Addenda	10 days after award	1	NEESA, G. Fanning, Code 112E4	16 Jul 93	Ltr Transmittal
					Ltr only - NAVFACCO, Code 2723		
				3	RPM, J. Murphy, SouthDiv		
				3	NTR, M. Wadel, ROICC NAS Jack'ville		
				4	Envir. Coordination, NAS Jack'ville		
Comments: Final submittal (incorporated comments) NLT 10 working days after Navy acceptance of response to comments.							
0003	A015	Work Plan, SHSP CQC Addendum	31 Jul 94	1	NEESA, G. Fanning, Code 112E4	Several Addenda from May 93 thru Mar 95	DD Form 250
					Ltr only - NAVFACCO, Code 2723		
				2	RPM, J. Murphy, SouthDiv		
				3	NTR, M. Wadel, ROICC NAS Jack'ville		
				4	Envir. Coordination, NAS Jack'ville		
Comments: Final submittal (incorporated comments) NLT 10 working days after Navy acceptance of response to comments.							
0003	A016	Project Schedule	31 Jul 94	1	NEESA, G. Fanning, Code 112E4	Included in Monthly Progress Report	DD Form 250
				1	NAVFACCO, Code 2723		
				2	RPM, J. Murphy, SouthDiv		
				1	NTR, M. Wadel, ROICC NAS Jack'ville		
				1	Envir. Coordination, NAS Jack'ville		

Contract N47408-92-D-3059
 Contract Data Requirements List (CDRL) Delivery Log

Date: 31-Jan-96

Del. Order No.	CDRL	Title of Data Item	Due Date	Qty	Addressee	Date Delivered	Transmittal Cover
0003	A017	Hydrostatic Test Reports	within 3 days of test		Ltr only - NAVFACCO, Code 2723	24 Aug 95	DD Form 250
				1	RPM, J. Murphy, SouthDiv		
				1	NTR, M. Wadel, ROICC NAS Jack'ville		
0003	A018	Soil Compaction Test Results	within 3 days of test	1	RPM, J. Murphy, SouthDiv	24 Aug 95	Ltr Transmittal
				1	NTR, M. Wadel, ROICC NAS Jack'ville		