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Former Cerro Conduit Company Site, Syosset New York
Remediation of Contaminated Soils
Work Plan

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1.0 Introduction

1.1 Background

The former Cerro Conduit Company site is located on Robbins Lane and Miller Road, in the town of Oyster Bay, Nassau County New York State. The site was reportedly in agricultural use prior to the construction of the plant in the early 1950's. Cerro manufactured primarily steel electrical conduit, hot rolled copper rod and steel strip. The waste water generated during the manufacturing process was treated onsite and subsequently discharged under a SPDES permit to three, onsite recharge basins until 1982, when the site was connected to the Nassau County Sanitary Sewer System.

Sampling programs have been carried out at the site by New York State, the Avendt Group, Camp Dresser & McKee, and Eder Associates Consulting Engineers, Inc (Eder). The results confirmed the presence of contaminants in the soil matrix at a number of locations, however, ground water samples show no signs of contamination from the site's industrial activities.

Eder conducted a risk assessment study to evauate potential health impacts associated with exposure to onsite soil. This risk assessment study concluded that exposure to onsite soil does not pose any adverse health impacts under the present or future, residential or industrial use scenarios. This study also determined that the target cleanup concentrations for copper in soil would be 5,200 mg/kg, based on future residential use. In accordance with New York State Department of Health approval of the risk assessment, and as agreed at a May 19, 1992 meeting with New York State Department of Environmental Conservation, removal of soil containing copper concentrations greater than the 5,200 mg/kg target cleanup level would satisfy Cerro Conduit Company's obligations for site remediation in accordance with the consent order (Index No. 1-30-002) between NYSDEC and Cerro Conduit Company.

Based upon all the sampling, there are only four isolated areas that exceed the 5,200 mg/kg target clean-up concentration based on future residential use. These areas, shown in the site plan (Sheet 1), are as follows:

- Basin No. 2 - Headwall Dual Chamber Detention Box
- Basin No. 2 - Partial Floor section
- Basin No. 3 - Partial Floor section
- Adjacent the Copper Pond and Pump House

1.2 Objectives

This work plan, prepared by Camp Dresser & McKee for the Cerro Conduit Company, is in accordance with paragraph X, page 6 of the consent order between NYSDEC and the Cerro Conduit Company.

The objective of this work plan is to outline the method to be followed for the removal and disposal of soils in excess of the 5200 mg/kg copper target clean-up concentration at the four isolated areas described above. The sampling protocol is designed to demonstrate the removal of soil exceeding the target concentrations.

2.0 Excavation Plan

2.1 Limits of Excavation

2.1.1 Copper Pond and Pump House

This area is located 3′ south of the copper pond and pump House, and is defined as a 6′ x 6′ square, centrally located around boring 109 (see plan view drawing sheet 1). Excavation will be to a depth of approximately 3-feet. This area was identified from samples collected and analyzed by the Avendt Group. The peak copper concentration observed in these samples was 41,400 mg/kg.

Based on this information the estimated volume of soil to be removed is 4 cubic yards.

2.1.2 Basin No. 2

Basin No. 2 (the middle Basin) has two areas to be excavated. The first is a dual chamber detention box located below the outfall (see figure 2-1), which shall be hand excavated until broom clean. Field investigations indicate a maximum depth of 2-feet in both chambers. This area was identified from samples collected and analyzed during the risk assessment prepared by Eder Associates. A peak copper concentration of 13,000 mg/kg was observed in these samples.

Based on this information the estimated volume of soil to be removed is 17.5 cubic yards.

The second location is the basin floor along the western slope between borings 201 and 202 (see plan view drawing sheet 1) and is defined as a 6′ x 6′ area. Excavation will be to a depth of approximately 3-feet. This area was identified from samples collected and analyzed by the NYSDEC. A peak copper concentration of 8710 mg/kg was observed in these samples.

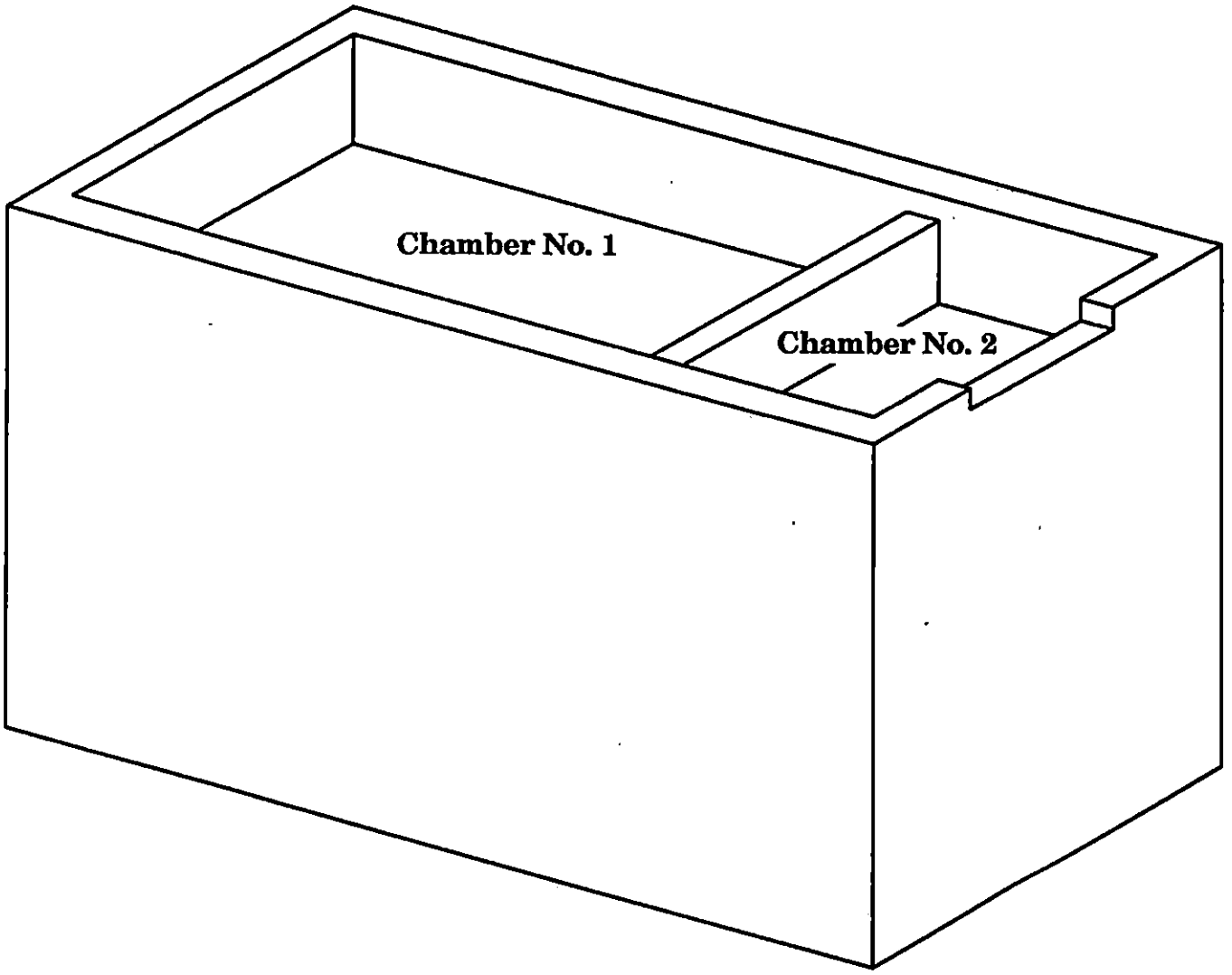

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Figure 2-1

Dual Chamber Detention Box

Former Cerro Conduit Company, Syosset, New York

Based on this information the estimated volume of soil to be removed is 4 cubic yards.

2.1.3 Basin No. 3

The most westerly basin is to have the soil removed from the basin floor in a 12′ x 12′ square, centrally located around boring 301 to a depth of approximately 12-feet (see plan view drawing sheet 1 and figure 2-2). This area was identified from samples collected and analyzed by the Avendt Group, and duplicated by CDM. A peak copper concentration of 10,000 mg/kg was observed in these samples.

Based on this information, the estimated volume of soil to be removed is 115 cubic yards.

The surface of the excavation will be properly sloped to provide a stable condition for removal of the contaminated soil.

The open excavation will be protected overnight with wood shoring.

2.2 Excavation Procedures

All excavated materials will be directly loaded into a double lined tractor trailer by the excavator, or manually transferred into a front end loader which will directly load a double lined tractor trailer. The trailer will be covered before it leaves the site.

No material will be stockpiled on the site.

2.3 Additional Excavation

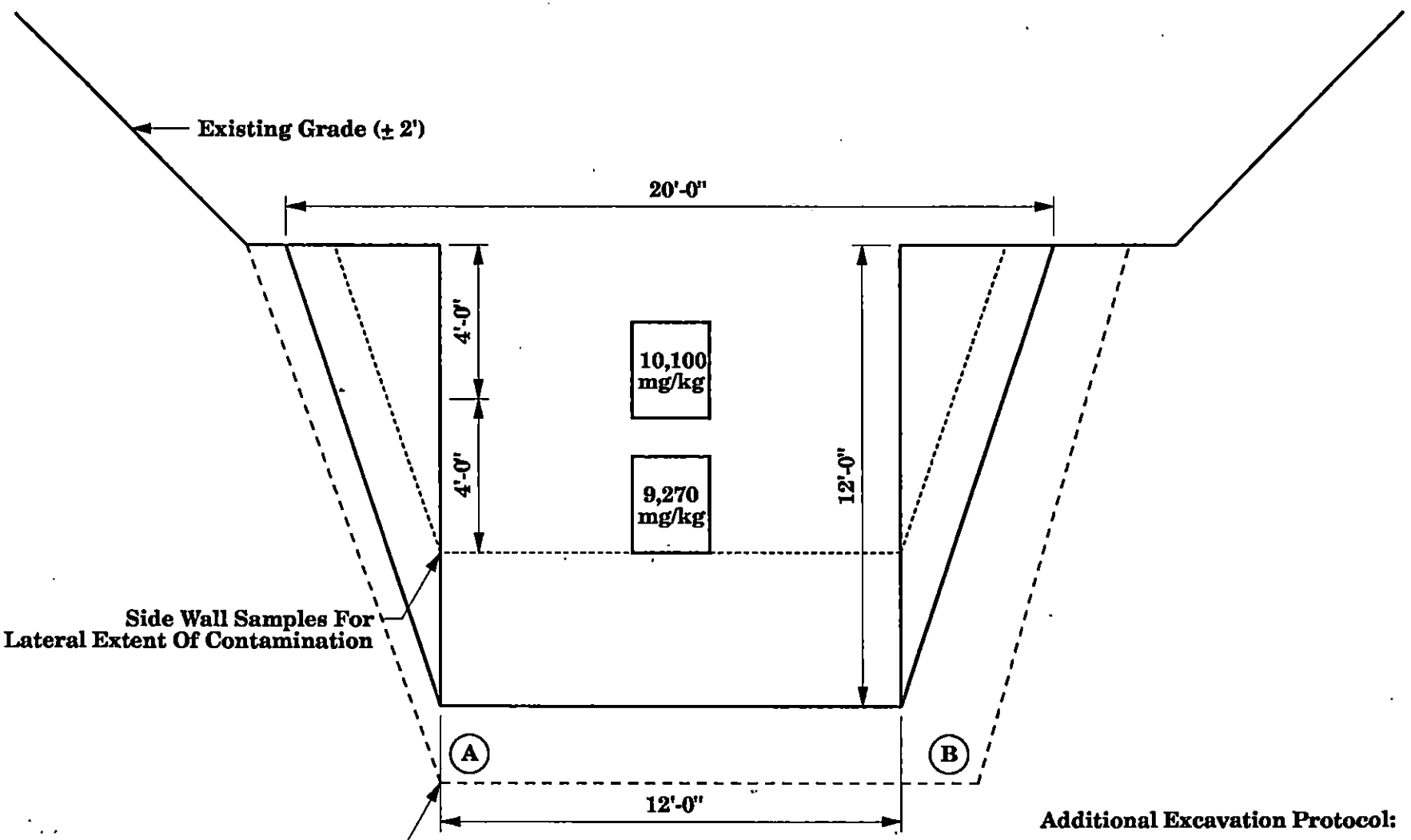
Additional excavation will be required if any sample has reported copper concentration in excess of 5200 mg/kg. Additional 2-feet increments will be excavated. Final depth and area of additional excavation will be determined by CDM's resident engineer and confirmed by an additional sample analysis.

2.4 Completion of Excavation

The excavation will be considered complete upon the recommendation of the Engineer (CDM) and the NYSDEC when laboratory analysis results show less than the target cleanup copper concentration of 5200 mg/kg for each area.

2.5 Demobilization

No equipment will be removed from site until all lab results have been reviewed and compared to the clean up criteria by CDM.



Not To Scale

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Figure 2-2

Basin 3 Excavation

Former Cerro Conduit [illegible] New York

All equipment utilized will be cleaned with potable water prior to its removal from the site. Any associated wastes generated by decontamination procedures will be properly disposed of offsite with the waste material. Wash water generated from the decontamination of heavy equipment will be collected, placed in appropriate containers and properly disposed of off-site.

3.0 Sampling Plan

The four locations have been identified by prior sampling programs, and represent the only locations that have been identified where soil or sludge material is present with copper concentrations in excess of 5200 mg/kg. No additional sampling is anticipated to further define the area of contamination. The extent of excavation has been determined based on existing soil data, and is expected to be sufficient to remove all soil in excess of the target concentration. Post-excavation sampling with a 24-hour turn-around time will be used to determine if any additional soil must be removed. If all samples have less than 5200 mg/kg copper, the excavation will be declared complete. If further excavation is needed, the same post-excavation sampling protocol will be followed.

3.1 Lab requirements

A New York State approved laboratory for soils analysis will be used. The analysis will be for total copper using method 701 EPA SW-846

Results from the laboratory should be received within 24 hours from delivery of the samples.

3.2 Sampling Locations

Sampling locations are listed below and summarized in table 3-1.

3.2.1 Copper Pond Pump House

Final grab samples will be taken at the center of the excavation floor, and at the floor depth at the mid-point of each side wall. Samples will be from a depth of 3'-4' from existing grade.

3.2.2 Basin No. 2

Headwall Dual Chamber Detention Box

The Risk Assessment by Eder Associates identifies the sludge/soil material to have a copper concentration of 13,000 mg/kg. All material will be removed and no sampling will be needed.

TABLE 3-1

SAMPLING LOCATIONS

Location	I.D.	Type	Description	Depth
Copper Pond/	1A-1	Grab	Middle of North Wall	3'-4'
Pump House	1A-2	Grab	Middle of South Wall	3'-4'
	1A-3	Grab	Middle of East Wall	3'-4'
	1A-4	Grab	Middle of West Wall	3'-4'
	1A-5	Grab	Center of Floor	3'-4'
	1B-__	Grab	Additional Samples if Needed	_____
Basin No.2				
Detention Box	None			
Floor @ West Wall	2A-1	Grab	Middle of North Wall	3'-4'
	2A-2	Grab	Middle of South Wall	3'-4'
	2A-3	Grab	Middle of East Wall	3'-4'
	2A-4	Grab	Middle of West Wall	3'-4'
	2A-5	Grab	Center of Floor	3'-4'
	2B-__	Grab	Additional Samples if Needed	_____
Basin No. 3	3A-1	Grab	Middle of North Wall	8'-9'
	3A-2	Grab	Middle of South Wall	8'-9'
	3A-3	Grab	Middle of East Wall	8'-9'
	3A-4	Grab	Middle of West Wall	8'-9'
	3B-1	Grab	Middle of North Wall	12'-13'
	3B-2	Grab	Middle of South Wall	12'-13'
	3B-3	Grab	Middle of East Wall	12'-13'
	3B-4	Grab	Middle of West Wall	12'-13'
	3B-5	Grab	Center of Floor	12'-13'
	3C-__	Grab	Additional Samples if Needed	_____

(WP113/2)

Basin Floor

Final samples will be taken at the center of the excavation floor, and at the floor depth at the mid-point of each side wall. Samples will be from a depth of 3'-4' from existing grade.

3.2.3 Basin No. 3

Grab samples will be taken from the floor of the excavation at the middle of each wall from an intermediate excavated depth of 7'-8' from existing grade. This depth represents the depth of greatest contamination, and will serve to indicate whether the lateral extent of the excavation is sufficient. The samples will be a grab type obtained with the excavator. No personnel will be permitted down in the excavation.

Grab samples will also be collected at the final excavation depth of 12 feet from the existing grade at the middle of each wall, and will include an additional sample from the center of the excavation floor. Samples will be obtained with the excavator. No personnel will be permitted down in the excavation.

3.3 Additional Sampling

The same post-excavation sampling protocol will be followed if additional excavation is required. Additional sampling locations will be at the identical horizontal coordinates of previous sample locations but at the minimum additional 2-feet depth.

4.0 BACKFILL

An amount equal to that which was excavated will be replaced. The backfill material will be clean sand containing no stumps or construction debris.

5.0 DISPOSAL

All material leaving the site will have a manifest.

A composite sample of the material to be excavated will be sent to a subtitle D landfill to confirm that it can be accepted. The composite will be weighted to duplicate the volume ratio of each area excavated.

If it is not acceptable at this time, or at any time during the course of the remediation, the material will be sent to a secure hazardous waste landfill. Pre-approval of the accepting landfill is required prior to the start of excavation.

6.0 FINAL SITE REPORT

Upon completion of the remediation field work, a Final Site Report will be prepared and submitted to the NYSDEC. The report will include the following:

- o Overall Project Discussion
  - Chronological order of events
  - Equipment/Manpower
  - Observations
  - Excavation/Backfilled Quantities
- o Laboratory Results
  - Final locations
  - Chain of custodies
  - Final analysis
  - Comparison with pre-excavation results
- o Disposal Documentation
  - Facility location
  - Manifests
  - Weigh slips
  - Facility acceptance
- o Cost Summary
- o Project Evaluation
  - Fulfillment of consent order requirements

7.0 COST ESTIMATE

A preliminary cost estimate has been provided based on a potential contractor's quotation. This cost may vary by ± 15 percent.

	Quantity	Units	Cost Item	Cost Total
Mobilization/Demobilization		L.S.		$ 7,954.00
Site Preparation		L.S.		$ 1,503.00
Excavation				
Copper Pond	4	CY	$653.63/Cy	$ 2,614.50
Basin 2	4	CY	$653.63/Cy	$ 2,614.50
Headwall	17.5	CY	$597.66/Cy	$10,459.00
Basin 3	115	CY	$ 76.88/Cy	$ 8,840.00
Disposal				
Secure Landfill	220	Tons	$220/Ton	$48,400.00
Transportation	10	Trailers	$1,742.00	$17,420.00
Subtotal				$65,820.00
or				or
Title D Landfill (includes transportation)			$190/Ton	$41,800.00
Sampling	19	Each	$25	$ 475.00
Backfill	220	Tons	$10/Ton	$ 2200.00
		Total Cost		$102,480.00
				or
				$ 78,460.00

8.0 HEALTH AND SAFETY

A Health and Safety plan has been developed by CDM for CDM personnel and is attached as Appendix D.

The contractor is expected to provide a Health and Safety plan for their personnel which will include level C equipment in the work zone. Level C equipment shall at a minimum include:

- Protective clothing (coveralls)
- Air purifying respirator
- Goggles
- Hard hat
- Steel toed and shanked boots and chemical resistant over boots
- Gloves and chemical resistant over gloves

9.0 PROJECT SCHEDULE

A Notice to Proceed will be issued to the contractor immediately upon approval of the Work Plan by the NYSDEC. The contractor will then have two weeks to mobilize his equipment. The remediation will commence on the third week and continue through the fourth week. Only five work days are actually required for the remediation. The other five days are for mobilization/demobilization and possible weather delays. The Final Report will be prepared and issued by the end of the sixth week.

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Appendix A

Chain of Custody Procedures

SAMPLE HANDLING AND ANALYSES

This section addresses the field team's responsibilities to prepare, handle, and ship samples collected for offsite laboratory analysis.

Chain-of-Custody

It is imperative that an accurate record of sample collection, transport, analysis, and disposal be maintained and documented. Therefore, chain-of-custody procedures will be instituted and followed throughout the sampling program.

Chain-of-custody procedures include field custody, laboratory custody, and the development of evidence files. The National Enforcement Investigation Center (NEIC) of the U.S. Environmental Protection Agency (EPA) states that custody of evidence, by definition, must be:

- In actual physical possession.
- In view after being in physical possession.
- In a locked repository.
- In a secure, restricted area.

It is necessary to establish documentation to trace sample possession from the time of collection until disposal. Field custody requirements include the following:

- As few people as possible shall handle the samples(s).
- The sample collection personnel shall be responsible for the care and custody of the samples until they are transferred or dispatched properly.

Samples shall be stored only by those individuals or facilities designated on the chain-of-custody form. The following procedures will be used to ensure proper transfer documentation:

- Samples shall be accompanied by a chain-of-custody record at all times.
- Samples shall be packed properly for shipment so that bottles will not dislodge and/or break during shipment.
- Shipped samples shall contain separate custody records (one for field laboratory, one for samples hand delivered to offsite laboratory, and one for samples shipped offsite).
- Samples shall be shipped via a 24-hour delivery service, when required, to ensure holding times are not exceeded.
- Method of shipment, courier name(s), and other pertinent information shall be recorded on the chain-of-custody form

including those special handling procedures as available by the delivery service during shipment of the samples.

- o When samples are split with an outside source or government agency, the split shall be noted.
- o If either party refuses a split sample, the refusal shall be noted and signed by both parties.
- o All records pertaining to the shipment of a sample shall be retained (freight bills, post office receipts, and bills of lading).

The laboratory shall not accept samples for analysis without a correctly prepared Chain-of-Custody Form. The laboratory shall be responsible for maintaining chain-of-custody of the sample(s) from time of receipt to disposal. The laboratory shall use all techniques specified by the EPA Contract Laboratory Program (CLP) to ensure the integrity of all samples.

(832)

Appendix B

Health and Safety Plan

Appendix B

Health and Safety Plan

HEALTH AND SAFETY PLAN FORM

CDM Health and Safety Program

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CAMP DRESSER & McKEE INC.

PROJECT DOCUMENT #: _____

PROJECT NAME Cerro Conduit Company

JOBSITE ADDRESS Robins Lane
Syosset, New York
11791

PROJECT # 5308-1-RT-Plan

REGION Northwest

CLIENT The Mormon Group

CLIENT CONTACT Ray Arendt

CLIENT CONTACT PHONE # _____

( ) AMENDMENT TO EXISTING APPROVED H&SP?

( ) H&SP AMENDMENT NUMBER? _____

( ) DATE EXISTING H&SP WAS APPROVED? _____

OBJECTIVES OF FIELD WORK:

Removal of approx 125 CY of soil with copper concentrations ≥ 5200 mg/kg

TYPE: *Check as many as applicable*

Active	( )	Landfill	( )	Unknown	( )
Inactive	(X)	Uncontrolled	( )	Military	( )
Secure	(X)	Industrial	(X)	Other (*specify*)	
Unsecure	( )	Recovery	( )		
Enclosed space	( )	Well Field	( )		

All requirements described in the CDM Health and Safety Assurance Manual for Hazardous Waste Operations are incorporated in this health and safety plan by reference.

DESCRIPTION AND FEATURES: *Include principal operations and unusual features (containers, buildings, dikes, power lines, hills, slopes, rivers, etc.)*

The former Cerro Conduit Company is an inactive factory bordered by Miller Rd to the South, Robins Lane to the west, the LIRR to the North, and the Town of Oyster Bay Maintenance Facility and the inactive Syosset Landfill to the East. There are no utilities presently on site. Three Recharge basins are located to the South of the buildings separated by on site waste water treatment tanks and an inactive water tower

SURROUNDING POPULATION: ( )Residential ( ) Industrial (X) Commercial ( ) Rural ( ) Urban OTHER:

Revised Feb 10, 1992

HEALTH AND SAFETY PLAN FORM

CDM Health and Safety Program

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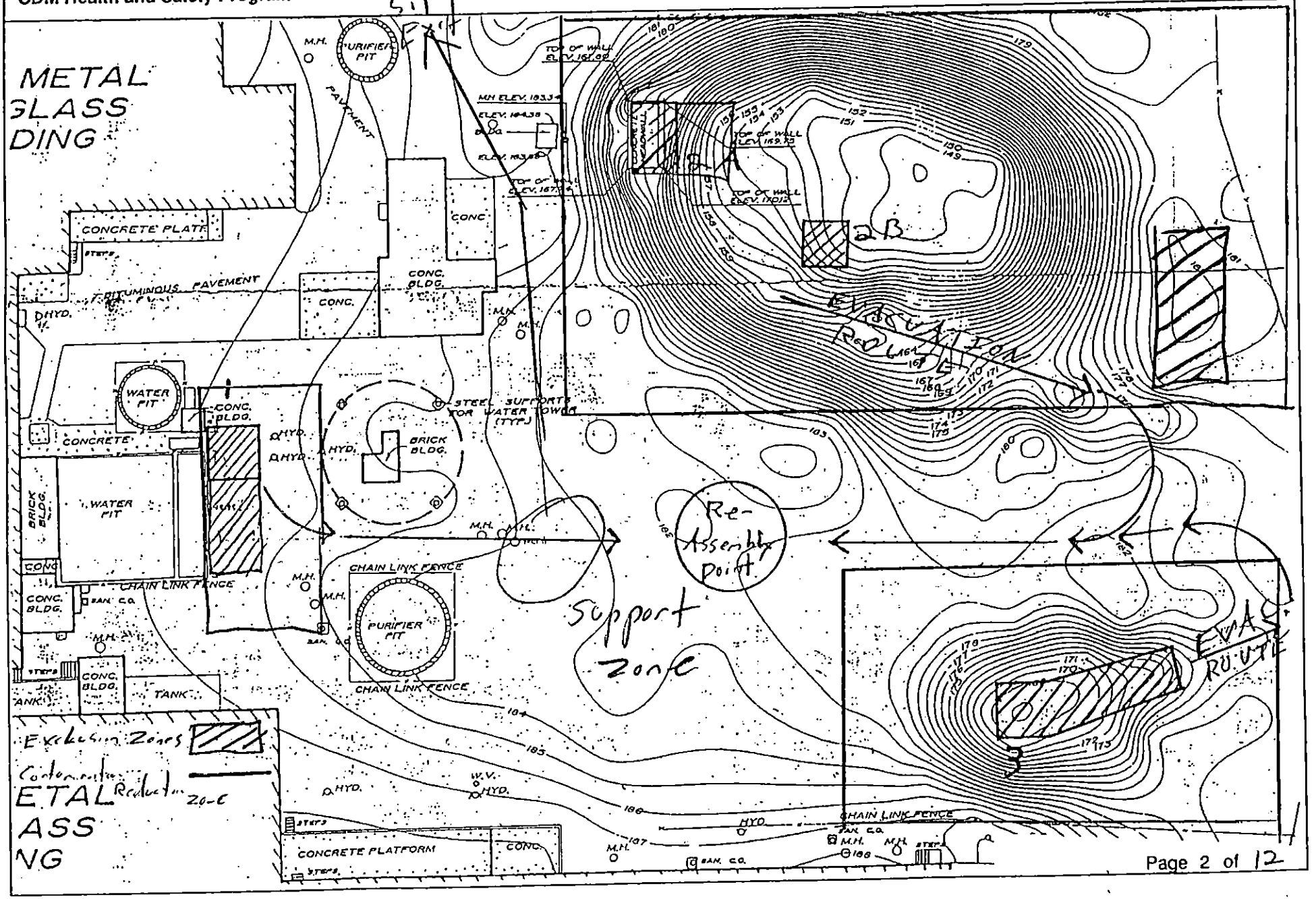
PROJECT DOCUMENT #: _____



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PROJECT DOCUMENT #: _____

HISTORY: *Summarize below. Include complaints from public, previous agency actions, known exposures or injuries, etc.*

The site was used for agricultural use prior to the early 1950's when Cerro constructed the plant to manufacture steel electrical conduit, hot rolled copper rod and steel strip. The plant closed in 1986 and is listed on the NYSDEC Registry of Inactive Hazardous Waste Disposal Site" (site # 130021) as a class 4 site. An order of consent requires them to undertake a sampling program and remediation plan. A Risk Assessment by Ecler Associates Identified a Target cleanup concentration of 5200 mg/kg

WASTE TYPES: ( ) Liquid (X) Solid ( ) Sludge ( ) Gas ( ) Unknown ( ) Other *specify:*

WASTE CHARACTERISTICS: *Check as many as applicable.*

( ) Corrosive ( ) Flammable ( ) Radioactive
( ) Toxic ( ) Volatile ( ) Reactive
( ) Inert Gas ( ) Unknown ( ) Other *specify:*

WORK ZONES: *Describe the Exclusion, Contamination Reduction, and Support Zones in terms on-site personnel will recognize*

The exclusion zones will be the four excavation locations and associated trailer loading locations. The contamination reduction zones will be a minimum of 20' outside of each Recharge Basin, loading location or excavation. The support zone is the remaining site with a central location for an evacuation Reassembly point and site Exit.

HAZARDS OF CONCERN:

(X) Heat Stress *attach guidelines*
( ) Cold Stress *attach guidelines*
( ) Explosive/Flammable
( ) Oxygen Deficient
( ) Radiological
( ) Biological
(X) Other - *specify* unsupported sidewalls during excavation
( ) Noise
(X) Inorganic Chemicals
( ) Organic Chemicals
( ) Motorized Traffic
(X) Heavy Machinery
( ) Slips, Trips, & Falls

FACILITY'S DISPOSAL METHODS AND PRACTICES: *Summarize below.*

The factory discharged treated wastewater into the three on site Recharge Basins until being connected to the Nassau County Sanitary Sewer System in 1982.

HEALTH AND SAFETY PLAN FORM

CDM Health and Safety Program

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PROJECT DOCUMENT #: _____

HAZARDOUS MATERIAL SUMMARY: *Circle waste type and estimate amounts by category*

CHEMICALS: Amount/Units:	SOLIDS: Amount/Units:	SLUDGES: Amount/Units:	SOLVENTS: Amount/Units:	OILS: Amount/Units:	OTHER: Amount/Units:
Acids	Flyash	Paints	Halogenated (chloro, bromo) Solvents	Oily Wastes	Laboratory
Pickling Liquors	Mine or Mill Tailings	Pigments	Hydrocarbons	Gasoline	Pharmaceutical
Caustics	Asbestos	Metals Sludges	Alcohols	Diesel Oil	Hospital
Pesticides	Ferrous Smelter	POTW Sludge	Ketones	Lubricants	Radiological
Dyes / Inks	Non-Ferrous Smelter	Aluminum	Esters	PCBs	Municipal
Cyanides	Metals	Distillation Bottoms	Ethers	Polynuclear Aromatics	Construction
Phenols	Other *specify:* 125 CY of Copper + Cyanide contaminated Sandy Soil	Other *specify:*	Other *specify:*	Other *specify:*	Munitions
Halogens					Other *specify:*
Dioxins					
Other *specify:*					

OVERALL HAZARD EVALUATION: ( ) High ( ) Medium (X) Low ( ) Unknown *(Where tasks have different hazards, evaluate each)*

JUSTIFICATION: Cyanide and Copper in soil Matrix are not readily airborn

FIRE/EXPLOSION POTENTIAL: ( ) High ( ) Medium (X) Low ( ) Unknown

BACKGROUND REVIEW: (X) COMPLETE ( ) INCOMPLETE Risk Assessment by Ecler Associates

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KNOWN CONTAMINANTS	HIGHEST OBSERVED CONCENTRATION *(specify units and media)*	PEL/TLV *ppm or mg/m3 (specify)*	IDLH *ppm or mg/m3 (specify)*	WARNING CONCENTRATION *(in ppm)*	SYMPTOMS & EFFECTS OF ACUTE EXPOSURE	PHOTO IONIZATION POTENTIAL
Copper	41,500 mg/kg in soil	1 mg/m3	NA	U	irritation Mucous Membrane pharynx nasal perforation eye irritation metal taste dermatitis	U
Cyanide	96 mg/kg in soil	5 mg/m3	50 mg/m3	U	Asphyxia & Death can occur weakness headache confusion Nausea and Vomiting. Incoordination Rate Respiratory slow gasping Respiration Eye and Skin Irritation	U

NA = Not Available NE = None Established U = Unknown

S = Soil SW = Surface Water T = Tailings W = Waste TK = Tanks SD = Sediment
A = Air GW = Groundwater S L = Sludge D = Drums L = Lagoon OFF = Off-site

HEALTH AND SAFETY PLAN FORM

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PROJECT DOCUMENT #: _____

TASK DESCRIPTION/SPECIFIC TECHNIQUE/SITE LOCATION (attach additional sheets as necessary)	TYPE	Primary	Contingency	HAZARD & SCHEDULE
1 Excavation & Inspection inside the exclusion zone	(Intrusive) / Non-Intrusive	A B (C) D / Modified	A B C D / Exit Area	Hi Med Low / September 92
2 Excavation Inspection outside the exclusion zone	Intrusive / Non-Intrusive	A B C (D) / Modified	A B C D / Exit Area	Hi Med Low / September 92
3	Intrusive / Non-Intrusive	A B C D / Modified	A B C D / Exit Area	Hi Med Low
4	Intrusive / Non-Intrusive	A B C D / Modified	A B C D / Exit Area	Hi Med Low
5	Intrusive / Non-Intrusive	A B C D / Modified	A B C D / Exit Area	Hi Med Low
6	Intrusive / Non-Intrusive	A B C D / Modified	A B C D / Exit Area	Hi Med Low

PERSONNEL AND RESPONSIBLITIES

NAME	FIRM/DIVISION	CDM HEALTH CLEARANCE	RESPONSIBILITIES	On site?
Mark Mamoine	CDM/Nor	***	Project or Task Manager	No 1-2-3-4
Robert T Burns	CDM/Nor	C-T	Site Health and Safety Coordinator	(1) 2-3-4
			Alternate Site H & S Coordinator	1-2-3-4
				1-2-3-4
				1-2-3-4
				1-2-3-4

HEALTH AND SAFETY PLAN FORM

CDM Health and Safety Program

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PROJECT DOCUMENT #: _____

PROTECTIVE EQUIPMENT: *Specify by task. Indicate type and/or material, as necessary. Group tasks if possible. Use copies of this sheet if needed.*

BLOCK A

TASKS: 1-2-3-4-5-6-7-8-9-10
LEVEL: (1) A-B-C-D-Modified ( ) Contingency
(X) Primary

Respiratory: ( ) Not needed
( ) SCBA, Airline: _____
( ) APR: _____
(X) Cartridge: _____
( ) Escape Mask: _____
( ) Other: _____

Head and Eye: ( ) Not needed
( ) Safety Glasses: _____
( ) Face Shield: _____
( ) Goggles: _____
(X) Hard Hat: _____
( ) Other: _____

Boots: ( ) Not Needed
(X) Steel -Toe ( ) Steel Shank
( ) Rubber ( ) Leather
(X) Overboots: _____

Prot. Clothing ( ) Not needed
( ) Encapsulated Suit: _____
( ) Splash Suit: _____
( ) Apron: _____
(X) Tyvek Coverall
( ) Saranex Coverall
(X) Cloth Coverall: _____
( ) Other: _____

Gloves: ( ) Not Needed
(X) Undergloves: _____
(X) Gloves: _____
( ) Overgloves: _____

Other: *Specify below*

BLOCK B

TASKS: 1-2-3-4-5-6-7-8-9-10
LEVEL: (2) A-B-C-D-Modified ( ) Contingency
(X) Primary

Respiratory: (X) Not needed
( ) SCBA, Airline: _____
( ) APR: _____
( ) Cartridge: _____
( ) Escape Mask: _____
( ) Other: _____

Head and Eye: ( ) Not needed
(X) Safety Glasses: _____
( ) Face Shield: _____
( ) Goggles: _____
(X) Hard Hat: _____
( ) Other: _____

Boots: ( ) Not Needed
(X) Steel-Toe ( ) Steel Shank
( ) Rubber ( ) Leather
( ) Overboots: _____

Prot. Clothing ( ) Not needed
( ) Encapsulated Suit: _____
( ) Splash Suit: _____
( ) Apron: _____
( ) Tyvek Coverall
( ) Saranex Coverall
( ) Cloth Coverall: _____
( ) Other: _____

Gloves: ( ) Not Needed
( ) Undergloves: _____
( ) Gloves: _____
( ) Overgloves: _____

Other: *Specify below*

BLOCK C

TASKS: 1-2-3-4-5-6-7-8-9-10
LEVEL: ( ) A-B-C-D-Modified ( ) Contingency
( ) Primary

Respiratory: ( ) Not needed
( ) SCBA, Airline: _____
( ) APR: _____
( ) Cartridge: _____
( ) Escape Mask: _____
( ) Other: _____

Head and Eye: ( ) Not needed
( ) Safety Glasses: _____
( ) Face Shield: _____
( ) Goggles: _____
( ) Hard Hat: _____
( ) Other: _____

Boots: ( ) Not Needed
( ) Steel-Toe ( ) Steel Shank
( ) Rubber ( ) Leather
( ) Overboots: _____

Prot. Clothing ( ) Not needed
( ) Encapsulated Suit: _____
( ) Splash Suit: _____
( ) Apron: _____
( ) Tyvek Coverall
( ) Saranex Coverall
( ) Cloth Coverall: _____
( ) Other: _____

Gloves: ( ) Not Needed
( ) Undergloves: _____
( ) Gloves: _____
( ) Overgloves: _____

Other: *Specify below*

BLOCK D

TASKS: 1-2-3-4-5-6-7-8-9-10
LEVEL: ( ) A-B-C-D-Modified ( ) Contingency
( ) Primary

Respiratory: ( ) Not needed
( ) SCBA, Airline: _____
( ) APR: _____
( ) Cartridge: _____
( ) Escape Mask: _____
( ) Other: _____

Head and Eye: ( ) Not needed
( ) Safety Glasses: _____
( ) Face Shield: _____
( ) Goggles: _____
( ) Hard Hat: _____
( ) Other: _____

Boots:( ) Not Needed
( ) Steel-Toe ( ) Steel Shank
( ) Rubber ( ) Leather
( ) Overboots: _____

Prot. Clothing ( ) Not needed
( ) Encapsulated Suit: _____
( ) Splash Suit: _____
( ) Apron: _____
( ) Tyvek Coverall
( ) Saranex Coverall
( ) Cloth Coverall: _____
( ) Other: _____

Gloves: ( ) Not Needed
( ) Undergloves: _____
( ) Gloves: _____
( ) Overgloves: _____

Other: *Specify belo*

HEALTH AND SAFETY PLAN FORM

CDM Health and Safety Program

This document is for the exclusive use of CDM and its subcontractors

CAMP DRESSER & McKEE INC.

PROJECT DOCUMENT #: _____

MONITORING EQUIPMENT: *Specify by task. Indicate type as necessary. Attach additional sheets if needed.*

INSTRUMENT	TASK	ACTION GUIDELINES		COMMENTS *(When and how will you use the monitor?)*
Combustible Gas Indicator	1-2-3-4-5-6-7-8	0-10%LEL 10-25%LEL >25%LEL 21.0%O_2 <21.0%O_2 <19.5%O_2	*No explosion hazard.* *Potential explosion hazard;notify SHSC.* *Explosion hazard; interupt task/evacuate* *Oxygen normal.* *Oxygen Deficient;notify SHSC.* *Interrupt task/evacuate*	(X) Not Needed
Radiation Survey Meter	(1)-2-3-4-5-6-7-8	3 x Background: >2mR/hr:	*Notify HSM.* *Establish REZ.*	start of Each Excavation ( ) Not Needed
Photoionization Detector _____ eV Lamp Type_____	1-2-3-4-5-6-7-8	*Specify:*		(X) Not Needed
Flame Ionization Detector Type_____	1-2-3-4-5-6-7-8	*Specify:*		(X) Not Needed
Detector Tubes/ Monitox Type_____ Type_____	1-2-3-4-5-6-7-8	*Specify:*		(X) Not Needed
Respirable Dust Monitor Type Visible Type_____	(1)-2-3-4-5-6-7-8	*Specify:* IF Team sees visible concentrations of dust in air or dry windy conditions in or near site they will don respirators or leave site		continous during Excavation ( ) Not Needed
Other *Specify:*	1-2-3-4-5-6-7-8	*Specify:*		

DECONTAMINATION PROCEDURES

ATTACH SITE MAP INDICATING EXCLUSION, DECONTAMINATION, AND SUPPORT ZONES

Personnel Decontamination

Summarize below and\or attach diagram

Team members will remove protective clothing in the order on page 9b.

A personnel decon station will be established for each work area within the site. All personnel decon gear will be temporarily stored in drums on site.

Team members will wash hands and face prior to leaving site.

( ) Not needed

Sampling Equipment Decontamination

Summarize below and\or attach diagram

The required decontamination procedure for all sampling equipment is:

a) Wash and scrub with low phosphate detergent

b) Tap water rinse

c) Methanol rinse (pesticide grade or better)

d) Deionized, distilled water rinse

e) Air dry, and

f) Wrap in aluminum foil for transport.

Tap water may be used from any municipal water treatment system.

( ) Not needed

Heavy Equipment Decontamination

Summarize below and\or attach diagram

A designated decon area will be established for ~~drilling and~~ heavy equipment. ~~All drilling equipment and well casings must be steam cleaned before use and the drilling equipment must be cleaned between boreholes.~~ All types of sampling equipment, ~~such as split spoons,~~ should be cleaned with soap and deionized water or steam cleaned before and between sampling locations and sampling intervals.

Heavy equipment decontamination will not occur near the personnel decontamination area.

( ) Not needed

Containment and Disposal Method

Disposable protective clothing will be double bagged. ~~If material tests hazardous, CDM (on behalf of the Town) will arrange for disposal through a commercial TSDF. Otherwise, Town will dispose of the material in Smithtown Landfill.~~

( ) Not needed

Containment and Disposal Method

All decon waste water will be allowed to discharge onto the ground. Methanol will be placed in an open container and allowed to evaporate.

( ) Not needed

Containment and Disposal Method

All decon waste water will be allowed to discharge onto the ground.

( ) Not needed

Decontamination Procedures

Protective clothing worn in the exclusion or hot zones will be removed in a sequential manner that controls contaminant travel into currently uncontaminated areas.

When workers wear level D, the sequence of removal will be as follows:

- Equipment drop
- Hard hat removal
- Boot cover removal
- Outer glove removal
- Optional coverall removal
- Inner glove removal
- Face and hands wash

When workers wear level C, the usual sequence of removal will be as follows:

- Equipment drop
- Hard hat removal
- Boot cover removal
- Outer glove wash
- Outer glove rinse
- Outer glove removal
- Coverall removal
- Respirator cartridge removal
- Respirator mask removal
- Inner glove removal
- Face and hands wash

HEALTH AND SAFETY PLAN FORM

CDM Health and Safety Program

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CAMP·DRESSER & McKEE INC.

PROJECT DOCUMENT #: _____

EMERGENCY CONTACTS

Water Supply NA

Site Telephone NA

EPA Release Report #: 1-800/424-8802

CDM 24-Hour Emergency #: 1-800/SKY-PAGE 31821#

Facility Management

Other *(specify)*

CHEMTREC Emergency #: 1-800/424-9300

CONTINGENCY PLANS: *Summarize below*

The contractor and CDM will each have separate site safety officers responsible for the implementation of their respective plans and personnel. On site they both will coordinate their activities as they relate to Health and Safety and will attempt to advise each other when an unsafe working condition is encountered All Team members in the work area shall wear the the protective equipment ensemble specified.
If the contractors Health and Safety officer determines that a higher level of protection is required under the plan, CDM personnel will wear that level. CDM personnel have the option to choose a level of protection higher than that directed by the action levels

HEALTH AND SAFETY PLAN APPROVALS

Prepared by R. Burns Date August 92

DHSC Signature _____ Date _____

HSM Signature _____ Date _____

EMERGENCY CONTACTS	NAME	PHONE
Health and Safety Manager	Chris Morbue 24 hrs	201-225-2000 800-SKY-PAGE #31821
Project Manager	Mark Mamaone	516-496-8400
Site Safety Coordinator	Robert Burns	516-496-8400
Client Contact	Ray Avault	
Other *(specify)*		
Environmental Agency	NYSDEC	
State Spill Number	—	
Fire Department		
Police Department		
State Police	New York	516 277 6190
Health Department		
Poison Control Center		
Occupational Physician	David Barnes	1-800/229-3674

MEDICAL EMERGENCY Phone:

Hospital Name: Syosset Community

Hospital Address: 221 Jericho Turnpike

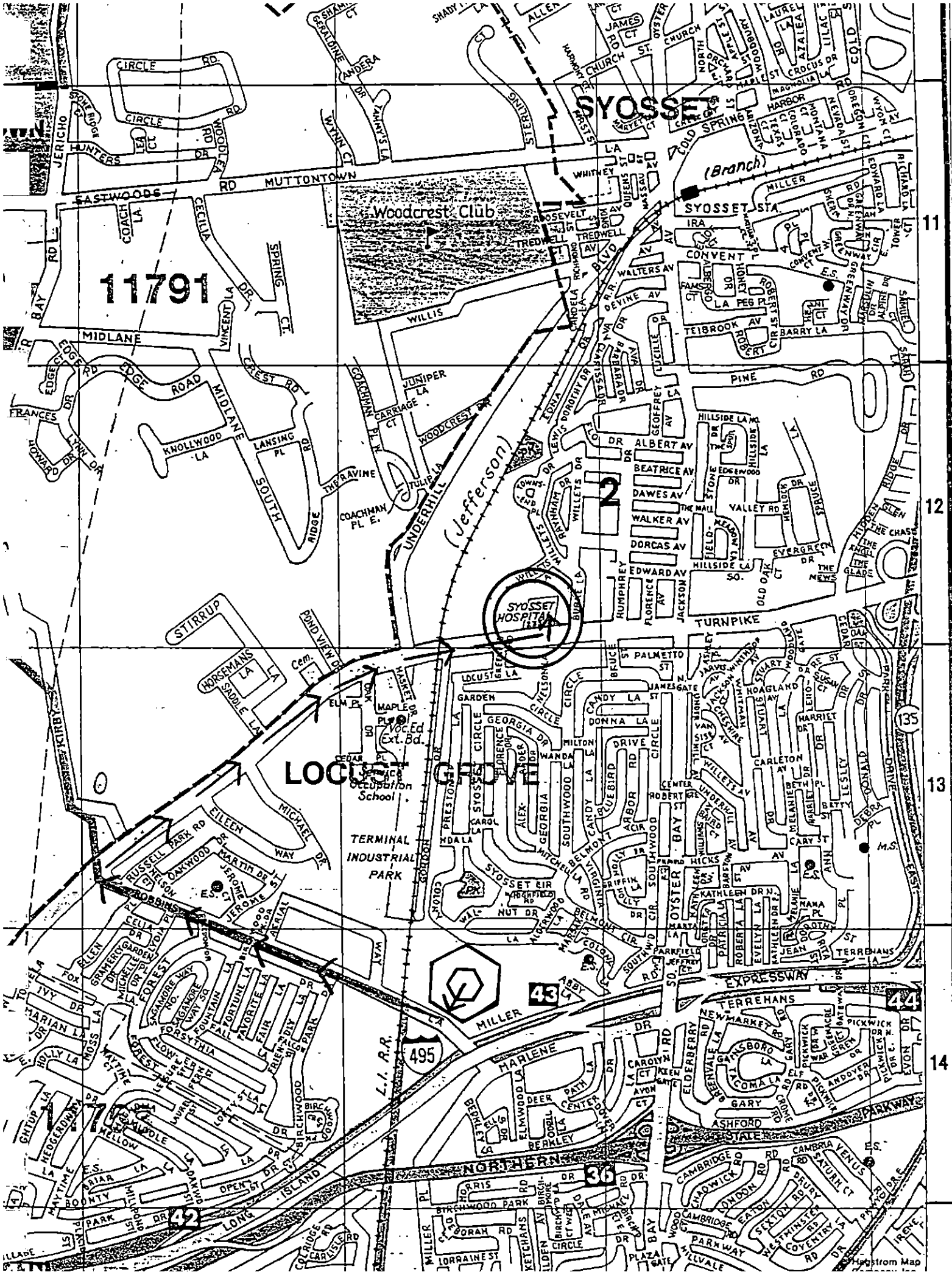
Name of Contact at Hospital: Phone:

Name of 24-Hour Ambulance:

Route to Hospital: North on Robbins Lane; Make a right and proceed East on Jericho Tnpk. Hospital is on left hand side. The second Entrance is for emergency

Distance to hospital 2.0 miles

Attach map with route to hospital



FOR ADJOINING AREA SEE MAP NO. 25

STEEL STRIP PLATING LINE (REF #1)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	16 PAY-OFF STANDS, 4 HEADS/STAND	A-BLDG
2	LEAD ANNEALING FURNACE	
3	MURIATIC ACID PICKLING TANK	
4	COLD WATER RINSE TANK & STRIP WIPE	
5	↓ ↓ SPRAY & STRIP WIPE	
6	SULFURIC ACID DIP TANK	
7	PLATING TANK	
8	COLD WATER SPRAY	
9	HOT WATER RINSE TANK & STRIP WIPE	
10	AGITATOR & AGITATOR PIT	
11	LIME SLURRY FEEDER	
12	CAPSTAN #1	
13	CAPSTAN #2	
14	48 HEAD STRIP COILER	
15	MURIATIC ACID STORAGE TANK (CAP. 9000 GALL)	
16	↓ ↓ ↓ ↓ ↓ ↓ (↓ 3000 ↓)	
17	↓ ↓ METERING PUMP	
18	PORTABLE SULFURIC ACID TANK	
19	SULFURIC ACID METERING PUMP	
20	2 PLATING SOLUTION CIRCULATION & TRANSFER PUMPS	
21	PLATING SOLUTION FILTER UNIT	
22	8 RECTIFIERS, 9V-8000 AMP/UNIT	
23	RECTIFIER COOLING UNIT	
24	TRANSFORMER	↓ ↓
25	5 PLATING SOLUTION STORAGE TANK (CAP. 7400 GALL/TK)	A-BLDG/ELEV. PLATFORM
26	BRIGHTENER METERING PUMP	A-BLDG
27	FLOCCULATING SOLUTION UNIT	↓
28	STRIP BALER	

STEEL STRIP FLATTENING MILL (REF #2)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	2 ROD PAY-OFF STANDS	B-BLDG
2	ROD STRAIGTENING CAGE	
3	MECHANICAL DESCALER	
4	WATER SPRAY BOX	
5	ROLLER DIE	
6	CAPSTAN (BULL BLOCK	
7	5 STAND WIRE FLATTENING MILL	
8	2 STRIP WINDER	
9	FILTRATION & ROLL COOLING SYSTEM	
10	ROD MILL LUBRICATION SYSTEM & LUBE OIL FILTER	↓

COPPER ROD MILL (REF #3)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	ROTARY FURNACE	C-BLDG
2	ROUGHING MILL #1	
3	ROUGHING MILL #2	
4	INTERMEDIATE MILL	
5	FINISHING MILL	
6	4 ROD COILERS	
7	QUENCH TROUGH & COIL CONVEYOR	
8	UP-ENDER	
9	COIL CONVEYOR	
10	2 DEEP SCALE TANKS	
11	DEEP SCALE PUMP	
12	2 COOLING WATER CIRCULATION PUMPS	
13	ROLL LATHE	↓

COPPER ROD PICKLING (REF #4)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	COIL CAR	D-BLDG
2	9 COPPER RECLAIM TANKS	
3	CRANE HOOK STORAGE RACK	
4	(4) SULFURIC ACID PICKLING TANKS	
5	RINSE TANK	
6	HIGH PRESSURE WATER SPRAY & DIP TANK	
7	2 SOAP DIP TANKS	
8	HIGH PRESSURE SPRAY PUMP	
9	↓ ↓ PNEUMATIC WATER TANK	EAST H.T. ROOM
10	FLOCCULATING SOLUTION UNIT (FOR WASTE TREATMENT)	D-BLDG

COPPER WIRE MACHINERY (REF #4a)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	ROD BUTT WELDER	F-BLDG
2	ROD PAY-OFF CONVEYOR & CAGE	
3	ROD MACHINE MOTOR & GEAR BOX	
4	RIPPER DIE BOX	
5	DX-13 MACHINE	
6	ANNEALER	
7	DHF SPOOLER	
8	ROD MACHINE COOLING SYSTEM	
9	12 BOBBIN STRANDER	
10	REEL WINDER	↓

60" COIL SLITTER (REF #5)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	COIL LOADING CAR, CAP. 60" WIDE x 60" O.D. x 30000#	E-BLDG
2	PAY-OFF REEL ↓ ↓ ↓ ↓ ↓ ↓	
3	AUTOMATIC EDGE CONTROL	
4	PEELER CAP: .130 TH'K x 60" WIDE	
5	SLITTER WITH ENTRY EDGE GUIDE TABLE & ENTRY PINCH ROLLS	
6	TENSION STAND	
7	RECOILER, CAP. 60" MAX. WIDTH x 60" O.D. x 30000#	
8	EXIT COIL CAR, CAP. SAME AS ITEM #1	
9	2 SCRAP WINDER, CAP. .130" TH'K x 2" COMBINED WIDTH & 2000# BUNDLE	↓

TUBE MILL #1 (REF #6)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	PAY-OFF	E-BLDG
2	SHEAR	
3	BUTT WELDER	
4	LOOPER (ACCUMULATOR)	
5	MARKING & PINCH ROLL STAND	
6	FORMING MILL WITH E.R. WELDER	
7	QUENCH TROUGH	
8	SIZING MILL	
9	CUT-OFF PRESS & RUN-OUT TABLE	
10	CONVEYOR	
11	STRAIGHTENER	
12	CONVEYOR	
13	HOPPER & UP-CONVEYOR	
14	ROTARY PLUG DEDIMPLER	
15	BRUSH DEBURRER	
16	CONVEYOR	
17	HOPPER & UP-CONVEYOR	
18	TURN-AROUND	↓
19	MOTOR-GENERATOR UNIT	EMT M-G ROOM

TUBE MILL #2 (REF #7)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	PAY-OFF	E-BLDG
2	SHEAR	
3	BUTT WELDER	
4	MARKING STAND	
5	LOOPER (ACCUMULATOR)	
6	PINCH ROLL STAND	
7	FORMING MILL WITH E.R. WELDER	
8	QUENCH TROUGH	
9	SIZING MILL	
10	CUT-OFF PRESS & RUN-OUT TABLE	
11	CONVEYOR	
12	STRAIGHTENER	
13	TUBE RUN-OUT	
14	HOPPER & UP-CONVEYOR	
15	DEDIMPLER & ENDFACING MACHINE	
16	CONVEYOR	
17	OVERHEAD CONVEYOR	↓

TUBE MILL #3 (REF #8)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	PAY-OFF	G-BLDG
2	SHEAR & BUTT WELDER	
3	FLOOP (ACCUMULATOR)	
4	MARKING STAND	
5	FORMING MILL WITH H.F. WELDER	
6	COOLING UNIT OF H.F. WELDER	
7	QUENCH TROUGH	
8	SIZING MILL	
9	CUT-OFF PRESS & RUN-OUT TABLE	
10	CONVEYOR	
11	STRAIGHTENER	
12	CONVEYOR & TUBE KICK-OFF	
13	HOPPER & UP-CONVEYOR	
14	ROTARY PLUG DEDIMPLER	
15	BRUSH DEBURRER	
16	TUBE KICK-OFF	
17	TUBE THREADING MACHINE 1/2"-2" IMC	
18	↓ ↓ ↓ 1/4"-4" IMC	
19	HOPPER & UP-CONVEYOR	
20		
21		
22	2 CONVEYORS	
23	UNLOADING CONVEYOR	
24	TUBE KICK-OFF	
25	CROSS COVEYOR	
26	HOPPER & UP-COVEYOR	
27	TURN-AROUND CONVEYOR	
28	AUTOMATIC TUBE HOPPER	
29	LONG TUBE WAGON	
30	TRACK & WAGON PULLER	
31	HYDRAULIC UNIT OF ITEM #18	

RIBBON SLITTING (REF #9)

ITEM #	DESCRIPTION OF EQUIPMENT	LOCATION
1	PAY-OFF	E-BLDG
2	SHEAR	
3	TIG WELDER	
4	YODER SLITTER CAP: 10 CUTS, .040 x 12" TOTAL WIDTH	
5	ARC SPRAY SYSTEM	
6	HYDRAULIC POWER UNIT OF COILER (ITEM #7)	
7	SLITTER CONTROL CONSOLE	

EMT PLATING LINE (1/2-2" EMT) - REF #10

ITEM #	DESCRIPTION OF EQUIPMENT		LOCATION
1	HOPPER & UP-CONVEYOR		E-BLDG
2	CLEANER TANK	TANK # 1 OF PLTG. LINE	
3	↓ RECLAIM TANK	2	
4	HOT WATER RINSE	3	
5	SULFURIC ACID PICKLING TANK	4	
6	COLD WATER RINSE TANK	5	
7	↓ ↓ ↓ ↓	6	
8	PLATING TANK	7 & 7b	
9	PLATING SOLUTION RECLAIM TANK	8	
10	RINSE TANK (EFFLUENT TO W.T. ROOM)	9	
11	NITRIC ACID DIP TANK	10	
12	CHROMATE	11	
13	HOT WATER RINSE	12	
14	↓ ↓ ↓ ↓	13	
15	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	14	
16	WET-TUBE DRYER		
17	PAINT MACHINE (5 WANDS)		
18	PAINT DRYER		
19	HOPPER & UP-CONVEYOR		
20	MARKEM MACHINE		
21	TUBE BUNDLER & BUNDLE EJECTOR		
22	BUNDLE CONVEYOR		
23	BALE ↓		EMT M-G ROOM
24	1-5000 AMP. MOTOR-GENERATOR UNIT		
25	3-20000 ↓ ↓ ↓ ↓		
26	ELECTRICAL SWITCH GEAR		"OUTSIDE EAST WALL OF E-BLDG
27	EMT PLATING SOLUTION STORAGE TANK, CAP. 28000 GALL	25000	
28	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓		
29	2 CLEANER HOLDING TANKS		E-BLDG
30	NITRIC ACID & CHROMATE DUMP METERING TANK		D-BLDG

IMC PLATING LINE (1/2-4" IMC & 1/2-4" EMT) - REF #11

ITEM #	DESCRIPTION OF EQUIPMENT		LOCATION
1	HOPPER & UP-CONVEYOR		G-BLDG. ADDITION
2	CLEANER TANK	TK #1 OF PLTG LINE	
3	↓	#2	
4	HOT WATER RINSE TANK	3	
5	COLD	4	
6	ACID PICKLING	5	
7	COLD WATER RINSE	6	
8	↓ ↓ ↓ ↓	7	
9	PLATING TANK	8a & 8b	
10	↓ SOLUTION RECOVERY TANK	9	
11	COLD WATER RINSE TANK	10	
12	NITRIC ACID DIP TANK	11	
13	CHROMATE	12	
14	HOT WATER RINSE	13	
15	↓ ↓ ↓	14	
16	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	15	
17	WET-TUBE DRYER		
18	PAINT MACHINE (6 WANDS)		
19	PAINT DRYER		
20	HOPPER & UP-CONVEYOR		
21	COUPLING MACHINE		
22	MARKEM MACHINE		
23	TUBE BUNDLER & BUNDLE EJECTOR		
24	BUNDLE CONVEYOR		
25	BALE CONVEYOR		IMC M-G ROOM
26	1-10 000 AMP. MOTOR-GENERATOR UNIT		
27	2-7500		
28	3-15000 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓		OUTSIDE EASTSIDE OF G-BLDG ADDITION
29	1-IMC PLTG SOLUTION STORAGE TANK, CAP: 25000 GALL.	10000	
30	2- ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓		

MAP 10

FOR LOCATION OF REF #'s & ITEM #'s SEE SHEET 1

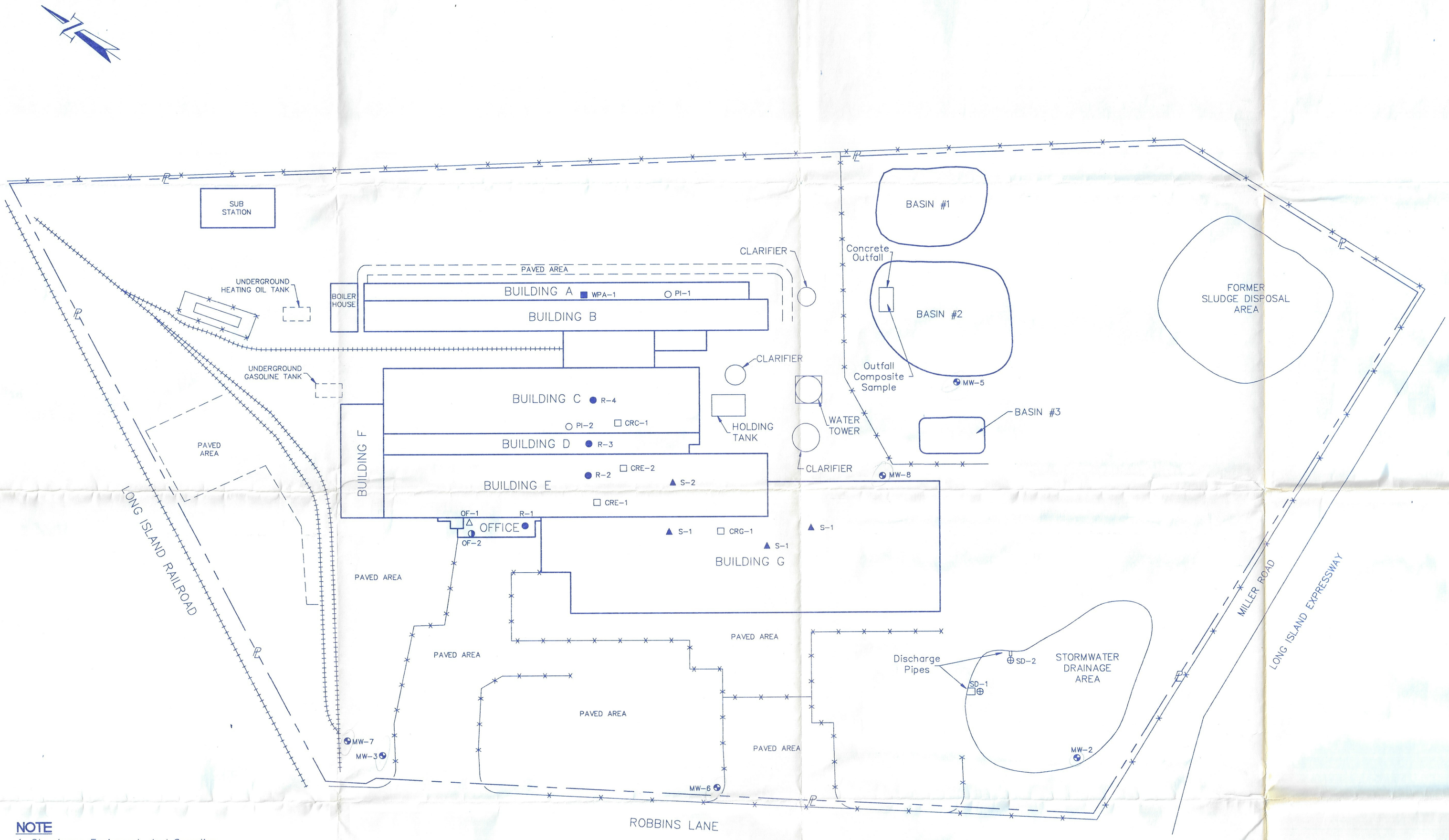
CERRO CONDUIT COMPANY
SYOSSET, L. I., NEW YORK

ARRANGEMENT OF MANUFACTURING FACILITIES

SCALE NONE
DATE 2/14/84
DWN. WHD
CHKD.

FIGURE 4 - Equipment Identification Key for Figure 3

KEY
- Removed Prior to Decommissioning
- Abandoned in Place
- Removed During Decommissioning



NOTE

1. *Structures, Equipment, And Sampling Locations Are Shown Schematically*

SAMPLE LEGEND

- *Monitoring Well*
- *Soil*
- *Piping Insulation*
- *Roofing*
- *Office Ceiling*
- *Sump Liquid*
- *Office Floor*
- *Trench Residue (Composite)*
- *Wipe Sample (Composite)*

607-2Y
092591

No.	REVISIONS	DATE	BY

DATA SUMMARY REPORT
FORMER CERRO CONDUIT FACILITY
SYOSSET, NEW YORK

eder associates consulting engineers, p.c.
NEW YORK MICHIGAN WISCONSIN GEORGIA

PROJECT
DATA SUMMARY REPORT
FORMER CERRO CONDUIT FACILITY
SYOSSET, NEW YORK

TITLE
SITE PLAN

eder associates consulting engineers, p.c.
LOCUST VALLEY, NEW YORK • MADISON, WISCONSIN
ANN ARBOR, MICHIGAN • AUGUSTA, GEORGIA

DRAWN BY JIK	SCALE 1" = 80'
DESIGNED BY KM	PROJECT No. 607-2
APPROVED BY GAR	DWG. No. MAP 24 1
DATE SEPTEMBER, 1991	