69-04

RESTORATION ADVISORY BOARD
MAY 30, 1996 MEETING MINUTES

1. Attendance

Government RAB members present:
Stephen Absolom, BRAC Environmental Coordinator, SEDA
Carla Struble, U.S. Environmental Protection Agency
Marsden Chen, N.Y. State Department of Environmental Conservation
(Alternate for Kamal Gupta, NYSDEC)
Dan Geraghty, N.Y. State Department of Health

Community RAB Members present:
Diane DeMuth, Richard Durst, Anne Herman, Frank Ives, Mary Anne Krupsak, Al Legasse, Richard Lewis, Russell Miller, Lucinda Sangree, Carmen Serrett, Richard Sisson, Henry Van Ness, David Wagner

Community RAB members absent:
Estelle Coleman, Brian Dombrowski, and Harold Kugelmass

Government and Technical Support Personnel present:
LTC Stephen Brooks, SEDA Commander
Thomas Enroth, SEDA Environmental Engineer
Janet Fallo, SEDA Environmental Engineer
Jerry Whitaker, SEDA Base Transition Coordinator
Beverly Lombardo, SEDA Public Affairs Officer
Joanne Ogden, SEDA Legal Representative
Susan Cooper, SEDA Secretary
John Buck, U.S. Army Environmental Center
Mike Cast, U.S. Army Environmental Center, Public Affairs Office
Keith Hoddinott, U.S. Army Center for Health Promotion and Preventive Medicine
Randy Nida, U.S. Army Industrial Operations Command
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Kevin Healy, U.S. Army Corps of Engineers, Huntsville Division
Michael Duchesneau, Parsons Engineering Science, Inc.
Robert Mutaw, Woodward-Clyde
Rick Newill, Woodward-Clyde

Others present (from sign-in sheet) :
Pete Coutts, International Technology Corporation
John Finn, Remediation Technologies Corporation
Thomas Grasek, Community Member
Martin Toombs, Finger Lakes Times
Mark Weider, International Technology Corporation

2. The first Restoration Advisory Board meeting was called to order by LTC Stephen Brooks, Commander of Seneca Army Depot Activity (SEDA). LTC Brooks welcomed all members and support staff to the Officer's Club.

3. Introductions were then made by Stephen Absolom, the BRAC Environmental Coordinator for SEDA. Mr. Absolom explained that the purpose of the evening's activities was to present a brief overview of the RAB process and become acquainted with other members and support staff.

4. Mike Cast, Public Affairs Officer from the Army Environmental Center provided basic information on Restoration Advisory Boards. His briefing explained what a RAB is, its purpose, and who comprised the Restoration Advisory Board. Mr. Cast defined the responsibilities of the RAB, its Co-Chairs, State and EPA support staff, and community members. Benefits of community participation were also discussed.

5. The Installation Command Briefing was then given by Jerry Whitaker, SEDA's Base Transition Coordinator. Items addressed were the depot's history, missions, population, facilities, contributions to the local community, relationship with the Local Redevelopment Authority, and white deer.

6. Future RAB meetings were discussed with the following issues agreed to by the members present:

a. When?: Monthly meetings were deemed necessary at first--preferably during a weekday evening to accommodate the majority. The next RAB meeting will be held on Wednesday, June 26, 1996 at 7:00 p.m.

b. Where?: It was decided that the next meeting will be held at the Seneca Army Depot Activity NCO Club. Other possible locations were the Romulus School, Willard Town Hall, and the Seneca County Office Building. These options may be exercised in the future.

c. Who?: The Community Co-Chair will be selected at the June 26th meeting. Interested individuals (seven expressed an interest on their initial applications) will be required to provide a verbal presentation with election by a majority vote. Discussion followed regarding duties, time commitments, and administrative support.

d. Two tours of the depot were offered to RAB members. Dates established were Wednesday, June 12th at 6:30 p.m. and Saturday, June 22nd at 9:00 a.m. A guest is welcome, provided there is room available in the 20-passenger bus. A sign-up sheet was available for those interested in attending a tour. Participants must sign in for the tour at Seneca's main gate on Route 96. The bus will depart 5 minutes after the times listed and will last approximately 1 ½ hours.

e. Training will be provided at initial RAB meetings to ensure understanding of the cleanup

process and what is required of the RAB. Information will be provided on regulatory involvement, the funding process, and acronyms and abbreviations.

f. A tentative agenda for the June 26th meeting included the following topics: (1) introductory training, (2) current activities, and (3) initiate charter.

7. The formal meeting was then adjourned at 8:30 p.m. to afford RAB members and regulatory and support staff the opportunity to socialize and become acquainted.

Respectfully submitted,

Susan R. Cooper

SUSAN R. COOPER
Secretary

APPROVED AS SUBMITTED:

Stephen M. Absolom

STEPHEN M. ABSOLOM
U.S. Army Co-chair

RICHARD A. DURST
Community Co-chair

MINUTES
RESTORATION ADVISORY BOARD
JUNE 26, 1996 MEETING MINUTES

1. Attendance:

Government RAB Members Present:

Stephen M. Absolom, BRAC Environmental Coordinator, SEDA
Carla Struble, U.S. Environmental Protection Agency
Dan Geraghty, NYS Department of Health

Government RAB Members Absent:

Kamal Gupta, NYS Department of Environmental Conservation (excused)

Community RAB Members Present:

Diane DeMuth, Dick Durst, Anne Herman, Frank Ives, Mary Ann Krupsak, Al Legasse, Richard Lewis, Harold Kugelmass, Henry Van Ness, Russell Miller, Carmen Serrett, Richard Sisson, David Wagner

Community RAB Member Absent:

Lucinda Sangree, Estelle Coleman, Brian Dombrowski

Government and Technical Support Personnel Present:

Thomas Enroth, SEDA Environmental Engineer
Janet Fallo, SEDA Environmental Engineer
Jerry Whitaker, SEDA Base Transition Coordinator
Beverly Lombardo, SEDA Public Affairs Officer
Susan Cooper, SEDA Secretary
Robert Scott, NYS Department of Conservation
Keith Hoddinott, U.S. Army Center for Health Promotion and Preventive Medicine
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Dorothy Richards, U.S. Army Corps of Engineers, Huntsville Division
Michael Duchesneau, Parsons Engineering Science, Inc.
Barry O'Melia, Woodward-Clyde
Rick Newill, Woodward-Clyde

Others Present:

Chris Raddell, Community/Contractor
Joanne Howard, Community/Contractor
Brian Howard, Community Member
Nellie Legasse, Community Member

2. The June Restoration Advisory Board meeting was called to order at 7:00 p.m. by Stephen Absolom, BRAC Environmental Coordinator for SEDA, who welcomed all members and support staff to the NCO Club and outlined the evening's agenda. Draft minutes from the May RAB meeting were then approved and accepted into record.

3. Mike Duchesneau from Parsons Engineering Science, Inc. provided an overview on the Environmental Cleanup Process. His briefing included governing regulations, milestones, and the process under which solid waste management units are listed, classified, and remediated. Copies of Mr. Duchesneau's briefing will be included in the next mailing along with the minutes of this meeting.

4. A discussion was held between Mike Duchesneau of Parsons Engineering Science, Inc. and Dr. Dick Durst who asked if Parsons was aware of the newly developed application of iron to reduce the contamination level in a groundwater plume such as the plume at the Ash Landfill. Mr. Duchesneau responded that he was aware of this technology and it was currently being implemented in a full scale application model through another office of Parsons located in North Carolina. The process uses a media, such as iron in the form of iron filings, placed such that the contaminated groundwater passes through the iron and is changed in the process. The iron would oxidize similar to rust forming on iron exposed to air and water. This section of iron can be thought of as a gate in a underground wall so all water would be stopped by the wall except for a section where the gate is installed as part of the wall. The water can pass through the gate of iron. This gate can be removed and replaced with new iron when the media needs to be changed. Mr. Duchesneau then discussed with Dr. Durst reasons this technology may not be applicable for the Ash Landfill. He commented that this innovative technology has been successfully demonstrated in the laboratory or in limited pilot scale applications. However, he has not yet seen results from the full scale demonstration studies. In addition, the iron may prematurely oxidize as the depth to groundwater at the Ash Landfill varies considerably during the year. This may render the treatment useless. An application of this type of technology at the Ash Landfill would require an extensive pilot study if it were to be considered.

5. A brief overview of the BRAC Cleanup Plan and its goals was given by Mr. Absolom. After introductions of all present, the responsibilities of the Community Co-Chair position were reviewed. Presentations were given by Richard Durst, David Wagner, and Anne Herman, RAB members interested in filling this position. Written ballots were collected from the 15 community RAB members present with majority vote electing Richard Durst as Community Co-Chair.

6. Discussion of Draft Charter followed. Each section was examined and commented on with changes identified and agreed upon for inclusion in the final charter to be approved for adoption at the August RAB meeting.

7. General discussion indicated possible topics for future presentations. Suggestions should be made to Mr. Absolom within the next week for preparation of an August agenda.

8. The next Restoration Advisory Board meeting will be held on Tuesday, August 20, 1996 at 7:00 p.m. at the SEDA NCO Club.

9. The meeting was adjourned at 9:25 p.m.

Respectfully submitted,

SUSAN R. COOPER
Secretary

APPROVED AS SUBMITTED:

STEPHEN M. ABSOLOM
U.S. Army Co-Chair

RICHARD A. DURST
Community Co-Chair

Restoration Advisory Board Meeting
Agenda

September 17, 1996

7:00	**Welcome** LTC Stephen W. Brooks Commander, Seneca Army Depot Activity
7:05	**Acceptance of Minutes** Mr. Stephen M. Absolom/Dr. Dick Durst Army Co-chair/Community Co-chair
7:15	**Fire Training Areas Remedial Investigation Status** Mr. Michael Duchesneau Parsons Engineering Science, Inc.
7:45	**Break**
8:00	**Risk Assessment for Environmental Sites** Mr. Keith Hoddinott U.S. Army Center for Health Promotion and Preventive Medicine
8:30	**Open Discussion**
9:00	**Adjourn**

ORIGINAL
File

Presentation to the Restoration Advisory Board (RAB)

September 17, 1996

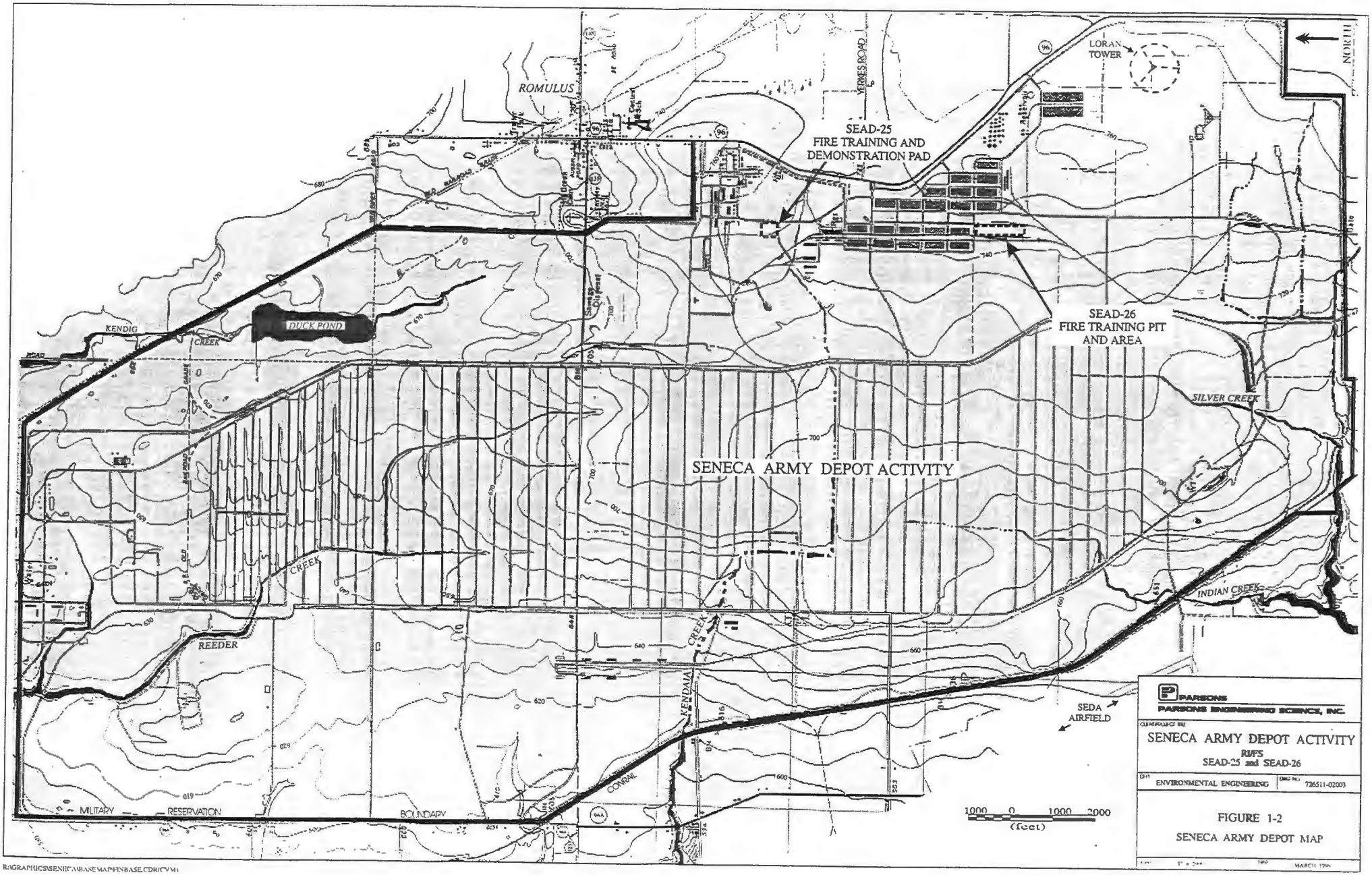
REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) STATUS REPORT

PARSONS ENGINEERING SCIENCE

PARSONS

Summary of Activities at SEAD-25(The Fire Demonstration Pad) and SEAD-26 (The Fire Training Area)

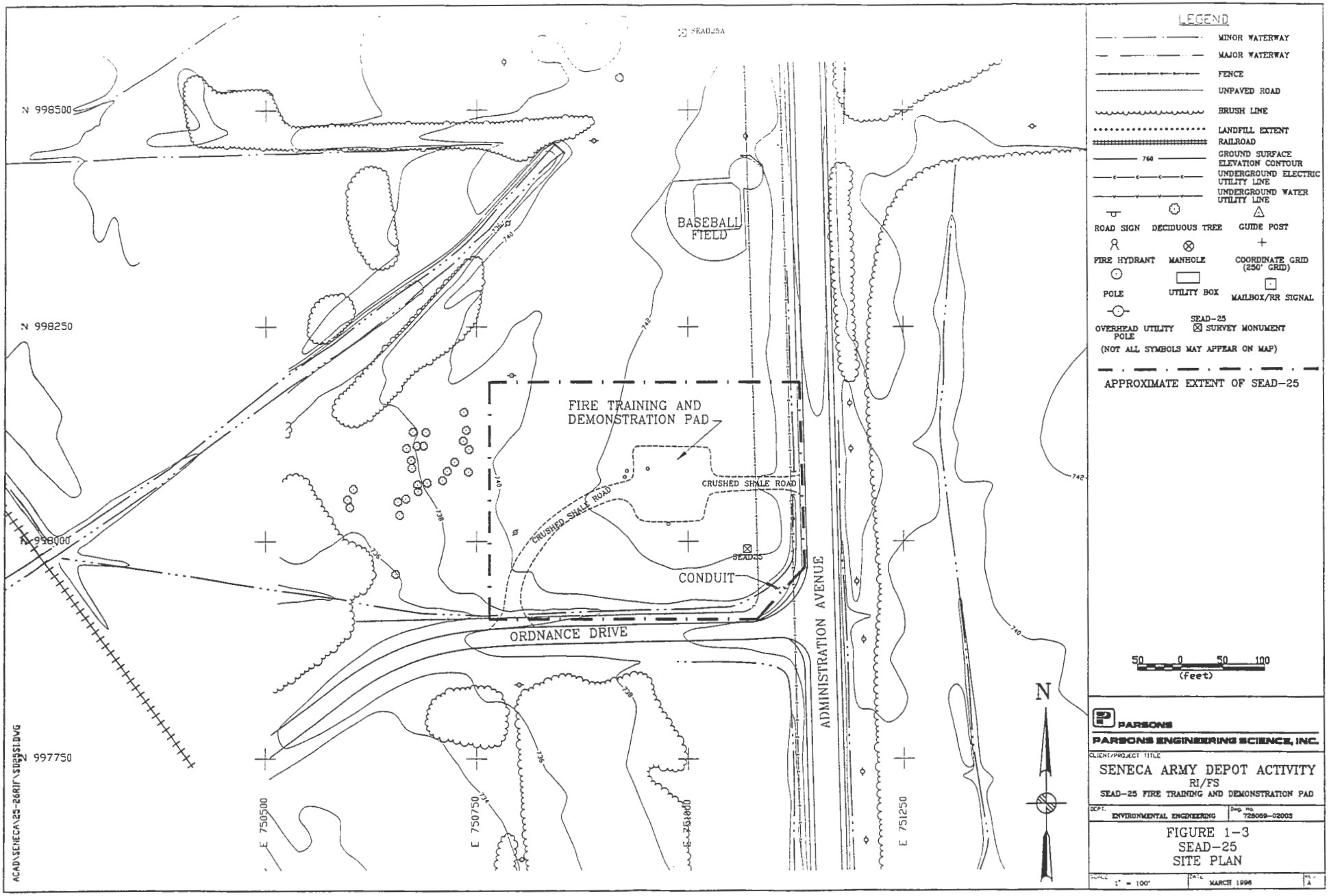
- Remedial Investigation
  - Fieldwork Completed in December, 1995
  - Second Round of GW Sampling Completed in April, 1996
- Pre-Draft Report Submitted to the Army in April, 1996
- Draft Report Submitted to Regulators on June 27, 1996



R:\GRAPHICS\SENECA\BASEMAP\FINBASE.CDR(CVM)

Summary of Remedial Investigation (RI) at SEAD-25

- Volatile Aromatic Compounds Detected in Soil and Groundwater
- Volatile Chlorinated Organics Detected in Soil and Groundwater
- Groundwater Plume Limited to Site Boundaries
- Risk Exceeds EPA Target Ranges for Residential Exposure



LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- LANDFILL EXTENT
- RAILROAD
- 760 GROUND SURFACE ELEVATION CONTOUR
- UNDERGROUND ELECTRIC UTILITY LINE
- UNDERGROUND WATER UTILITY LINE
- ROAD SIGN
- DECIDUOUS TREE
- GUIDE POST
- FIRE HYDRANT
- MANHOLE
- COORDINATE GRID (250' GRID)
- POLE
- UTILITY BOX
- MAILBOX/RR SIGNAL
- OVERHEAD UTILITY POLE
- SEAD-25 SURVEY MONUMENT

(NOT ALL SYMBOLS MAY APPEAR ON MAP)

APPROXIMATE EXTENT OF SEAD-25

50 0 50 100
(feet)

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

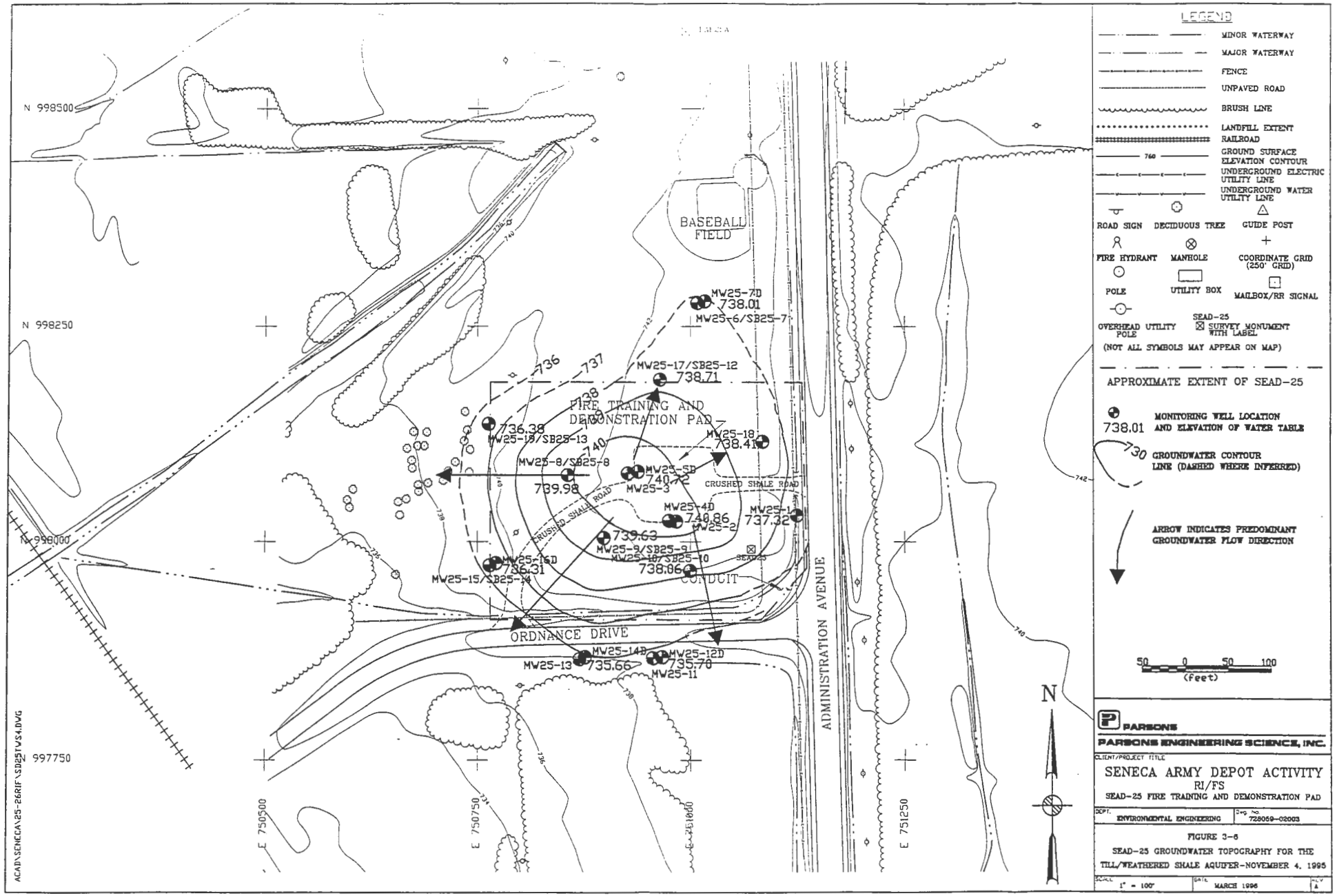
CLIENT/PROJECT TITLE

SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-25 FIRE TRAINING AND DEMONSTRATION PAD

DEPT: ENVIRONMENTAL ENGINEERING | Dwg. No. 728059-02003

FIGURE 1-3
SEAD-25
SITE PLAN

SCALE: 1" = 100' | DATE: MARCH 1996 | REV.: A



LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- LANDFILL EXTENT
- RAILROAD
- 760 GROUND SURFACE ELEVATION CONTOUR
- UNDERGROUND ELECTRIC UTILITY LINE
- UNDERGROUND WATER UTILITY LINE
- ROAD SIGN
- DECIDUOUS TREE
- GUIDE POST
- FIRE HYDRANT
- MANHOLE
- COORDINATE GRID (250' GRID)
- POLE
- UTILITY BOX
- MAILBOX/RR SIGNAL
- OVERHEAD UTILITY POLE
- SEAD-25 SURVEY MONUMENT WITH LABEL

(NOT ALL SYMBOLS MAY APPEAR ON MAP)

APPROXIMATE EXTENT OF SEAD-25

738.01 MONITORING WELL LOCATION AND ELEVATION OF WATER TABLE

730 GROUNDWATER CONTOUR LINE (DASHED WHERE INFERRED)

ARROW INDICATES PREDOMINANT GROUNDWATER FLOW DIRECTION

50 0 50 100
(Feet)

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

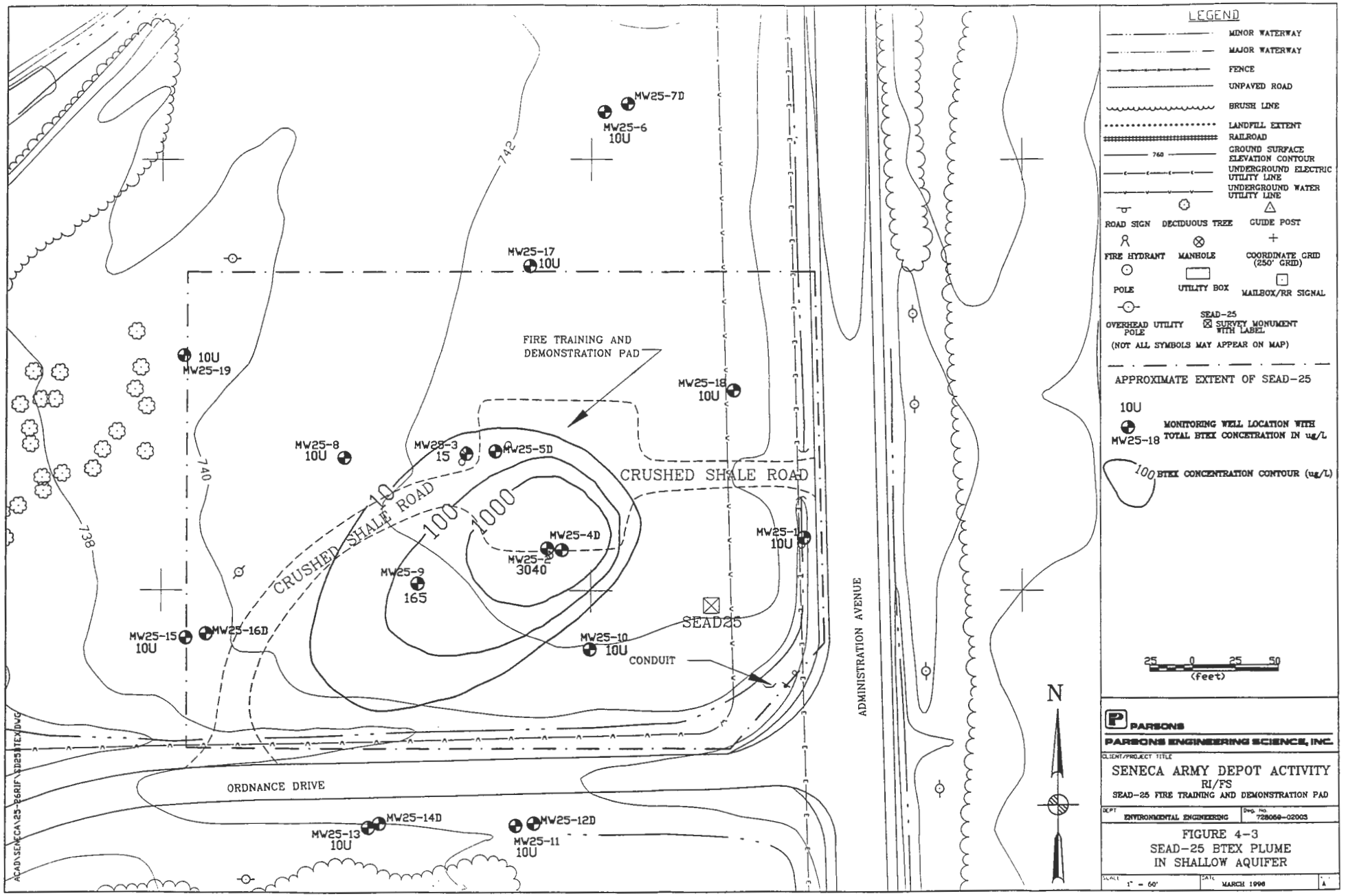
CLIENT/PROJECT TITLE

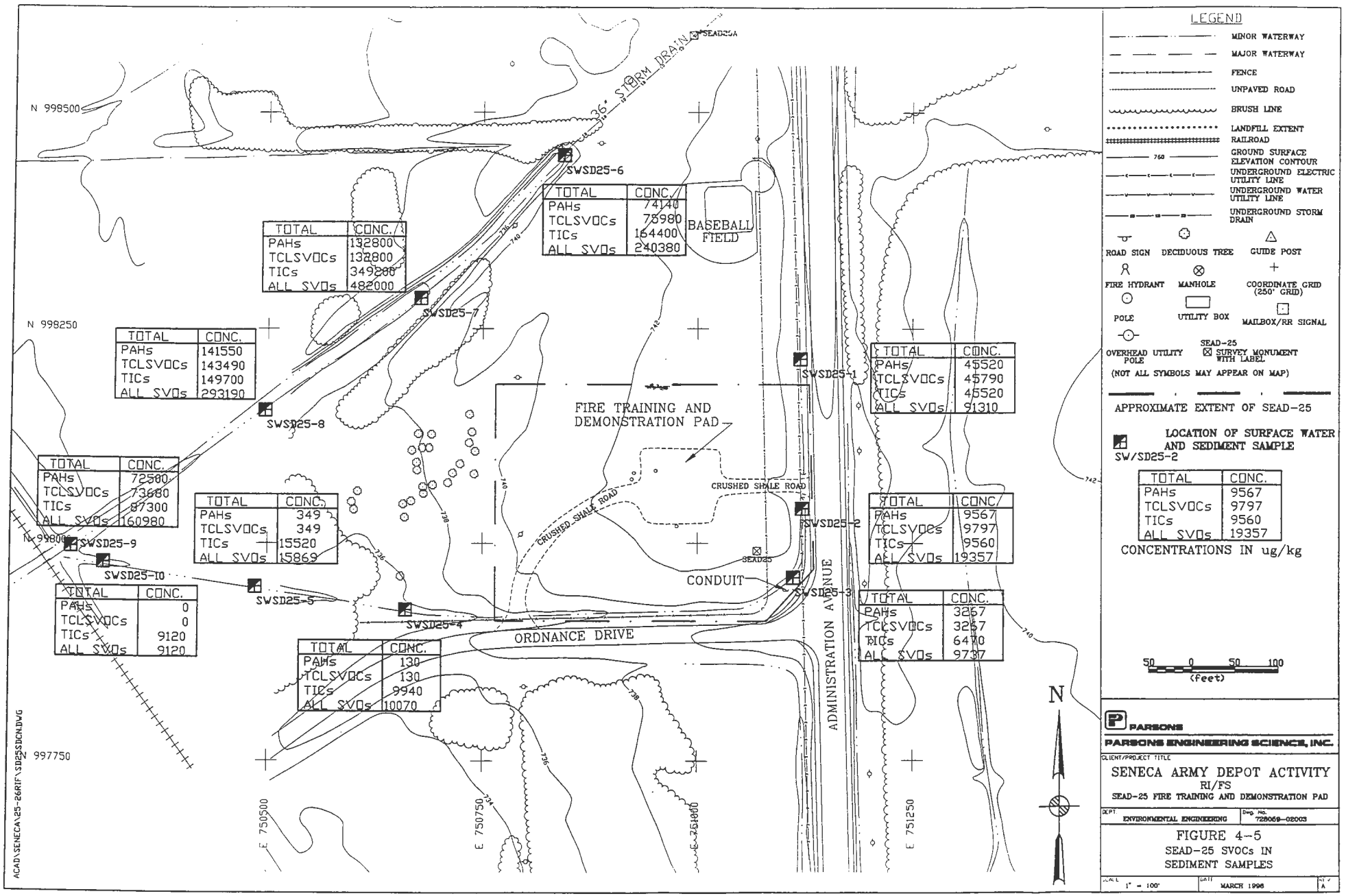
SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-25 FIRE TRAINING AND DEMONSTRATION PAD

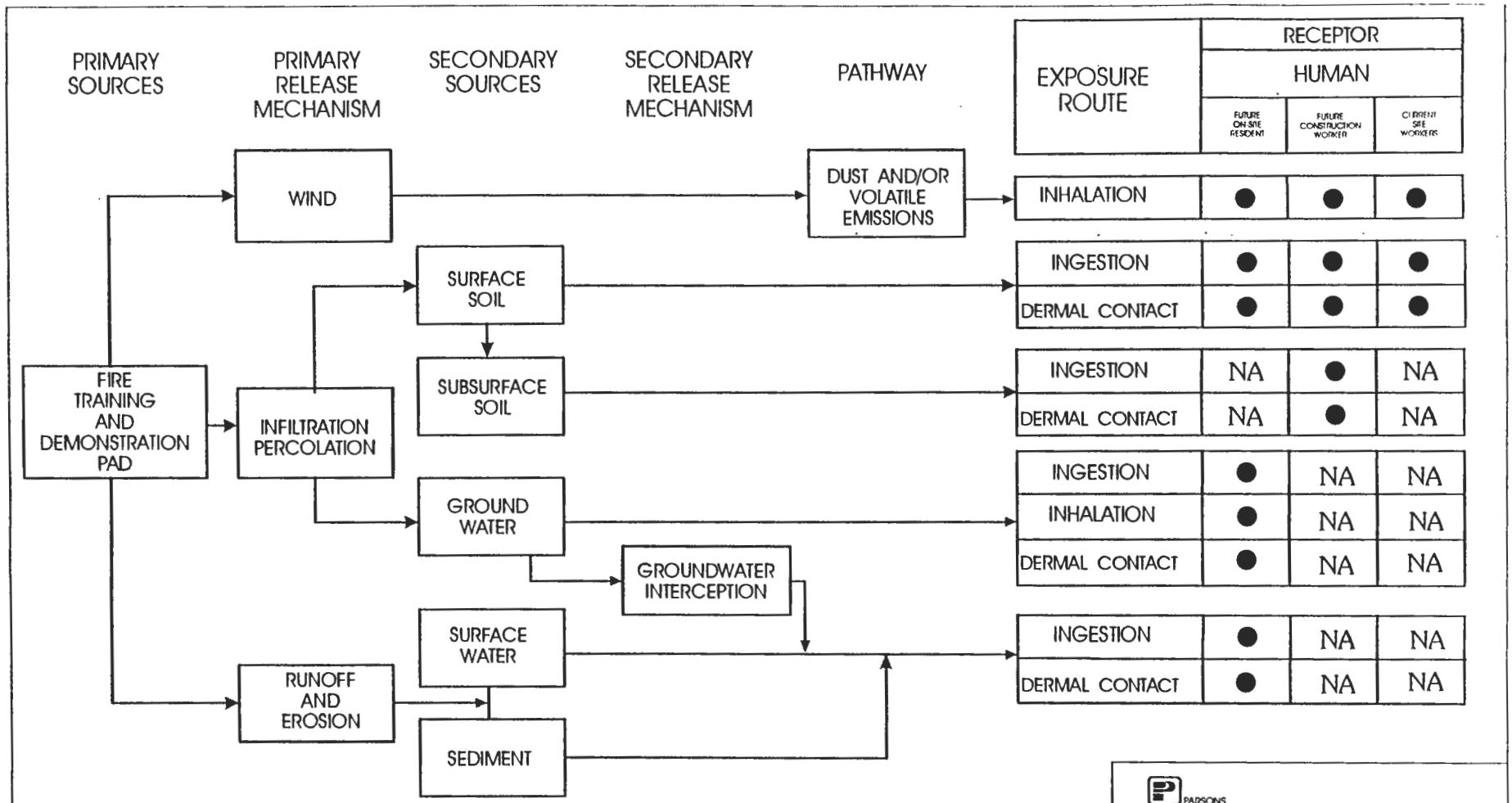
DEPT.	Dwg No
ENVIRONMENTAL ENGINEERING	728059-02003

FIGURE 3-6
SEAD-25 GROUNDWATER TOPOGRAPHY FOR THE TILL/WEATHERED SHALE AQUIFER-NOVEMBER 4, 1995

SCALE	DATE	REV
1" = 100'	MARCH 1996	A


LEGEND
MINOR WATERWAY
MAJOR WATERWAY
FENCE
UNPAVED ROAD
BRUSH LINE
LANDFILL EXTENT
RAILROAD
GROUND SURFACE ELEVATION CONTOUR
UNDERGROUND ELECTRIC UTILITY LINE
UNDERGROUND WATER UTILITY LINE
ROAD SIGN
DECIDUOUS TREE
GUIDE POST
FIRE HYDRANT
MANHOLE
COORDINATE GRID (250' GRID)
POLE
UTILITY BOX
MAILBOX/RR SIGNAL
OVERHEAD UTILITY POLE
SEAD-25 SURVEY MONUMENT WITH LABEL
(NOT ALL SYMBOLS MAY APPEAR ON MAP)
APPROXIMATE EXTENT OF SEAD-25
10U
MW25-18
MONITORING WELL LOCATION WITH TOTAL BTEX CONCETRATION IN ug/L
100
BTEX CONCENTRATION CONTOUR (ug/L)
25 0 25 50
(Feet)
FIRE TRAINING AND DEMONSTRATION PAD
CRUSHED SHALE ROAD
ADMINISTRATION AVENUE
ORDNANCE DRIVE
CONDUIT
SEAD25
MW25-7D
MW25-6 10U
MW25-17 10U
MW25-19 10U
MW25-18 10U
MW25-8 10U
MW28-3 15
MW25-5D
MW25-4D
MW25-2 3040
MW25-9 165
MW25-1 10U
MW25-15 10U
MW25-16D
MW25-10 10U
MW25-14D
MW25-13 10U
MW25-12D
MW25-11 10U
742
740
738
10
100
1000
N
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
CLIENT/PROJECT TITLE
SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-25 FIRE TRAINING AND DEMONSTRATION PAD
DEPT
ENVIRONMENTAL ENGINEERING
Dwg. No.
728060-02003
FIGURE 4-3
SEAD-25 BTEX PLUME
IN SHALLOW AQUIFER
SCALE
1" = 60'
DATE
MARCH 1998
A
ACAD\SENECA\25-26RIF\SD25BTEX.DWG


SEAD25A
36" STORM DRAIN
N 998500
N 998250
N 998000
E 997750
E 750500
E 750750
E 751000
E 751250
SWSD25-6
SWSD25-7
SWSD25-8
SWSD25-9
SWSD25-10
SWSD25-5
SWSD25-4
SWSD25-1
SWSD25-2
SWSD25-3
BASEBALL FIELD
FIRE TRAINING AND DEMONSTRATION PAD
CRUSHED SHALE ROAD
CRUSHED SHALE ROAD
CONDUIT
SEAD25
ORDNANCE DRIVE
ADMINISTRATION AVENUE
N
TOTAL CONC.
PAHs 74140
TCLSVOCs 78980
TICs 164400
ALL SVOs 240380
TOTAL CONC.
PAHs 132800
TCLSVOCs 132800
TICs 349200
ALL SVOs 482000
TOTAL CONC.
PAHs 141550
TCLSVOCs 143490
TICs 149700
ALL SVOs 293190
TOTAL CONC.
PAHs 72500
TCLSVOCs 73680
TICs 87300
ALL SVOs 160980
TOTAL CONC.
PAHs 349
TCLSVOCs 349
TICs 15520
ALL SVOs 15869
TOTAL CONC.
PAHs 0
TCLSVOCs 0
TICs 9120
ALL SVOs 9120
TOTAL CONC.
PAHs 130
TCLSVOCs 130
TICs 9940
ALL SVOs 10070
TOTAL CONC.
PAHs 45520
TCLSVOCs 45790
TICs 45520
ALL SVOs 91310
TOTAL CONC.
PAHs 9567
TCLSVOCs 9797
TICs 9560
ALL SVOs 19357
TOTAL CONC.
PAHs 9567
TCLSVOCs 9797
TICs 9560
ALL SVOs 19357
TOTAL CONC.
PAHs 3267
TCLSVOCs 3267
TICs 6470
ALL SVOs 9737
LEGEND
MINOR WATERWAY
MAJOR WATERWAY
FENCE
UNPAVED ROAD
BRUSH LINE
LANDFILL EXTENT
RAILROAD
760 GROUND SURFACE ELEVATION CONTOUR
UNDERGROUND ELECTRIC UTILITY LINE
UNDERGROUND WATER UTILITY LINE
UNDERGROUND STORM DRAIN
ROAD SIGN
DECIDUOUS TREE
GUIDE POST
FIRE HYDRANT
MANHOLE
COORDINATE GRID (250' GRID)
POLE
UTILITY BOX
MAILBOX/RR SIGNAL
OVERHEAD UTILITY POLE
SEAD-25
SURVEY MONUMENT WITH LABEL
(NOT ALL SYMBOLS MAY APPEAR ON MAP)
APPROXIMATE EXTENT OF SEAD-25
LOCATION OF SURFACE WATER AND SEDIMENT SAMPLE
SW/SD25-2
CONCENTRATIONS IN ug/kg
50 0 50 100
(Feet)
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
CLIENT/PROJECT TITLE
SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-25 FIRE TRAINING AND DEMONSTRATION PAD
DEPT: ENVIRONMENTAL ENGINEERING
Dwg. No. 728069-02003
FIGURE 4-5
SEAD-25 SVOCs IN SEDIMENT SAMPLES
SCALE 1" = 100'
DATE MARCH 1998
REV A
ACAD\SENECA\25-26RIF\SD25SDCN.DWG



PARSONS
PARSONS ENGINEERING SCIENCE, INC.

CLIENT/PROJECT TITLE

SENECA ARMY DEPOT ACTIVITY
RISK ASSESSMENT EXPOSURE PATHWAYS
SEAD-25 FIRE TRAINING AND DEMONSTRATION AREA

DEPT ENVIRONMENTAL ENGINEERING | DWG NO 728059-02002

FIGURE 6-11
EXPOSURE PATHWAY SUMMARY

SCALE NA | DATE MAY 1996

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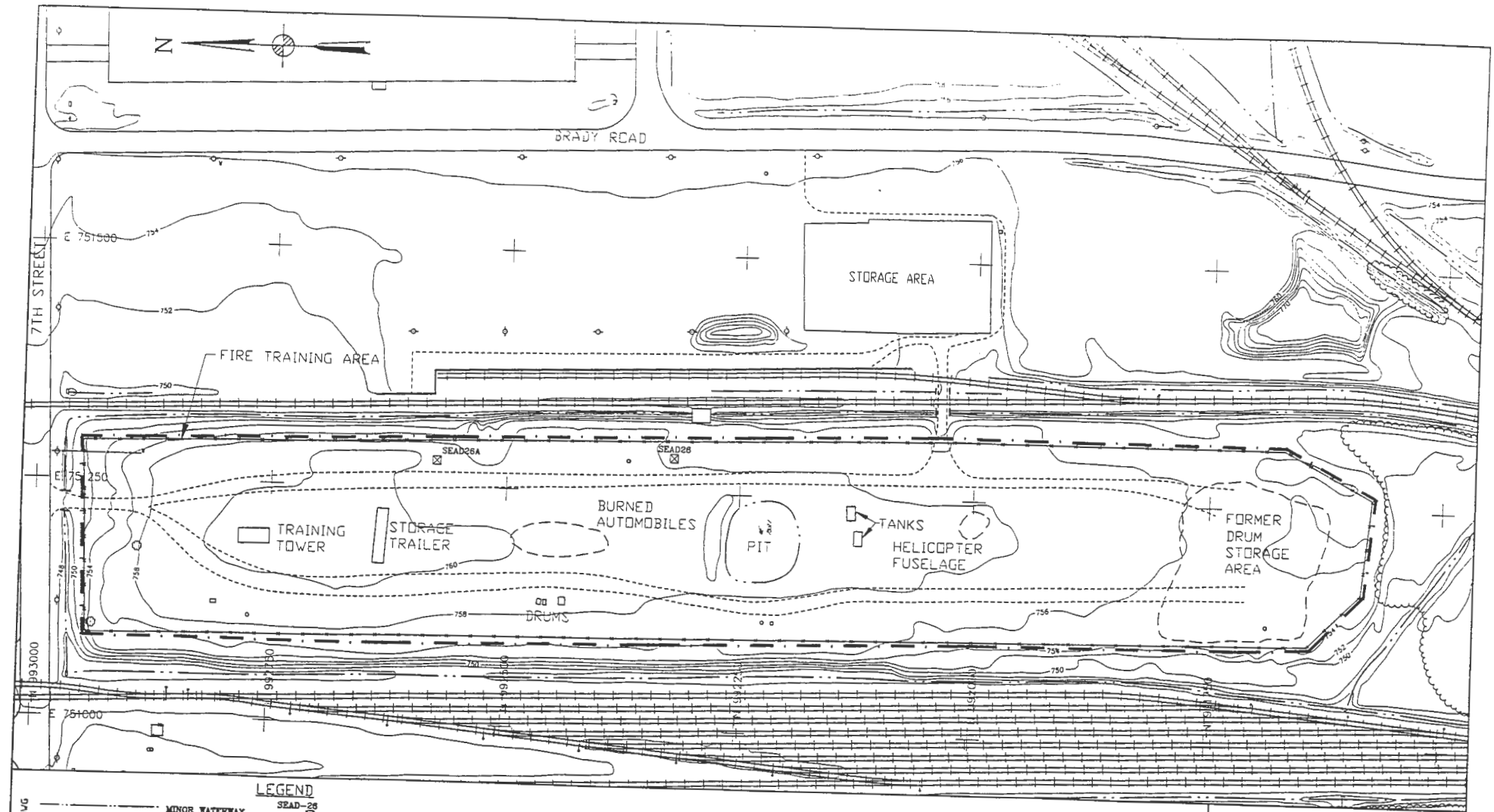
TABLE 6-74
CALCULATION OF TOTAL NONCARCINOGENIC AND CARCINOGENIC RISKS
REASONABLE MAXIMUM EXPOSURE
SENECA ARMY DEPOT, ROMULUS, NEW YORK - SEAD 25

RECEPTOR	EXPOSURE ROUTE	EXPOSURE ASSESSMENT Table Number	RISK CHARACTERIZATION Table Number	HAZARD INDEX	CANCER RISK
CURRENT SITE WORKER	Inhalation of Volatile Organics in Ambient Air	Table 6-7	Table 6-42	3.6E-07	8.7E-12
	Ingestion of Onsite Soils	Table 6-13	Table 6-44	1.6E-03	3.3E-08
	Dermal Contact to Onsite Soils	Table 6-19	Table 6-46	0.0E+00	0.0E+00
TOTAL RECEPTOR RISK (Nc & CAR)				1.6E-03	3.3E-08
FUTURE RESIDENTIAL	Inhalation of Volatile Organics in Ambient Air	Table 6-9	Table 6-48	6.4E-06	1.8E-10
	Ingestion of Onsite Soils	Table 6-15	Table 6-50	2.9E-01	1.8E-06
	Dermal Contact to Onsite Soils	Table 6-21	Table 6-52	0.0E+00	0.0E+00
	Ingestion of Groundwater	Table 6-25	Table 6-54	3.1E+00	5.1E-04
	Dermal Contact to Groundwater	Table 6-27	Table 6-56	2.8E+00	2.5E-04
	Inhalation of Groundwater while Showering	Table 6-31	Table 6-58	3.7E-04	9.2E-08
	Ingestion of Onsite Surface Water while Wading	Table 6-33	Table 6-60	5.4E-03	4.0E-07
	Dermal Contact to Surface Water while Wading	Table 6-35	Table 6-62	3.2E-03	4.1E-09
	Ingestion of Onsite Sediment	Table 6-37	Table 6-64	3.6E-01	4.1E-05
	Dermal Contact to Sediment while Wading	Table 6-39	Table 6-66	1.1E-04	0.0E+00
TOTAL RECEPTOR RISK (Nc & CAR)				6.6E+00	8.1E-04
FUTURE ON-SITE CONSTRUCTION WORKERS	Inhalation of Volatile Organics in Ambient Air - RME	Table 6-11	Table 6-68	4.5E-06	4.4E-12
	Ingestion of Onsite Soils	Table 6-17	Table 6-70	9.2E-02	4.6E-07
	Dermal Contact to Onsite Soils	Table 6-23	Table 6-72	0.0E+00	4.4E-08
TOTAL RECEPTOR RISK (Nc & CAR)				9.2E-02	5.0E-07

Summary of Remedial Investigation (RI) at SEAD-26

- Semi Volatile Organic Compounds (SVOC) Detected in Surface and Subsurface Soils
- Highest Concentrations Detected in Surface Soils Around Fire Training Pit
- Low Conc. of Aromatic Compounds Detected in One Well, MW-26-7, Located Near the Pit
- Risk Exceeds EPA Target Range for Residential Exposure



ACAD\SENECA\25-26RIFS\SD26S1.DWG

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

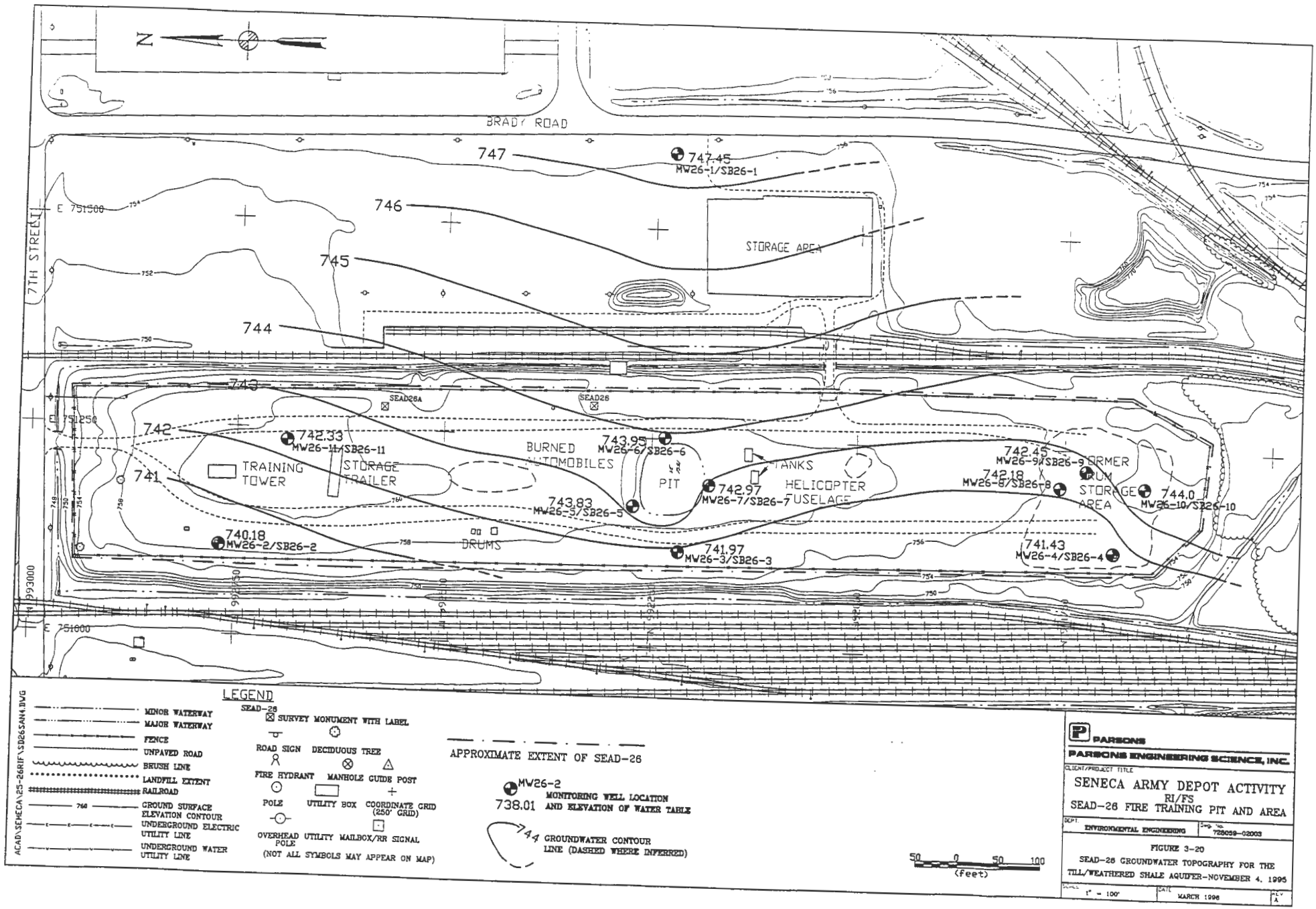
CLIENT/PROJECT TITLE

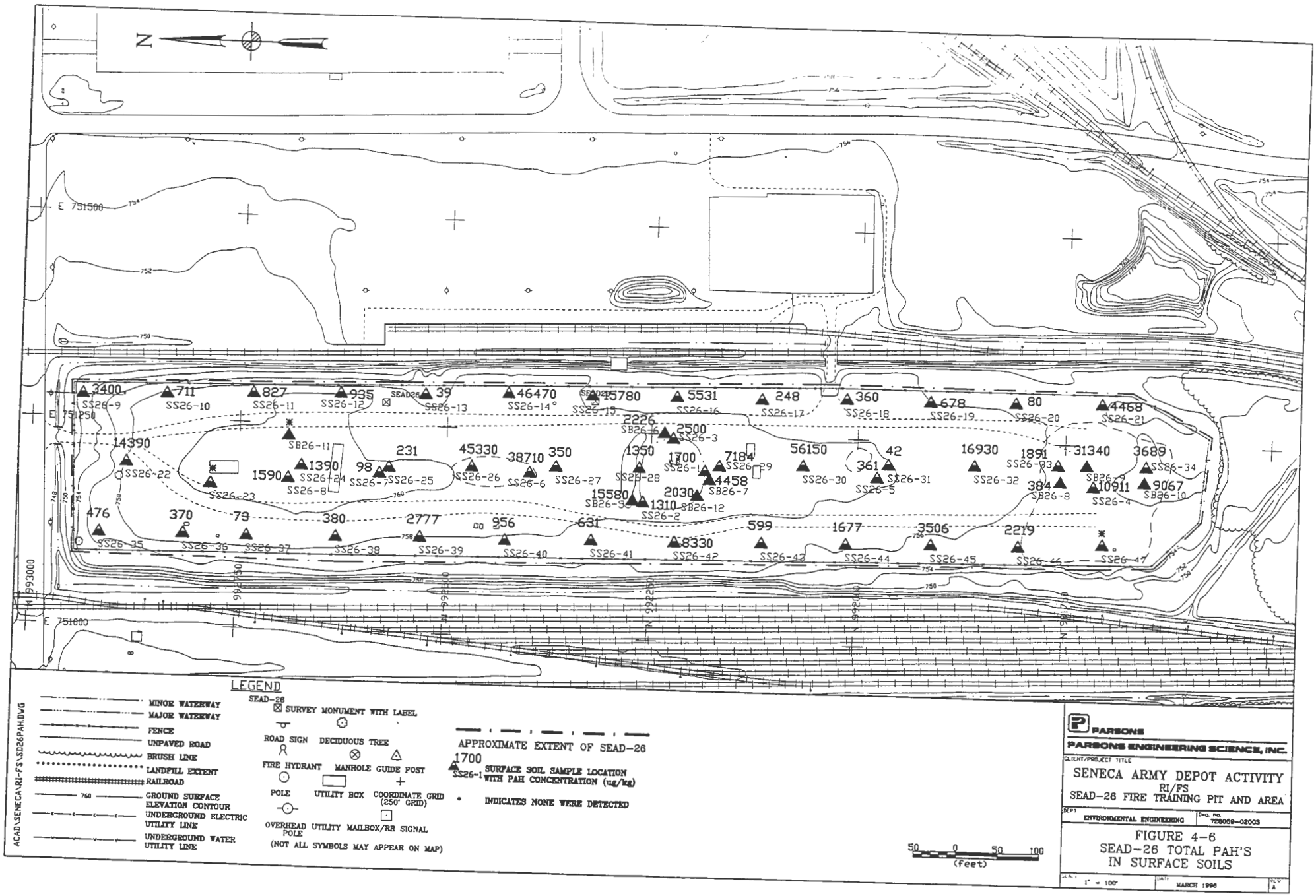
SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-26 FIRE TRAINING PIT AND AREA

DEPT: ENVIRONMENTAL ENGINEERING | DWG. NO. 728056-02003

FIGURE 1-4
SEAD-26
SITE PLAN

SCALE: 1" = 100' | DATE: MARCH 1996 | REV: A


N
BRADY ROAD
7TH STREET
E 751500
E 751250
E 751000
N 993000
747
746
745
744
743
742
741
747.45
MW26-1/SB26-1
STORAGE AREA
SEAD26A
SEAD26
742.33
MW26-11/SB26-11
TRAINING TOWER
STORAGE TRAILER
BURNED AUTOMOBILES
743.95
MW26-6/SB26-6
PIT
TANKS
742.97
MW26-7/SB26-7
HELICOPTER FUSELAGE
743.83
MW26-5/SB26-5
742.45
MW26-9/SB26-9
742.18
MW26-8/SB26-8
FORMER DRUM STORAGE AREA
744.0
MW26-10/SB26-10
740.18
MW26-2/SB26-2
DRUMS
741.97
MW26-3/SB26-3
741.43
MW26-4/SB26-4
LEGEND
MINOR WATERWAY
MAJOR WATERWAY
FENCE
UNPAVED ROAD
BRUSH LINE
LANDFILL EXTENT
RAILROAD
760
GROUND SURFACE ELEVATION CONTOUR
UNDERGROUND ELECTRIC UTILITY LINE
UNDERGROUND WATER UTILITY LINE
SEAD-26
SURVEY MONUMENT WITH LABEL
ROAD SIGN
DECIDUOUS TREE
FIRE HYDRANT
MANHOLE
GUIDE POST
POLE
UTILITY BOX
COORDINATE GRID (250' GRID)
OVERHEAD UTILITY POLE
MAILBOX/RR SIGNAL
(NOT ALL SYMBOLS MAY APPEAR ON MAP)
APPROXIMATE EXTENT OF SEAD-26
MW26-2
738.01
MONITORING WELL LOCATION AND ELEVATION OF WATER TABLE
744
GROUNDWATER CONTOUR LINE (DASHED WHERE INFERRED)
50 0 50 100
(Feet)
ACAD\SENECA\25-26RIFS\SD26SAN4.DWG
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
CLIENT/PROJECT TITLE
SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-26 FIRE TRAINING PIT AND AREA
DEPT.
ENVIRONMENTAL ENGINEERING
Drg. No.
726059-02003
FIGURE 3-20
SEAD-26 GROUNDWATER TOPOGRAPHY FOR THE TILL/WEATHERED SHALE AQUIFER-NOVEMBER 4, 1995
SCALE
1" = 100'
DATE
MARCH 1996
REV.
A



LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- LANDFILL EXTENT
- RAILROAD
- 760 GROUND SURFACE ELEVATION CONTOUR
- UNDERGROUND ELECTRIC UTILITY LINE
- UNDERGROUND WATER UTILITY LINE

SEAD-26

- SURVEY MONUMENT WITH LABEL
- ROAD SIGN
- DECIDUOUS TREE
- FIRE HYDRANT
- MANHOLE
- GUIDE POST
- POLE
- UTILITY BOX
- COORDINATE GRID (250' GRID)
- OVERHEAD UTILITY POLE
- MAILBOX/RR SIGNAL

(NOT ALL SYMBOLS MAY APPEAR ON MAP)

APPROXIMATE EXTENT OF SEAD-26

1700 SS26-1 SURFACE SOIL SAMPLE LOCATION WITH PAH CONCENTRATION (ug/kg)

• INDICATES NONE WERE DETECTED

50 0 50 100 (Feet)

ACAD\SENECA\RI-FS\SD26PAH.DWG

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SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-26 FIRE TRAINING PIT AND AREA

DEPT: ENVIRONMENTAL ENGINEERING

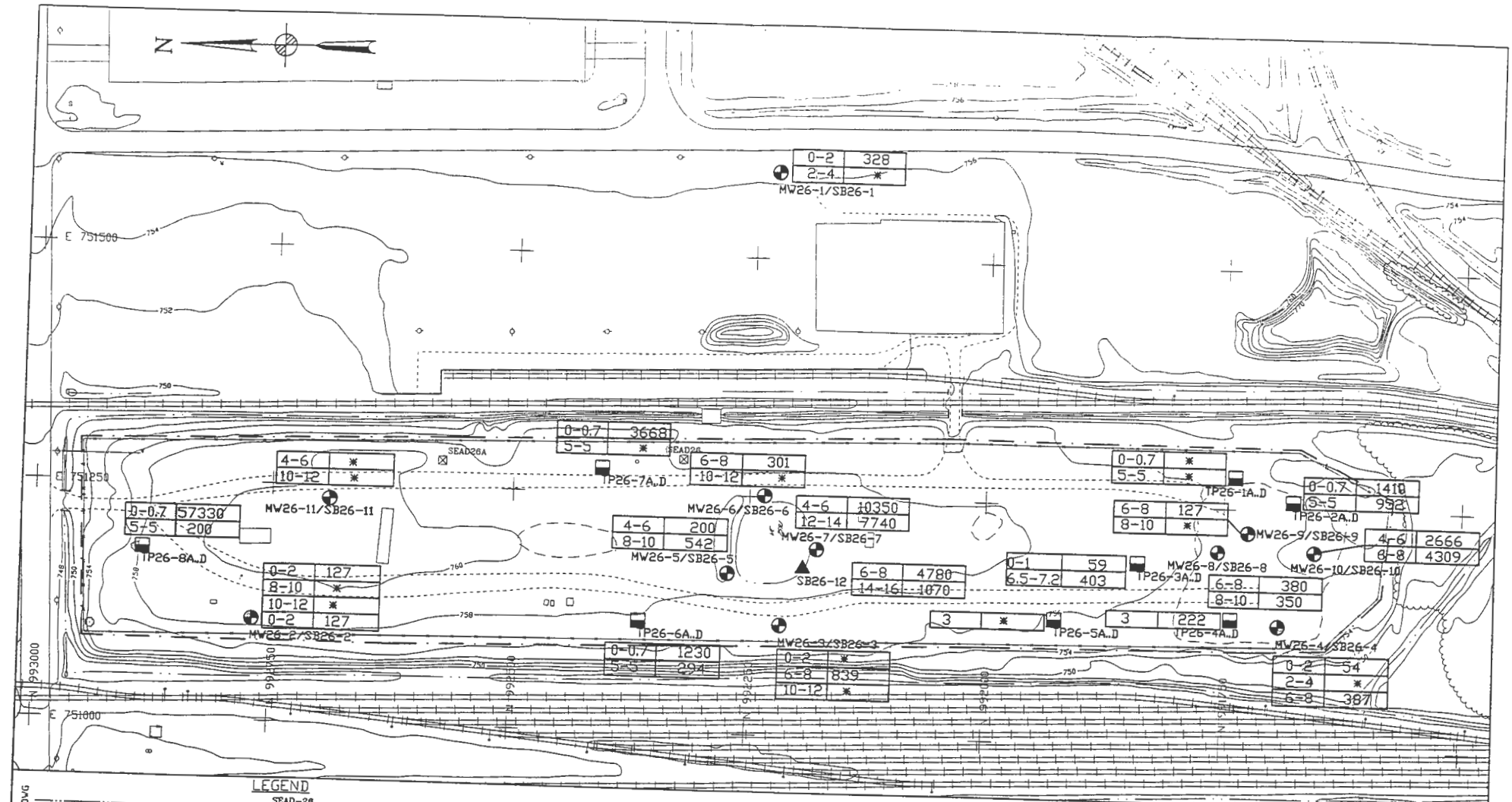
D+G. NO. 728059-02003

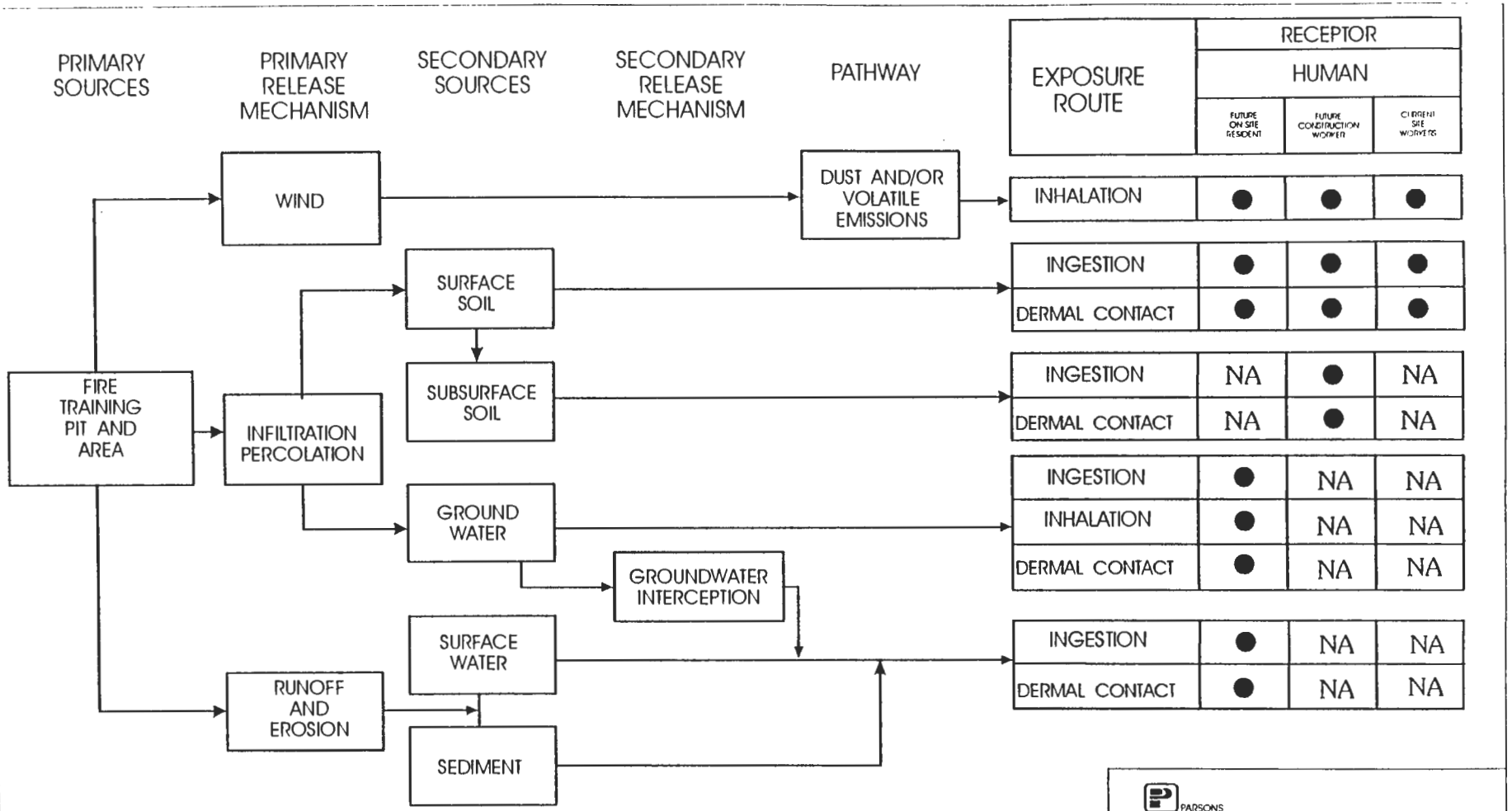
FIGURE 4-6
SEAD-26 TOTAL PAH'S
IN SURFACE SOILS

SCALE: 1" = 100'

DATE: MARCH 1996

REV: A


N
E 751500
E 751250
E 751000
N 993000
MW26-1/SB26-1
0-2 328
2-4 *
MW26-11/SB26-11
0-0.7 57330
5-5 200
TP26-8A..D
4-6 *
10-12 *
MW26-2/SB26-2
0-2 127
8-10 *
10-12 *
0-2 127
SEAD26A
SEAD26
0-0.7 3668
5-5 *
TP26-7A..D
6-8 301
10-12 *
MW26-6/SB26-6
4-6 10350
12-14 7740
MW26-7/SB26-7
4-6 200
8-10 542
MW26-5/SB26-5
SB26-12
6-8 4780
14-16 1070
TP26-6A..D
0-0.7 1230
5-5 294
MW26-3/SB26-3
0-2 *
6-8 839
10-12 *
0-0.7 *
5-5 *
TP26-1A..D
6-8 127
8-10 *
MW26-9/SB26-9
0-0.7 1410
5-5 992
TP26-2A..D
4-6 2666
8-8 4309
MW26-10/SB26-10
0-1 59
6.5-7.2 403
TP26-3A..D
MW26-8/SB26-8
6-8 380
8-10 350
3 *
TP26-5A..D
3 1222
TP26-4A..D
MW26-4/SB26-4
0-2 54
2-4 *
6-8 387
LEGEND
SEAD-26
MINOR WATERWAY
MAJOR WATERWAY
FENCE
UNPAVED ROAD
BRUSH LINE
LANDFILL EXTENT
RAILROAD
760 GROUND SURFACE ELEVATION CONTOUR
UNDERGROUND ELECTRIC UTILITY LINE
UNDERGROUND WATER UTILITY LINE
SURVEY MONUMENT WITH LABEL
ROAD SIGN
DECIDUOUS TREE
FIRE HYDRANT
MANHOLE
GUIDE POST
POLE
UTILITY BOX
COORDINATE GRID (250' GRID)
OVERHEAD UTILITY POLE
MAILBOX/RR SIGNAL
(NOT ALL SYMBOLS MAY APPEAR ON MAP)
APPROXIMATE EXTENT OF SEAD-26
TEST PIT LOCATION
MONITORING WELL LOCATION
SOIL BORING SAMPLE
* INDICATES NONE WERE DETECTED
DEPTH CONC.
0-0.7 3668
10-12 *
50 0 50 100
(Feet)
ACAD\SENECA\25-26RIF\SD26PHDP.DWG
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
CLIENT/PROJECT TITLE
SENECA ARMY DEPOT ACTIVITY
RI/FS
SEAD-26 FIRE TRAINING PIT AND AREA
DEPT. ENVIRONMENTAL ENGINEERING
Dwg. No. 726059-02003
FIGURE 4-10
SEAD-26 DISTRIBUTION OF PAH'S IN SOIL
SCALE 1" = 100'
DATE MARCH 1996
REV A



● PATHWAY CONSIDERED TO POSE POTENTIAL RISK

NA NOT APPLICABLE RECEPTOR

PARSONS

PARSONS ENGINEERING SCIENCE, INC

CLIENT/PROJECT TITLE

SENECA ARMY DEPOT ACTIVITY

RISK ASSESSMENT EXPOSURE PATHWAYS

SEAD-26 FIRE TRAINING PIT AND AREA

DEPT ENVIRONMENTAL ENGINEERING

DWG NO 728059 02002

FIGURE 7-13

EXPOSURE PATHWAY SUMMARY

SCALE NA

DATE MAY 1995

H:\ENG\SENECA\s2526\Figures\25EXP.CDR

TABLE 7-74
CALCULATION OF TOTAL NONCARCINOGENIC AND CARCINOGENIC RISKS
REASONABLE MAXIMUM EXPOSURE
SENECA ARMY DEPOT, ROMULUS, NEW YORK - SEAD 26

RECEPTOR	EXPOSURE ROUTE	EXPOSURE ASSESSMENT Table Number	RISK CHARACTERIZATION Table Number	HAZARD INDEX	CANCER RISK
CURRENT SITE WORKER	Inhalation of Volatile Organics in Ambient Air	Table 7-7	Table 7-42	1.5E-09	5.0E-13
	Ingestion of Onsite Soils	Table 7-13	Table 7-44	3.1E-03	1.1E-06
	Dermal Contact to Onsite Soils	Table 7-19	Table 7-46	0.0E+00	0.0E+00
TOTAL RECEPTOR RISK (Nc & CAR)				3.1E-03	1.1E-06
FUTURE RESIDENTIAL	Inhalation of Volatile Organics in Ambient Air	Table 7-9	Table 7-48	2.6E-08	1.0E-11
	Ingestion of Onsite Soils	Table 7-15	Table 7-50	5.6E-01	6.1E-05
	Dermal Contact to Onsite Soils	Table 7-21	Table 7-52	0.0E+00	0.0E+00
	Ingestion of Groundwater	Table 7-25	Table 7-54	5.7E-02	2.9E-06
	Dermal Contact to Groundwater	Table 7-27	Table 7-56	2.6E-01	6.5E-06
	Inhalation of Groundwater while Showering	Table 7-31	Table 7-58	7.4E-07	2.7E-10
	Ingestion of Onsite Surface Water while Wading	Table 7-33	Table 7-60	2.0E-02	7.0E-07
	Dermal Contact to Surface Water while Wading	Table 7-35	Table 7-62	3.2E-03	4.7E-06
	Ingestion of Onsite Sediment	Table 7-39	Table 7-64	3.1E-01	8.1E-06
	Dermal Contact to Sediment while Wading	Table 7-39	Table 7-66	2.5E-03	3.6E-06
TOTAL RECEPTOR RISK (Nc & CAR)				1.2E+00	8.7E-05
FUTURE ON-SITE CONSTRUCTION WORKERS	Inhalation of Volatile Organics in Ambient Air - RME	Table 7-11	Table 7-68	1.8E-08	2.5E-13
	Ingestion of Onsite Soils	Table 7-17	Table 7-70	5.6E-01	3.9E-06
	Dermal Contact to Onsite Soils	Table 7-23	Table 7-72	0.0E+00	0.0E+00
TOTAL RECEPTOR RISK (Nc & CAR)				5.6E-01	3.9E-06

Potential Soil Remedial Technologies for SEADs-25 & 26

- No-Action
- Off-Site Disposal (Landfilling)
- Containment (Slurry Walls and Caps)
- Vapor Extraction
- Bioremediation (In-Situ or Ex-Situ)
- Low Temperature Thermal Treatment
- Soil Washing

Potential Groundwater Remedial Technologies for SEAD-25

- No Action
- Pump and Treat (Collection Trench & Air Stripping/Carbon Adsorption)
- Bioremediation
- Air Sparging

Health Risk Assessment

U.S. Army Center for Health Promotion and Preventive Medicine

Health Risk Assessment and Risk Communication Program

HRA Objectives ~ 1

- *Provide a consistent Process for evaluating and documenting public health threats at sites*

HRA Objectives - 2

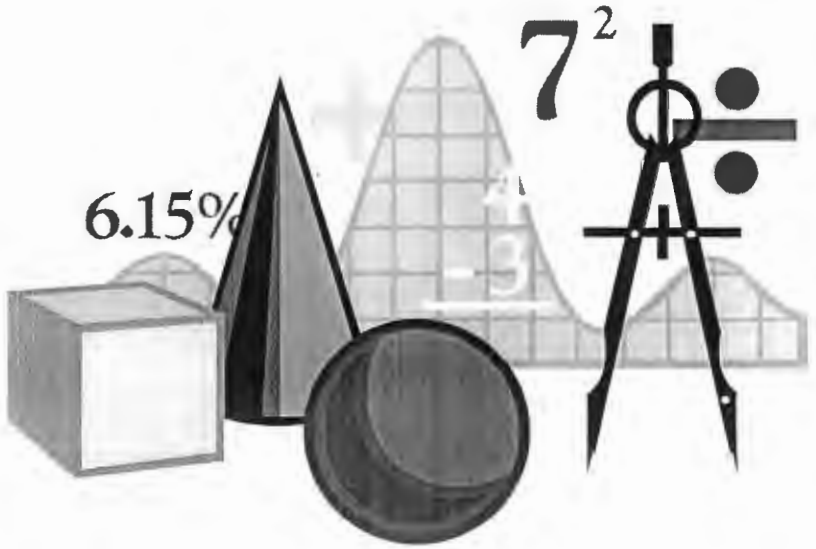
- *Provide an analysis of baseline risks and help determine the need for action at sites*

HRA Objectives ~ 3

- *Provide a basis for determining levels that can remain onsite and still be adequately protective of public health*

HRA Objectives - 4

- *Provide a basis for comparing potential health impacts of various remedial alternatives*



Superfund Remediation Process

- *CERCLA Information System (CERCLIS)*
  - *A listing of sites with possible releases of hazardous substances*
- *Preliminary Assessment (PA)*
  - *An initial evaluation of the site using existing information.*
  - *Approximately 50% of CERCLIS sites are eliminated from further consideration after PA*

Superfund Remediation Process

- *Site Inspection (SI)*
  - *Based on the results of the PA, an SI may be performed to:*
    - *Determine if there is a potential threat to human health or the environment*
    - *Determine if there is an immediate threat to people in the area*
    - *Collect sufficient data (which may include limited sampling) to enable the site to be scored using HRS*

Superfund Remediation Process

- *Interagency Agreement*
  - *Agreement between the federal facility, EPA, and often the state to address remediation at the site*
- *Remedial Investigation*

Remedial Investigation (RI)

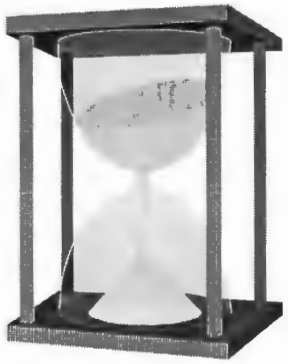
- *Purpose*
  - *To Collect data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives*
  - *Usually contains BRA*

Superfund Remediation Process

- Baseline Risk Assessment

Superfund Remediation Process

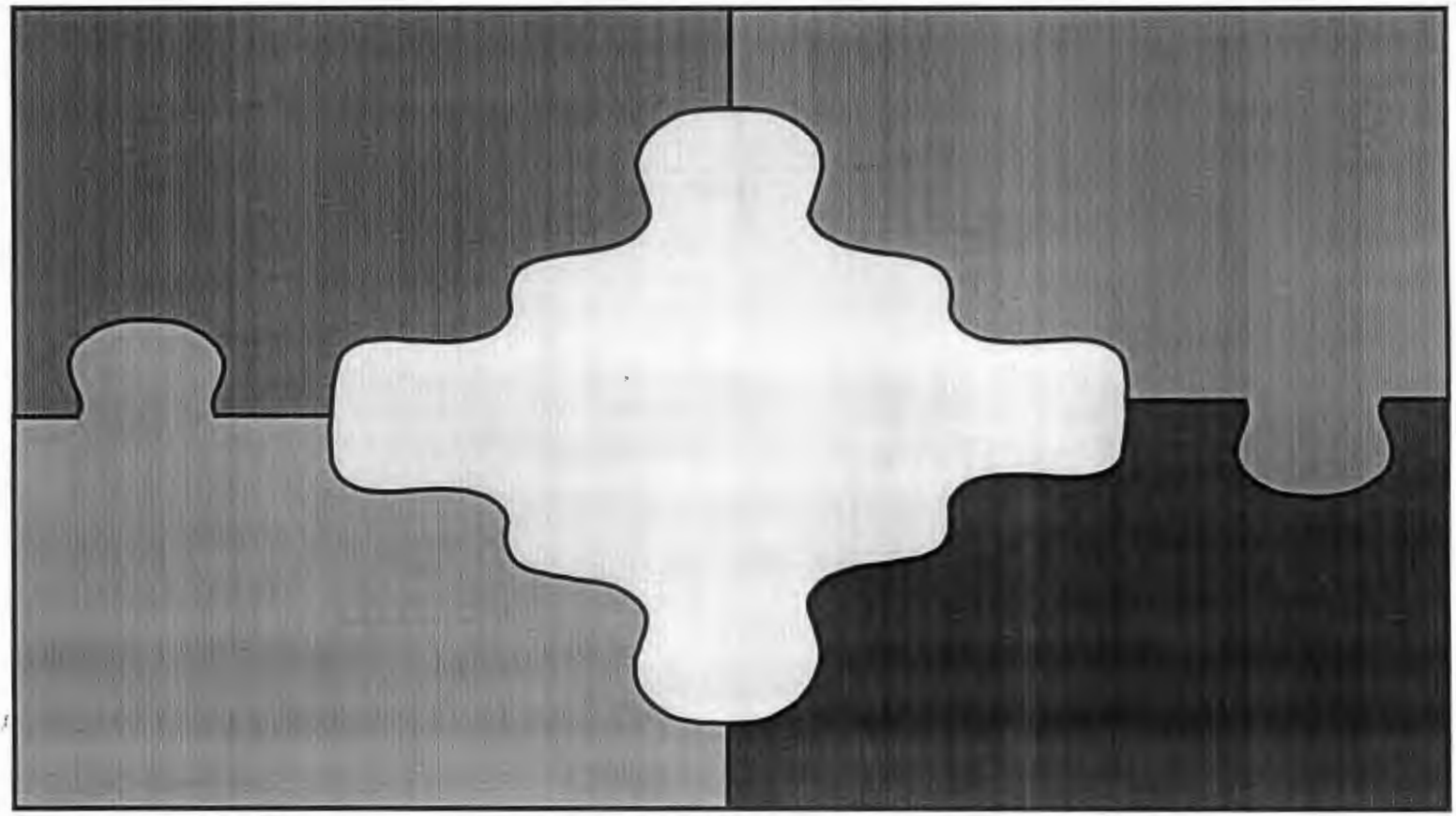
- *Feasibility Study*
  - *Develop and evaluate remedial alternatives*



Superfund Remediation Process

- *Record of Decision (ROD)*
  - *Final remedy decision agreed upon by regulated and regulating agencies*
- *Remedial Design (RD)*
  - *Development of actual design of the selected remedy*
- *Remedial Action (RA)*
  - *Implementation of the remedy*

Risk Assessment Process



Risk Assessment Process

- Data Collection
- Data Evaluation
- Exposure Assessment
- Toxicity Assessment
- Risk Characterization

Data Collection

- *Collect Existing Information*
- *Address Modeling Needs*
- *Collect Background Data*
- *Conduct Preliminary Exposure Assessment*
- *Devise Strategy for Sample Collection*
- *Identify Special Analytical Needs*
- *Examine QA/QC Measures*

Data Collection

- *Data Needed for Risk Assessment*
  - *Contaminant Identities*
  - *Contaminant Concentrations*
  - *Characteristics of Source*
  - *Characteristics of Environmental Setting*
    - *As they may affect fate, transport and persistence*

Data Collection

- *Based on review of existing information, develop a conceptual site model*
  - *Sources*
  - *Pathways*
  - *Receptors*

Data Collection

- *Background*
  - *Naturally occurring - Ambient concentrations of chemicals present in the environment that have not been influenced by humans*
  - *Anthropogenic - Concentrations of chemicals that are present in the environment du to human made non-site sources*

Data Collection

- *Preliminary Identification of Potential Human Exposure*
  - *Media of Concern*
  - *Areas of Concern*
  - *Types of Chemicals*
  - *Routes of Transport*

Data Collection

Media - Soil

- *Heterogeneous Nature of Soil*
- *Designation of Hot Spots*
- *Depth of Samples*
- *Fate and Transport Properties*
- *"Exposure" Properties*

Data Collection

Media - Ground Water

- *Hydrogeologic Properties*
- *Well Location*
- *Well Depth*
- *Filtered Vs. Unfiltered Samples*
- *"Exposure" Properties*

Data Collection

Media - Surface Water and Sediment

- *Lotic Waters*
- *Lentic Waters*
- *Estuaries*
- *Sediments*
- *"Exposure" Properties*

Data Collection

Media - Air

- Time and Space
- Emission Sources
- Meteorological Conditions
- Modeling Considerations
- "Exposure" Properties

Data Collection

Media ~ Biota

- *Area Specific Food Preferences*
- *Usability*
- *Whole vs. Portion*
- *Time*

Data Evaluation

- *Combine Available SI Data*
- *Evaluate Analytical Methods*
- *Evaluate Quantitation Limits*
- *Evaluate Qualified and Coded Data*
- *Evaluate Blanks*
- *Evaluate Tentatively Identified Compounds*
- *Compare Site Data with Background*
- *Identify Chemicals of Potential Concern*

Data Evaluation

- Comparison of Blanks with Sample Data
  - Containing Common Laboratory Contaminants
    - Methyl ethyl ketone
    - Methylene Chloride
    - Toluene
    - Pthalate esters
  - Containing Other Contaminants

Data Evaluation

- *Comparison of Samples with Background*
  - *Use appropriate background data*
  - *Identify statistical methods - statistical significance*
  - *compare concentrations with naturally occurring levels*
  - *compare chemical concentrations with anthropogenic levels*

Data Evaluation

- *Identify Chemicals of Potential Concern*
  - *Positively detected in at least one sample with adequate QA/QC*
  - *Detected at levels significantly elevated above naturally occurring levels*
  - *Tentatively identified, but associated with the site based on historical information*
  - *Transformation or breakdown products of chemicals known to be present*

Exposure Assessment

- *Characterize the Physical Setting*
- *Identify Potentially Exposed Populations*
- *Identify Potential Exposure Pathways*
- *Estimate Exposure Concentrations*
- *Estimate Chemical Intakes*

Exposure Assessment

Step 1

- *Characterize the Physical Setting*
  - *Climate*
  - *Meteorology*
  - *Geologic Setting*
  - *Vegetation*
  - *Soil Type*
  - *Ground Water Hydrology*
  - *Location and Description of Surface Water*

Exposure Assessment

Step 2

- *Characterize Potentially Exposed Populations*
  - *Determine location of current populations relative to the site*
  - *Determine current land use*
  - *Determine future land use*
  - *Identify subpopulations of potential concern*

Exposure Assessment

Step 3

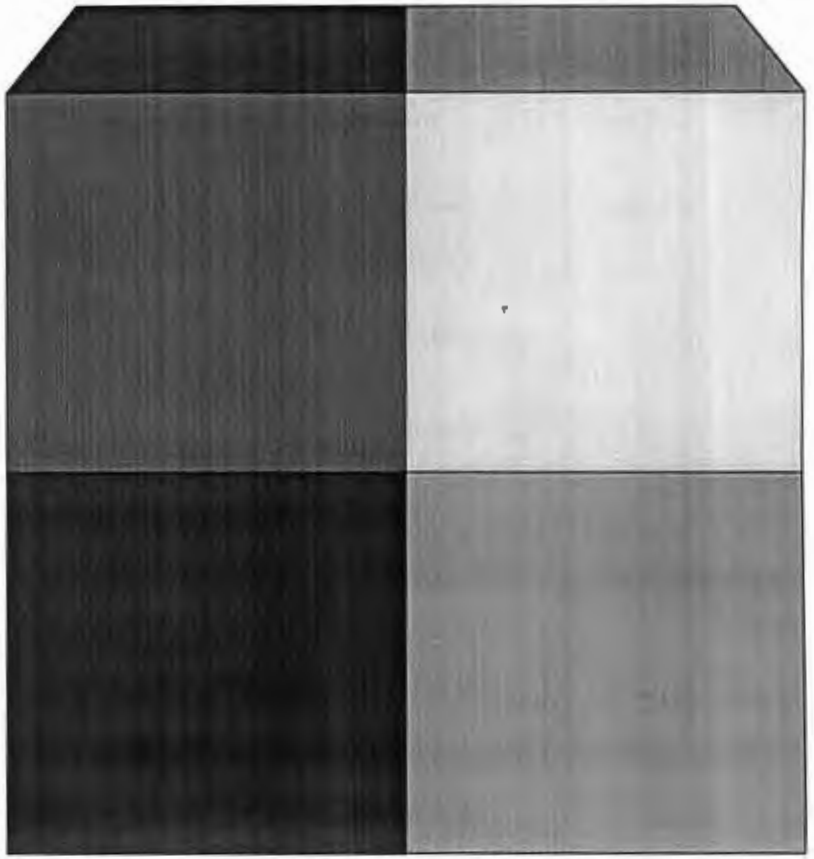
- *Identify Potential Exposure Pathways*
  - *Identify sources and receiving media*
  - *Evaluate fate and transport in release media*
  - *Integrate information into exposure pathways*

Exposure Assessment

Reasonable Maximum Exposure

Exposure Assessment

- *Estimation of Chemical Intakes*



Exposure Assessment

Step 4

- *Determination of Exposure Concentrations*
  - *Media specific*
  - *Statistically based*
  - *Direct use of monitoring data*
  - *Use of modeling data*

Toxicity Assessment

- *Gather Qualitative and Quantitative Toxicity Information for Substances being Evaluated*
- *Identify Exposure Periods for Which Toxicity Values are Necessary*
- *Determine Toxicity Values for Noncarcinogenic Effects*
- *Determine Toxicity Values for Carcinogenic Effects*

Toxicity Assessment

- Gather Toxicity Information for Substances Being Evaluated

Toxicity Assessment

- *Sources of Toxicological Information*
  - *Integrated Risk Information System (IRIS)*
  - *Health Effects Summary Tables (HEAST)*
  - *EPA Criteria Documents*
  - *ATSDR Toxicological Profiles*
  - *EPA Environmental Criteria and Assessment Office (ECAO)*
  - *Open Literature*

Toxicity Assessment

- *Noncarcinogenic Toxicity Assessment*
  - *Uses Reference Dose (RfD)*
  - *mg/kg-day*

Toxicity Assessment

- *Carcinogenic Toxicity Assessment*
  - *Uses Slope Factors*
    - *– Based on one-hit linear dose response*
  - *$(mg/kg\text{-}day)^{-1}$*

Toxicity Assessment

- *Carcinogenicity Weight of Evidence (EPA)*
  - *A ~ Known human carcinogen*
  - *B ~ Probable human carcinogen*
    - *B1 ~ Limited human data available*
    - *B2 ~ Sufficient animal data, inadequate or no evidence in humans*
  - *C ~ Possible human carcinogen*
  - *D ~ Not classifiable*
  - *E ~ Evidence of noncarcinogenicity in humans*

Risk Characterization

- *Review Outputs from Toxicity and Exposure Assessments*
- *Quantify Risks from Individual Chemicals*
- *Quantify Risks from Multiple Chemicals*
- *Combine Risk Across Exposure Pathways*
- *Assess and Present Uncertainty*
- *Consider Site-Specific Human Studies*

Risk Characterization

- *Review Outputs from Toxicity and Exposure Assessments*

Risk Characterization

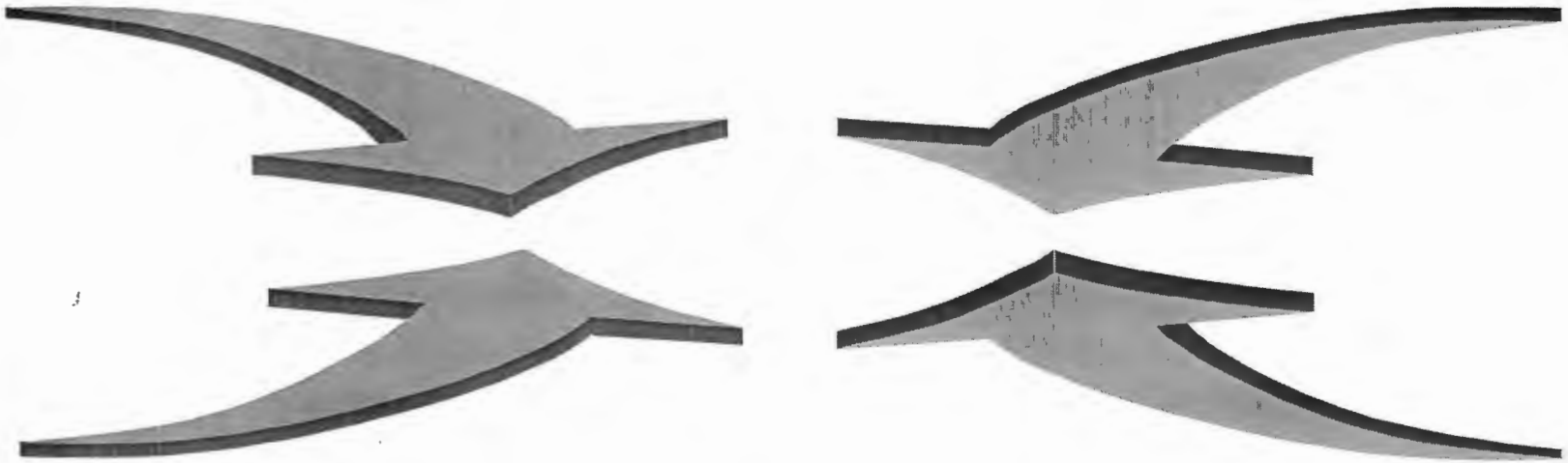
- *Calculate Risks from Individual Chemicals*
  - *Carcinogenic Risk*
    - *Intake X Toxicity = Risk*
    - *Risk expressed as probability in hypothetically exposed population*
  - *Noncarcinogenic Risk*
    - *Intake/Toxicity = Hazard Quotient*
    - *HQ > 1 indicates potential for adverse health effects (noncarcinogenic)*

Risk Characterization

- *Quantify Risks from Multiple Chemicals*
  - *Carcinogenic Risk ~~~> Summation of risk for all chemicals*
  - *Noncarcinogenic Risk ~~~> Summation of HQs to determine Hazard Index*

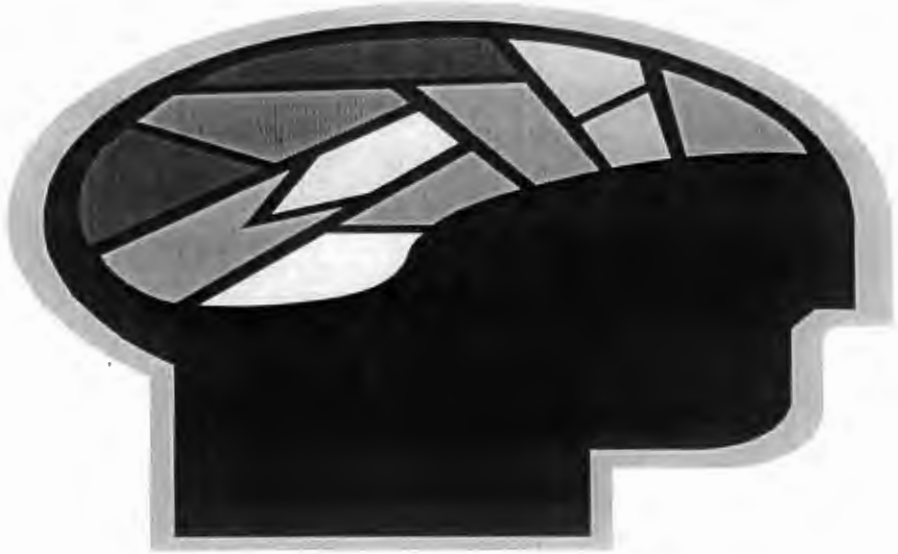
Risk Characterization

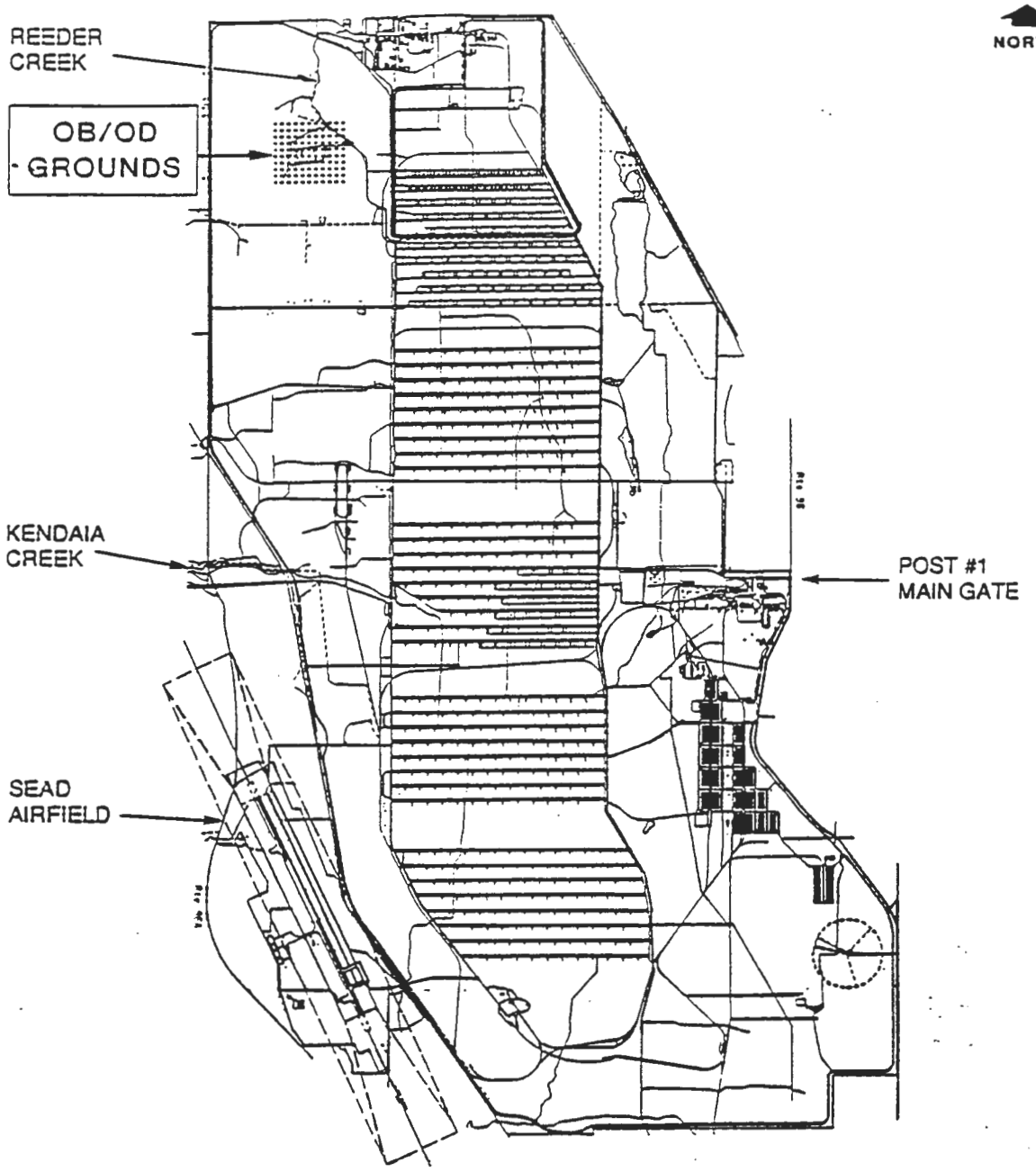
- *Combine Risks Across Exposure Pathway*
  - *Summation for both carcinogenic and noncarcinogenic effects in the same manner as for multiple chemicals*



Risk Characterization

- *Assess and Present Uncertainty*
  - *Lack of data and/or scientific certainty necessitates use of assumptions*





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ENGINEERING-SCIENCE, INC.

CLIENT/PROJECT TITLE

SENECA ARMY DEPOT
REMEDIAL INVESTIGATION / FEASIBILITY STUDY
OPEN BURNING GROUNDS

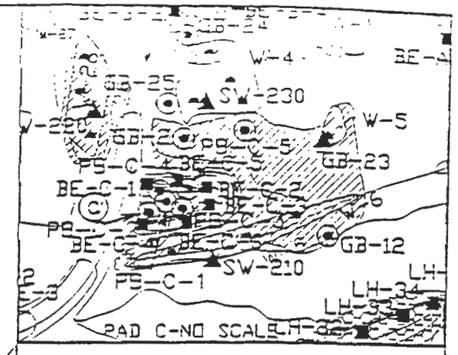
DEPT ENVIRONMENTAL ENGINEERING | NO. 720446-01000

FIGURE 1-2

SENECA ARMY DEPOT MAP

SCALE 1" = 5000' (APPROXIMATE)

SOURCE: Seneca Army Depot



LEGEND:

- BURNING PAD DESIGNATION
- BE-G-1 — BERM EXCAVATION & DESIGNATION
- PB-G-1 GB-2 — PAD OR GRID BORING DESIGNATION
- GAE-G-2 — GEOPHYSICAL ANOMOLY EXCAVATION & DESIGNATION
- GROUND CONTOUR AND ELEVATION
- W-1 — WETLAND & DESIGNATION
- MW-17 — MONITORING WELL & DESIGNATION
- UTILITY POLE
- TREE
- BRUSH
- SV-210 — SURFACE WATER/SEDIMENT SAMPLE & DESIGNATION
- CASE 1
- CASE 2 — AREAS TO BE REMEDIATED IN REEDER CREEK NOT SHOWN
- CASE 3
- CASE 4
- CASE 5

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

CLIENT/PROJECT TITLE

SENECA army DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS

DEPT. ENVIRONMENTAL ENGINEERING | Dwg. No.

FIGURE 2-2
LOCATION OF SOIL TO BE REMEDIATED
(GREATER THAN 500mg/kg LEAD)

SCALE 1" = 200' | DATE MARCH 1996 | REV A

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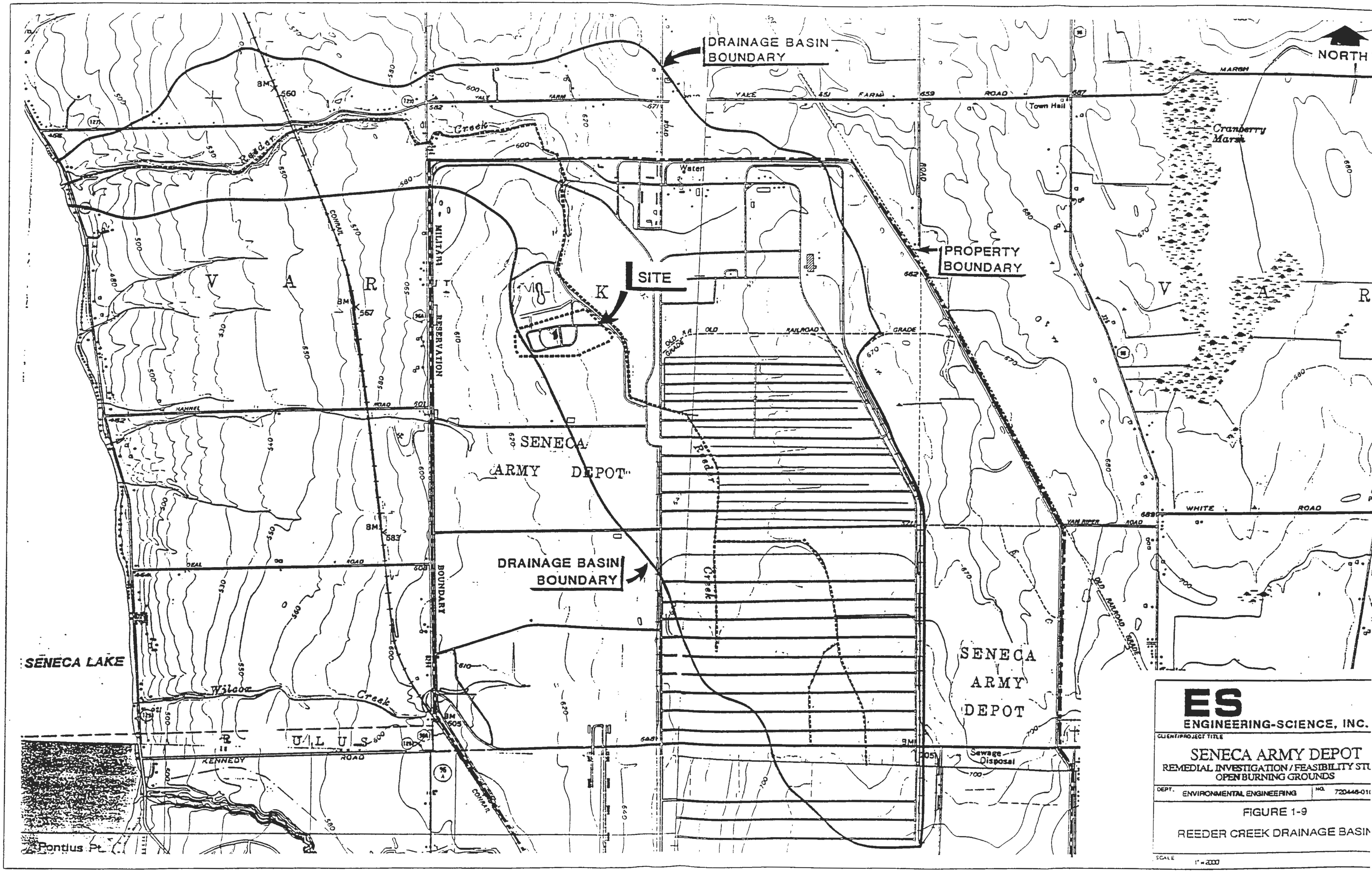

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ENGINEERING-SCIENCE, INC.

CLIENT/PROJECT TITLE

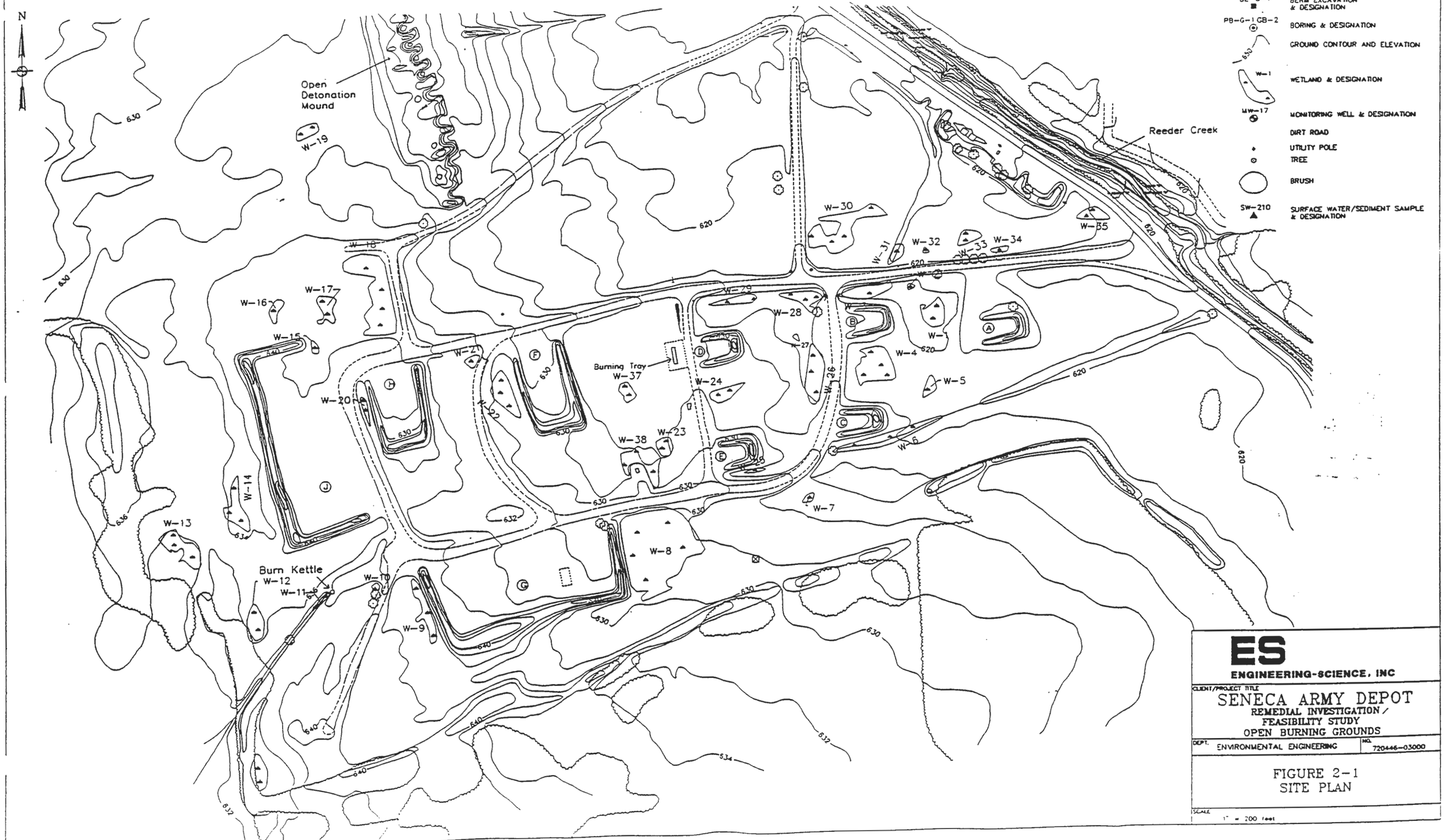
SENECA ARMY DEPOT
REMEDIAL INVESTIGATION / FEASIBILITY STU
OPEN BURNING GROUNDS

DEPT. ENVIRONMENTAL ENGINEERING | NO. 720446-01

FIGURE 1-9

REEDER CREEK DRAINAGE BASIN

SCALE 1" = 2000'



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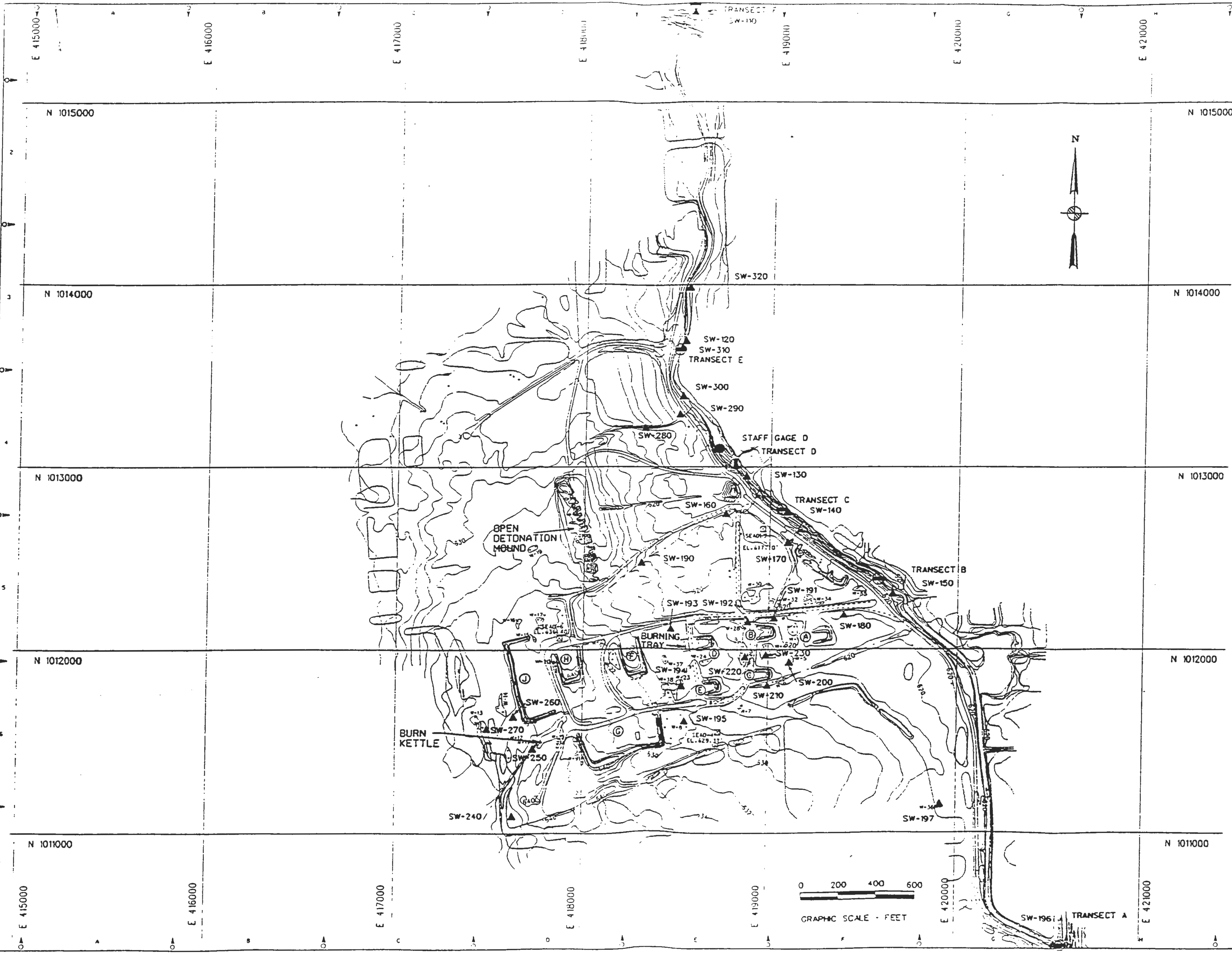
ENGINEERING-SCIENCE, INC

CLIENT/PROJECT TITLE
SENECA ARMY DEPOT
REMEDIAL INVESTIGATION / FEASIBILITY STUDY
OPEN BURNING GROUNDS

DEPT. ENVIRONMENTAL ENGINEERING
NO. 720446-03000

FIGURE 2-1
SITE PLAN

SCALE 1" = 200 feet


TRANSECT F
SW-110
E 415000
E 416000
E 417000
E 418000
E 419000
E 420000
E 421000
N 1015000
N 1014000
N 1013000
N 1012000
N 1011000
N
SW-320
SW-120
SW-310
TRANSECT E
SW-300
SW-290
SW-280
STAFF GAGE D
TRANSECT D
SW-130
TRANSECT C
SW-140
SW-160
OPEN DETONATION MOUND
SW-190
SW-170
TRANSECT B
SW-150
SW-191
SW-193 SW-192
SW-180
BURNING TRAY
SW-194
SW-220
SW-230
SW-200
SW-210
SW-260
SW-195
BURN KETTLE
SW-270
SW-250
SW-240
SW-197
SW-196
TRANSECT A
SEAD-4
EL.629.37'
0 200 400 600
GRAPHIC SCALE - FEET
01-SEP-1993 15:36 /usr/sl3/environ/misc/senp216.dgn
LEGEND:
PAVED ROAD
DIRT ROAD
GROUND CONTOUR
UTILITY POLE
TREE
BRUSH
WETLAND & DESIGNAT
RUNOFF SWALE
BURNING PAD DESIGN
CULVERT
MONUMENT AND DESI
SURFACE WATER/SED & DESIGNATION
TRANSECT & STAFF
TRANSECT
STAFF GAGE

B PRE-DRAFT PHASE I RI/FS
A ISSUED WITH PRELIMINARY SITE CHARACTERIZATION REPORT
REV DATE DESCRIPTION

DRAWN BY E.SCHACHT — CHECKED BY M.E. BAKER
DESIGN SUPV. G.A.KAELIN — RESP. ENGR. M.A.DUCHESNEAU
CHIEF DISC. ENGR. M.E.BAKER — MGR. OF ENGR. J.P.CHAPLICK
PROJECT MANAGER M.A.DUCHESNEAU
MGR. OF PROJECTS J.P.CHAPLICK
IN CHARGE W.D.PATTERSON

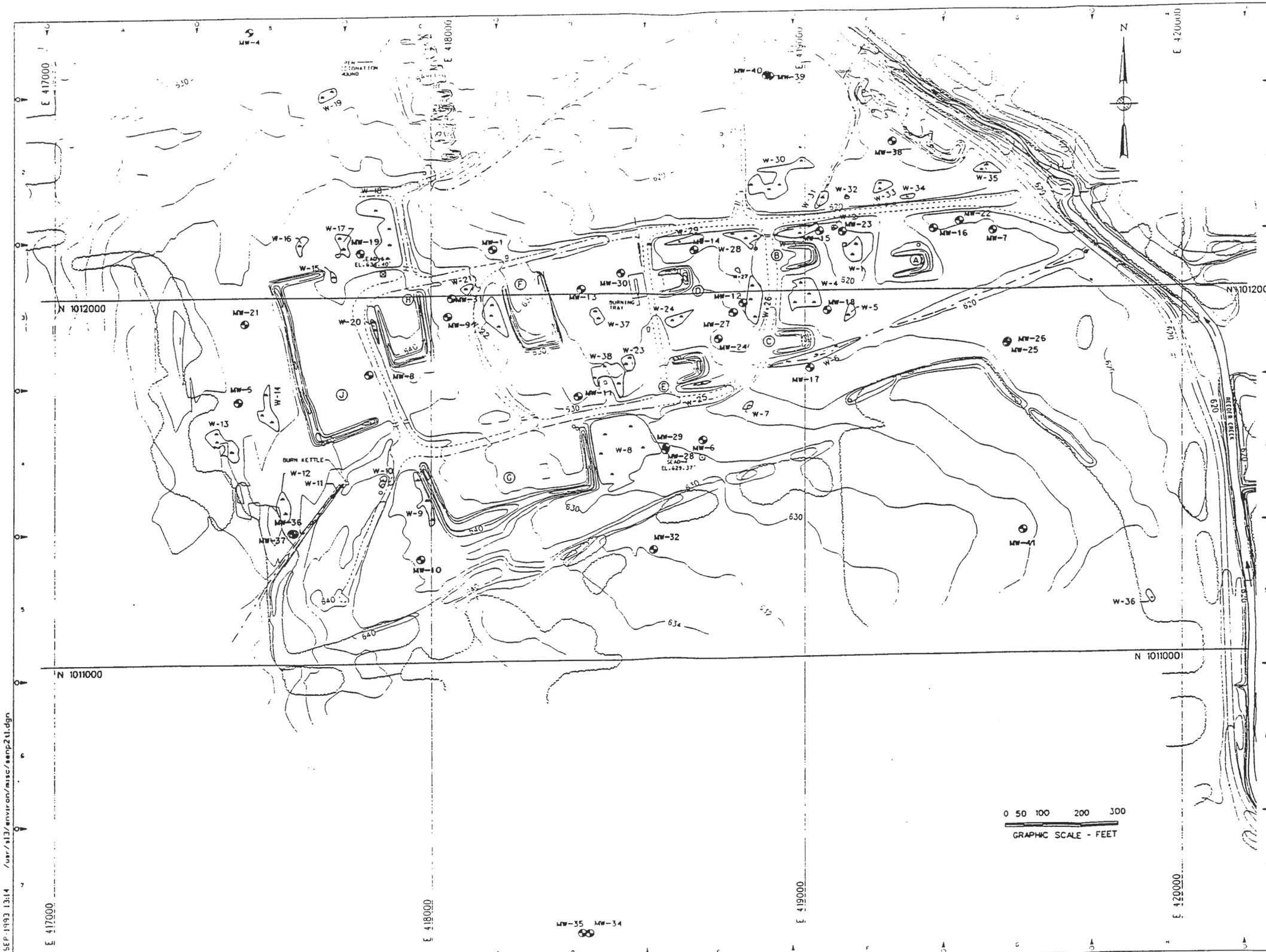
ES
ENGINEERING-SCIENCE

CLIENT/PROJECT TITLE
SENECA ARMY D
REMEDIAL INVESTIGAT
FEASIBILITY STUDY
OPEN BURNING GROU

DEPT. ENVIRONMENTAL ENGINEERING

FIGURE 2-4
LOCATION OF SURFACE
AND SEDIMENT SAMPL

SCALE 1"=500'
720446-01022-2-4



REV	DATE	DESCRIPTION	DRAWN	CHECKED	DES SUPV.	M.P SUPV.
B	9/93	PRE-DRAFT PHASE II RI/FS				
A	2/93	ISSUED WITH PRELIMINARY SITE CHARACTERIZATION REPORT				

DRAWN BY E.SCHACHT	CHECKED BY W.E.BAKER
DESIGN SUPV. G.A.KAELIN	RESP. ENGR. M.M.DUCHESNEAU
CHIEF TECH. ENGR. W.E.BAKER	MGR. OF ENGR. J.P.CHAPLICK
PROJECT MANAGER M.M.DUCHESNEAU	
MGR. OF PROJECTS J.P.CHAPLICK	
IN CHARGE W.D.PATTERSON	

ES
ENGINEERING-SCIENCE, I

CLIENT/PROJECT TITLE
SENECA ARMY DEP
REMEDIAL INVESTIGATION
FEASIBILITY STUDY
OPEN BURNING GROUNDS

DEPT. ENVIRONMENTAL ENGINEERING | NO. 7284

FIGURE 2-8
LOCATION OF
MONITORING WELLS

SCALE 1" = 250'

E.S. DOC. NO. 720446-01022-2-3

01-SEP-1993 13:14 /usr/s13/environ/misc/senp2tl.dgn

N

1015000

1014000

1013000

1012000

REMOTE AREAS
TO BE REMEDIATED

REEDER CREEK

OPEN
DETONATION
MOUND

OB GROUNDS

BURN KETTLE

100 0 100 200
(feet)

LEGEND:

- BURNING PAD DESIGNATION
- GROUND CONTOUR AND ELEVATION
- WETLAND
- UTILITY POLE
- TREE
- BRUSH
- CASE 2

ACAD\SENECA\OBRI\REMEDIST.DWG

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

CLIENT/PROJECT TITLE

SENECA ARMY DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS

DEPT. ENVIRONMENTAL ENGINEERING | Dwg. No.

FIGURE 2-1
LOCATION OF SOIL & SEDIMENT TO BE
REMEDIATED AT REMOTE AREAS

Scale 1" = 500' | Date MARCH 1998 | Rev.

MINUTES
RESTORATION ADVISORY BOARD
SEPTEMBER 17, 1996 MEETING MINUTES

1. Attendance:

Government RAB Members Present:

Stephen M. Absolom, BRAC Environmental Coordinator, SEDA/Army Co-Chair
Carla Struble, U.S. Environmental Protection Agency
Kamal Gupta, NYS Department of Environmental Conservation
Dan Geraghty, NYS Department of Health

Community RAB Members Present:

Dick Durst/Community Co-Chair, Anne Herman, David Wagner,
Brian Dombrowski, Richard Sisson, Al Legasse, Lucinda Sangree,
Mary Ann Krupsak, Russell Miller, Estelle Coleman, Frank Ives

HAROLD

Community RAB Member Not Present:

Henry Van Ness, Richard Lewis, Diane DeMuth, Carmen Serrett

Government and Technical Support Personnel Present:

Jerry Whitaker, SEDA Base Transition Coordinator
Beverly Lombardo, SEDA Public Affairs Officer
Susan Cooper, SEDA Secretary
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Mike Duchesneau, Parsons Engineering Science, Inc.
Keith Hoddinott, U.S. Army Environmental Center for Health Promotion and Preventive Medicine
Jim Ridenour, NYS Department of Health
Robert Scott, NYS Department of Environmental Conservation
Mark Maddaloni, U.S. Environmental Protection Agency, Region II
Bruce Nelson, Malcolm Pirnie
Kevin Healy, U.S. Army Corps of Engineers, Huntsville District

Others Present (from sign-in sheet):

Joanne Howard, Community Member
Nellie Legasse, Community Member
Karl Bechler, Community Member
Patricia Jones, LRA

2. Stephen Absolom welcomed members and support staff to the September Restoration Advisory Board in the NCO Club, delivered opening remarks, outlined the evening's agenda, and asked for introductions.

3. Minutes from the June and August RAB meetings were then approved, signed, and accepted into record. The June minutes required a change to show Lucinda Sangree present.

4. Mike Duchesneau gave a presentation on the Fire Training Areas Remedial Investigation Status. The presentation covered the Fire Demonstration Pad used by firefighters to demonstrate their proficiency in fighting fires. Compounds were found to exceed EPA ranges in soil and groundwater at this site. The Fire Training Area was also explained as an area where firefighters practiced their skills in a variety of situations. Compounds detected there also exceeded EPA ranges in soils and subsurface soils. Possible remedial action alternatives were identified for soil and groundwater. Questions fielded during the presentation follow:

a. An inquiry was made as to whether compounds used for firefighting could be contributing to the contamination. Response was that it was possible, but there is little info on what was used at the site.

b. A question on how the site was constructed was asked. This response was in conjunction with the discussion of why the groundwater was mounding at the site.

c. A discussion took place on the reuse scenario and the impact on remediation efforts if the reuse was a continuation of the area for fire training. The discussion indicated some remediation may be required for hot spot removal, but that would have to be determined. It was stated that any new activity would be required to be performed in an environmentally friendly procedure that would involve some construction which might also require some remediation effort.

5. Keith Hoddinott then briefed the RAB on Risk Assessment for Environmental Sites. What was normally a 5-day class was successfully compressed into a 30-minute presentation to include objectives, Superfund Remediation Process, and Risk Assessment Process. Assessing risks in humans entailed data collection and evaluation, exposure assessment, toxicity assessment, and risk characterization. The following additional issues were discussed regarding this process:

a. When determining toxicity, the significance of 1 in 10,000 is a common number used. Assumptions used in risk assessments are widely accepted throughout the U.S., but not by the World Health Association.

b. A residential scenario was provided to lend perspective to the risk assessment process.

6. General discussion enumerated several topics for future meetings:

a. Ecological risk assessment as opposed to human risk assessment as was discussed during this meeting.

b. Feasibility Study process.

c. Treatment processes for remediation.

d. Radiological contamination--it's impact, extent, future impact, and findings.

e. A presentation by the Local Redevelopment Authority (LRA) to include future uses of the depot as well as the correlation between the RAB and LRA's activities and their impacts.

f. Records of Decision.

g. National Environmental Policy Act (NEPA) and Environmental Impact Statement.

7. The next Restoration Advisory Board meeting will be held on October 15, 1996 at 7:00 p.m. at the SEDA NCO Club.

8. The meeting was adjourned at 9:25 p.m.

Respectfully submitted,

Susan R. Cooper

SUSAN R. COOPER
Secretary

APPROVED AS SUBMITTED:

STEPHEN M. ABSOLOM
U.S. Army Co-Chair

RICHARD A. DURST
Community Co-Chair

Restoration Advisory Board
Meeting Agenda

October 15, 1996

7:00	**Welcome** LTC Stephen W. Brooks Commander, Seneca Army Depot Activity
7:05	**Acceptance of Minutes** Mr. Stephen M. Absolom/Dr. Dick Durst Army Co-chair/Community Co-chair
7:15	**BRAC Cleanup Plan Update** Mr. Richard J. Newill Woodward-Clyde Federal Services
7:45	**Break**
8:00	**Radiological Sites Investigation Status** Mr. Michael Duchesneau Parsons Engineering Science, Inc.
8:30	**Open Discussion**
9:00	**Adjourn**

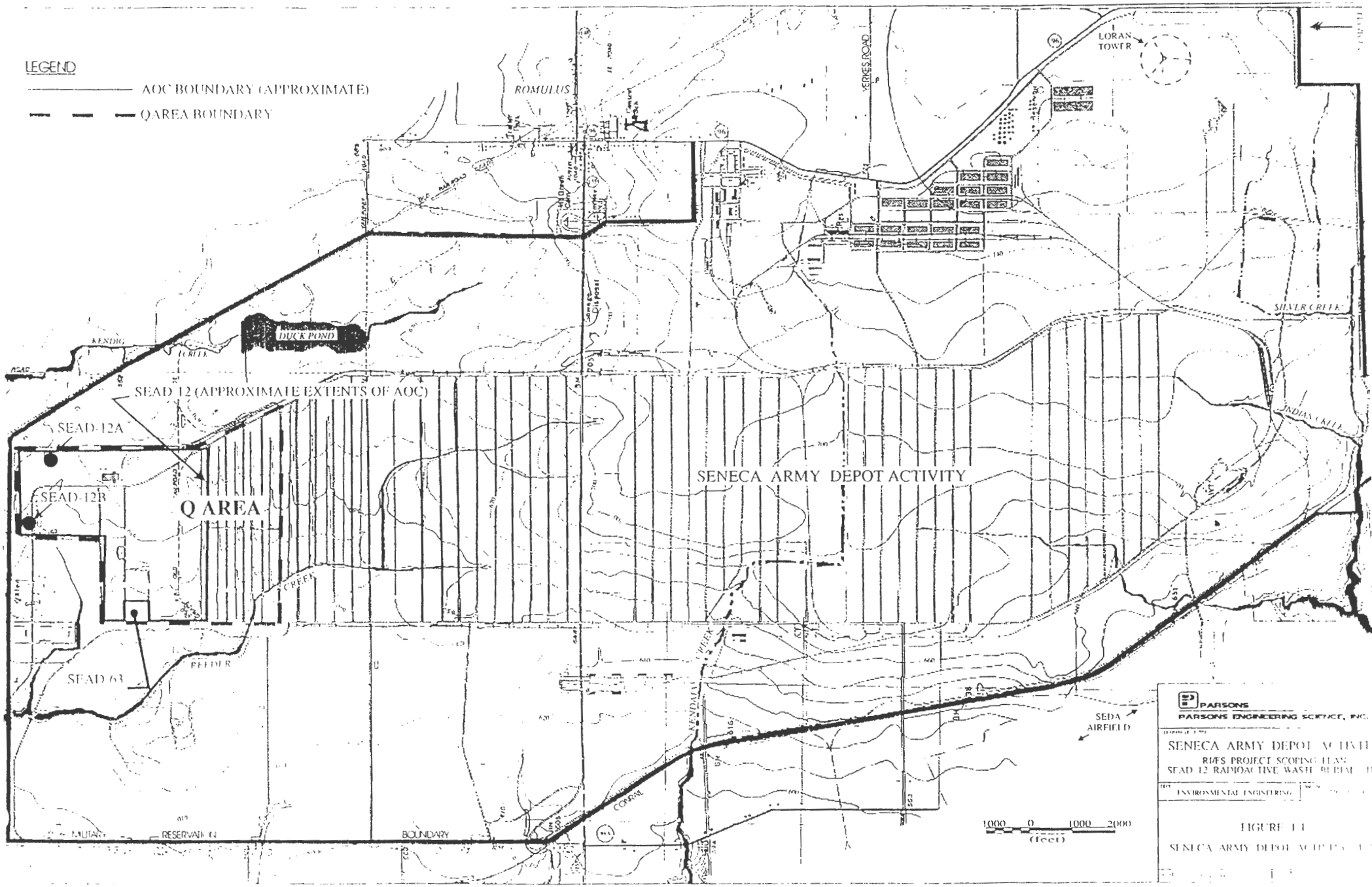
Presentation to the RAB

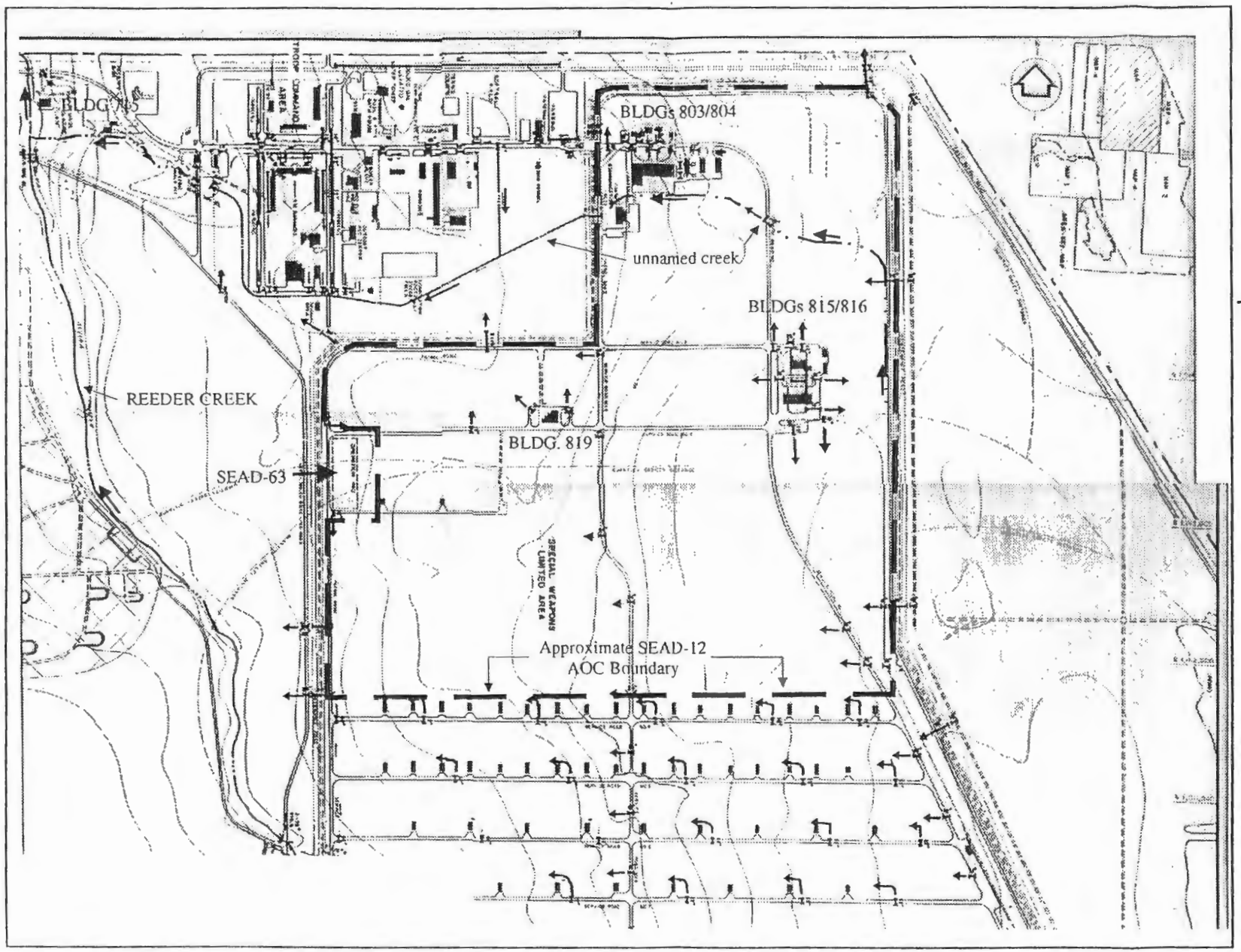
October 15,1996

Update on Site Status

at SEAD-12,

Former Weapons Storage Area


LEGEND
AOC BOUNDARY (APPROXIMATE)
QAREA BOUNDARY
ROMULUS
YERKES ROAD
LORAN TOWER
DUCK POND
SILVER CREEK
INDIAN CREEK
SEAD 12 (APPROXIMATE EXTENTS OF AOC)
SEAD-12A
SEAD-12B
Q AREA
SENECA ARMY DEPOT ACTIVITY
SEAD 63
SEDA AIRFIELD
CONRAIL
MILITARY RESERVATION BOUNDARY
1000 0 1000 2000
(feet)
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
SENECA ARMY DEPOT ACTIVITY
RI/FS PROJECT SCOPING PLAN
SEAD 12 RADIOACTIVE WASTE BURIAL
ENVIRONMENTAL ENGINEERING
FIGURE 1-1
SENECA ARMY DEPOT ACTIVITY



PARSONS
PARSONS ENGINEERING SCIENCE, INC.

SENECA ARMY DEPOT
RI/FS PROJECT SCOPING PLAN
SEAD-12

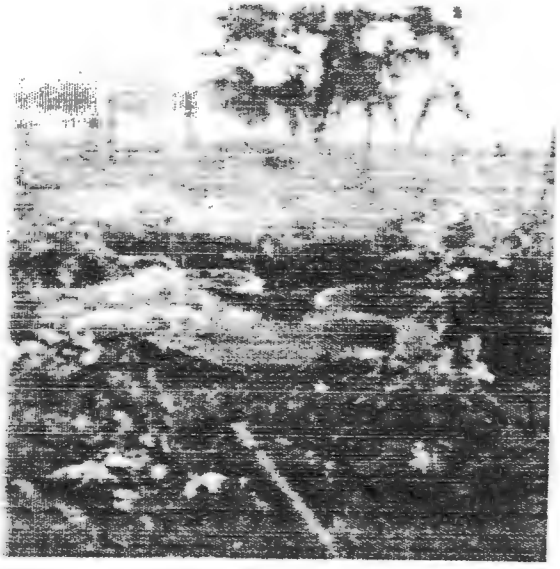
ENVIRONMENTAL ENGINEERING

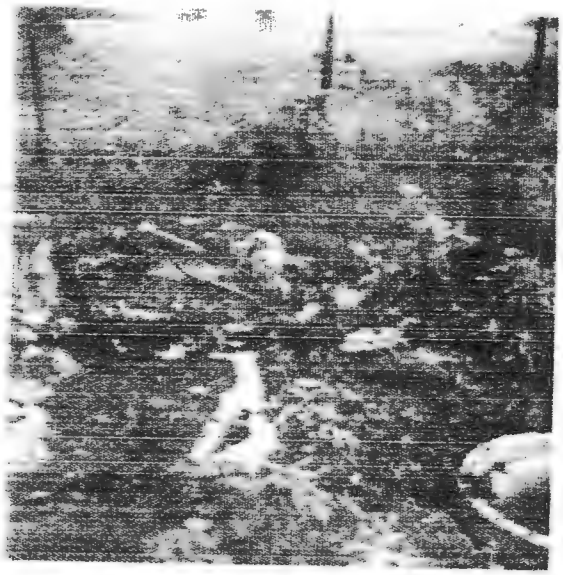
FIGURE 3-10
SURFACE WATER FLOW DIRECTION
FOR SEAD-12

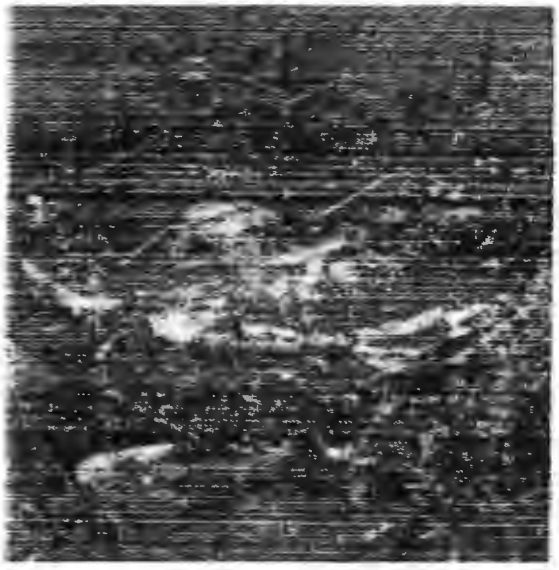
NA

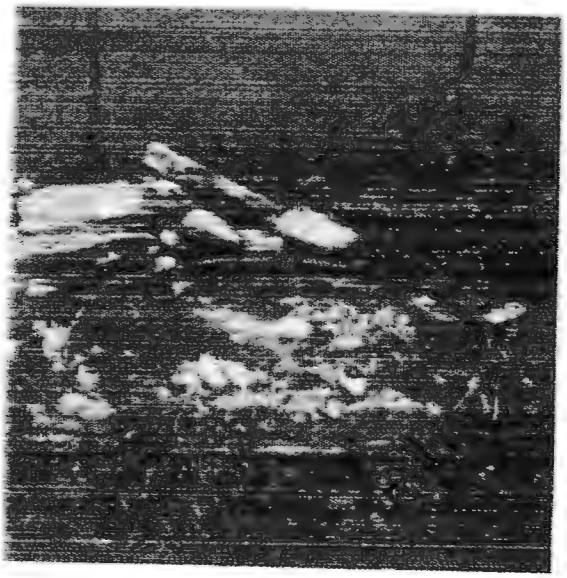
Site Status at SEAD-12

- √ Originally Split into Two Sites, SEAD-12A and SEAD-12B
- √ SEAD-12A : Area of the Former Waste Burial Disposal Pits
- √ SEAD-12B : Area of Dry Waste Disposal Pit and Wastewater Storage Tank







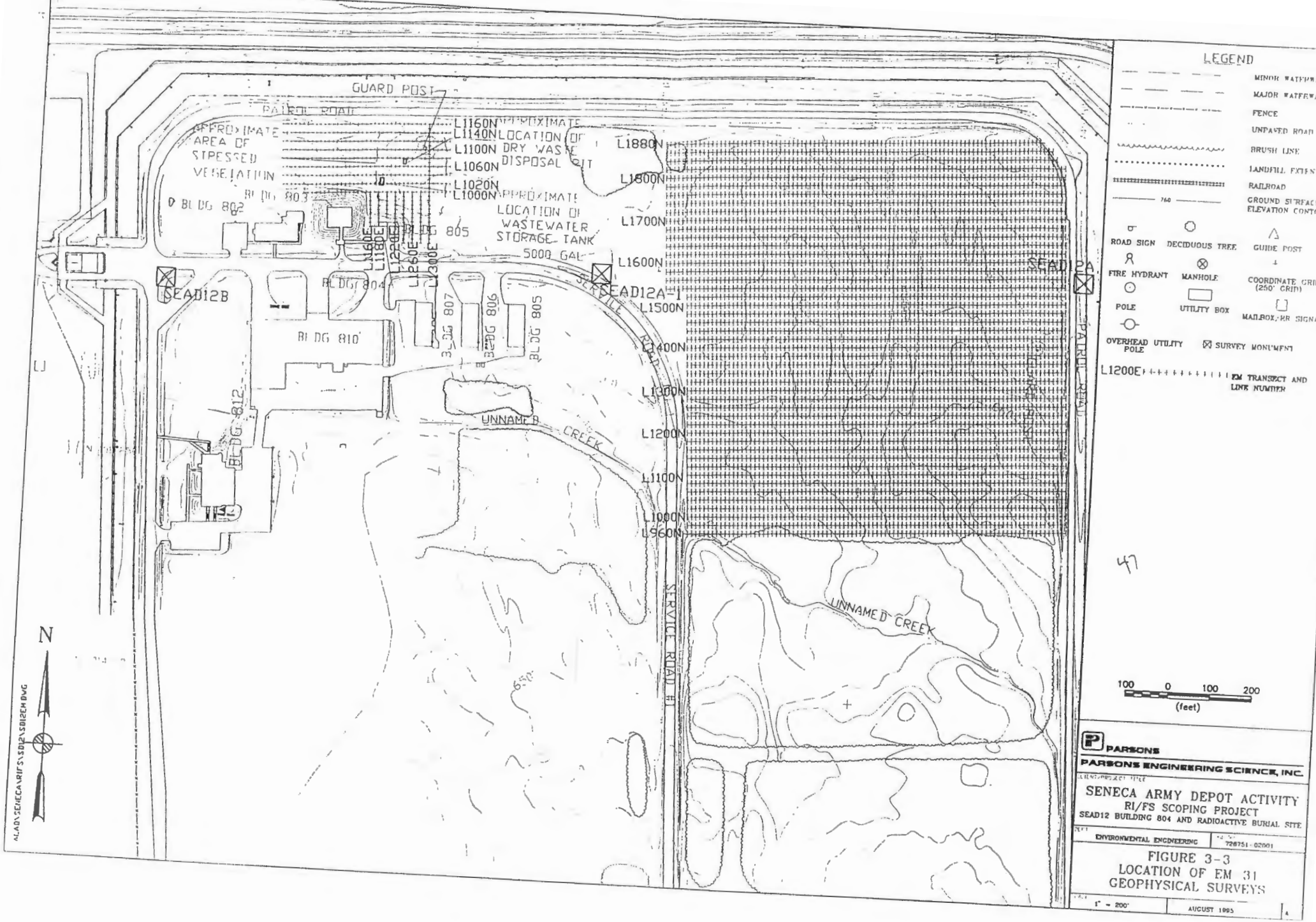


SEAD-12 Milestones

- √ Draft Report ESI Issued April, 1995
- √ Draft-Final ESI Issued Jan., 1996
- √ Army Recommended an RI
- √ Draft RI Workplan Issued Dec. 1995
- √ EPA Comments Recd. July, 1996
- √ NYSDEC Comments Recd. July, 1996

Site Status at SEAD-12

- √ Classified as an Area of Concern
- √ Finalization of Regulatory Comments in Progress
- √ Geophysical Survey Currently On-going



LEGEND

- MINOR WATERWAY
- MAJOR WATERWAY
- FENCE
- UNPAVED ROAD
- BRUSH LINE
- LANDFILL EXTENT
- RAILROAD
- 760 GROUND SURFACE ELEVATION CONTOUR
- ROAD SIGN
- DECIDUOUS TREE
- GUIDE POST
- FIRE HYDRANT
- MANHOLE
- COORDINATE GRID (250' GRID)
- POLE
- UTILITY BOX
- MAILBOX/RR SIGNAL
- OVERHEAD UTILITY POLE
- SURVEY MONUMENT
- L1200E EM TRANSECT AND LINE NUMBER

47

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

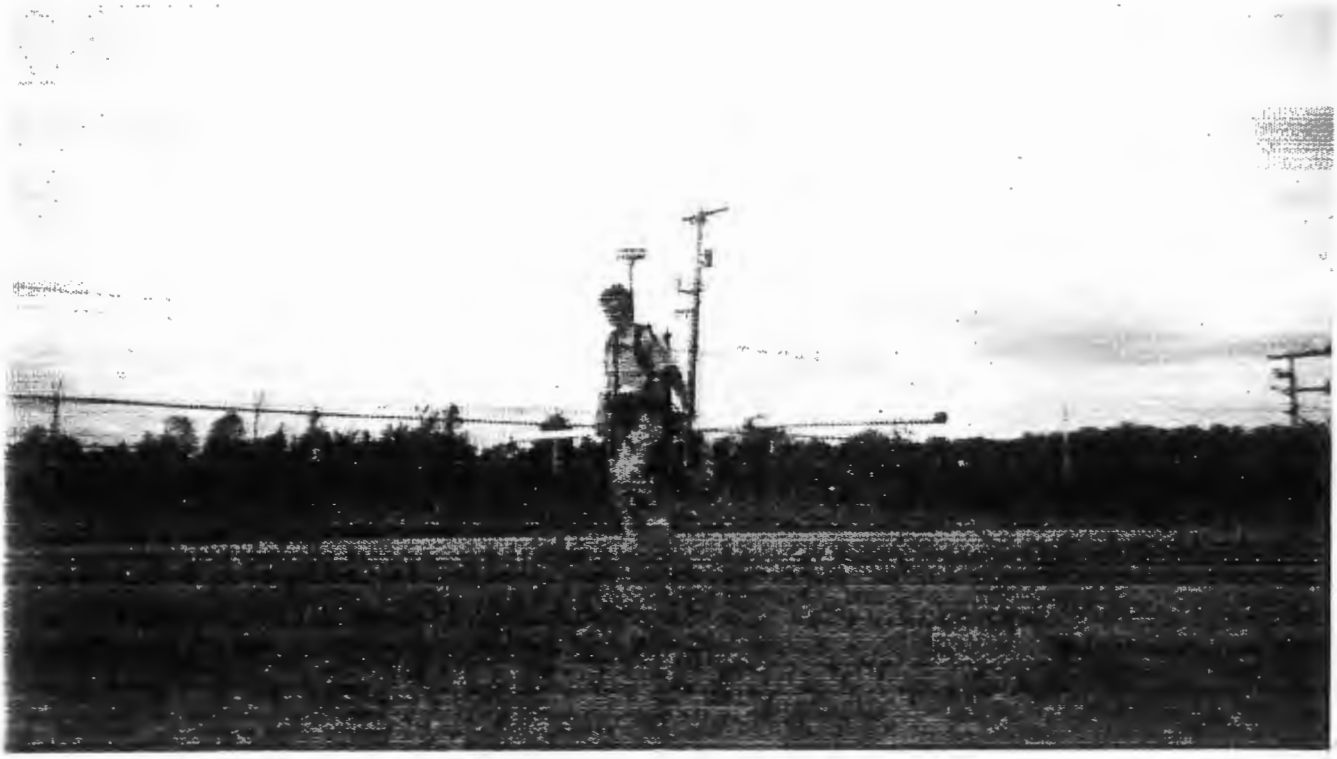
SENECA ARMY DEPOT ACTIVITY
RI/FS SCOPING PROJECT
SEAD12 BUILDING 804 AND RADIOACTIVE BURIAL SITE

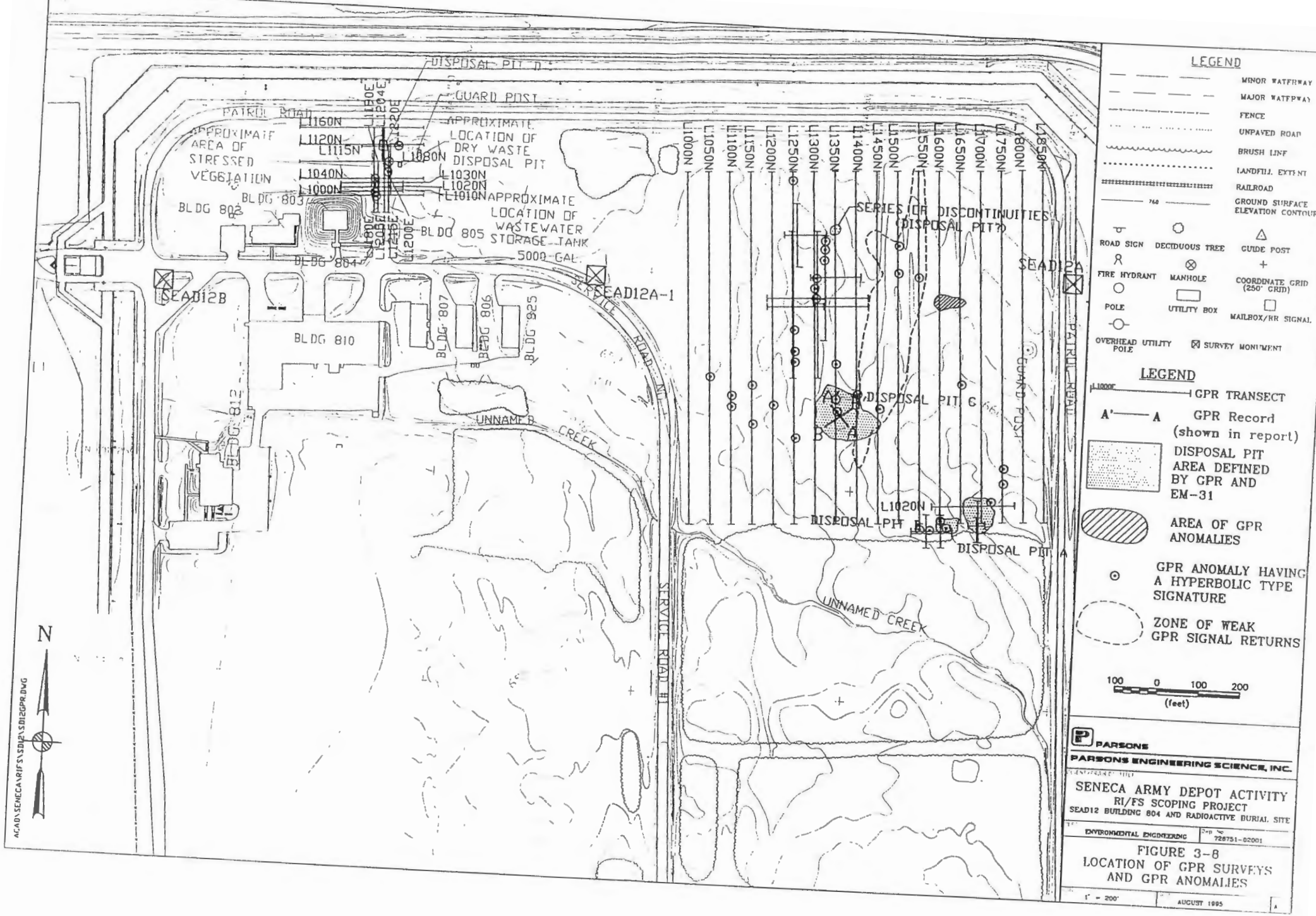
ENVIRONMENTAL ENGINEERING | 726751-02001

FIGURE 3-3
LOCATION OF EM 31
GEOPHYSICAL SURVEYS

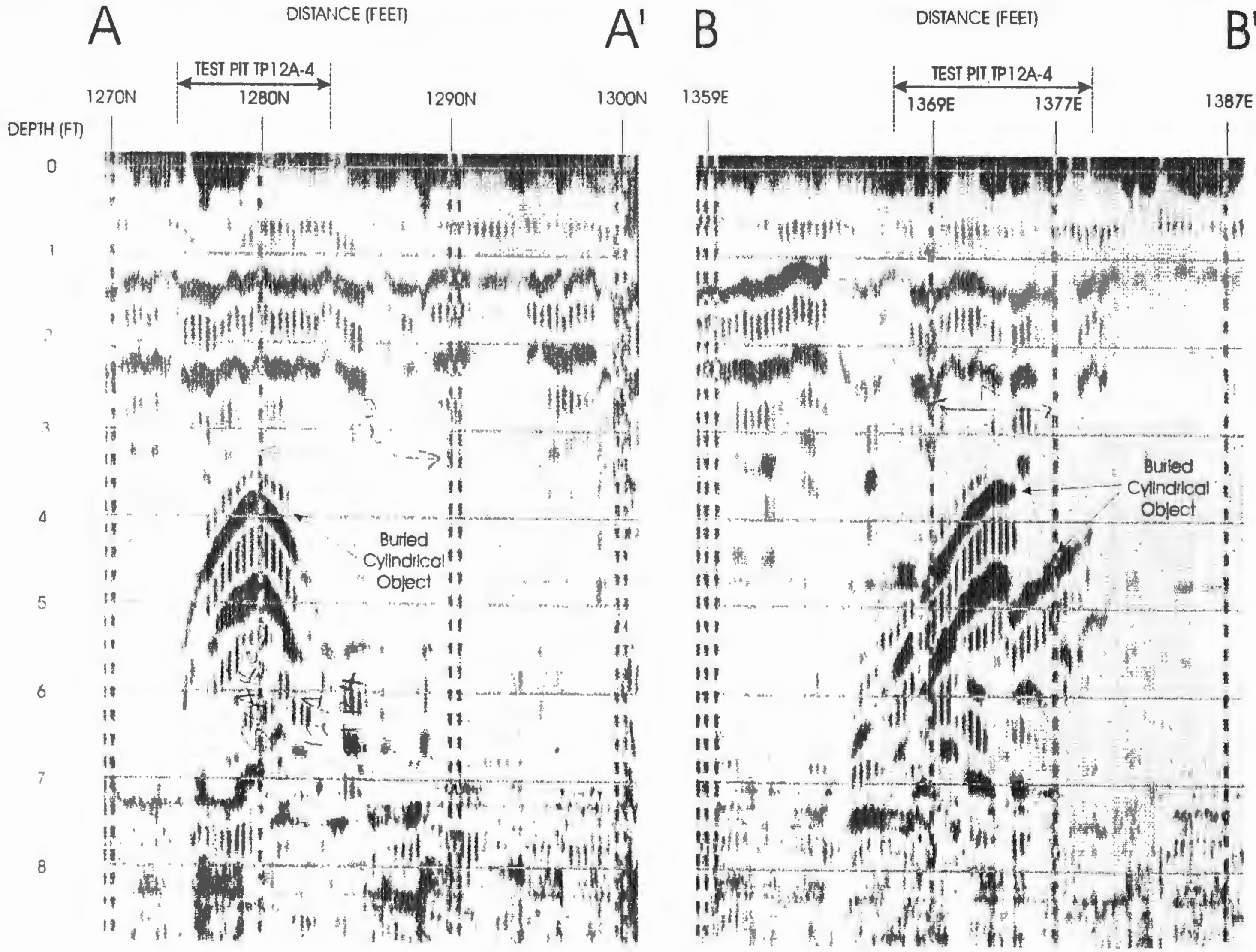
1" = 200' | AUGUST 1995

A:\AD\SENECA\RIFS\SD12\SD12EM.DVG




DISPOSAL PIT D
GUARD POST
PATROL ROAD
APPROXIMATE AREA OF STRESSED VEGETATION
APPROXIMATE LOCATION OF DRY WASTE DISPOSAL PIT
APPROXIMATE LOCATION OF WASTEWATER STORAGE TANK
5000 GAL
BLDG 803
BLDG 804
BLDG 805
BLDG 810
BLDG 812
BLDG 807
BLDG 806
BLDG 925
SEAD12A
SEAD12A-1
SEAD12B
SERVICE ROAD #1
UNNAMED CREEK
SERIES OF DISCONTINUITIES (DISPOSAL PIT?)
DISPOSAL PIT C
DISPOSAL PIT B
DISPOSAL PIT A
L1020N
N
LEGEND
MINOR WATERWAY
MAJOR WATERWAY
FENCE
UNPAVED ROAD
BRUSH LINE
LANDFILL EXTENT
RAILROAD
GROUND SURFACE ELEVATION CONTOUR
ROAD SIGN
DECIDUOUS TREE
GUIDE POST
FIRE HYDRANT
MANHOLE
COORDINATE GRID (250' GRID)
POLE
UTILITY BOX
MAILBOX/RR SIGNAL
OVERHEAD UTILITY POLE
SURVEY MONUMENT
LEGEND
GPR TRANSECT
GPR Record (shown in report)
DISPOSAL PIT AREA DEFINED BY GPR AND EM-31
AREA OF GPR ANOMALIES
GPR ANOMALY HAVING A HYPERBOLIC TYPE SIGNATURE
ZONE OF WEAK GPR SIGNAL RETURNS
100 0 100 200
(feet)
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
SENECA ARMY DEPOT ACTIVITY
RI/FS SCOPING PROJECT
SEAD12 BUILDING 804 AND RADIOACTIVE BURIAL SITE
ENVIRONMENTAL ENGINEERING
728751-02001
FIGURE 3-8
LOCATION OF GPR SURVEYS AND GPR ANOMALIES
1" = 200'
AUGUST 1995
A
ACAD\SENECA\RIFS\SD12\SD12GPR.DWG

Site Maps / ARARs / Conc Hist.



GPR Profile A-A', Perpendicular to Long Axis of Buried Cylindrical Objects

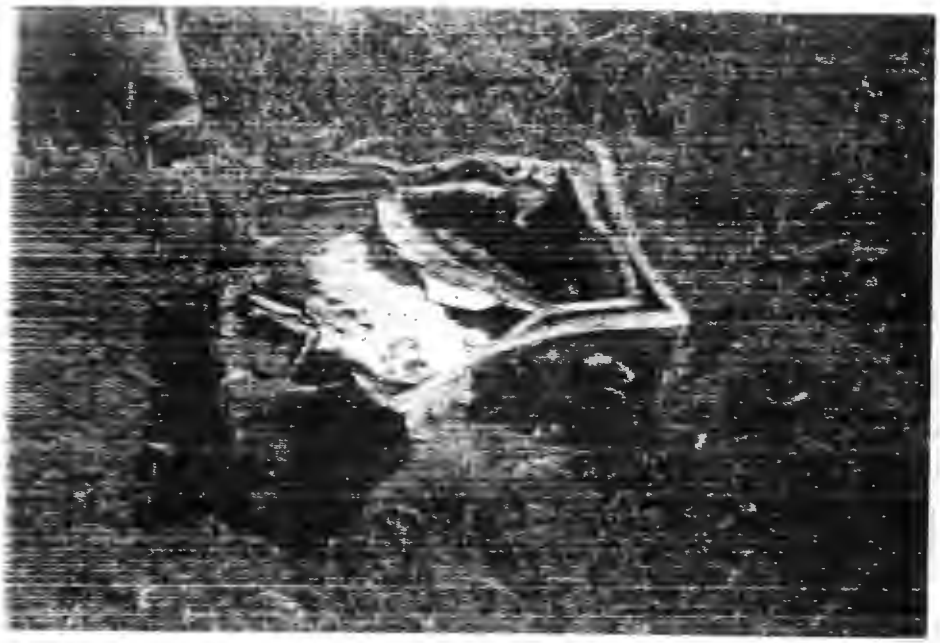
GPR Profile B-B', Parallel to Long Axis of Buried Cylindrical Objects.

SENECA ARMY DEPOT

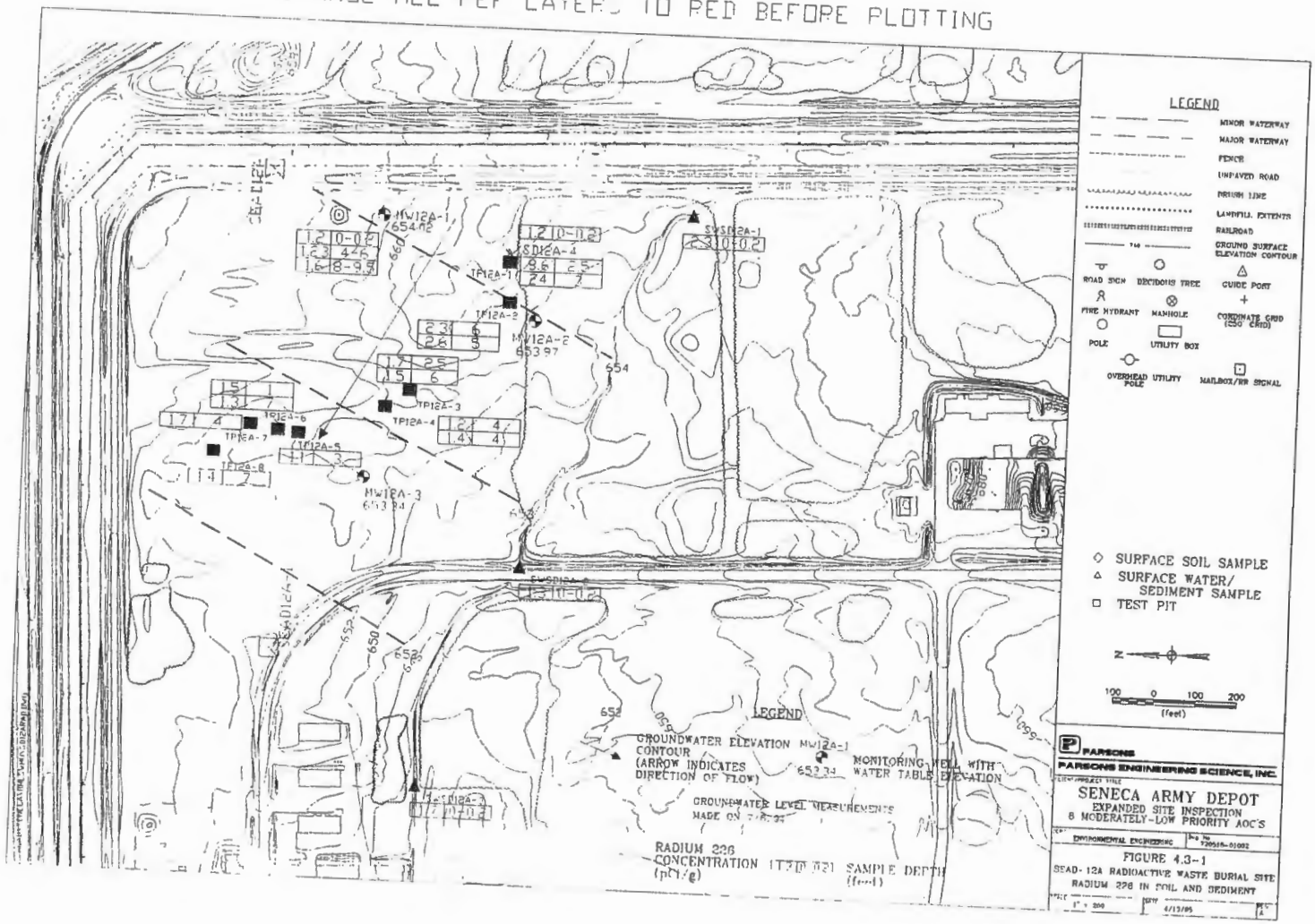
FIGURE 3.9
SEAD 12
GPR PROFILES A-A' AND B-B'

ESI Test Pitting Activities

- √ Eleven Test Pits Excavated at SEAD-12, (8 at SEAD-12A and 3 at SEAD-12B)
- √ TP12A-1, TP12A-2, TP12A-3 and TP12A-4 contained various unknown components
- √ Elevated radiological readings were obtained in 2 to 4 foot zone at TP12A-1



CHANGE ALL PEF LAYERS TO RED BEFORE PLOTTING

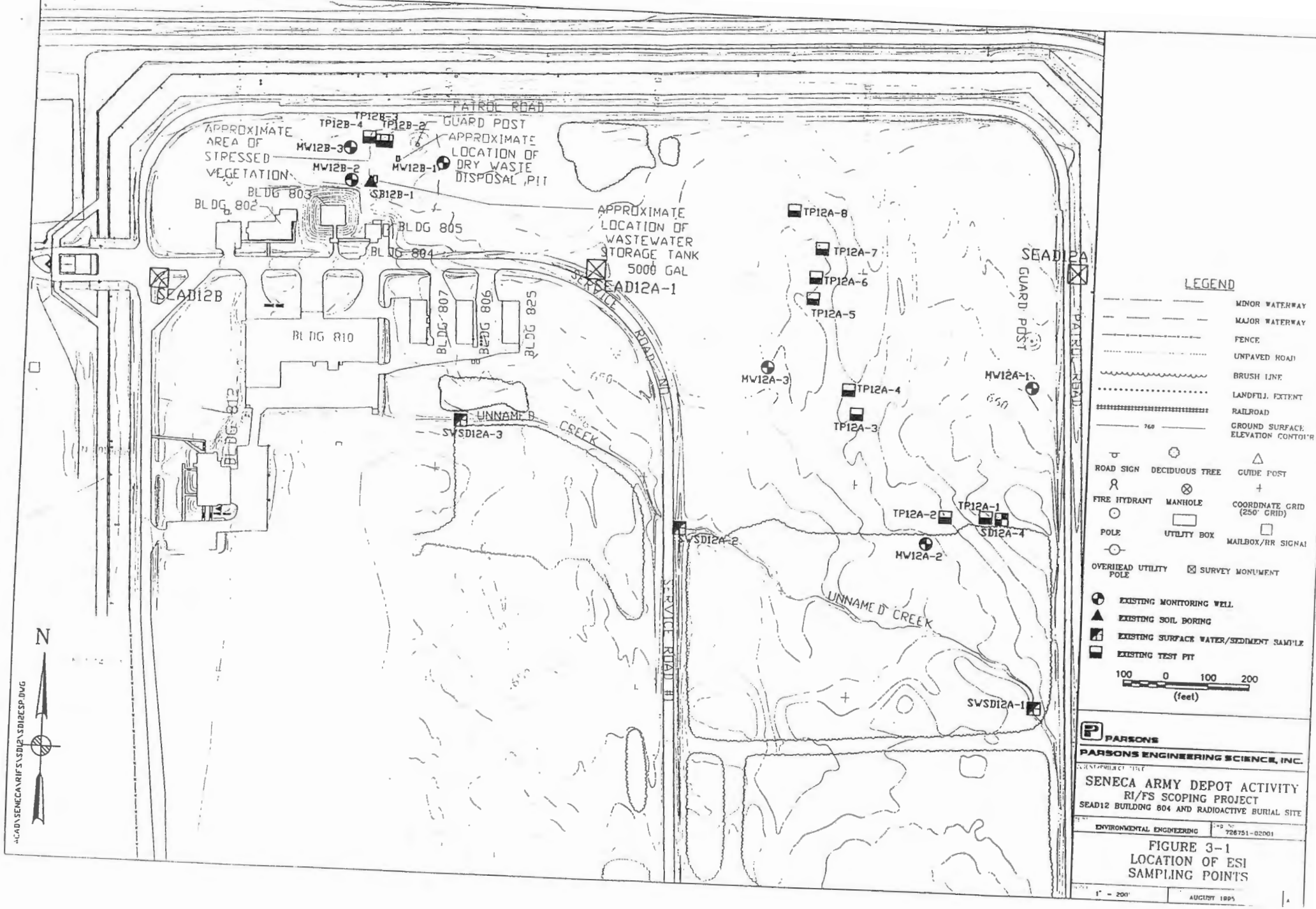


Soil Boring, Monitoring Wells and Surface Water/Sediment Sampling

- √ Seven Soil Borings Performed
- √ Six Monitoring Wells installed, (3 at SEAD-12A and 3 at SEAD-12B)
- √ Three Surface Water and Four Sediment Samples Collected

Soil Sampling Results from ESI

- Soil from TP12A-1 at 2.5 feet contained Radium 226 at 8.6 pCi/g (Including Background ~1.5 pCi/g)
- Soil from TP12A-1 at 3 feet contained Radium 226 at 24 pCi/g(Including Background ~1.5 pCi/g)
- Above the UMTRCA allowable value of 16.5 pCi/g for Subsurface Soils



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SENECA ARMY DEPOT ACTIVITY
RI/FS SCOPING PROJECT
SEAD12 BUILDING 804 AND RADIOACTIVE BURIAL SITE

ENVIRONMENTAL ENGINEERING | 726751-02001

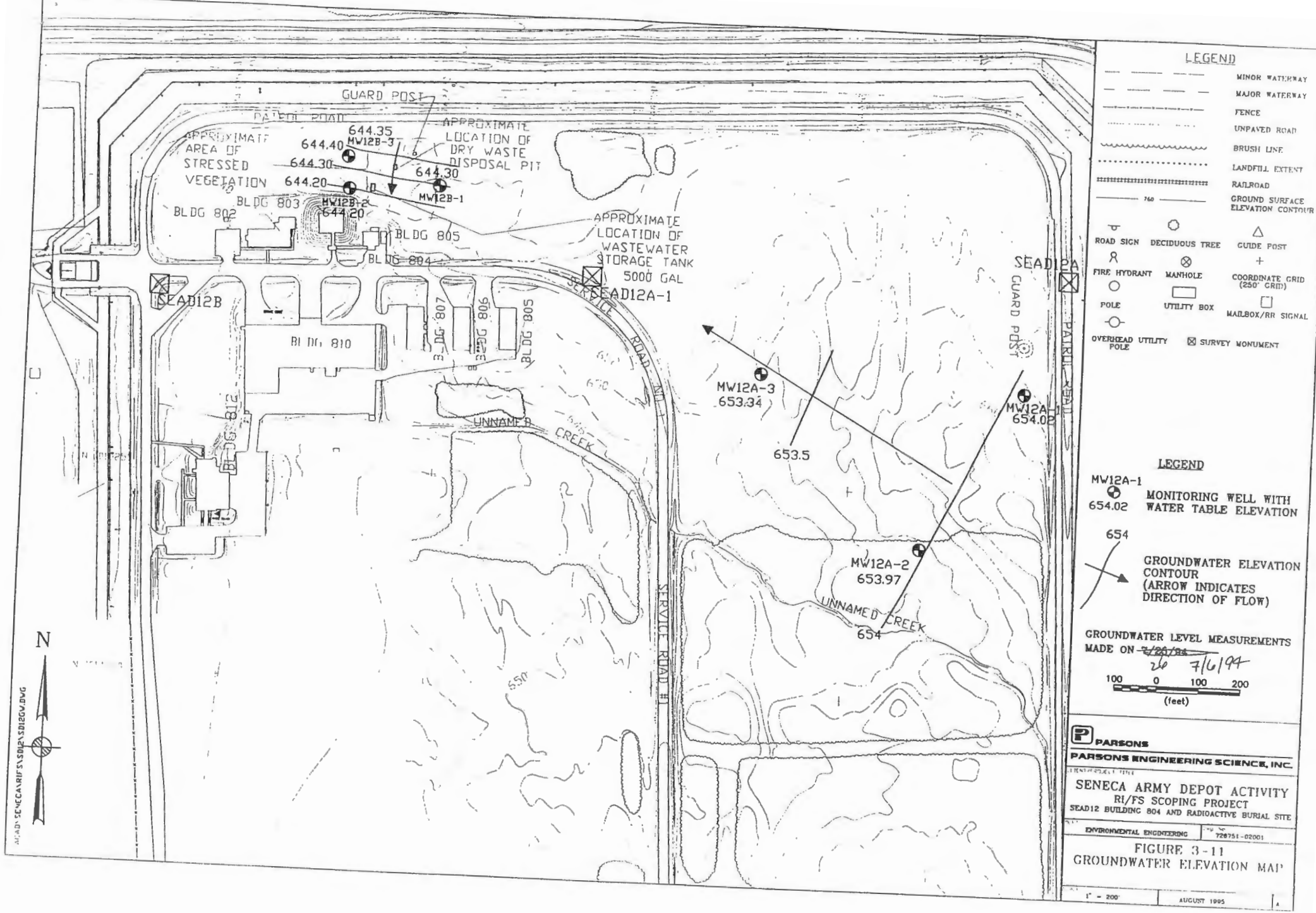
FIGURE 3-1
LOCATION OF ESI
SAMPLING POINTS

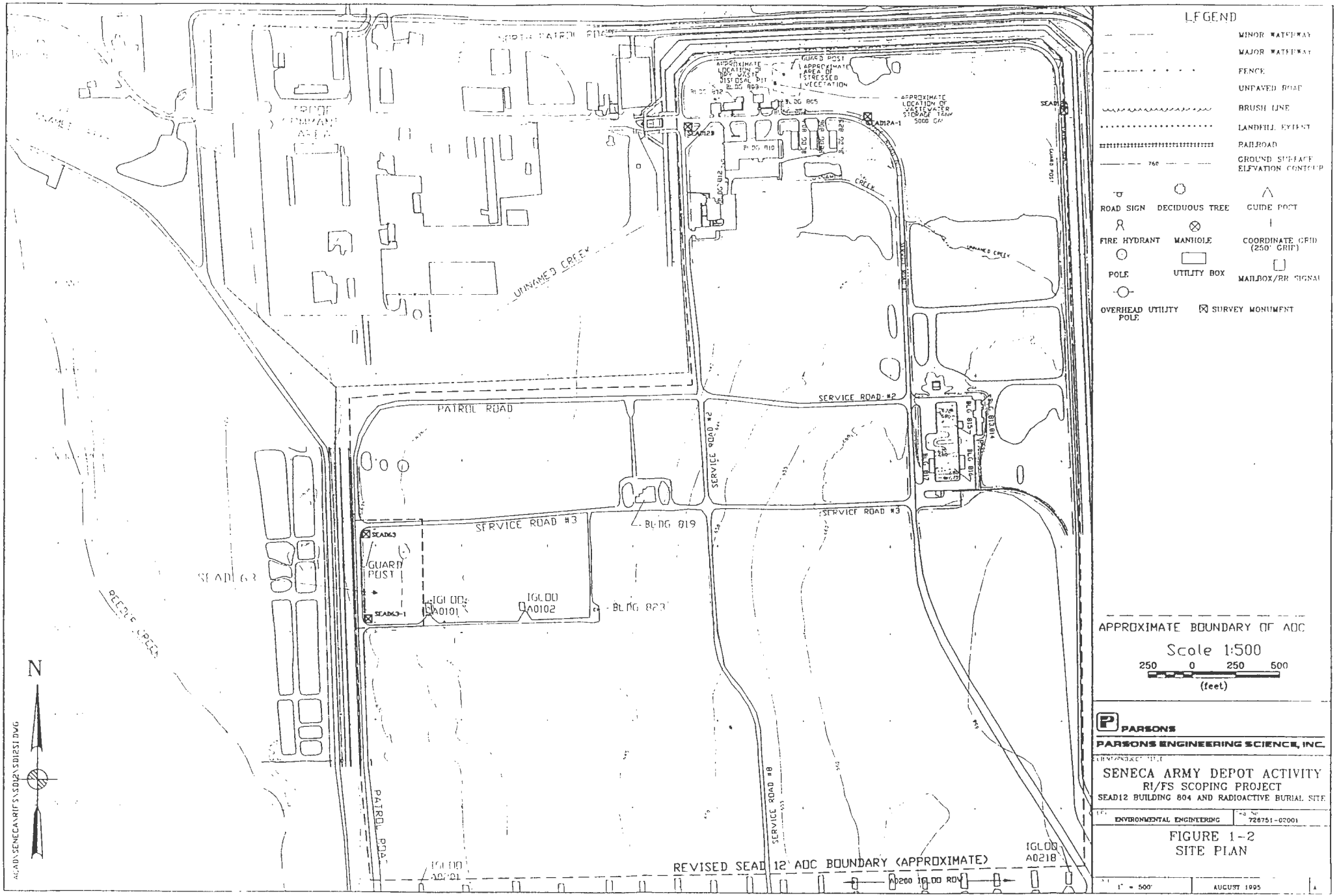
1" = 200' | AUGUST 1995

M:\CAD\SENECA\RIFS\SD12\SD12ESP.DWG

ESI Groundwater Results

- √ Gross Alpha at MW-12A-1 was measured at 15 pCi/L
- √ Gross Alpha at MW-12A-2 was measured at 38 pCi/L
- √ NY Class GA Groundwater Standards for Gross Alpha is 15 pCi/L


GUARD POST
PATROL ROAD
APPROXIMATE AREA OF STRESSED VEGETATION
644.35
644.40
MW12B-3
644.30
644.30
644.20
MW12B-1
MW12B-2
644.20
APPROXIMATE LOCATION OF DRY WASTE DISPOSAL PIT
BLDG 802
BLDG 803
BLDG 805
BLDG 804
APPROXIMATE LOCATION OF WASTEWATER STORAGE TANK 5000 GAL
SEAD12A-1
SEAD12A
SEAD12B
BLDG 810
BLDG 807
BLDG 809
BLDG 808
BLDG 812
SERVICE ROAD #1
UNNAMED CREEK
MW12A-3
653.34
653.5
MW12A-1
654.02
MW12A-2
653.97
654
650
550
N
LEGEND
MINOR WATERWAY
MAJOR WATERWAY
FENCE
UNPAVED ROAD
BRUSH LINE
LANDFILL EXTENT
RAILROAD
760
GROUND SURFACE ELEVATION CONTOUR
ROAD SIGN
DECIDUOUS TREE
GUIDE POST
FIRE HYDRANT
MANHOLE
COORDINATE GRID (250' GRID)
POLE
UTILITY BOX
MAILBOX/RR SIGNAL
OVERHEAD UTILITY POLE
SURVEY MONUMENT
LEGEND
MW12A-1
654.02
MONITORING WELL WITH WATER TABLE ELEVATION
654
GROUNDWATER ELEVATION CONTOUR (ARROW INDICATES DIRECTION OF FLOW)
GROUNDWATER LEVEL MEASUREMENTS MADE ON 7/6/94 26 7/6/94
100 0 100 200
(feet)
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
SENECA ARMY DEPOT ACTIVITY
RI/FS SCOPING PROJECT
SEAD12 BUILDING 804 AND RADIOACTIVE BURIAL SITE
ENVIRONMENTAL ENGINEERING
728751-02001
FIGURE 3-11
GROUNDWATER ELEVATION MAP
1" = 200'
AUGUST 1995
A



PARSONS

PARSONS ENGINEERING SCIENCE, INC.

SENECA ARMY DEPOT ACTIVITY
RI/FS SCOPING PROJECT
SEAD12 BUILDING 804 AND RADIOACTIVE BURIAL SITE

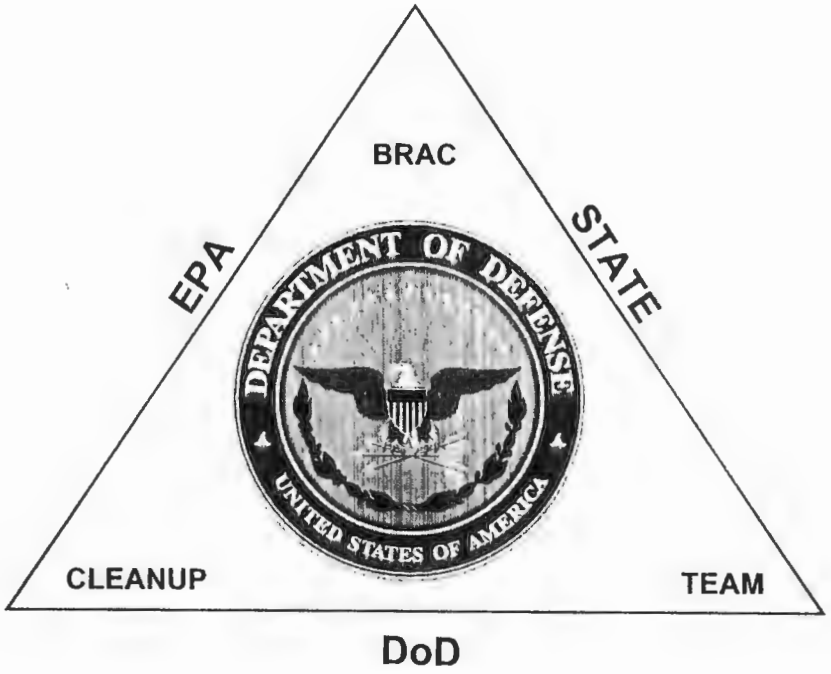
ENVIRONMENTAL ENGINEERING | 726751-02001

FIGURE 1-2
SITE PLAN

1" = 500' | AUGUST 1995 | A

A:\AD\SENECA\RIFS\SD12\SD12S1.DWG

BRAC Cleanup Plan Support



Woodward-Clyde

BRAC Cleanup Plan

- **BRAC Cleanup Plan (BCP) goal is expediting and improving environmental response leading to disposal or reuse of property.**
- **The BCP is a comprehensive summary of:**
  - ***Status*** **of environmental programs**
  - ***Strategy*** **for selecting and implementing actions**
  - ***Schedule*** **for actions**

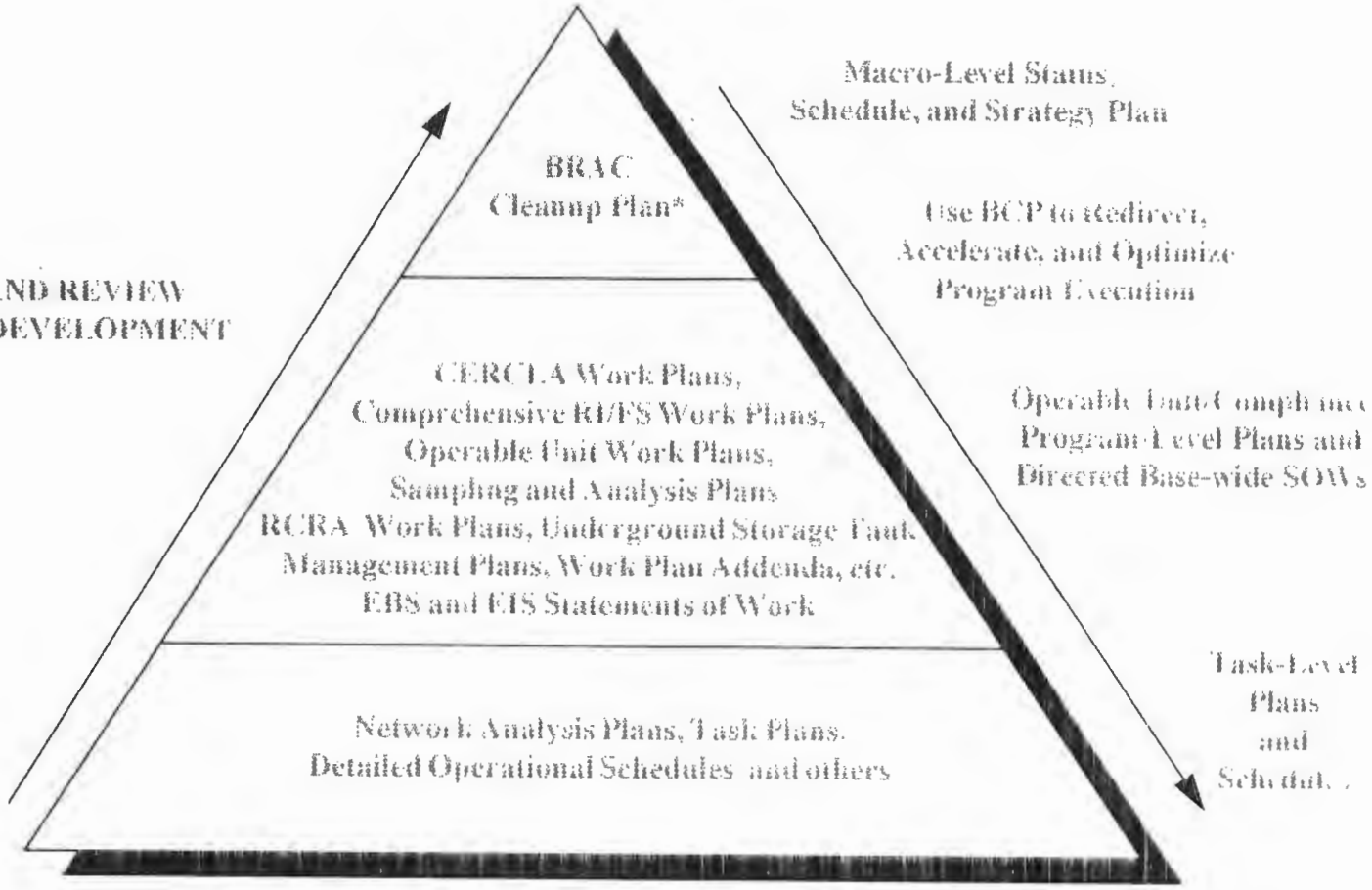
Woodward-Clyde

BRAC Cleanup Plan (BCP)
Goals and Objectives

- Macro-level status, schedule and strategy for environmental response leading to disposal and reuse.
- Version 1 (1996) is a "snapshot" of existing installation programs and future strategy.
- Version 2 (1997) will reflect further analysis and input from BCT, RAB and LRA.

Woodward-Clyde

BCP Requirements



* A BCP is a comprehensive summary of the status of your installation's environmental programs, and provides a strategy and schedule for selecting and implementing response actions under all applicable regulatory programs.

Woodward-Clyde

BRAC Cleanup Team

- **Comprised of the following individuals:**
  - **Steve Absolom - BRAC Environmental Coordinator**
  - **Carla Struble - U.S. Environmental Protection Agency, Region 1**
  - **Kamal Gupta - N.Y. State Department of Environmental Conservation**
- **Composition of the BCT is designed to:**
  - **Bring empowered decision makers to the table to make remediation decisions**
  - **Expedite cleanup and reuse decisions**

ROLE OF BCT

- PRIMARY FORUM FOR ISSUES AFFECTING EXECUTION OF CLEANUP TO FACILITATE REUSE
- MANAGES 5-STEP BCP PROCESS
- PREPARES BCP
- IDENTIFIES RESOURCES TO FACILITATE BCP PROCESS
- CONDUCTS BOTTOM-UP REVIEW

Woodward-Clyde

BCT COORDINATES WITH:

- INSTALLATION COMMANDER
- DoD BASE TRANSITION COORDINATOR
- FACILITY/CARETAKER
- REAL/PERSONAL PROPERTY
- RESTORATION ADVISORY BOARD
- COMMUNITY REUSE COMMITTEE

Woodward-Clyde

SEDA BCT is supported by:

- **U.S. Army**
  - Installation personnel (Environmental, operations, legal, real estate)
  - U.S. Army Corps of Engineers, N.Y. District
  - U.S. Army Corps of Engineers, Huntsville Division
  - Center for Health Promotion and Preventative Medicine
  - U.S. Army Industrial Operations Command
  - U.S. Army Materiel Command
  - Department of the Army BRAC Office
  - U.S. Army Environmental Center
- **N.Y. State Department of Health**
- **Local Redevelopment Authority**
- **Contractors**
  - Woodward-Clyde
  - Parsons Engineering Science
  - Malcom Pirnie

BCP Process

Step 1	Form BRAC Cleanup Team
Step 2	Conduct Bottom-Up Review
Step 3	Develop BRAC Environmental Restoration/Compliance Strategy
Step 4	Prepare BCP • Bottom-Up Review • Draft Version 1 BCP
Step 5	Execute/Update BCP

Woodward-Clyde

Bottom-Up Review Performed by BCT

- BRAC Cleanup Team and Project Team
- Environmental Program Status
- Environmental Program Strategy
- Master Schedules
- Technical/Operational Issues
- Disposal Process/Reuse Options
- Disposal Related Environmental Issues

Woodward-Clyde

BCP Outline

1.0 Introduction and Summary

2.0 Property Disposal and Reuse Plan

3.0 Installation-Wide Environmental Program Status

4.0 Installation-Wide Strategy for Environmental Restoration

5.0 Environmental Program Master Schedules

6.0 Technical and Other Issues to be Resolved

Appendix A - Fiscal Year Funding Requirements/Costs

Appendix B - Installation Environmental Restoration Documents Summary Tables

Appendix C - Decision Document/RAD Summaries

Appendix D - NFRAP Summaries

Appendix E - Conceptual Model Data Summaries

Woodward-Clyde

Looking Forward

- **Current Status**
  - Draft Version 1 BCP submitted September 1996
  - Completed review by U.S. Army, U.S. EPA, NYSDEC
  - Currently preparing the Final Version 1 BCP
- **Next Steps**
  - BCT will continue to meet periodically to assess progress
  - Version 2 BCP update will be prepared in approximately one year to reflect progress in remediation activities and redevelopment status

Woodward-Clyde

MINUTES
RESTORATION ADVISORY BOARD
OCTOBER 15, 1996 MEETING MINUTES

1. Attendance:

Government RAB Members Present:

Stephen M. Absolom, BRAC Environmental Coordinator, SEDA/Army Co-Chair
Kamal Gupta, NYS Department of Environmental Conservation
Dan Geraghty, NYS Department of Health

Government RAB Members Not Present:

Carla Struble, U.S. Environmental Protection Agency

Community RAB Members Present:

Dick Durst/Community Co-Chair, Anne Herman, David Wagner,
Brian Dombrowski, Richard Sisson, Al Legasse, Lucinda Sangree,
Estelle Coleman, Frank Ives, Henry Van Ness, Harold Kugelmass

Community RAB Members Not Present:

Russell Miller, Mary Ann Krupsak, Richard Lewis, Carmen Serrett

Government and Technical Support Personnel Present:

LTC Stephen Brooks, SEDA Commander
Jerry Whitaker, SEDA Base Transition Coordinator
Beverly Lombardo, SEDA Public Affairs Officer
Joanne Ogden, SEDA Legal Office Representative
Thomas Enroth, SEDA Engineering and Environmental Division
Janet Fallo, SEDA Engineering and Environmental Division
Susan Cooper, SEDA Secretary
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Mike Duchesneau, Parsons Engineering Science, Inc.
Andrew Schwartz, Parsons Engineering Science, Inc.
Keith Hoddinott, U.S. Army Environmental Center for Health Promotion and Preventive Medicine
Michael Rivara, NYS Department of Health
Rick Newill, Woodward-Clyde Federal Services
Robert Scott, NYS Department of Environmental Conservation
Jeff Waugh, U.S. Army Environmental Center
Dorothy Richards, U.S. Army Corps of Engineers, Huntsville District

Others Present (from sign-in sheet):

Christopher Raddell, Community Member
Joanne Howard, Community Member

Nellie Legasse, Community Member
Karl Bechler, Community Member
Patricia Jones, LRA

2. LTC Brooks welcomed members and support staff to the October Restoration Advisory Board in the NCO Club. Stephen Absolom then delivered opening remarks, outlined the evening's agenda, and asked for introductions.

3. Minutes from the September's RAB meeting were then approved, signed, and accepted into record. The minutes required a change to show Harold Kugelmass present.

4. An update on the BRAC Cleanup Plan (BCP) was presented by Rick Newill of Woodward-Clyde. The presentation covered the BRAC Cleanup Plan's goals and objectives; requirements; the BRAC Cleanup Team, it's role, coordination, and support agencies; the BCP process; document outline; and future planning. Dr. Durst asked how big the document was and if it would be available for review. In response to Dr. Durst's question, the document will be available for review in the Information Repository located in the Romulus Town Hall and in the Economic Development and Planning Office at the Seneca County Office Building after November 12, 1996.

5. LTC Brooks made opening remarks to the briefing by Mike Duchesneau on the Radiological Sites Investigation Status at the Former Weapons Storage Area, SEAD-12. He stated that we were there to discuss environmental issues and not specific Army missions. Mike Duchesneau proceeded with a discussion on the environmental sites which consist of a waste burial disposal pit, dry waste disposal pit, and wastewater storage tank. Milestones were listed as well as site status, sampling procedures, and results of sampling from soil borings and monitoring wells. Results of soil and groundwater sampling showed localized low level radioactive contamination. Further testing will be performed as part of the remedial investigation. Issues raised during the presentation follow:

a. Concerns were raised regarding geophysical investigations for detecting metal objects. Mike Duchesneau explained that detecting metal can reveal burial sites not previously identified. It was then asked how contaminated sites that do not contain metal objects are detected. He explained that they use Ground Penetrating Radar (GPR) to detect disturbances in the soil, then sample the disturbed areas for contamination.

b. From the photographs of the metal anomalies found, there were questions regarding whether they could be associated with military operations previously conducted or old farm equipment from the residents located here before depot operations. The appearance and size of the objects found would indicate some type of aluminum solid waste, however, the objects were not identified.

c. A discussion took place on the definition of an alpha radiation particle. Other contaminants looked for included metals, PCBs, pesticides, and solvents. Mike Duchesneau described an alpha particle as high-energy and one in a series of radioactive particles. Dr. Durst mentioned that this is the most dangerous type of radioactive particle because it ionizes quickly and can be a problem when drinking or inhaling it. Mike Duchesneau responded that contamination is below the ground surface, groundwater on the site is not used for drinking, and safety precautions are taken when working on site.

d. A question arose regarding sampling and the significance of the regulatory standard reading of 15 pCi/L for radiation is set by the State. Readings above 15 pCi/L are levels for concern. Testing is also being conducted to determine levels of natural radiation in soil and groundwater.

e. The waste burial pits were questioned in regards to the items found there. The residual contamination and other items disposed of were consistent with the mission ongoing in that area.

f. A concern was raised considering possible past disposal practices of classified material over vast areas of the depot. The response was that sites were identified and defined based on historical information and that it was improbable that such activities took place in other areas not previously identified.

g. An inquiry was made as to whether water samples were collected from a creek near the burial pit site. Mike Duchesneau stated that surface water and sediment samples were collected from the creek and no elevated readings were found. It was also mentioned that the creek is a small, intermittent stream and does not flow continuously.

6. During general discussion, RAB members suggested topics for future meetings:

a. A presentation by the Local Redevelopment Authority (LRA) on its Reuse Plan based on the current schedule adopted by the Seneca County Board of Supervisors. Impacts on sites and zoning was also suggested to tie together initiatives of the LRA and the RAB.

b. National Environmental Policy Act (NEPA) and Environmental Impact Statement.

7. The next Restoration Advisory Board meeting will be held on November 19, 1996 at 7:00 p.m. at the SEDA NCO Club.

8. The meeting was adjourned at 9:00 p.m.

Respectfully submitted,

SUSAN R. COOPER
Secretary

APPROVED AS SUBMITTED:

STEPHEN M. ABSOLOM
U.S. Army Co-Chair

RICHARD A. DURST
Community Co-Chair

Restoration Advisory Board
Meeting Agenda

November 19, 1996

7:00	**Welcome** LTC Stephen W. Brooks Commander, Seneca Army Depot Activity
7:05	**Acceptance of Minutes** Mr. Stephen M. Absolom/Dr. Dick Durst Army Co-chair/Community Co-chair
7:15	**Local Redevelopment Authority Reuse Plan** Pat Jones, Interim Executive Director Seneca Army Depot Local Redevelopment Authority
7:35	**Impact of LRA Reuse Plan on Environmental Sites** Mr. Michael Duchesneau, P.E. Project Manager, Parsons Engineering Science, Inc.
7:55	**Break**
8:10	**The Army BRAC NEPA Process** Mr. Stephen M. Absolom Army Co-chair/BRAC Environmental Coordinator
8:30	**Open Discussion**
9:00	**Adjourn**

MINUTES
RESTORATION ADVISORY BOARD
NOVEMBER 19, 1996 MEETING

1. Attendance:

Government RAB Members Present:

Stephen M. Absolom, BRAC Environmental Coordinator, SEDA/Army Co-Chair
Dan Geraghty, NYS Department of Health
Carla Struble, U.S. Environmental Protection Agency

Government RAB Members Not Present:

Kamal Gupta, NYS Department of Environmental Conservation

Community RAB Members Present:

Dick Durst/Community Co-Chair, Anne Herman, Mary Ann Krupsak,
Richard Sisson, Al Legasse, Estelle Coleman, Henry Van Ness, Pat Jones

Community RAB Members Not Present:

Russell Miller, Richard Lewis, Carmen Serrett, Lucinda Sangree,
Frank Ives, Harold Kugelmass, Brian Dombrowski, David Wagner

Government and Technical Support Personnel Present:

Thomas Enroth, SEDA Engineering and Environmental Division
Janet Fallo, SEDA Engineering and Environmental Division
Susan Cooper, SEDA Secretary
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Mike Duchesneau, Parsons Engineering Science, Inc.
Keith Hoddinott, U.S. Army Environmental Center for Health Promotion and Preventive Medicine
Robert Scott, NYS Department of Environmental Conservation
Kevin Healy, U.S. Army Corps of Engineers, Huntsville Division

Others Present (from sign-in sheet):

Christopher Raddell, Community Member
Nellie Legasse, Community Member
Karl Bechler, Community Member
Neil Chaffie, Community Member

2. Stephen Absolom welcomed members and support staff to the November Restoration Advisory Board in the NCO Club, then delivered opening remarks, outlined the evening's agenda, and asked for introductions.

3. Minutes from October's RAB meeting were approved, signed, and accepted into record.

4. Pat Jones, Interim Director of the Local Redevelopment Authority (LRA), briefed the RAB on the SEDA Reuse Plan. Included in Seneca's redevelopment were goals; alternatives; development areas; land use suitability; buildings and facilities location, use, evaluation, and current conditions; and property acquisition. The LRA has plans to sell the Lake Housing area as a whole for a one-time purchase price and use the proceeds to upgrade and improve the PID for resale. Ms. Jones identified several notices of interest for various areas of the depot and mentioned that the window of opportunity was still open for a couple more months. Issues raised during this presentation follow:

a. The availability of the Study/Reuse Plan to the public was addressed. A copy of this document can be reviewed at the County Office Building or at the LRA office by calling ahead for an appointment.

b. A concern was raised regarding community objections for an area's specific use and whether these objections would be heard. In this case, the LRA would try to work with the community through a public forum.

5. Mike Duchesneau's presentation covered Future Land Use and Cleanup and the impact of these decisions on the remediation process. Future land use is divided into six specific areas: Conservation/Recreation, Housing/Residential, Institutional, Office/Industrial, Special Events, and Training Ranges. Specific sites were identified within the land use areas as well as exposure scenarios and impacts on cleanup goals. Issues raised during Mr. Duchesneau's presentation follow:

a. The possibility of sampling harvested deer livers for contamination was discussed. This issue has been considered, however it would not necessarily point out any specific area where contamination could have been ingested due to herds traveling in different areas of the depot.

b. Differences between types and numbers of species from inside and outside the depot was questioned. Mr. Duchesneau stated that mammals from the OB Grounds and fish from Reeder Creek were collected and sent to a lab for monitoring. There did not appear to be any significant disparity.

c. Asked whether asbestos and lead-based paint sampling had been done on post, the RAB was assured that all areas are being identified and readied for reuse.

d. A comment was made concerning possible contamination of the depot related to the perceived elevated levels of cancer in the surrounding communities. Out of approximately 10,600 acres of land, 9,100 acres are uncontaminated and can be transferred immediately. The Department of Health offered to provide information concerning cancer rates.

6. Stephen Absolom then showed a video on NEPA, the National Environmental Policy Act, and further explained areas of importance. Typical areas for analysis were identified and opportunities for public involvement were addressed. The NEPA manuals are available for review in the County Office Building and in the LRA office.

7. General discussion followed with a suggestion to include an Ecological Risk Assessment Presentation as a possible topic for a future meeting.

8. Mr. Absolom offered the option of canceling the December RAB meeting due to the busy holiday season. A vote showed all in favor. The next Restoration Advisory Board meeting will be held on January 21, 1997 at 7:00 p.m. at the SEDA NCO Club.

9. The meeting was adjourned at 9:25 p.m.

Respectfully submitted,

Susan R. Cooper

SUSAN R. COOPER
Secretary

APPROVED AS SUBMITTED:

Stephen M. Absolom

STEPHEN M. ABSOLOM
U.S. Army Co-Chair

RICHARD A. DURST
Community Co-Chair

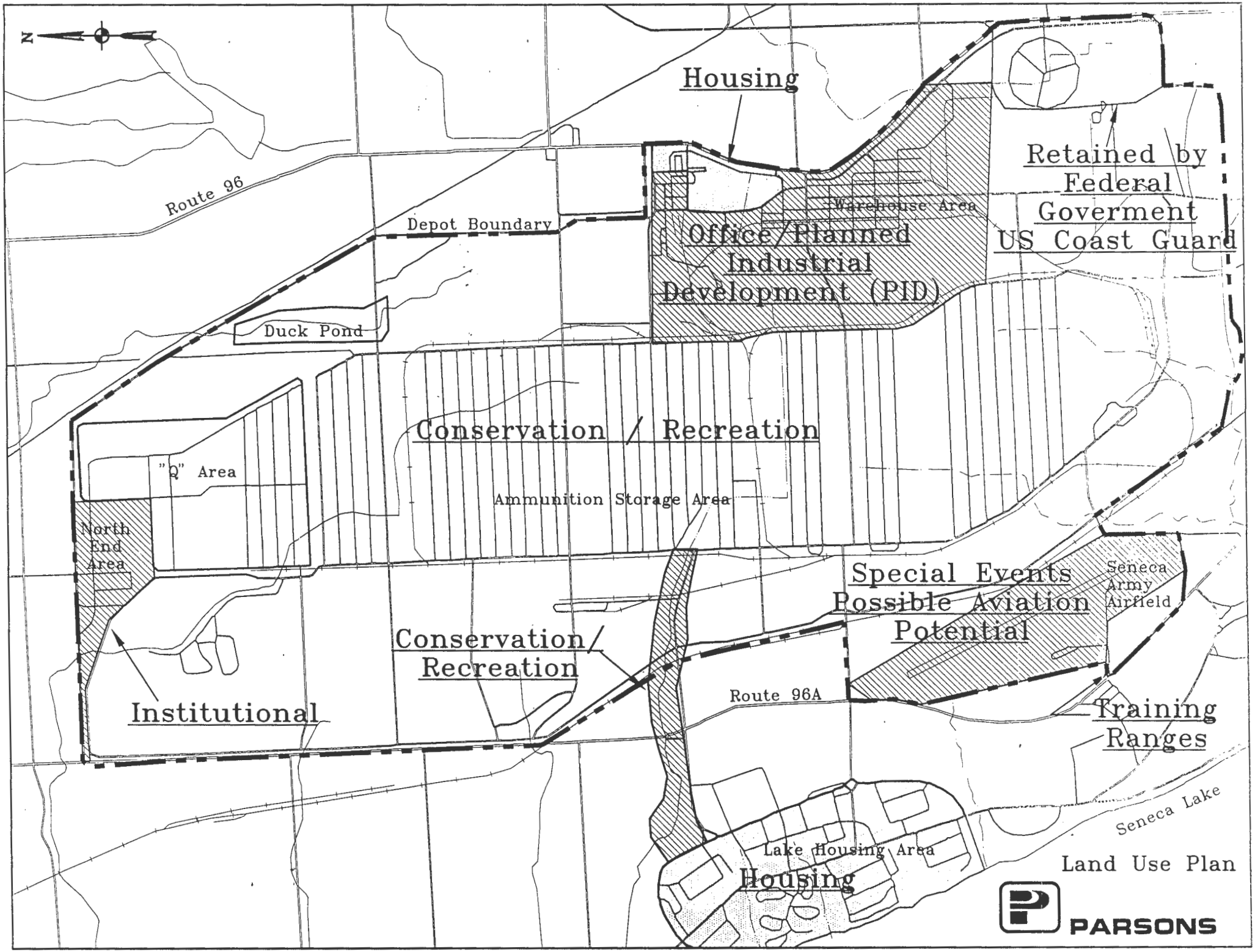
Presentation to the RAB

November 18, 1996

Future Land Use and Clean-up

cal Redevelopment Authority (LRA) Future Land Uses

- Conservation/Recreation
- Housing/Residential
- Institutional
- Office/Industrial
- Special Events
- Training Ranges


N
Housing
Route 96
Depot Boundary
Warehouse Area
Retained by Federal Goverment US Coast Guard
Office/Planned Industrial Development (PID)
Duck Pond
Conservation / Recreation
"Q" Area
Ammunition Storage Area
North End Area
Special Events Possible Aviation Potential
Seneca Army Airfield
Conservation/ Recreation
Route 96A
Institutional
Training Ranges
Seneca Lake
Lake Housing Area
Housing
Land Use Plan
PARSONS

ture Land Uses and tes within the Land Use Areas

- Conservation/Recreation (8300 Acres)
  - Ammunition Storage Areas
  - Special Weapons "Q" Area (SEAD-12)
  - "Duck Pond" Area (SEAD-13, IRFNA Site)
  - Kendaia Creek & Reeder Creek
  - OB/OD Grounds (SEADs-23 & 45)
  - Ash Landfill (SEADs-3, 6, 8,14 & 15)

nd Uses and
posure Scenarios

- Conservation / Recreational
  - Site Visitor
    - Bird Watcher
    - Hiker
    - Hunter
  - Ecological Exposure
    - Small Mammals
    - Birds that Ingest Soil

ture Land Uses and Sites within the Land Use Areas

- Housing/Residential
  - Lake Housing (120 Acres)
  - Elliot Acres Housing (80 Acres)
  - No SWMUs in these Areas
  - Residential Exposure will not be Considered at any Site

ture Land Uses and tes within the Land Use Areas

- Institutional
  - North End Area (200 Acres)
    - No Active Investigations
    - Six (6) Sites Within the North End
      - Four (4) No Action Sites
      - Two (2) Sites to be Addressed
  - Risk Assessments are not Anticipated for these Sites

ture Land Uses and tes within the Land Use Areas

- Office / Industrial
  - Main Administration Area (620 Acres)
    - Twenty-six (26) Sites are Located in this Area
    - Ten (10) Sites are No-Action Sites
    - SEADs-16 & 17, Deactivation Furnaces
    - SEADs-25 & 26, Fire Training Areas
    - SEADs-5, 59 & 71, Former Fill Areas
    - Nine (9) Sites to be Addressed

Land Uses and Exposure Scenarios

- Industrial Exposure Scenarios
  - Current Site Worker
  - Future Industrial Worker
  - Future On-site Construction Worker
  - Future Site Trespasser
- Ecological Exposure Scenarios
  - Small Mammals Living On-Site
  - Birds that Visit Site & Ingest Soil

...ture Land Uses and ...tes within the Land Use Areas

- Special Events Area
  - Seneca Airfield (450 Acres)
  - No SWMUs in this Area
- Training Range Area
  - Firearms Training Ranges Area (50 Acres)
  - No SWMUs in this Area

Land Uses, Exposure Scenarios and Impacts on Clean-up Goals

- *Residential Exposure Results in Greatest Exposure and Lowest Clean-up Goals*
- *Industrial & Conservation Exposure Results in Higher Clean-up Goals as Exposure is Less*
- *Ecological Protection Can Result in Lower Clean-up Goals*

LRA REUSE

BRIEFING

for

RESTORATION ADVISORY BOARD

November 19, 1996

Presented by: Patricia Jones
Interim Executive Director
LRA

Redevelopment Goals

Seneca Army Depot Reuse Plan

- New Employment Opportunities
- Fiscally Responsible and Prudent
- Provide Incentives to Private Sector
- Focus on Portions of the Site that Offer Potential for Success

Redevelopment Goals (continued)

Seneca Army Depot Reuse Plan

- Work to Establish Wildlife Conservation Area
- Encourage Involvement of the State of New York
- Encourage Effective and Efficient Environmental Clean-up

DEVELOPMENT CONSIDERATIONS

- Range of development options
- Some options will involve risk and be expensive
- Development choices
  - Focus on the entire site or just on portions of the site?
  - Amount of local government funding?
  - Role of local government in the management of redevelopment efforts?

DEVELOPMENT ALTERNATIVES

- Housing development provides best opportunity for redevelopment
- Warehouse/distribution usage is possible - cold storage
- Some opportunity for manufacturing -south end
- Office development is viable use - information/back office
- Aviation potential is limited
- Institutional usage in north end
- Several opportunities for recreational development
- Agricultural production may be limited due to cost of clearance

Development Areas

Seneca Army Depot Reuse Plan

- Conservation Land
- Lake Housing
- Elliot Acres Housing
- Federal Uses

Development Areas (continued)

Seneca Army Depot Reuse Plan

- Aviation/Special Events
- Institutional
- Warehouse/Storage
- Planned Industrial Development
- Training Ranges

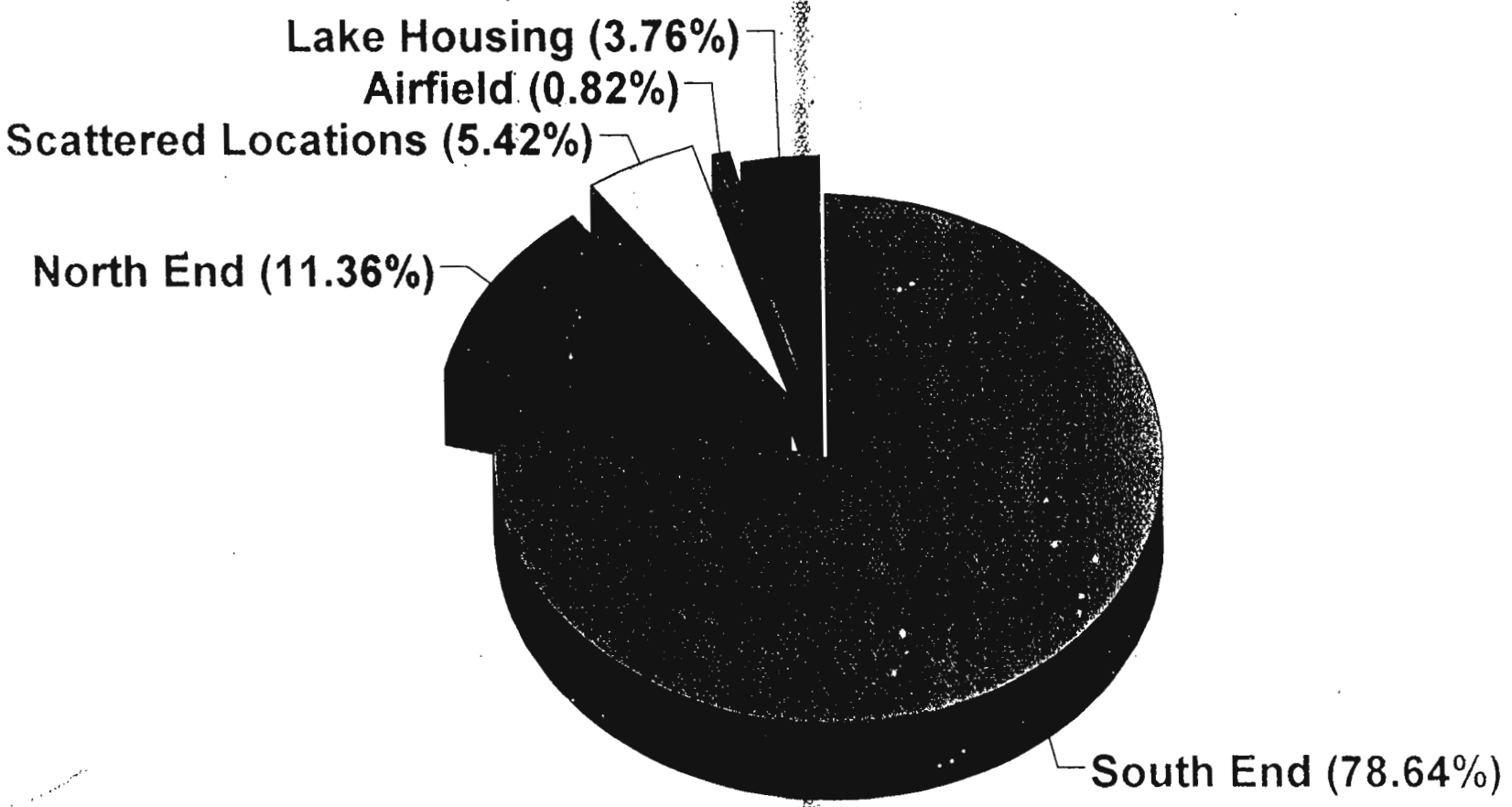
LAND USE SUITABILITY

- 10,634± acres at site
- 300 acres proposed for transfer to the U.S. Coast Guard
- 2,197 acres identified with environmental constraints
- 525 acres represent Airfield Clear Zone
- Net usable area - 7,612 acres
- Current layout of utilities only service a small portion of property available for transfer

BUILDINGS AND FACILITIES

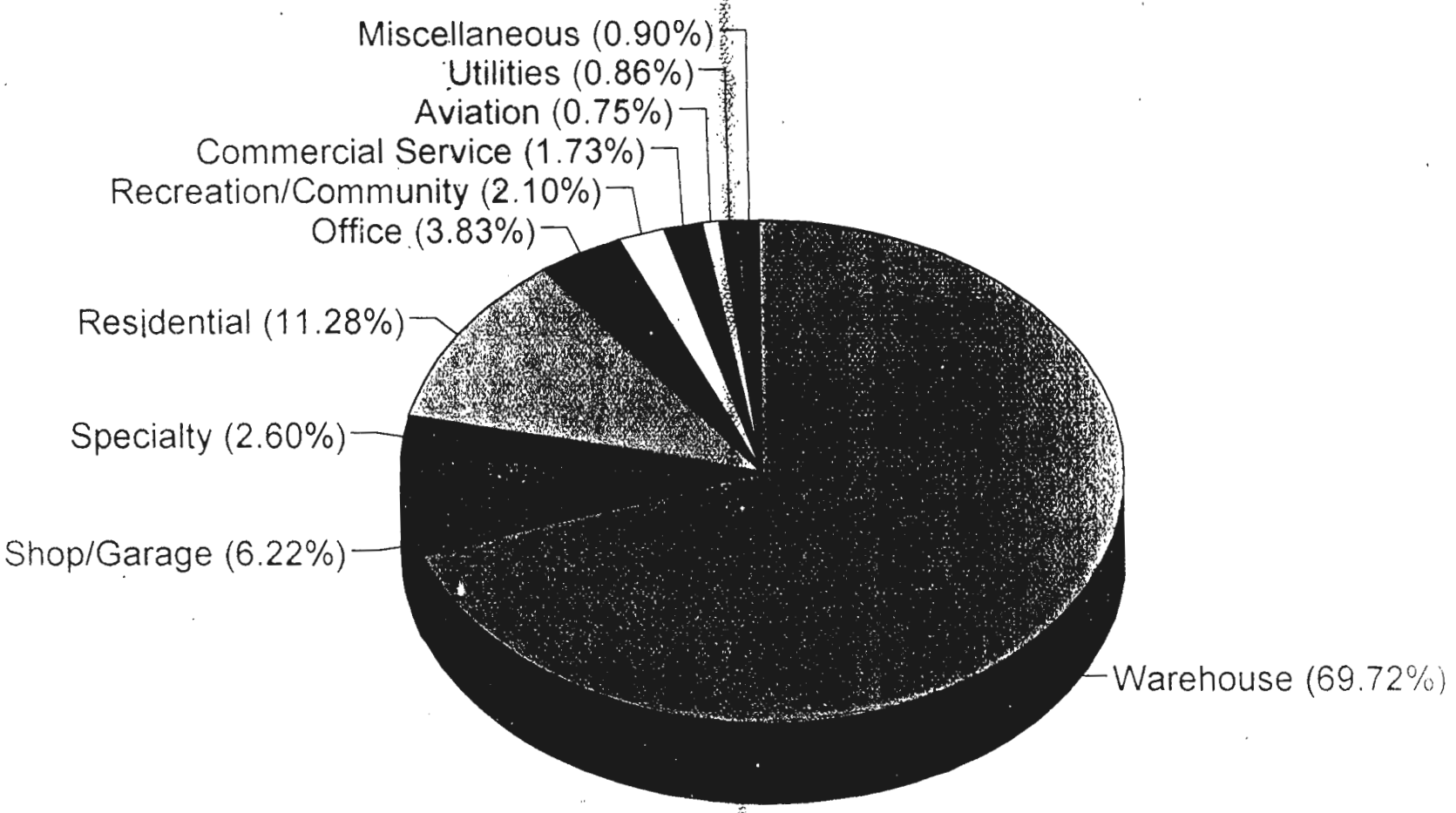
- Diversified Inventory of 365 buildings containing 3.72 million SF. This does not include the 519 Igloos
- A majority of the buildings are contained in the South End (79%)
- Nearly all the buildings in the North End have been vacant since 1993

Seneca Army Depot
Building Distribution by Location



Total Building Area:
3.725 Million SF
(Not including Igloos)

Seneca Army Depot
Building Distribution by Existing Use



Total Building Area:
3.725 Million SF
(Not including Igloos)

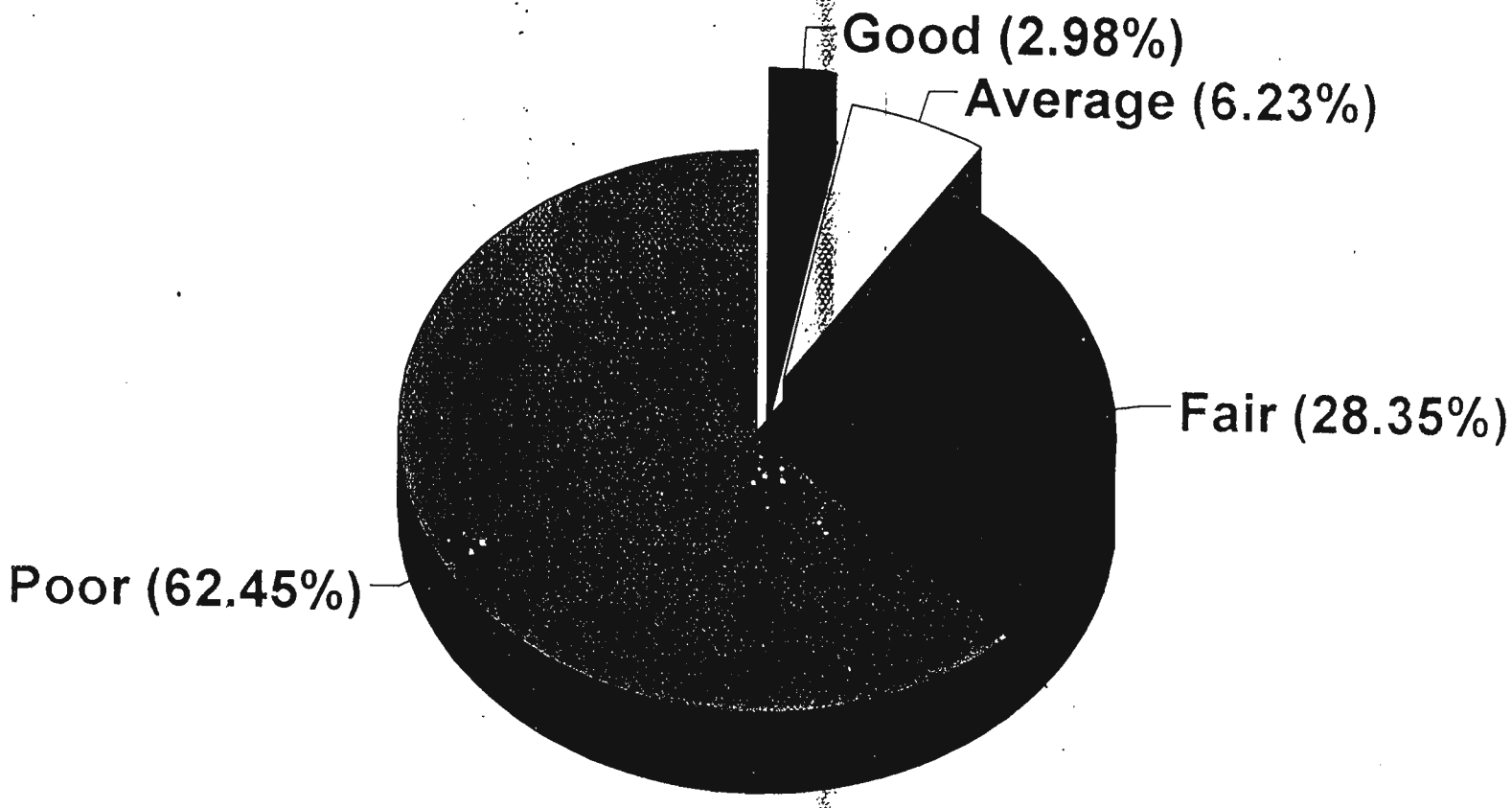
BUILDINGS AND FACILITIES

- Building reuse could include industrial, assembly, warehouse, office and R&D
- Housing
  - Elliot Acres - Variety of unit types, but rehabilitation will be required
  - Lake Housing - Marketable condition

BUILDING EVALUATION

- Building Evaluation involved variety of factors: design, layout, age, type of material, specialty features, utilities, existing mechanicals, overall functional utility
- Building Terms
  - Good - Appears readily adaptable to market with minimal cost
  - Average - Potentially marketable with minor investment
  - Fair - Modernization and renovation required
  - Poor - Significant investment required to replace/modernize mechanicals or structural items

Seneca Army Depot
Current Conditions of Buildings



Total Building Area:
3.69 Million SF
(Not including Igloos
and Small Buildings)

BUILDINGS AND FACILITIES

- Warehouse facilities tend to be in the poorest condition
- Office properties are in better condition
- Number of specialty buildings are in good condition, but they are in isolated locations

PROPERTY ACQUISITION

- Recommend that PID and Lake Housing Area be acquired by local officials under a Rural Economic Development Conveyance.

- Recommend that other sites be acquired by regional and state agencies under a Public Benefit Conveyance or private organizations under Negotiated/Bid Sale.

- Recommend that the LRA continue operations for the next three to four years to complete planning activities and assist in the property transfer process.

- Recommended that development and marketing of PID and Lake Housing areas be undertaken by the Seneca County IDA.

PROPERTY ACQUISITION

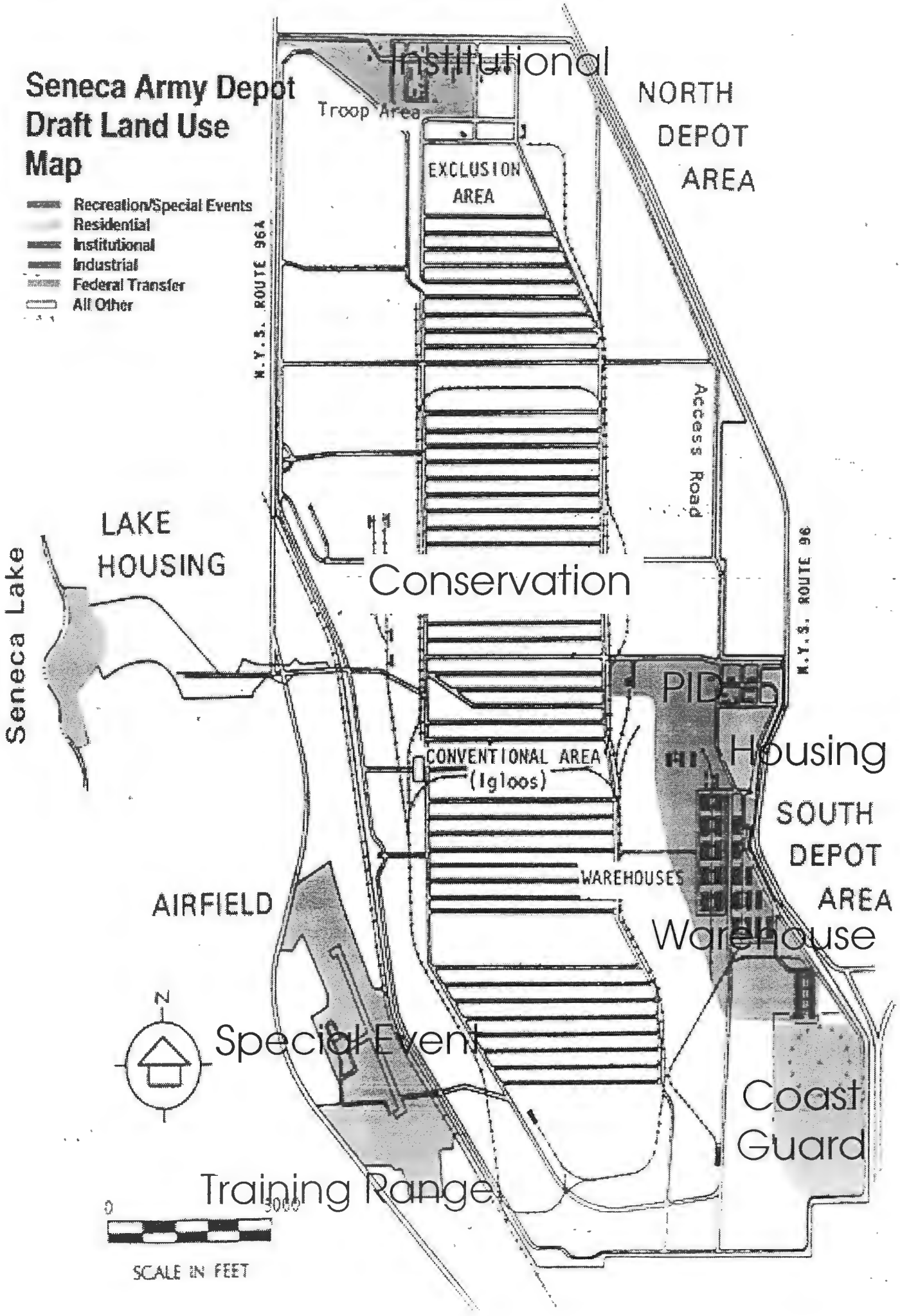
Continued

- Recommend that the LRA request a partial EIS, Record of Decision and Finding of Suitability to Transfer for the PID and Lake Housing areas.

- Recommend that the LRA/IDA solicit interest from developers for Lake Housing Area in late 1997 early 1998. Target transfer date for this property is Spring/Summer 1998.

- Recommend that proceeds from the sale of Lake Housing be dedicated to operation, maintenance, marketing and capital improvements in the PID area.

- If Lake Housing Area cannot be acquired through no-cost EDC, and re-sold to support the reuse of PID area, the community should be prepared to walk away from ownership of any property at the Depot.


Seneca Army Depot
Draft Land Use
Map
Recreation/Special Events
Residential
Institutional
Industrial
Federal Transfer
All Other
Institutional
Troop Area
NORTH
DEPOT
AREA
EXCLUSION
AREA
N.Y.S. ROUTE 96A
Access Road
N.Y.S. ROUTE 96
LAKE
HOUSING
Seneca Lake
Conservation
PID
Housing
CONVENTIONAL AREA
(Igloos)
SOUTH
DEPOT
AREA
WAREHOUSES
AIRFIELD
Warehouse
N
Special Event
Coast
Guard
Training Range
0
3000
SCALE IN FEET

SENECA ARMY DEPOT ACTIVITY

ENVIRONMENTAL IMPACT STATEMENT

November 19, 1996

NATIONAL ENVIRONMENTAL POLICY ACT

(Public Law 91-190)

A federal law that requires

the identification and analysis of potential environmental effects

of certain proposed federal actions and alternatives

before those actions take place.

A "full disclosure" law with provisions for

public access to and public participation in

the federal decision making process.

REFERENCES & AUTHORITIES

- National Environmental Policy Act of 1969
  (Public Law 91-190; 42 United States Code 4321-4347)

- Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act
  (40 Code of Federal Regulations 1500-1508)

- Army Regulation 200-2

- Defense Base Closure and Realignment Act of 1990 (BRAC)
  (Public Law 101-510)

ENVIRONMENTAL IMPACT STATEMENT STEPS

Identify issues to be analyzed (scoping)

Clearly define proposed action and alternatives

Gather data, analyze potential impacts, consider mitigation

Prepare Draft EIS - make available for agency and public review

Prepare Final EIS - make available for agency and public review

Prepare Record of Decision - make available for agency and public review

TYPICAL AREAS FOR ANALYSIS

Land Use
Air Quality
Noise
Water Resources
Geology
Infrastructure
Hazardous and Toxic Materials
Permits and Regulatory Authorizations
Biological Resources and Ecosystems
Cultural Resources
Environmental Justice
Sociological Environment
Economic Development
Installation Agreements

HAZARDOUS AND TOXIC MATERIALS

NEPA DECISION MAKING

POTENTIAL ENVIRONMENTAL EFFECTS OF LEASING, TRANSFER, AND SUBSEQUENT USE

CERCLA DECISION MAKING

MOST APPROPRIATE REMEDIAL MEASURES TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Environmental effects analysis - the NEPA process

Restoration of hazardous waste sites - the cleanup process

Replacement of jobs/creation of new jobs - the reuse planning process

Restoration Advisory Board Meeting Agenda

May 30, 1996

7:00	**Welcome** LTC Stephen W. Brooks Commander, Seneca Army Depot Activity
	Introduction Mr. Stephen M. Absolom BRAC Environmental Coordinator, Seneca Army Depot Activity
7:10	**What to Expect from a Restoration Advisory Board** Mr. Mike Cast Public Affairs Officer, Army Environmental Center
7:25	**Installation Command Briefing** Mr. Jerry Whitaker Base Transition Coordinator, Seneca Army Depot Activity
7:45	**Future RAB Meetings** Mr. Stephen Absolom BRAC Environmental Coordinator, Seneca Army Depot Activity
8:00	**Open Discussion/Get Acquainted**
8:30	**Adjourn**

Public Affairs Office
Seneca Army Depot Activity
Romulus, N.Y.
14541-5001
Beverly Lombardo
(607) 869-1353
DSN: 489-5353
DSN FAX: 489-5296
Commercial FAX: 607-869-1296

FACT SHEET

For Release: Mar 26, 1996 **Release No. 96-01**

This fact sheet provides basic information and statistics – facts and figures on Seneca Army Depot Activity.

Primary Mission:

1. Closure. Seneca Army Depot Activity was recommended for closure on February 28, 1995, by the Department of Defense as part of the Base Realignment and Closure (BRAC) process. Seneca was approved for closure by an independent BRAC Commission, the President, and finally Congress on September 28, 1995. The law requires Seneca to close by July 13, 2001.

Other Missions:

1. Storage, issue, maintenance, and demilitarization of conventional munitions.
2. Storage, and issue of general supplies including hazardous materials.
3. Continental U.S. Care of Materials In Storage for U.S. Army Reserve Command.
4. Strategic and critical materials storage.
5. Logistics support and training assistance to the Army Reserve and National Guard units.

Tenant Organizations:

1. U.S. Coast Guard LORAN-C Transmitting Station.
2. Defense Finance & Accounting Service.
3. U.S. Army Test, Measurement, and Diagnostic Equipment Support Operations.
4. Defense Reutilization and Marketing Office-Romulus Branch.
5. U.S. Army Health Clinic.
6. Civilian Personnel Office.

Budget for fiscal year 1996:

1. Payroll	$11,604,000
2. Local Procurement:	$10,704,000
3. Utilities:	$1,045,000
4. Total:	$23,353,000

Restoration Advisory Board Fact Sheet
May 1996

Establishing the Restoration Advisory Board

This fact sheet is prepared for RAB participants and provides information on the Seneca Army Depot Activity Installation Restoration Program (IRP).

THE NEXT STEPS

Community members for the RAB have been selected. The next steps in the development of the RAB include electing a Community Co-chair, developing a set of Operating Procedures, and setting up training sessions to introduce the public to the clean-up program.

OPERATING PROCEDURES

Part of establishing the RAB will involve setting up operating procedures. They will address issues such as:

- Attendance
- Meeting frequency
- Procedures for adding, removing, or replacing members or co-chair
- Membership and co-chair length of service
- Methods of resolving disputes
- Process for reviewing documents and responding to public comments
- Procedures for public participation.

TRAINING FOR RAB MEMBERS

Most RAB members will need an initial orientation to the environmental clean-up program to perform their duties. Seneca Army Depot Activity plans to conduct training sessions at future RAB meetings. All RAB training will be open to the public and all documents or other information released to the RAB will be available to the public at the Information Repository.

For more information, contact the Installation Co-chair, Mr. Stephen Absolom, at (607) 869-1309.

Restoration Advisory Board Fact Sheet
May 1996

The Community Co-chair: Role & Responsibilities

This fact sheet is prepared for RAB participants and provides information on the Seneca Army Depot Activity Installation Restoration Program (IRP).

THE ROLE

The Community Co-chair plays an important role in the success of a RAB. He/she will volunteer to jointly run the RAB along with the Installation Co-chair.

RESPONSIBILITIES

The major responsibilities of the RAB Co-chair will include:

- Coordinate with Installation Co-chair to prepare and distribute an agenda prior to each meeting
- Ensure that community issues and concerns related to cleanup are raised
- Ensure that community members participate in an open and constructive manner
- Ensure that the RAB has the opportunity to provide input into the decision process
- Report back to the community.

WHO WILL DECIDE?

The community members of the RAB will select the community Co-chair as their representative. They will review and evaluate interested candidates and select the Co-chair at the next RAB meeting.

Possible options for selecting the Co-chair include:

- Interested RAB members could write a short summary of why they are interested in the position
- Interested RAB members could give a brief talk at the next meeting and explain why they are interested in the position.

For more information, contact the Installation Co-chair, Mr. Stephen Absolom, at (607) 869-1309.

Restoration Advisory Board Fact Sheet
May 1996

The Information Repository

This fact sheet is prepared for RAB participants and provides information on the Seneca Army Depot Activity Installation Restoration Program (IRP).

WHAT IS IT?

The Information Repository is a collection of documents available for public inspection which contains information that relates to the clean-up of former hazardous waste sites. It was established on March 16, 1992 and is periodically updated by staff at the Seneca Army Depot Activity.

The Information Repository contains technical reports, background information, guides to the waste clean-up process, minutes from public meetings, and other information to aid the public in understanding response actions taken by the Army at Seneca Army Depot Activity.

Establishing an Information Repository is a requirement under the National Contingency Plan in the Code of Federal Regulations.

WHERE IS IT LOCATED?

The Information Repository is located for public review at:

Romulus Town Hall
1435 Prospect Street
Willard, NY 14588

The town hall is open Monday through Friday from 8:30 am to 4:00 pm.

For more information, contact the Romulus Town Hall at (607) 869-9326.

Restoration Advisory Board Fact Sheet
May 1996

Acronyms & Abbreviations

This fact sheet is prepared for RAB participants and provides information on the Seneca Army Depot Activity Installation Restoration Program (IRP).

AEC	Army Environmental Center
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BRAC	Base Realignment and Closure
BTC	Base Transition Coordinator
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHPPM	Center for Health Promotion and Preventive Medicine
COE	Corps of Engineers
DA	Department of the Army
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
DOH	Department of Health
EBS	Environmental Baseline Survey
EPA	Environmental Protection Agency
FS	Feasibility Study
IRP	Installation Restoration Program
LTM	Long Term Monitoring
LRA	Local Redevelopment Authority
NPL	National Priority List
NYSDEC	New York State Department of Environmental Conservation
PA	Preliminary Assessment
RA	Remedial Action
RAB	Restoration Advisory Board
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SEDA	Seneca Army Depot Activity
SI	Site Inspection
SWMU	Solid Waste Management Unit

May 30, 1996 7:00 pm at OClub

SENECA ARMY DEPOT
RAB MEMBERS

Anne Herman
4612 East Lake Road
Geneva, NY 14456

Mary Anne Krupsak
PO Box 34
Romulus, NY 14541

Lucinda Sangree
Box 34, 5440 Route 96
Romulus, NY 14541

Russell Miller
PO Box 448
Seneca Falls, NY 13148

Brian Dombrowski
Public Health Director
Seneca County Health Dept
31 Thurber Drive
Waterloo, NY 13165

Frank Ives
International Union of
Operating Engineers
4325 South Salina Street
Syracuse, NY 13205

YES

Carmen Serrett
Labor Unions Local 103
PO Box 571
Geneva, NY 14456

Daniel R. Geraghty
NYS Department of Health ←
2 University Place - Room 205
Albany, NY 12203-3399

Richard Durst
5487 East Lake Road
Romulus, NY 14541

Al Legasse
6213 County Road 129
Romulus, NY 14541

Richard R. Sisson
11 Nicholas Street
Seneca Falls, NY 13148

Harold Kugelmass
3233 County Road 143
Interlaken, NY 14847

cannot attend

David Wagner
1834 County House Road
Waterloo, NY 13165

Richard M. Lewis, Jr.
9180 Booth Road
Trumansburg, NY 14850

YES

Henry Van Ness
9695 Route 96
Trumansburg, NY 14850

Estelle Coleman
Box 34, 5440 Route 96
Romulus, NY 14541

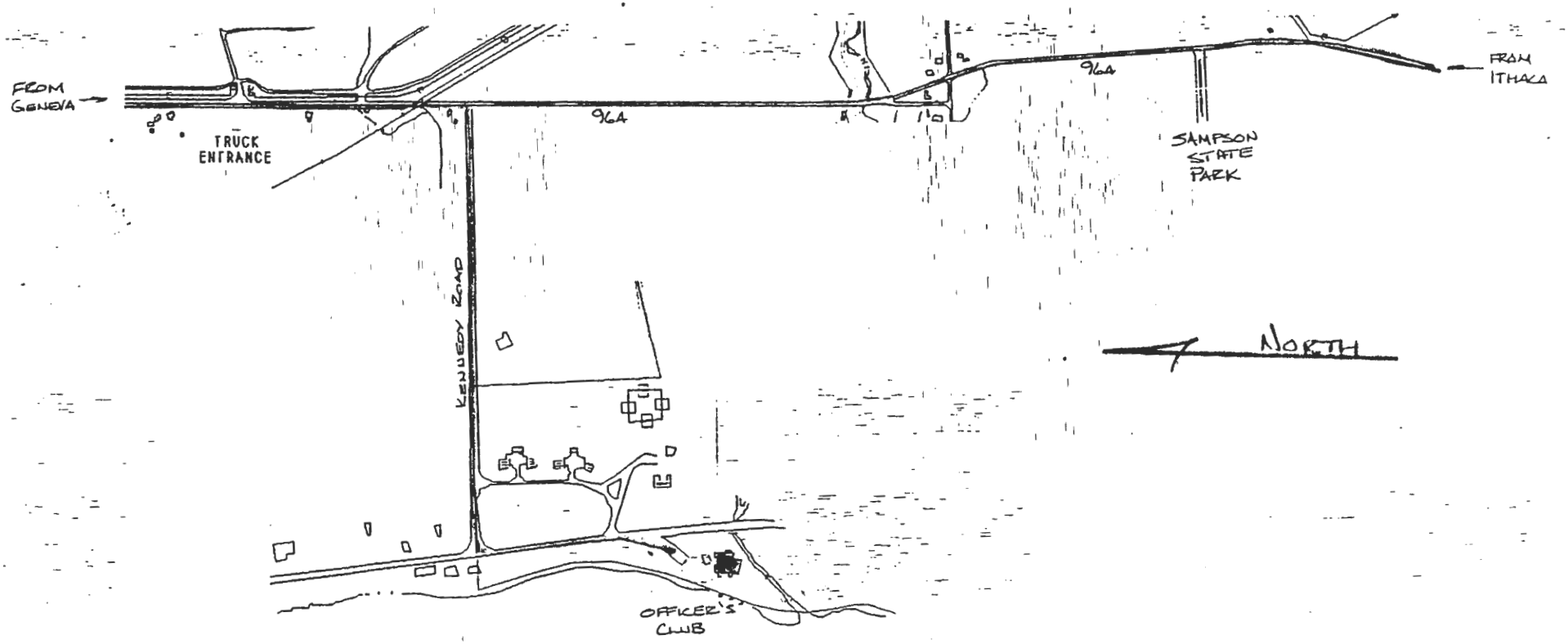
Diane DeMuth
Seneca Army Depot LRA
Building 101
Romulus, NY 14541

DRAFT

Restoration Advisory Board Icebreaker Agenda

May 30, 1996

7:00	**Welcome** LTC Stephen W. Brooks Commander, Seneca Army Depot Activity
	Introduction Mr. Stephen M. Absolom BRAC Environmental Coordinator, Seneca Army Depot Activity
7:10	**What to Expect from a Restoration Advisory Board** Mr. Greg Mavhill Public Affairs Officer, Army Environmental Center
7:25	**Installation Command Briefing** Mr. Jerry Whitaker Base Transition Coordinator, Seneca Army Depot Activity
7:45	**Future RAB Meetings** Mr. Stephen Absolom BRAC Environmental Coordinator, Seneca Army Depot Activity
8:00	**Open Discussion**
8:30	**Adjourn**


FROM GENEVA
TRUCK ENTRANCE
964
964
FROM ITHACA
SAMPSON STATE PARK
KENNEDY ROAD
NORTH
OFFICER'S CLUB
SENECA LAKE

31 May - 8:00-1:00 NCO Club
30 May - 1:00 pm - NCO

BUR AND RAB ATTENDEES
30 May - 7:00 pm at OClub

Ms. Carla Struble, P.E
U.S. Environmental Protection Agency
Emergency & Remedial Response Division
290 Broadway
18th Floor, E-3
New York, New York 10007-1866

Mr. Kamal Gupta
New York State Department of
Environmental Conservation
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation
50 Wolf Road, Room 208
Albany, New York 12233-7010

Mr. Michael Duchesneau, P.E.
Parsons Engineering-Science, Inc.
Prudential Center
101 Huntington Avenue
Boston, Massachusetts 02199-7697

Mr. Jim Collins
Senior Scientist
Tetra Tech, Inc.
10306 Eaton Place, Suite 340
Fairfax, Virginia 22030

Mr. Daniel Geraghty
New York State Department of Health
Bureau of Environmental Exposure
Investigation
2 University Place, Room 205
Albany, New York 12203

sending - Mr. Manmohan Mehta
(whole watch) ~~Mr. Robert K. Scott~~
New York State Department of
Environmental Conservation
Region 8
6274 East Avon-Lima Road
Avon, New York 14414-9519

YES

Mr. Bruce Nelson
Malcom Pernie
4 Cooperate Place
Washington Avenue Extension
Albany, New York 12203

Ms. Sue VanPatten
Health Liaison Program
Bureau of Toxic Substances
2 University Place
Room 240
Albany, New York 12203-3399

Mr. Bob Mutaw
Woodward-Clyde Federal Services, Inc.
4582 S. Ulster Street
Stanford Place 3, Suite 1200
Denver, Colorado 80237

YES

Commander
U.S. Army Corps of Engineers
SEDA Resident Office
ATTN: CENAN-PP-E (Randy Battaglia)
Romulus, NY 14541-5001

YES

Commander
U.S. Army Corps of Engineers
Seattle District
ATTN: CENPS-EN-GT (Mike Nelson)
PO Box 3755
Seattle, WA 98124-2255

Commander
U.S. Army Corps of Engineers
Huntsville District,
ATTN: CEHND-ED-CS (Kevin Healy)
PO Box 1600
Huntsville, AL 35807

Commander
U.S. Army Corps of Engineers
Huntsville District
ATTN: CEHND-ED-CS (Dorothy Richards)
PO Box 1600
Huntsville, AL 35807

Commander
U.S. Army Industrial Operations Command
ATTN: AMSIO-EQE (Randy Nida)
Rock Island, IL 61299-6000

YES

Commander
U.S. Army Environmental Center
ATTN: SFIM-AEC-IRP (John Buck)
Aberdeen Proving Ground, MD 21010-5410

YES

Commander
U.S. Army Environmental ~~Hygiene Agency~~ Center for Health Promotion & Preventive Medicine
ATTN: ~~HSHB-ME-SR~~ (Keith Hoddinott) MCHB-DC-ERA
Aberdeen Proving Ground, MD 21010-5422

YES

Commander
U.S. Army Material Command
ATTN: AMCEN-A (Pete Cunanen)
5001 Eisenhower Avenue
Alexandria, VA 22333-0001

BTC - Jerry Whitaker

LRA - Diane DeMuth

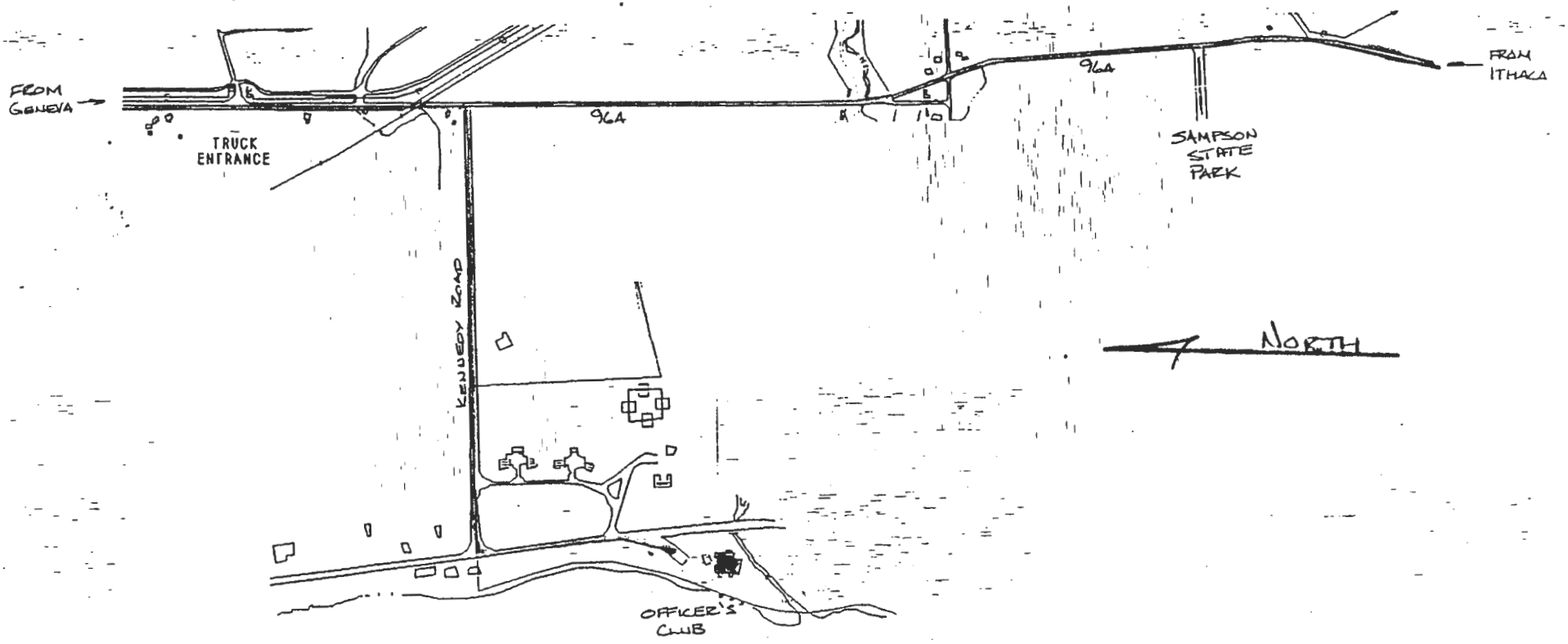
Legal - Joanne Ogden

PAO - Bev Lombardo

CEA - Bruce Johnson

CDR - LTC Brooks

Steve
Tom E.
Janet
me


FROM GENEVA
TRUCK ENTRANCE
96A
96A
SAMPSON STATE PARK
FROM ITHACA
KENNEDY ROAD
NORTH
OFFICER'S CLUB
SENECA LAKE

SIOSE-IE
SUBJECT: Bottom-up Review (BUR) and Restoration Advisory Board (RAB) Meeting Schedule

Commander, U.S. Army Industrial Operations Command, ATTN: AMSIO-EQE (Randy Nida), Rock Island, IL 61299-6000

Commander, U.S. Army Environmental Center, ATTN: SFIM-AEC-IRP (John Buck), Aberdeen Proving Ground, MD 21010-5410

Commander, U.S. Army Environmental Hygiene Agency, ATTN: HSHB-ME-SR (Keith Hoddinott), Aberdeen Proving Ground, MD 21010-5422

Commander, U.S. Army Material Command, ATTN: AMCEN-A (Pete Cunanen), 5001 Eisenhower Avenue, Alexandria, VA 22333-0001

BTC
LRA
BRAC Ofc
Legal
PAO
CEA/CDR

Restoration Advisory Board Icebreaker Agenda

May 30, 1996

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8:30	**Adjourn**

DRAFT

Restoration Advisory Board Icebreaker Agenda

May 30, 1996

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LTC Stephen W. Brooks
Commander, Seneca Army Depot Activity

Introduction
Mr. Stephen M. Absolom
BRAC Environmental Coordinator, Seneca Army Depot Activity

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Mr. Greg Mavhill
Public Affairs Officer, Army Environmental Center

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Mr. Jerry Whitaker
Base Transition Coordinator, Seneca Army Depot Activity

7:45 **Future RAB Meetings**
Mr. Stephen Absolom
BRAC Environmental Coordinator, Seneca Army Depot Activity

8:00 **Open Discussion**

8:30 **Adjourn**

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL # of pages ► 2

To Pete Coutts	From Janet Fallo
Dept./Agency IT Corp	Phone # 607 | 869-1450
Fax # 716 | 271-0251	Fax # 607 | 869-1362

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

Seneca Army Depot Activity
Restoration Advisory Board Meeting

The first gathering of the Restoration Advisory Board (RAB) will take place at the Seneca Army Depot Officer's Club, East Lake Road on May 30, 1996 at 7:00 pm. The meeting is expected to adjourn no later than 8:30 pm. The purpose of this meeting is to provide general information on how the RAB will function and for the members to meet each other.

The purpose of establishing the RAB is to improve public participation by involving the community in the environmental restoration decision-making process. Seventeen community members are volunteering for the RAB and all the meetings will be open for public attendance and participation.

For more information contact Bev Lombardo, Public Affairs Officer at (607) 869-1353.

Pete -

This is a copy of the public notice we are releasing in the Finger Lakes Times. Everyone who takes part in our program will be there - regulators, Corps of Engineers, Army Environmental Center, Woodward Clyde (EBS + BRAC Cleanup Plan), Engineering Science, etc.

Minutes of the meeting will be available. (no stenographers!)

Hope to see you there. If you have any other questions, give me a call.

Janet

****
*** ACTIVITY REPORT ***
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RESTORATION ADVISORY BOARD
MAY 30, 1996 MEETING MINUTES

1. Attendance

Government RAB members present:
Stephen Absolom, BRAC Environmental Coordinator, SEDA
Carla Struble, U.S. Environmental Protection Agency
Marsden Chen, N.Y. State Department of Environmental Conservation
(Alternate for Kamal Gupta, NYSDEC)
Dan Geraghty, N.Y. State Department of Health

Community RAB Members present:
Diane DeMuth, Richard Durst, Anne Herman, Frank Ives, Mary Anne Krupsak, Al Legasse, Richard Lewis, Russell Miller, Lucinda Sangree, Carmen Serrett, Richard Sisson, Henry Van Ness, David Wagner

Community RAB members absent:
Estelle Coleman, Brian Dombrowski, and Harold Kugelmass

Government and Technical Support Personnel present:
LTC Stephen Brooks, SEDA Commander
Thomas Enroth, SEDA Environmental Engineer
Janet Fallo, SEDA Environmental Engineer
Jerry Whitaker, SEDA Base Transition Coordinator
Beverly Lombardo, SEDA Public Affairs Officer
Joanne Ogden, SEDA Legal Representative
Susan Cooper, SEDA Secretary
John Buck, U.S. Army Environmental Center
Mike Cast, U.S. Army Environmental Center, Public Affairs Office
Keith Hoddinott, U.S. Army Center for Health Promotion and Preventive Medicine
Randy Nida, U.S. Army Industrial Operations Command
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Kevin Healy, U.S. Army Corps of Engineers, Huntsville Division
Michael Duchesneau, Parsons Engineering Science, Inc.
Robert Mutaw, Woodward-Clyde
Rick Newill, Woodward-Clyde

Others present (from sign-in sheet) :
Pete Coutts, International Technology Corporation
John Finn, Remediation Technologies Corporation
Thomas Grasek, Community Member
Martin Toombs, Finger Lakes Times
Mark Weider, International Technology Corporation

2. The first Restoration Advisory Board meeting was called to order by LTC Stephen Brooks, Commander of Seneca Army Depot Activity (SEDA). LTC Brooks welcomed all members and support staff to the Officer's Club.

3. Introductions were then made by Stephen Absolom, the BRAC Environmental Coordinator for SEDA. Mr. Absolom explained that the purpose of the evening's activities was to present a brief overview of the RAB process and become acquainted with other members and support staff.

4. Mike Cast, Public Affairs Officer from the Army Environmental Center provided basic information on Restoration Advisory Boards. His briefing explained what a RAB is, its purpose, and who comprised the Restoration Advisory Board. Mr. Cast defined the responsibilities of the RAB, its Co-Chairs, State and EPA support staff, and community members. Benefits of community participation were also discussed.

5. The Installation Command Briefing was then given by Jerry Whitaker, SEDA's Base Transition Coordinator. Items addressed were the depot's history, missions, population, facilities, contributions to the local community, relationship with the Local Redevelopment Authority, and white deer.

6. Future RAB meetings were discussed with the following issues agreed to by the members present:

a. When?: Monthly meetings were deemed necessary at first--preferably during a weekday evening to accommodate the majority. The next RAB meeting will be held on Wednesday, June 26, 1996 at 7:00 p.m.

b. Where?: It was decided that the next meeting will be held at the Seneca Army Depot Activity NCO Club. Other possible locations were the Romulus School, Willard Town Hall, and the Seneca County Office Building. These options may be exercised in the future.

c. Who?: The Community Co-Chair will be selected at the June 26th meeting. Interested individuals (seven expressed an interest on their initial applications) will be required to provide a verbal presentation with election by a majority vote. Discussion followed regarding duties, time commitments, and administrative support.

d. Two tours of the depot were offered to RAB members. Dates established were Wednesday, June 12th at 6:30 p.m. and Saturday, June 22nd at 9:00 a.m. A guest is welcome, provided there is room available in the 20-passenger bus. A sign-up sheet was available for those interested in attending a tour. Participants must sign in for the tour at Seneca's main gate on Route 96. The bus will depart 5 minutes after the times listed and will last approximately 1 ½ hours.

e. Training will be provided at initial RAB meetings to ensure understanding of the cleanup

process and what is required of the RAB. Information will be provided on regulatory involvement, the funding process, and acronyms and abbreviations.

f. A tentative agenda for the June 26th meeting included the following topics: (1) introductory training, (2) current activities, and (3) initiate charter.

7. The formal meeting was then adjourned at 8:30 p.m. to afford RAB members and regulatory and support staff the opportunity to socialize and become acquainted.

Respectfully submitted,

Susan R. Cooper

SUSAN R. COOPER
Secretary

APPROVED AS SUBMITTED:

Stephen M. Absolom

STEPHEN M. ABSOLOM
U.S. Army Co-chair

RICHARD A. DURST
Community Co-chair

Restoration Advisory Board Meeting
Agenda

draft

June 26, 1996

7:00	**Welcome** Mr. Bruce Johnson Civilian Executive Assistant (CEA), Seneca Army Depot Activity Mr. Stephen M. Absolom BRAC Environmental Coordinator, Seneca Army Depot Activity
7:10	**Environmental Cleanup Process Overview** Mr. Mike Duchesneau Parsons Engineering Science, Inc.
7:25	**BRAC Cleanup Plan Overview** Mr. Stephen M. Absolom BRAC Environmental Coordinator, Seneca Army Depot Activity
7:40	**Community Co-chair Presentations/Election** RAB members
8:10	**Discussion of Draft Charter** Mr. Stephen Absolom BRAC Environmental Coordinator, Seneca Army Depot Activity
8:45	**Adjourn**

SENECA ARMY DEPOT ACTIVITY, NY
RESTORATION ADVISORY BOARD CHARTER

I. Purpose of the Restoration Advisory Board (RAB)

The primary purpose of the Seneca Army Depot Activity (SEDA) RAB is to improve public participation in the environmental restoration process taking place at SEDA.

II. Functions of the RAB

1. The RAB will: function as a forum for open and interactive dialogue between government agencies and the public regarding environmental cleanup information; conduct regular meetings open to the public at convenient times and locations; keep meeting minutes; and make meeting minutes available to the public. The RAB brings together members who reflect diverse community interests to facilitate the flow of information, concerns, and needs between the local community, U.S. Army, N.Y. state regulators, and federal regulators.

2. The RAB will review issues related to cleanup, review cleanup strategies, track current and future activities and provide perspectives on cleanup priorities. The RAB and its members will communicate with community members and interest groups, serve as direct and reliable conduits of information to and from the community, and review and comment on various technical reports and cleanup plans.

III. Basis and Authority for the RAB Charter

The basis and authority for this charter are contained in the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendment and Reauthorization Act (SARA) of 1986, particularly section 120(a), 120(f), and 10 USC 2705, enacted by Section 211 of SARA, and DoD and United States Environmental Protection Agency RAB Implementation Guidelines of September 1994, plus subsequent acts of United States Congress that here-in apply.

IV. Structure of the RAB

1. The RAB will be co-chaired by the BRAC Environmental Coordinator (BEC) for Seneca Army Depot Activity (or his/her alternate) and a community member. The co-chairs will have responsibility for managing the meetings.

2. Government RAB members include representatives from the installation (the BEC), U.S. Environmental Protection Agency, and N.Y. State. Other representatives from

government agencies attend the RAB meetings as technical support staff but will not be named as RAB members. All other RAB members will be part of the communities that surround the Seneca Army Depot Activity installation. "Community" in this case is defined as _____.

3. The community co-chair will be selected by _____ as established by the RAB. The term of office for the community co-chair position will be _____ (months/years/indefinite) after being selected.

4. The RAB community members are responsible for terminating a co-chair who is ineffective or detrimental to the progress of the RAB. Co-chair removal is determined by _____.

5. The RAB will meet at least quarterly at a location agreed upon by a consensus of the RAB members. Additional meetings or special focus meetings may be scheduled as the need arises.

6. Agenda items will be compiled by the co-chairs. Suggested topics should be given to the SEDA co-chair not later than_____ (weeks/days) prior to each meeting. The SEDA co-chair will be responsible for providing written notification to all RAB members of the upcoming agenda, date, time, and place of scheduled RAB meetings at least_____ (weeks/days) prior to each meeting.

7. The SEDA co-chair will be responsible for recording and distributing meeting minutes including a written list of attendees within_____ (weeks/days) after the meeting. Any comments on the minutes must be received within_____ (weeks/days) to be incorporated into the final minutes.

8. A copy of meeting minutes will be sent to all RAB members within_____ (days/weeks) after the meeting. After the minutes are reviewed and revised, they will be available in the Information Repository at the Romulus Town Hall in Willard.

V. Roles and Responsibilities

1. **The SEDA co-chairperson will:**

Coordinate with the community co-chairperson to prepare and distribute an agenda prior to each RAB public meeting.

Ensure that Department of Defense employees participate in an open and constructive manner.

Ensure that the RAB has the opportunity to participate in the SEDA environmental

restoration process.

Ensure that community issues and concerns related to restoration are addressed when raised.

Ensure that an accurate mailing list of interested parties is developed and maintained.

Provide relevant policies and guidance documents to RAB members in order to enhance the RAB operation.

Ensure that adequate administrative support is provided for meeting agendas and minutes, meeting locations, necessary document reproduction and mailings, and distribution of public notices in local newspapers.

Refer issues not related to restoration to an appropriate installation official.

Report RAB activities to the appropriate installation officials.

Ensure documents distributed to the RAB are also made available to the general public.

2. **The Community Co-chairperson will:**

Coordinate with the SEDA co-chairperson and RAB members to prepare and distribute an agenda prior to each RAB public meeting.

Ensure that community members participate in an open and constructive manner.

Ensure that the RAB has the opportunity to participate in the SEDA environmental restoration process.

Ensure that community issues and concerns related to restoration are raised.

Ensure documents distributed to the RAB are also made available to the general public, as deemed appropriate in compliance with applicable laws and regulations.

3. **The RAB Community Members will:**

Attend all RAB meetings.

Provide advice and comment on environmental restoration issues to appropriate governmental agencies.

Be responsible for representing and communicating community interests and concerns to

the RAB.

Members will serve as a direct and reliable conduit for information exchange between the community and restoration process decision makers.

Members will be available to review the various technical documents generated by the environmental restoration process at SEDA.

4. **The N.Y. State Regulatory Agency Member(s) will:**

Attend all RAB meetings.

Serve as an information, referral resource bank for communities, installations and agencies regarding installation restoration.

Review documents and other materials related to restoration.

Ensure that state environmental standards and regulations are identified and addressed by SEDA.

Facilitate flexible and innovative resolutions of environmental issues and concerns.

Assist in education and training for the RAB members.

5. **The U.S. Environmental Protection Agency (EPA) Member will:**

Attend all RAB meetings.

Serve as an information, referral and resource bank for communities, installations and agencies regarding installation restoration.

Facilitate flexible and innovative resolutions of environmental issues and concerns.

Ensure that federal environmental standards and regulations are identified and addressed by SEDA.

Assist in education and training for the RAB members.

VI. RAB Attendance Requirements

RAB members are expected to attend all meetings. If a conflict occurs, the member should notify one of the co-chairpersons that they will not be in attendance or send an alternate to the meeting. Members unable to continue to fully participate may submit or

be asked to submit their resignation in writing to the RAB.

VII. RAB Meeting Structure

1. The regular RAB meetings will be conducted _____ (monthly/quarterly) or as needed on_____ (Wednesdays/etc) at _____ or a location determined at the previous meeting.
2. Meetings will begin at _____ (time) and end when RAB business has been completed, normally not lasting more than 2 hours. Special focus meetings will be held, when necessary, in addition to the regular meetings.

3. There will be time allotted at the end of each item on the agenda for public comments.

VIII. Procedure and Time Period for Review of Technical Documents

Technical documents will be reviewed by the RAB in the same time period as the regulatory staff, normally at least 30 days, so that the environmental restoration efforts at SEDA are not impeded. RAB members may provide written comments on documents which will be consolidated by the SEDA co-chairperson. An executive summary of large documents may be provided to RAB members and full documents will be available at the Information Repository. RAB members will be furnished a copy of documents in review at request.

IX. Amendments to this Charter

This charter may be amended by a simple majority vote of RAB members in attendance at a RAB meeting, if the amendment is consistent with the laws and regulations governing its existence.

X. Termination of this Charter

This charter will be terminated upon completion of the environmental restoration process at SEDA.

XI. Effective Date of this Charter

The effective date of this charter shall be _____ (date which it is accepted by a simple majority vote of members present at meeting/date last signatory signed charter/etc).

XII. Signatories to the RAB Charter

IN WITNESS WHEREOF, this charter was approved by the following members of the SEDA Restoration Advisory Board on the _____ day of _____, 19___ .

_____

Stephen M. Absolom
BRAC Environmental Coordinator
Seneca Army Depot Activity Co-chair

_____

(Name of Community Co-chair)
Community Co-chair

RESTORATION ADVISORY BOARD
MAY 30, 1996 MEETING MINUTES

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Stephen Absolom, BRAC Environmental Coordinator, SEDA
Carla Struble, U.S. Environmental Protection Agency
Marsden Chen, N.Y. State Department of Environmental Conservation
(Alternate for Kamal Gupta, NYSDEC)
Dan Geraghty, N.Y. State Department of Health

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LTC Stephen Brooks, SEDA Commander
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Beverly Lombardo, SEDA Public Affairs Officer
Joanne Ogden, SEDA Legal Representative
Susan Cooper, SEDA Secretary
John Buck, U.S. Army Environmental Center
Mike Cast, U.S. Army Environmental Center, Public Affairs Office
Keith Hoddinott, U.S. Army Center for Health Promotion and Preventive Medicine
Randy Nida, U.S. Army Industrial Operations Command
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Kevin Healy, U.S. Army Corps of Engineers, Huntsville Division
Michael Duchesneau, Parsons Engineering Science, Inc.
Robert Mutaw, Woodward-Clyde
Rick Newill, Woodward-Clyde

Others present (from sign-in sheet) :
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2. The first Restoration Advisory Board meeting was called to order by LTC Stephen Brooks, Commander of Seneca Army Depot Activity (SEDA). LTC Brooks welcomed all members and support staff to the Officer's Club.

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6. Future RAB meetings were discussed with the following issues agreed to by the members present:

a. When?: Monthly meetings were deemed necessary at first--preferably during a weekday evening to accommodate the majority. The next RAB meeting will be held on Wednesday, June 26, 1996 at 7:00 p.m.

b. Where?: It was decided that the next meeting will be held at the Seneca Army Depot Activity NCO Club. Other possible locations were the Romulus School, Willard Town Hall, and the Seneca County Office Building. These options may be exercised in the future.

c. Who?: The Community Co-Chair will be selected at the June 26th meeting. Interested individuals (seven expressed an interest on their initial applications) will be required to provide a verbal presentation with election by a majority vote. Discussion followed regarding duties, time commitments, and administrative support.

d. Two tours of the depot were offered to RAB members. Dates established were Wednesday, June 12th at 6:30 p.m. and Saturday, June 22nd at 9:00 a.m. A guest is welcome, provided there is room available in the 20-passenger bus. A sign-up sheet was available for those interested in attending a tour. Participants must sign in for the tour at Seneca's main gate on Route 96. The bus will depart 5 minutes after the times listed and will last approximately 1 ½ hours.

e. Training will be provided at initial RAB meetings to ensure understanding of the cleanup

process and what is required of the RAB. Information will be provided on regulatory involvement, the funding process, and acronyms and abbreviations.

f. A tentative agenda for the June 26th meeting included the following topics: (1) introductory training, (2) current activities, and (3) initiate charter.

7. The formal meeting was then adjourned at 8:30 p.m. to afford RAB members and regulatory and support staff the opportunity to socialize and become acquainted.

Respectfully submitted,

STEPHEN M. ABSOLOM
BRAC Environmental Coordinator

APPROVED:

_____

STEPHEN W. BROOKS
LTC, CM
Commanding

****
*** ACTIVITY REPORT ***
****

TRANSMISSION OK

TX/RX NO.	2679
CONNECTION TEL	665184573972
CONNECTION ID	
START TIME	06/17 12:13
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RESULT	OK

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*** ACTIVITY REPORT ***
****

TRANSMISSION OK

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CONNECTION ID	
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USAGE TIME	04'55
PAGES	11
RESULT	OK

****
*** ACTIVITY REPORT ***
****

TRANSMISSION OK

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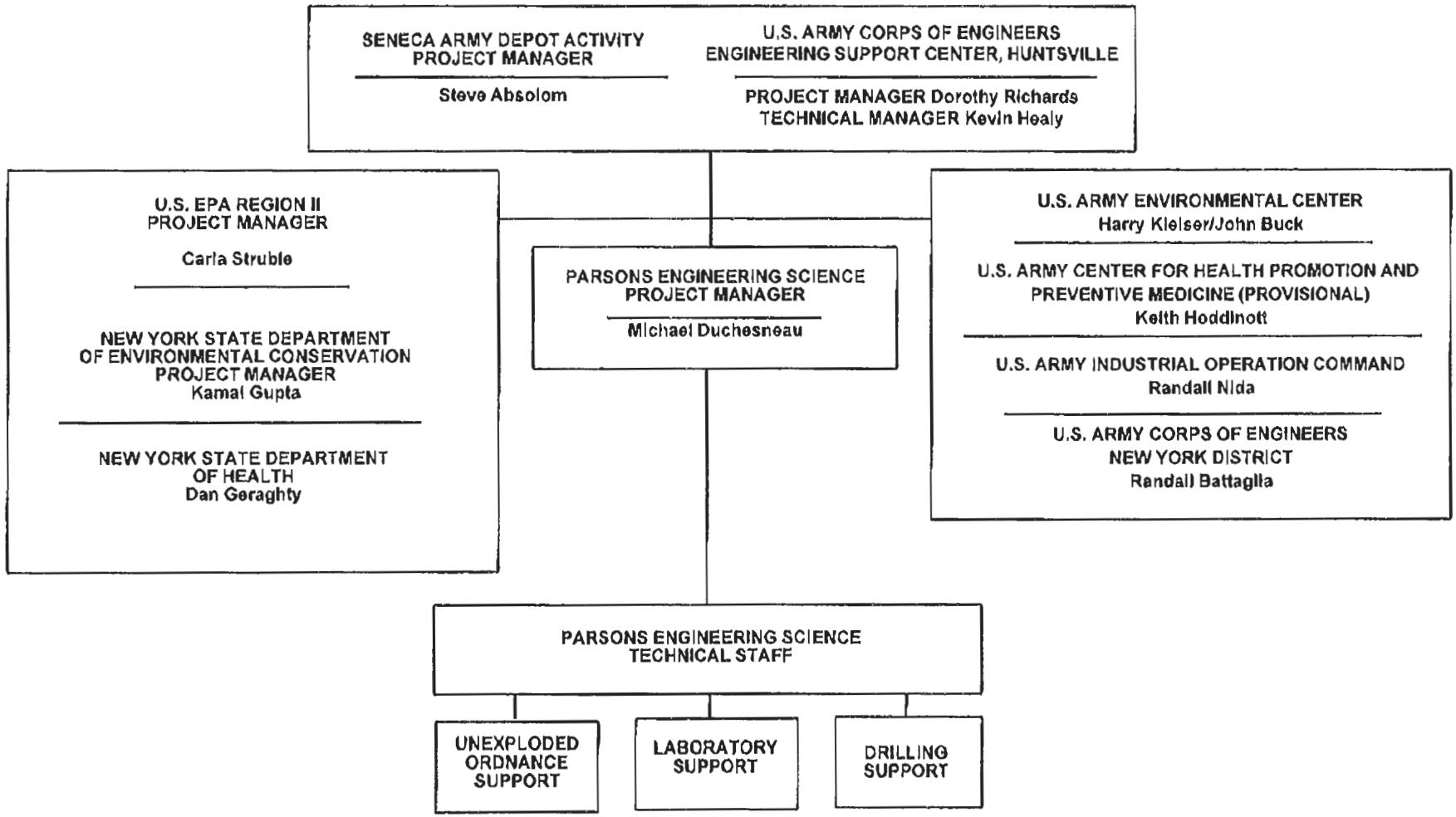
SENECA ARMY DEPOT ACTIVITY PROJECT ORGANIZATION



UPDATE ON THE CLEAN-UP PROCESS

- ☑ **The Clean-up Process**
- ☑ **SWMU Investigation/Classification Status Update**
- ☑ **RI/FS's Status Update**
- ☑ **Completed Remedial or Removal Actions**

THE CLEAN-UP PROCESS

GOVERNING REGULATIONS

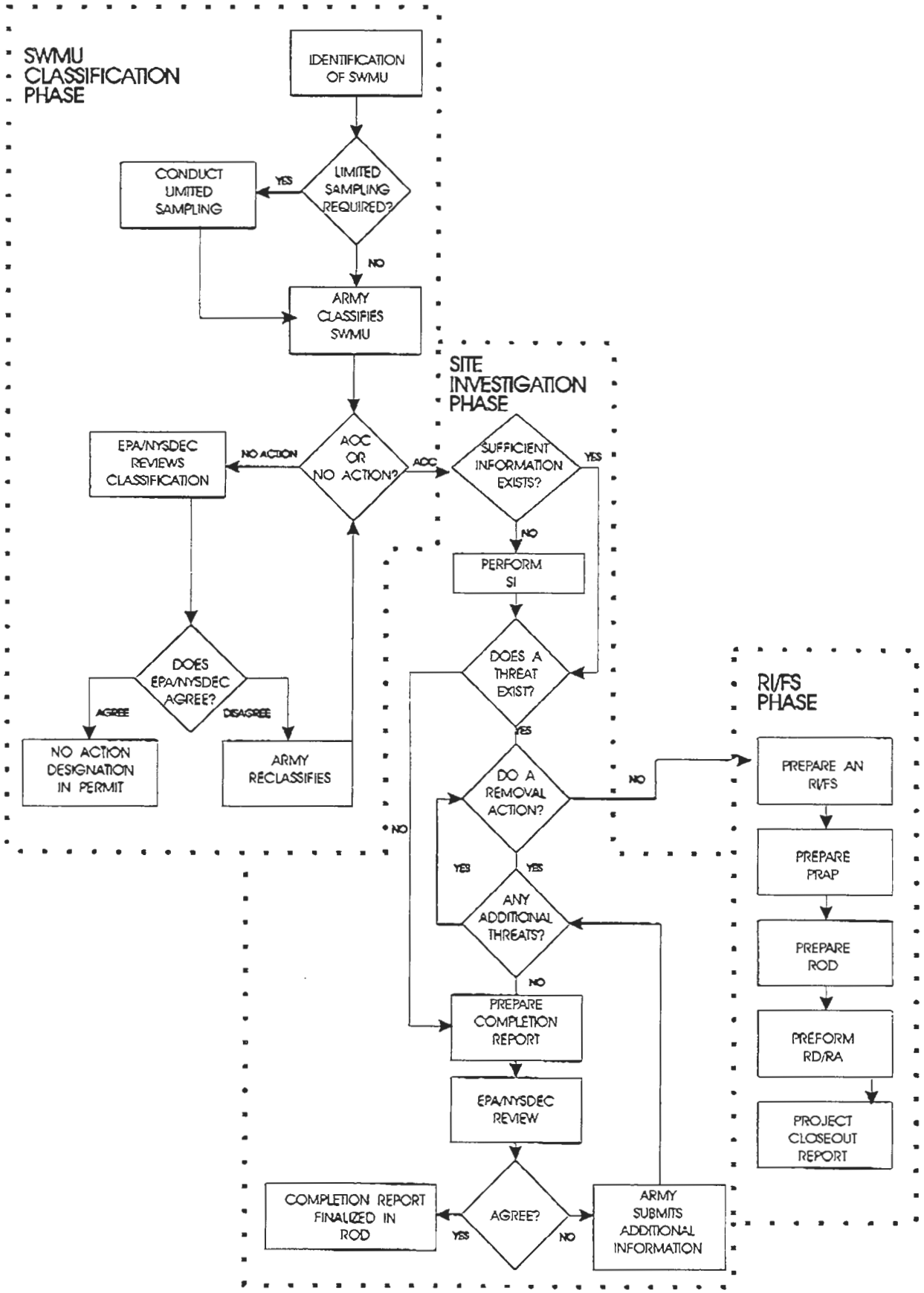
- Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or Superfund
- Superfund Amendments and Reauthorization Act of 1986 (SARA)
- New York Rules for Inactive Hazardous Waste Disposal Sites
- Resource Recovery and Conservation Act (RCRA)

INITIAL MILESTONES OF CLEANUP PROCESS

- ☑ **Listed on the National Priority List (NPL)**
  - ➢ Hazard Ranking System(HRS)
  - ➢ August 1990, Seneca Army Depot Activity Listed on NPL

- ☑ **Interagency Agreement (IAG) or Federal Facility Agreement (FFA)**
  - ➢ Agreement between EPA, NYSDEC and the Army
  - ➢ Signed by all parties on Jan, 21 1993

SWMU CLASSIFICATION FLOWCHART



THE CERCLA PROCESS at SEDA

PHASE	ACTIVITIES
IDENTIFICATION	SWMU Clasification
DELINEATION	Expanded Site Inspection (ESI) Remedial Investigation (RI)
EVALUATION	Risk Assessment
PRE-DESIGN	Feasibility Study (FS) Project Remedial Action Plan (PRAP) Record of Decision (ROD)
DESIGN	Plans and Specifications
REMEDIAL ACTION	Construction / Operation
MONITORING	Long Term Monitoring

SWMU INVESTIGATION/CLASSIFICATION PROCESS STATUS REPORT

PARSONS ENGINEERING SCIENCE

SWMU CLASSIFICATION REPORT

- **All 72 SWMUs Have Been Classified as Either No Action or Area or Area of Concern (AOC)**
- **Final SWMU Classification Report Issued on September 16, 1994**
- **First Primary Document Finalized Under IAG**

SWMU CLASSIFICATION SUMMARY

Federal Facilities Agreement (FFA) Status	Number of SWMUs or AOCs
No Action	24
Completion Report/ROD	12
Removal Action/Completion Report/ROD	8
RI/FS/PRAP/ROD	28
TOTAL	72

ROD - Record of Decision
RI/FS - Remedial Investigation/Feasibility Study
PRAP - Proposed Remedial Action Plan
SWMU - Solid Waste Management Unit
AOC - Area of Concern

7 HIGH PRIORITY ESI MILESTONES

- Draft Report (for EPA/NYSDEC Review) issued July 8, 1994
- Draft-Final Report Issued on May 11, 1985
- No Additional NYSDEC Comments will be Provided
- EPA Comments Received on October 18, 1995
- Final Report Issued on December 11, 1995
- Army Recommends RI/FS/PRAP/ROD at SEADs-4, 16, 17 25, 26, and 45 and Removal Action/Completion Report/ROD at SEAD-24

3 MODERATE PRIORITY ESI MILESTONES

- ☑ Draft Submitted on August 5, 1994
- ☑ Draft-Final Report Issued on June 9, 1995
- ☑ No Additional NYSDEC Comments will be Provided
- ☑ EPA Comments Received on October 18, 1995
- ☑ Final Report Issued on December 11, 1995
- ☑ Army Recommends:
  RI/FS/PRAP/ROD for SEADs-11, 13, 57

8 MODERATELY LOW PRIORITY ESI MILESTONES

- ☑ Field Work Completed in July 1994
- ☑ Draft Report Submitted on April 14, 1995
- ☑ Draft -Final Issued on January 11, 1996
- ☑ Army Recommends:
  - RI/FS/PRAP/ROD at SEADs-5, 12, 59
  - Completion Report/ROD for SEADs-9, (43,56,69), 44, and 58
  - Removal Action/Completion Report/ROD for SEAD-50

7 LOW PRIORITY ESI MILESTONES

- ☑ Fieldwork Completed in July 1994
- ☑ Draft Report Submitted on April 6, 1995
- ☑ Draft -Final Report Submitted on May 3, 1996
- ☑ Army Recommends:
  - RI/FS/PRAP/ROD at SEADs-60, 63, 64 and 71
  - Completion Report/ROD for SEADs-62, and 70
  - Removal Action/Completion Report/ROD for SEAD-67

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) STATUS REPORT

PARSONS ENGINEERING SCIENCE

PARSONS

REMEDIAL INVESTIGATION (RI) AND FEASIBILITY STUDY (FS) OF THE FORMER OPEN BURNING GROUND (MILESTONES)

- [x] **Remedial Investigation**
  - Final Submitted on September 9, 1994
  - Accepted as Final
- [x] **Feasibility Study**
  - Submitted Draft for Regulatory Review on March 10, 1994 with EPA and NYSDEC
  - Received NYSDEC Comments on May 5, 1994.
  - Received EPA Comments on September 30, 1994
  - Formal Consultation with EPA and NYSDEC Occured until January 1996
  - Draft-final FS Submitted on March 19, 1996
  - EPA and NYSDEC comments Received on May 2, 1996

CLEAN-UP GOALS FOR OB GROUNDS

- ☑ 500 mg/Kg max. for Lead in Soils On-site
- ☑ 16 mg/Kg max. for Copper in Sediments in Reeder Creek
- ☑ 31 mg.Kg max. for Lead in Sediments in Reeder Creek
- ☑ No Runoff Without Sedimentation
- ☑ Unexploded Ordnance Clearance, as Required

REMEDIAL INVESTIGATION (RI) AND FEASIBILITY STUDY (FS) OF THE ASH LANDFILL (MILESTONES)

- ☑ **Remedial Investigation**
  - ➢ **Final Submitted on October 3, 1994**
- ☑ **Source Removal Action Completed in June 1995**
- ☑ **Feasibility Study**
  - ➢ **Draft Submitted on September 19, 1994**
  - ➢ **Groundwater Modeling Report Submitted on January 4, 1996**
  - ➢ **Draft-final FS Submitted on December 15, 1995**
  - ➢ **EPA and NYSDEC comments Received in March 1996**
  - ➢ **Final FS due on June 21, 1996**

REMEDIAL INVESTIGATION (RI) AND FEASIBILITY STUDY (FS) OF THE FIRE TRAINING AREAS (SEAD-25 and SEAD-26)

- ☑ **Remedial Investigation**
  - ➢ **Fieldwork Completed in December, 1995**
  - ➢ **Second Round of GW Sampling Completed April, 1996**
- ☑ **Pre-Draft (for Army Review) Submitted in April, 1996**
- ☑ **Draft due on June 28, 1996**

COMPLETED REMEDIAL ACTIONS STATUS

Restoration Advisory Board Meeting
Agenda

August 20, 1996

7:00	**Welcome** LTC Stephen W. Brooks Commander, Seneca Army Depot Activity
7:05	**Acceptance of Minutes** Mr. Stephen M. Absolom/Dr. Dick Durst Army Co-chair/Community Co-chair
7:10	**The Process of Locating Environmental Sites** Mr. Bob Mutaw Woodward-Clyde
7:45	**Break**
8:00	**Proposed Remedial Action Plan (PRAP), Open Burning Grounds** Ms. Eliza Schacht Parsons Engineering Science, Inc.
8:30	**Review of Charter for Acceptance** Mr. Stephen M. Absolom/Dr. Dick Durst Army Co-chair/Community Co-chair
8:40	**Open Discussion**
9:00	**Adjourn**

RAB MEETING

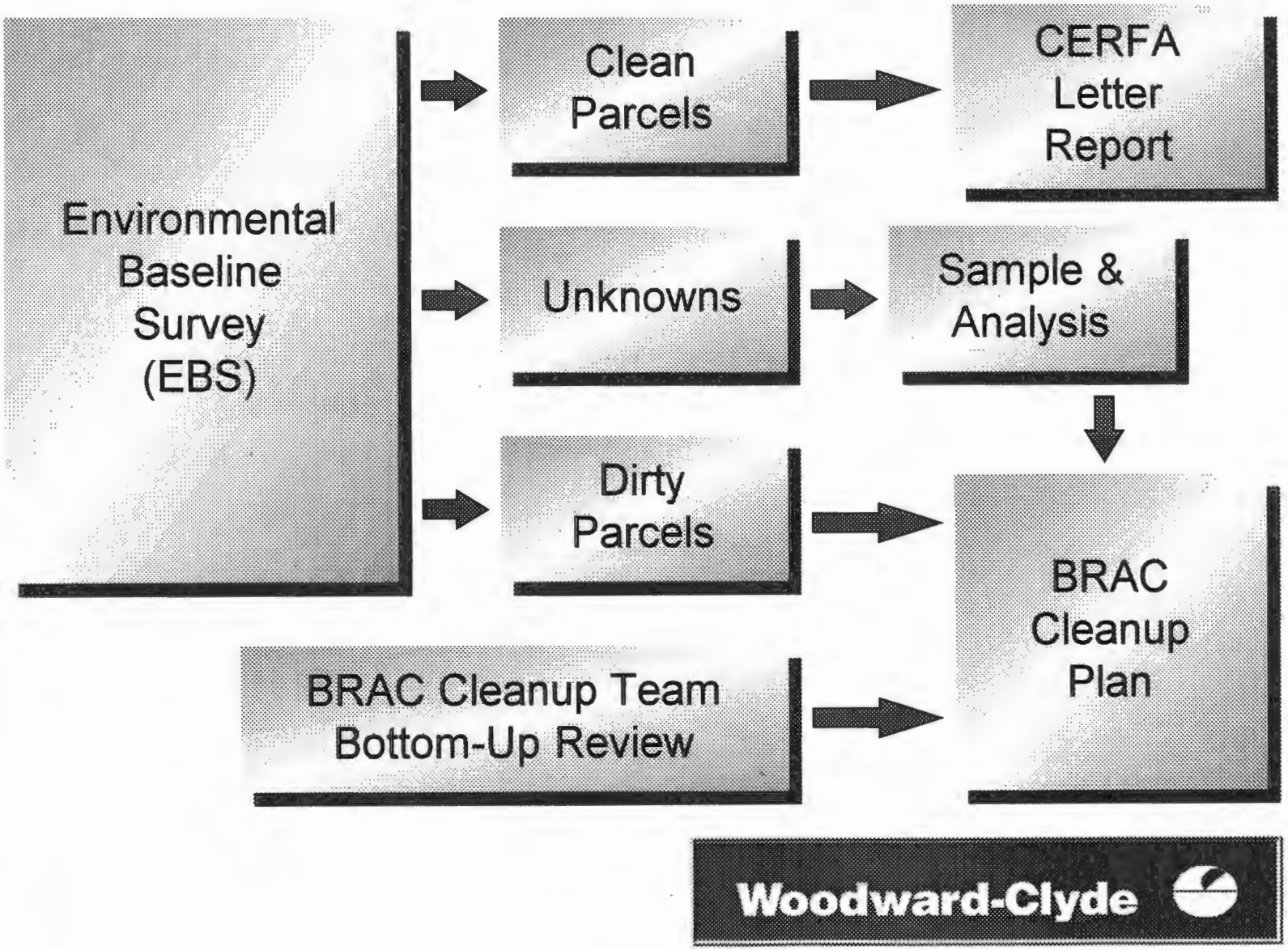
Purpose of presentation:

To inform the RAB of the methods used by Woodward-Clyde during the EBS process to ensure that all contaminated sites have been identified

August 21, 1996

Woodward-Clyde

BRAC Environmental Process



Woodward-Clyde

Environmental Baseline Survey

- **Scope:**

  All parts of the installation were looked at

- **Objective:**

  To determine the environmental condition of all property at SEDA

Woodward-Clyde

CERFA Category Definitions

Cat. #	Color	Environmental Condition of Property
1		Areas where no storage, for one year or longer, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). Additionally, includes areas where no evidence exists for the release, disposal, or migration of hazardous substances or petroleum products; however, the area has been used to store less than reportable quantities of hazardous substances (40 CFR 302.4) or 600 or fewer gallons of petroleum products.
2		Areas where only storage of hazardous substances in amounts exceeding their reportable quantity or petroleum products exceeding 600 gallons has occurred, but no release, disposal, or migration has occurred.
3		Concentrations do not require a removal or remedial action.
4		Removal or remedial actions have been taken.
5		Removal or remedial actions are underway, but all required actions have not yet been implemented.
6		Required removal or remedial actions have not yet been initiated.
7		Areas that are not evaluated or require additional evaluation.

Woodward-Clyde

Parcel Qualifiers

- Asbestos Containing Materials
- Lead Based Paint
- PCBs
- Radon
- Unexploded ordnance
- Radiological Sources

Woodward-Clyde

EBS METHODS

- Records Reviews
- Aerial Photograph Analysis
- Personnel Interviews
- Visual Inspections

Woodward-Clyde

Records Reviews

- Federal, State and Local Agencies
- Database Searches
- Deed and Title Searches
- Installation Records and Environmental Reports

Woodward-Clyde

Aerial Photograph Analysis

- Purpose: to search for evidence of past activities
- Review of 1954, 1963, 1969, 1981 & 1988 aerial photographs
- Areas identified were already SWMUs

Woodward-Clyde

Personnel Interviews

- Purpose: to obtain information about the Depot's environmental history
- Past and present employees contacted
- Consistent approach

Woodward-Clyde

Visual Inspections

- Purpose: to support the determination of the environmental condition
- Grounds, buildings, structures and equipment were inspected
- On-site and off-site inspections
- Consistent approach

Woodward-Clyde

What did we find?

- Investigated 17 "rumored" sites
- Seven of these were confirmed and will be considered as Areas of Concern
- Ten of these were determined to not be real problem areas

Woodward-Clyde

Conclusion

- Thorough investigation of all "rumored" sites
- Additional work will occur at confirmed sites
- All that can be reasonably done, has been done
- Your guarantee: the Army has stated that they will clean up any sites identified in the future that they were resposible for

Woodward-Clyde

PRESENTATION
TO THE
RESTORATION ADVISORY BOARD

AUGUST 20, 1996

PARSONS ENGINEERING SCIENCE, INC

PARSONS

PRESENTATION TO THE RESTORATION ADVISORY BOARD

AUGUST 20, 1996

PARSONS ENGINEERING SCIENCE, INC

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PROPOSED REMEDIAL ACTION PLAN

FOR OPEN BURNING (OB) GROUNDS

AT THE

SENECA ARMY DEPOT ACTIVITY

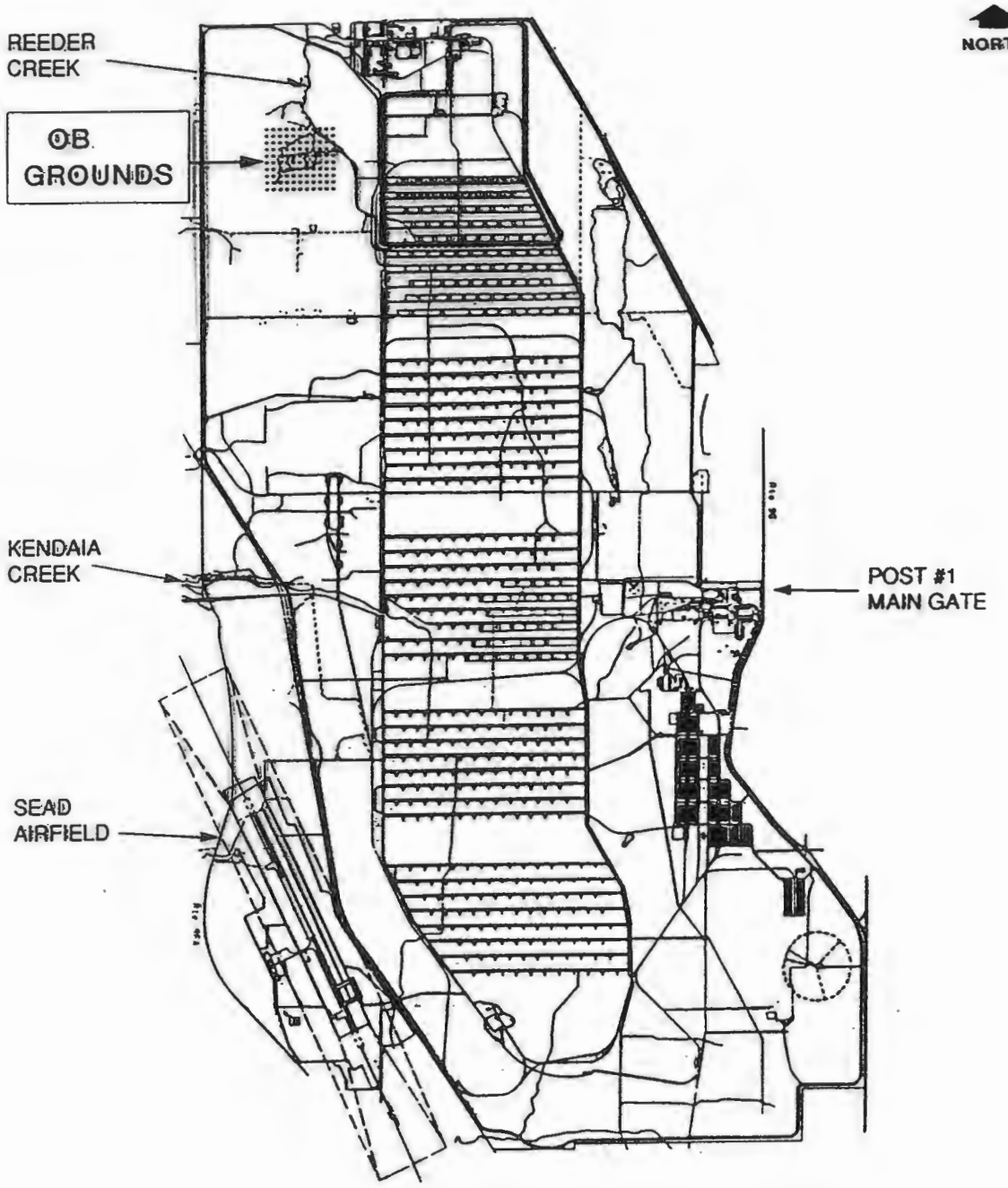
(SEDA)

PARSONS ENGINEERING SCIENCE

PARSONS

PROPOSED REMEDIAL ACTION PLAN (PRAP)
OPEN BURNING GROUNDS

- ☑ Background of the OB Grounds
- ☑ Remedial Investigation (RI) Summary
- ☑ Remedial Action Objectives
- ☑ Remedial Alternatives
- ☑ Preferred Alternative



SOURCE: Seneca Army Depot

ES
ENGINEERING-SCIENCE, INC.

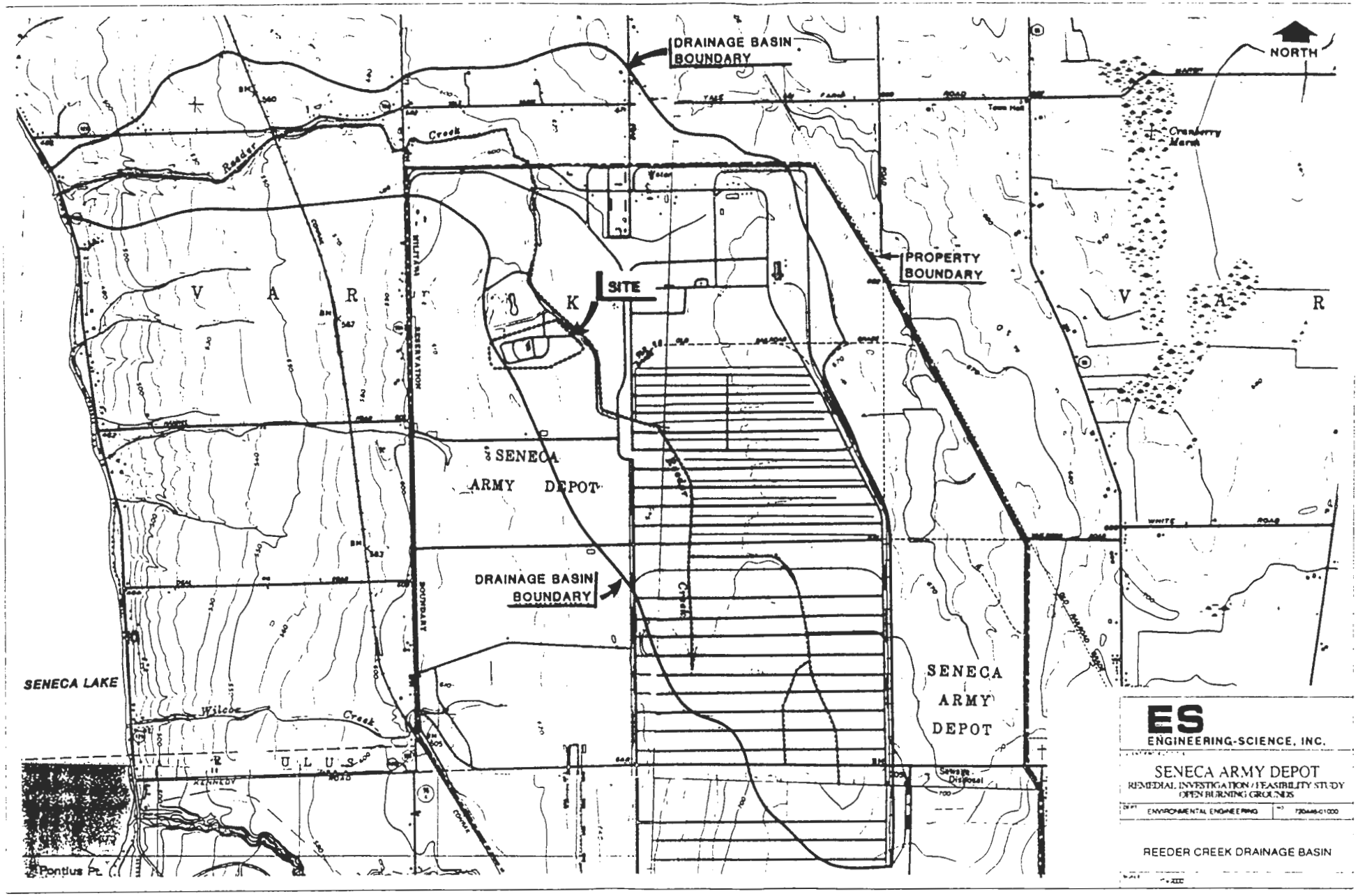
CLIENT/PROJECT TITLE

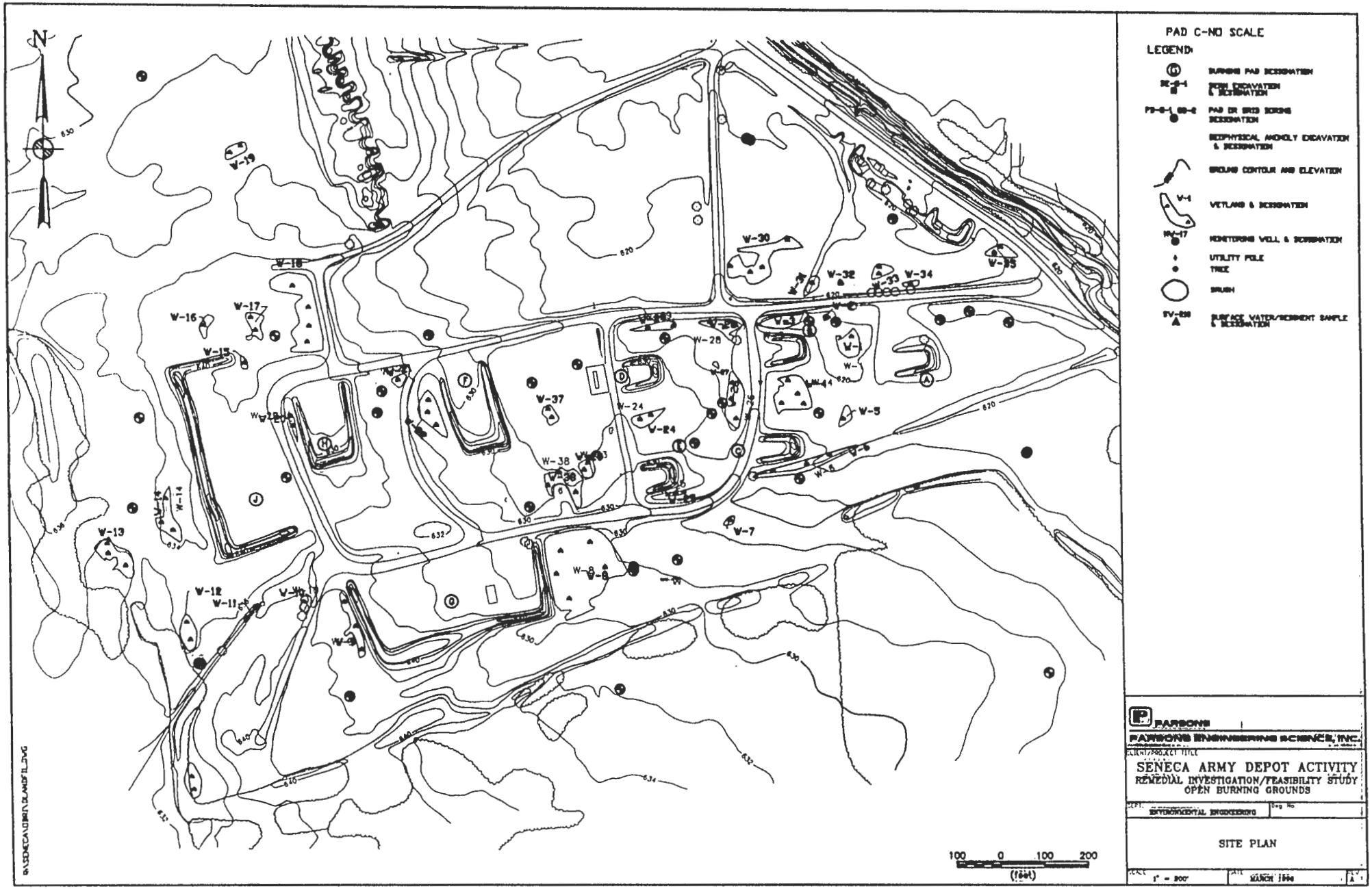
SENECA ARMY DEPOT
REMEDIAL INVESTIGATION / FEASIBILITY STUDY
OPEN BURNING GROUNDS

DEPT.	ENVIRONMENTAL ENGINEERING	NO.	720446-01000

SENECA ARMY DEPOT MAP

SCALE 1" = 5000' (APPROXIMATE)


DRAINAGE BASIN BOUNDARY
NORTH
PROPERTY BOUNDARY
SITE
SENECA ARMY DEPOT
DRAINAGE BASIN BOUNDARY
SENECA LAKE
SENECA ARMY DEPOT
ES
ENGINEERING-SCIENCE, INC.
SENECA ARMY DEPOT
REMEDIAL INVESTIGATION / FEASIBILITY STUDY
OPEN BURNING GROUNDS
ENVIRONMENTAL ENGINEERING
REEDER CREEK DRAINAGE BASIN



PAD C-NO SCALE

LEGEND

- BURNING PAD DESIGNATION
- SOIL EXCAVATION & DESIGNATION
- PAD OR GRID SOILING DESIGNATION
- GEOPHYSICAL ANOMOLY EXCAVATION & DESIGNATION
- GROUND CONTOUR AND ELEVATION
- WETLAND & DESIGNATION
- MONITORING WELL & DESIGNATION
- UTILITY POLE
- TREE
- BRUSH
- SURFACE WATER/SEDIMENT SAMPLE & DESIGNATION

PARSONS

PARSONS ENGINEERING SCIENCE, INC.

CLIENT/PROJECT TITLE

SENECA ARMY DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS

DEPT: ENVIRONMENTAL ENGINEERING | Dwg No.

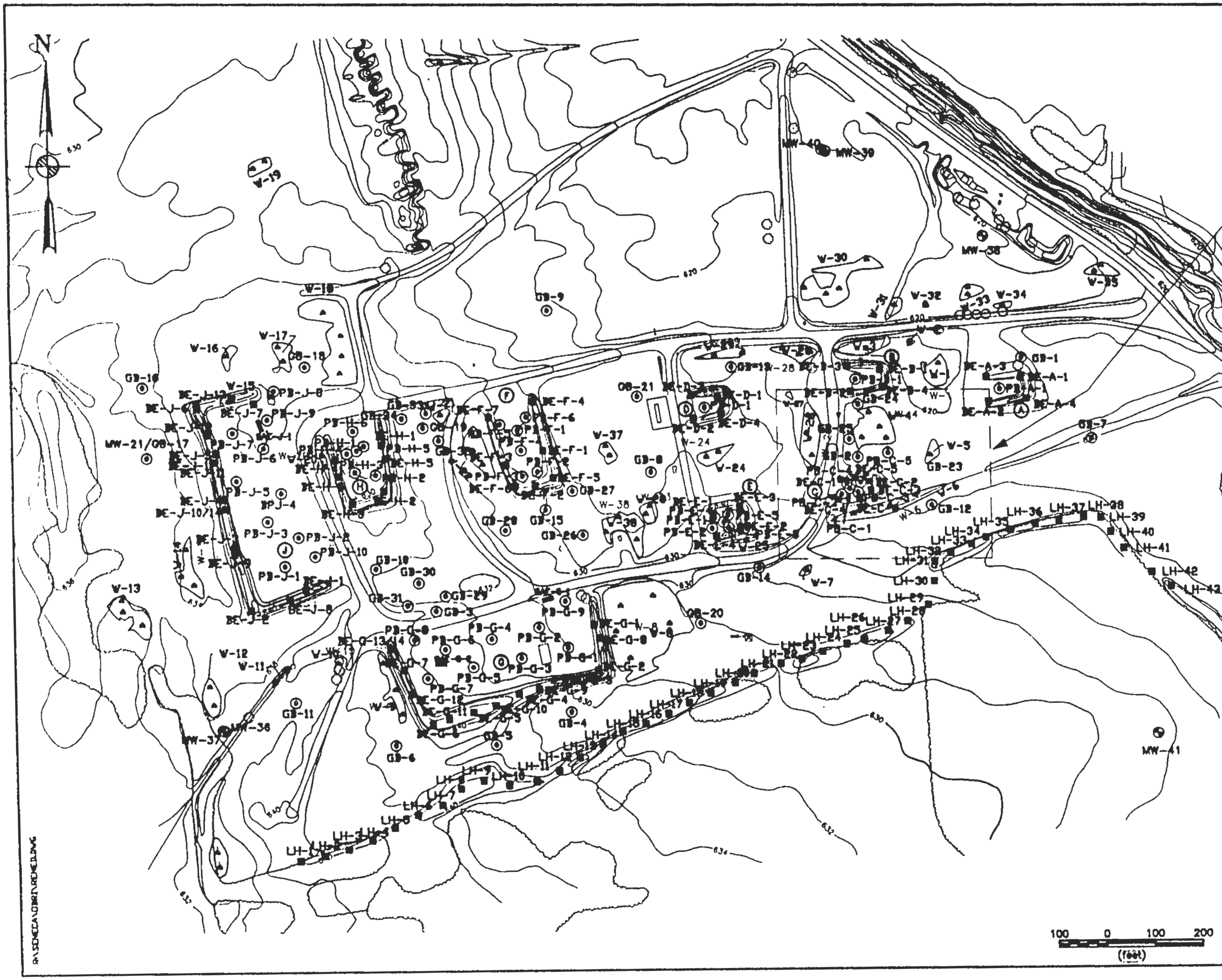
SITE PLAN

SCALE: 1" = 200' | DATE: MARCH 1994 | REV: A 1

B:\SENECA\DRW\LANDFIL.DWG

REMEDIAL INVESTIGATION FIELD TASKS

- 88 Soil Borings
  - 44 Grid Borings
  - 44 Pad Borings
- 106 Soil Excavations
  - 63 Berm Excavations
  - 43 Low Hill Excavations
- 22 Groundwater Monitoring Wells
  - 13 Groundwater Monitoring Wells Were Previously Installed
- 2 Rounds of Groundwater Sampling
- 29 Surface Water and Sediment Samples
- Ecological Survey
  - Aquatic Sampling in Reeder Creek
  - Terrestrial Study



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SENECA ARMY DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS

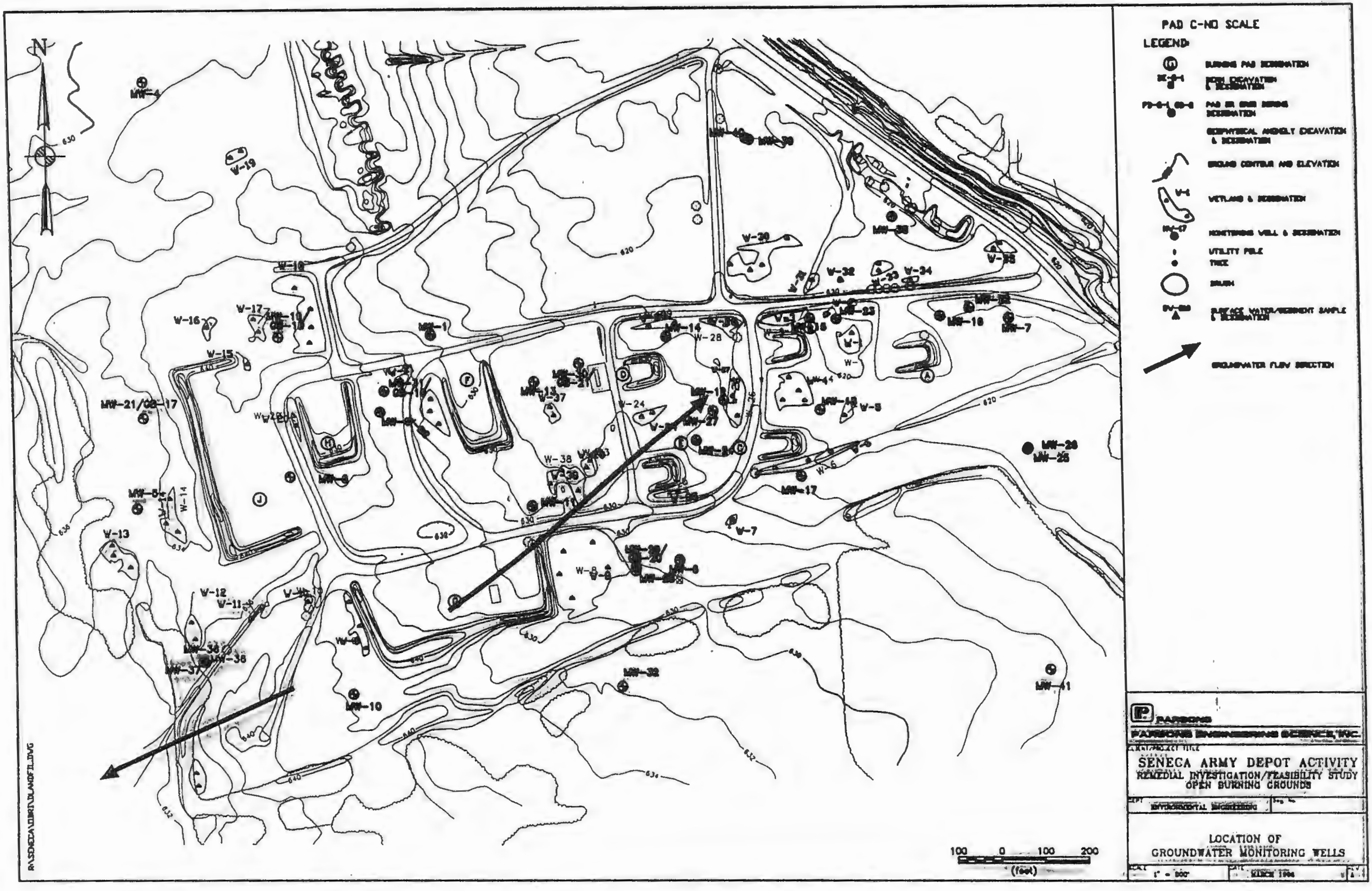
ENVIRONMENTAL ENGINEERING

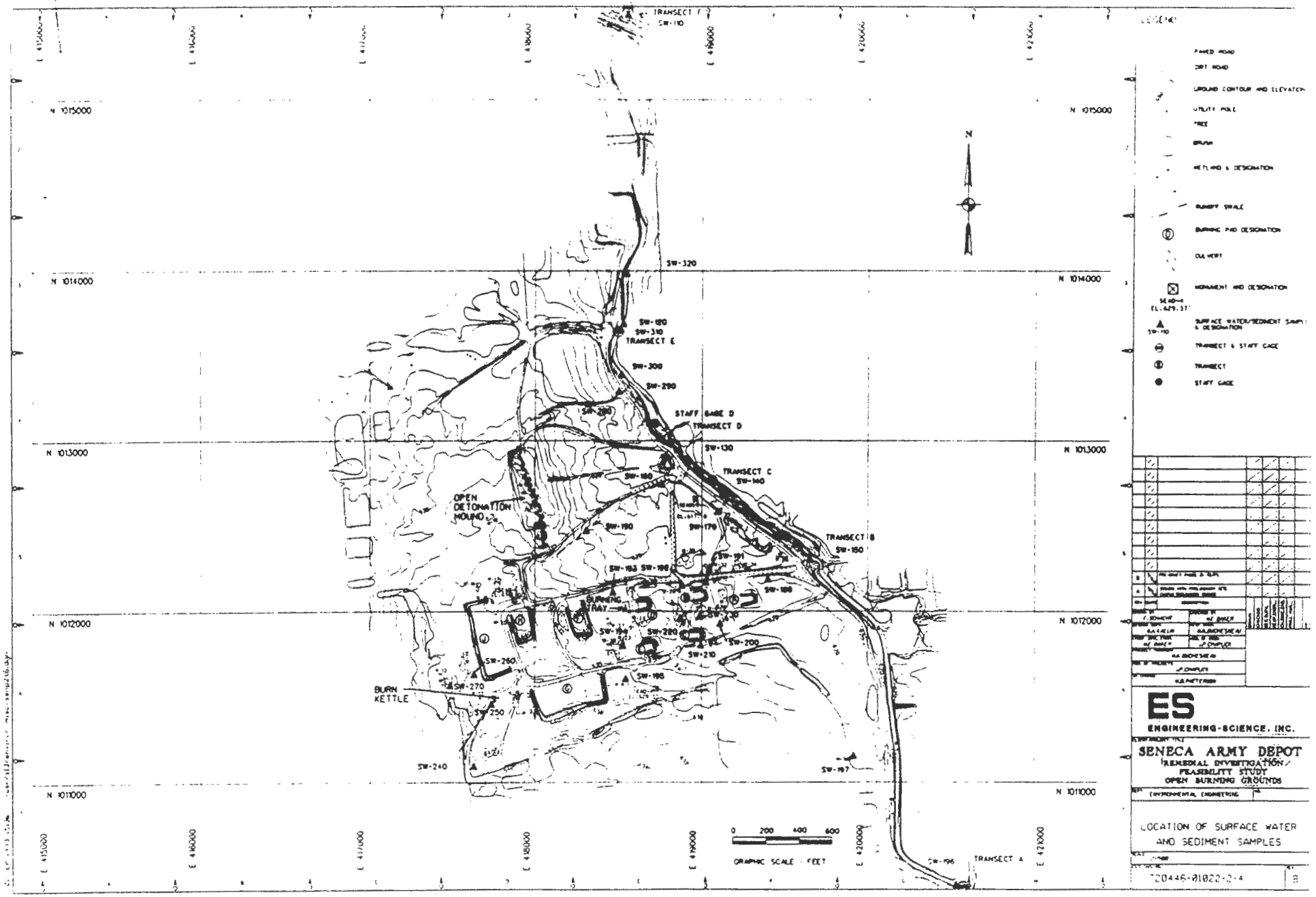
LOCATION OF SOIL BORINGS
AND EXCAVATIONS

1" = 200'

MARCH 1996

A


N
PAD C-NO SCALE
LEGEND:
GROUNDWATER FLOW DIRECTION
W-19
W-16
W-17
W-15
W-13
W-12
W-11
W-24
W-38
W-30
W-32
W-34
W-28
W-7
W-8
MW-4
MW-21/GS-17
MW-1
MW-10
MW-14
MW-16
MW-17
MW-37
MW-41
620
630
640
100 0 100 200
(feet)
PARSONS ENGINEERING SCIENCE, INC.
SENECA ARMY DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS
LOCATION OF
GROUNDWATER MONITORING WELLS



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ENGINEERING-SCIENCE, INC.

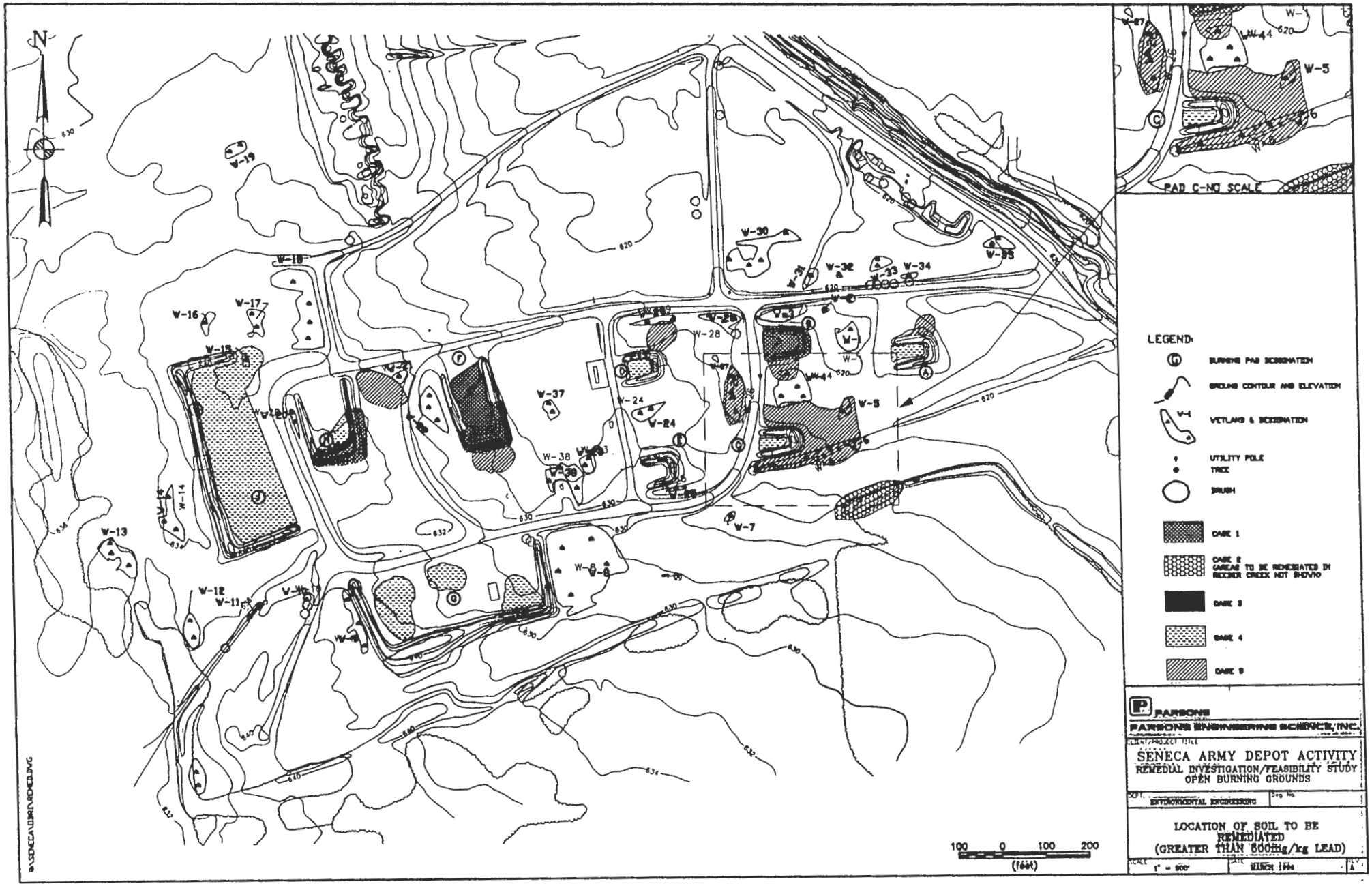
SENECA ARMY DEPOT
REMEDIAL INVESTIGATION/
FEASIBILITY STUDY
OPEN BURNING GROUNDS

LOCATION OF SURFACE WATER AND SEDIMENT SAMPLES

20446-01022-2-4

ANALYTES
OPEN BURNING GROUNDS

- ☑ Volatile Organic Compounds
- ☑ Semivolatile Organic Compounds
- ☑ Pesticides and PCBs
- ☑ Metals
- ☑ Explosives


N
W-19
W-10
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W-11
W-30
W-31
W-32
W-33
W-34
W-35
W-28
W-5
W-7
W-8
620
630
632
634
100 0 100 200
(feet)
PAD C-NO SCALE
LEGEND
BURNING PAD DESIGNATION
GROUND CONTOUR AND ELEVATION
WETLAND & DESIGNATION
UTILITY POLE
TREE
BRUSH
OASE 1
OASE 2
CAREAS TO BE REMEDIATED IN
RICKER CREEK NOT SHOWN
OASE 3
OASE 4
OASE 5
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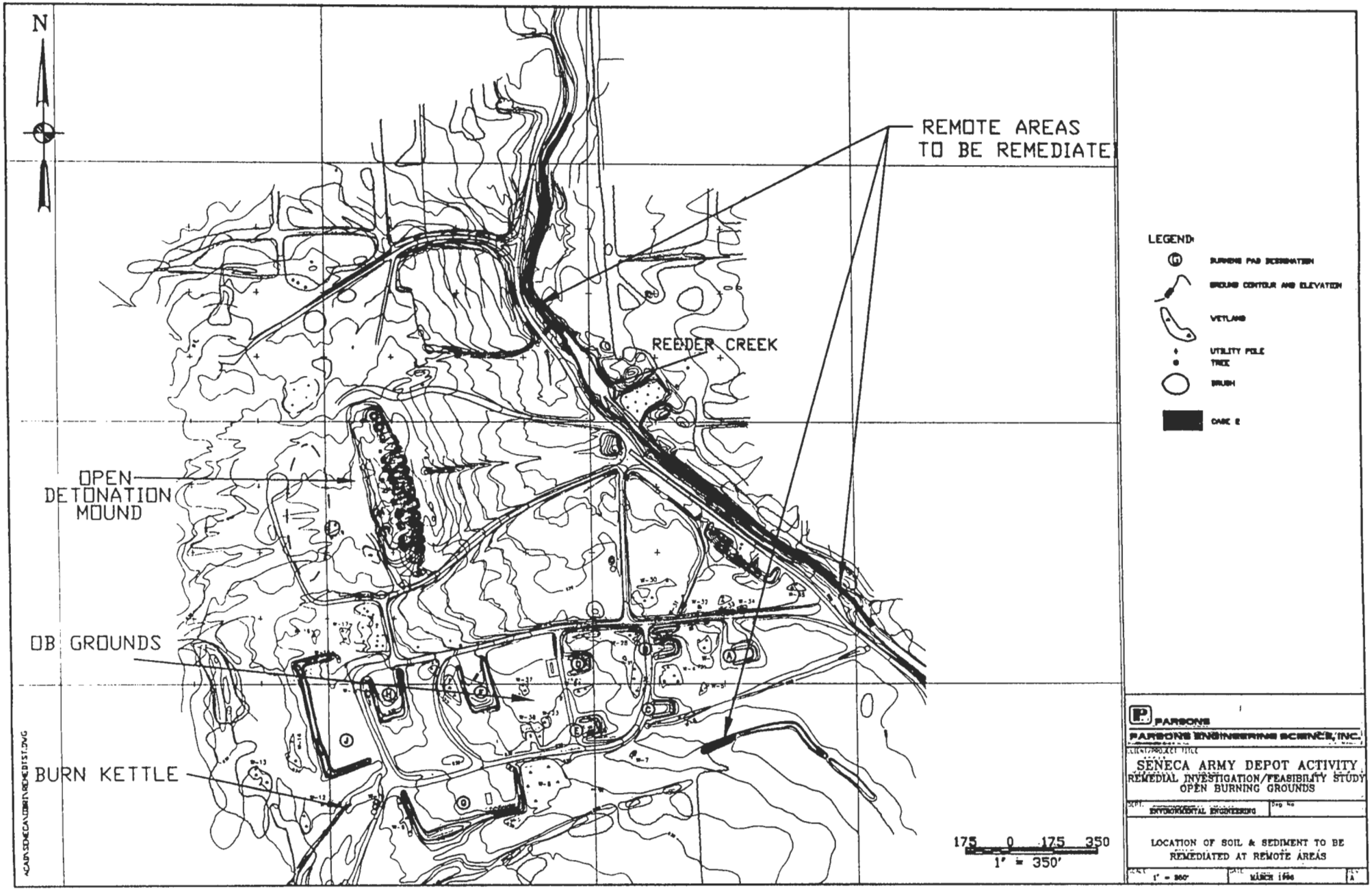
PARSONS ENGINEERING SCIENCE, INC.
SENECA ARMY DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS
ENVIRONMENTAL ENGINEERING
LOCATION OF SOIL TO BE
REMEDIATED
(GREATER THAN 500mg/kg LEAD)
1" = 800'
MARCH 1994
A

REMEDIAL ACTION OBJECTIVES FOR OPEN BURNING GROUNDS

- ☑ 500 mg/Kg max. for Lead in Soils On-Site
- ☑ 16 mg/Kg max. for Copper in Sediments in Reeder Creek
- ☑ 31 mg/Kg max. for Lead in Sediments in Reeder Creek
- ☑ Prevent Surface Water Runoff
- ☑ Unexploded Ordnance Clearance, as Required
- ☑ Groundwater Monitoring
- ☑ Revegetate the Site
- ☑ Monitor Sediments in Reeder Creek

VOLUME OF SOIL TO BE REMEDIATED
OPEN BURNING GROUNDS

CASE	LOGIC	LOCATION	TOTAL VOLUME
Case 1	Soils exceeding TCLP limits	Pads B, F, H	3,746 c.y.
Case 2	Reeder Creek sediments Low Hill Soils	Reeder Creek Low Hill	896 c.y.
Case 3	All berms with concentrations of lead above 500 mg/kg	Pads A, C, D, E, G, J	3,825 c.y.
Case 4	All soils in pads with lead concentrations above 500 mg/kg	Pads A, C, D, G, J, H	7,107 c.y.
Case 5	All grid soils with lead concentrations above 500 mg/kg	Near Pads A, B, C, D, F, H	2,341 c.y.
CUMULATIVE TOTAL VOLUME			**17, 915 c.y.**


N
REMOTE AREAS
TO BE REMEDIATE
REEDER CREEK
OPEN
DETONATION
MOUND
OB GROUNDS
BURN KETTLE
LEGEND
BURNING PAD DESIGNATION
GROUND CONTOUR AND ELEVATION
WETLAND
UTILITY POLE
TREE
BRUSH
CAMP
175 0 175 350
1" = 350'
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SENECA ARMY DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS
ENVIRONMENTAL ENGINEERING
LOCATION OF SOIL & SEDIMENT TO BE
REMEDIATED AT REMOTE AREAS
1" = 350'
MARCH 1996
A

REMEDIAL ALTERNATIVES FOR THE OPEN BURNING GROUNDS

- ALTERNATIVE 1: No Action
- ALTERNATIVE 4: Off-Site Disposal
- ALTERNATIVE 5: On-Site Disposal
- ALTERNATIVE 6: Soil Washing

CRITERIA FOR EVALUATING REMEDIAL ALTERNATIVES

- Overall Projection of Human Health and the Environment
- Compliance with Applicable or Relevant and Appropriate requirements (ARARs)
- Long-Term Effectiveness and Permanence
- Reduction of Toxicity, Mobility, or Volume through Treatment
- Short-Term Effectiveness
- Implementability
- Cost

COST ESTIMATES FOR ALTERNATIVES FOR OPEN BURNING GROUNDS SENECA ARMY DEPOT ACTIVITY

Alternative	Present Worth Cost	Capital Cost	O&M Costs
4	(in millions) $2.9 to $4.5	(in millions) $2.4 to $4.0	$45,300
5	$4.5	$4.0	$49,100
6	$9.9	$9.4	$45,300

PREFERRED ALTERNATIVE: ALTERNATIVE 4 - OFF-SITE DISPOSAL

- ✓ **Disposal of all Excavated Soils in an Off-Site Subtitle D Landfill**
- ✓ **Treatment of Soils with TCLP Exceedences by Solidification/Stabilization**
- ✓ **Construction Time:**
  - **Treatability Testing for Solidification/Stabilization:** **2 to 3 months**
  - **Remediation:** **1 to 2 months**
- ✓ **Present Worth Cost:** **$2.9 to $4.5 million**

RESULTS OF THE REMEDIAL INVESTIGATION
SOIL DATA
OPEN BURNING GROUNDS

COMPOUND	UNITS	MAXIMUM	95th UCL OF THE MEAN	NYSDEC SOIL CLEANUP CRITERIA
Semivolatiles				
Benzo(a)anthracene	ug/kg	3900	348.74	220
Benzo(a)pyrene	ug/kg	3700	350.19	61
Dibenz(a,h)anthracene	ug/kg	670	301.48	14
Explosives				
RDX	ug/kg	4,800	91.	
1,3,5-Trinitrobenzene	ug/kg	7,800	11(	
Tetryl	ug/kg	1,000	14	
2,4,6-Trinitrotoluene	ug/kg	80,000	13(	
4-amino-2,6-Dinitrotoluene	ug/kg	8,900	13	
2-amino-4,6-Dinitrotoluene	ug/kg	11,000	143.50	NA
Metals				
Barium	mg/kg	34,400	1445.67	300
Copper	mg/kg	38,100	678.04	25
Lead	mg/kg	56,700	2836.27	30
Zinc	mg/kg	127,000	884.31	89.1

Removed from Presentation

RESULTS OF REMEDIAL INVESTIGATION SEDIMENT DATA FOR REEDER CREEK OPEN BURNING GROUNDS

COMPOUND	UNITS	95TH UCL OF THE MEAN	NYSDEC SEDIMENT CRITERIA
Copper	ug/kg	1032.68	19
Lead	ug/kg	418.55	27
Mercury	ug/kg	1.22	0.11
Zinc	ug/kg	899.80	85

HUMAN HEALTH RISK ASSESSMENT
OPEN BURNING GROUNDS
EXPOSED POPULATIONS

- ☑ **CURRENT LAND USE:** On-Site Workers, Off-Site Residents
- ☑ **FUTURE LAND USE:** On-Site Residents

SUMMARY OF BASELINE HUMAN HEALTH RISK ASSESSMENT OPEN BURNING GROUNDS SENECA ARMY DEPOT ACTIVITY

EXPOSURE SCENARIO	TOTAL HAZARD INDEX	TOTAL CANCER RISK
Current on-site industrial workers	0.25	6.3×10^{-6}
Current local off-site residents	.007	3.9×10^{-7}
Future on-site residents	0.33	1.0×10^{-5}
EPA target value	1.0	$10^{-4} \times 10^{-6}$

ANALYSES OF LEAD IN SOIL

ANALYSIS METHOD	RESULTS OF ANALYSIS
EPA Leaching Model (VLEACH)	Allowable concentration of lead in soil 16 mg/kg to 483 mg/kg
EPA Biokinetic Uptake Model (UBK) for Lead in Children	Allowable concentration of lead in soil 500 mg/kg to 1000 mg/kg

RESULTS OF REMEDIATION
OPEN BURNING GROUNDS

	Maximum Concentrations/ Values	Remedial Objectives
Maximum Lead Concentration in Soils	463 mg/kg	500 mg/kg
Maximum Copper Concentration in Reeder Creek sediment	22.4 mg/kg *	16 mg/kg
Maximum Lead Concentration in Reeder Creek sediment	15.4 mg/kg	31 mg/kg
Hazard Index for Future on-site Residents	0.107	1.0
Total Carcinogenic Risk for Future on-site Residents	9.46 x 10-6	10-4 to 10-6
Maximum Lead in Blood	5.17 ug/dl	10 ug/dl

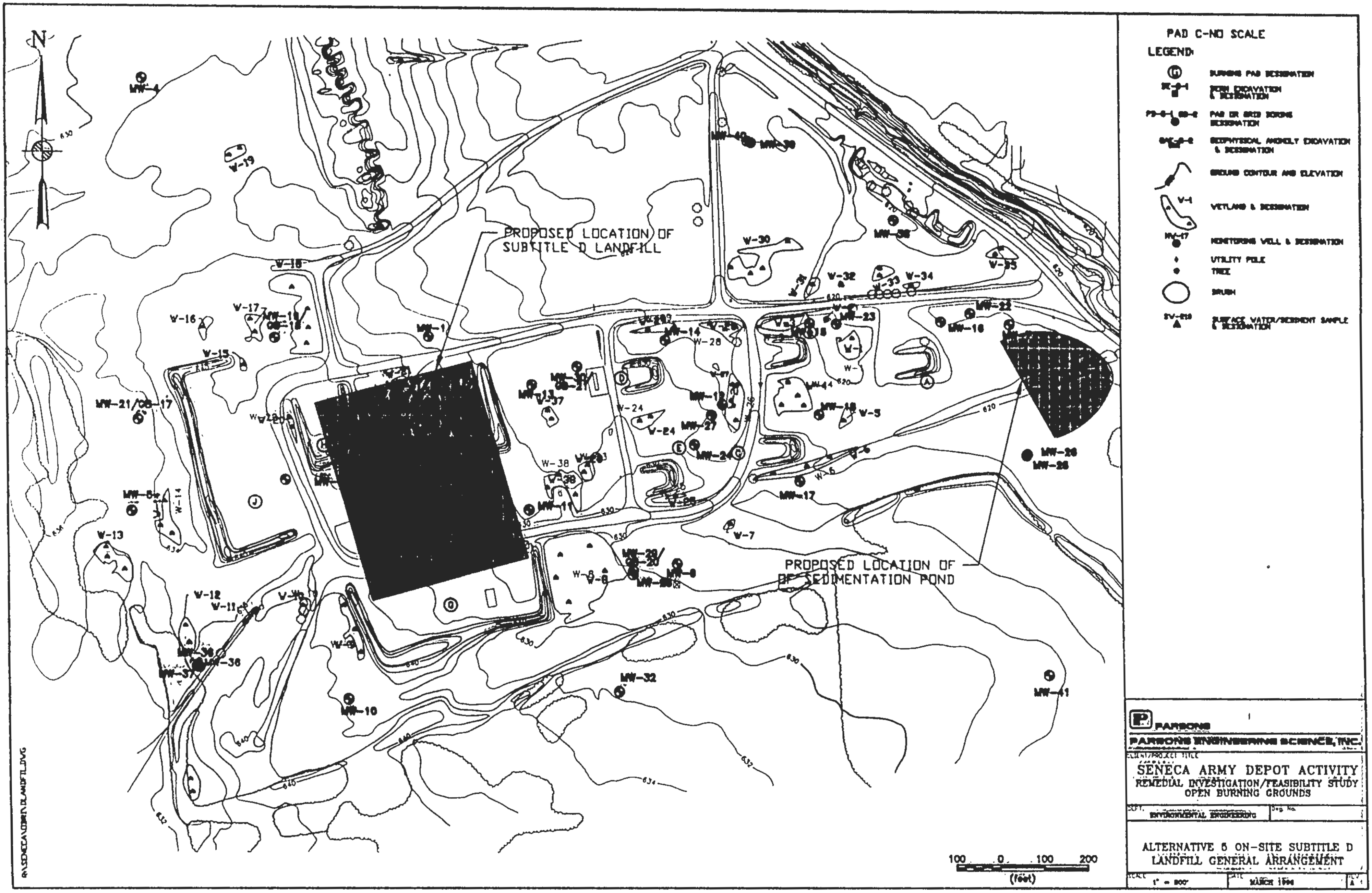
*The maximum concentration of copper is above the criteria because of the concentrations of copper in the background sediment sample

ALTERNATIVE 4: Off-Site Disposal

- Excavation and Treatment of Soils with Concentrations Above TCLP Criteria
- Excavation of Sediments in Reeder Creek
- Excavation of Remaining Soils with Lead Concentrations Above 500 mg/Kg
- Disposal of All Excavated Soils in an *Off-Site* Subtitle D Landfill
- Long Term Groundwater Monitoring
- Runoff Prevention
- Site Revegetation
- Sediment Sampling in Reeder Creek

ALTERNATIVE 5: On-Site Disposal

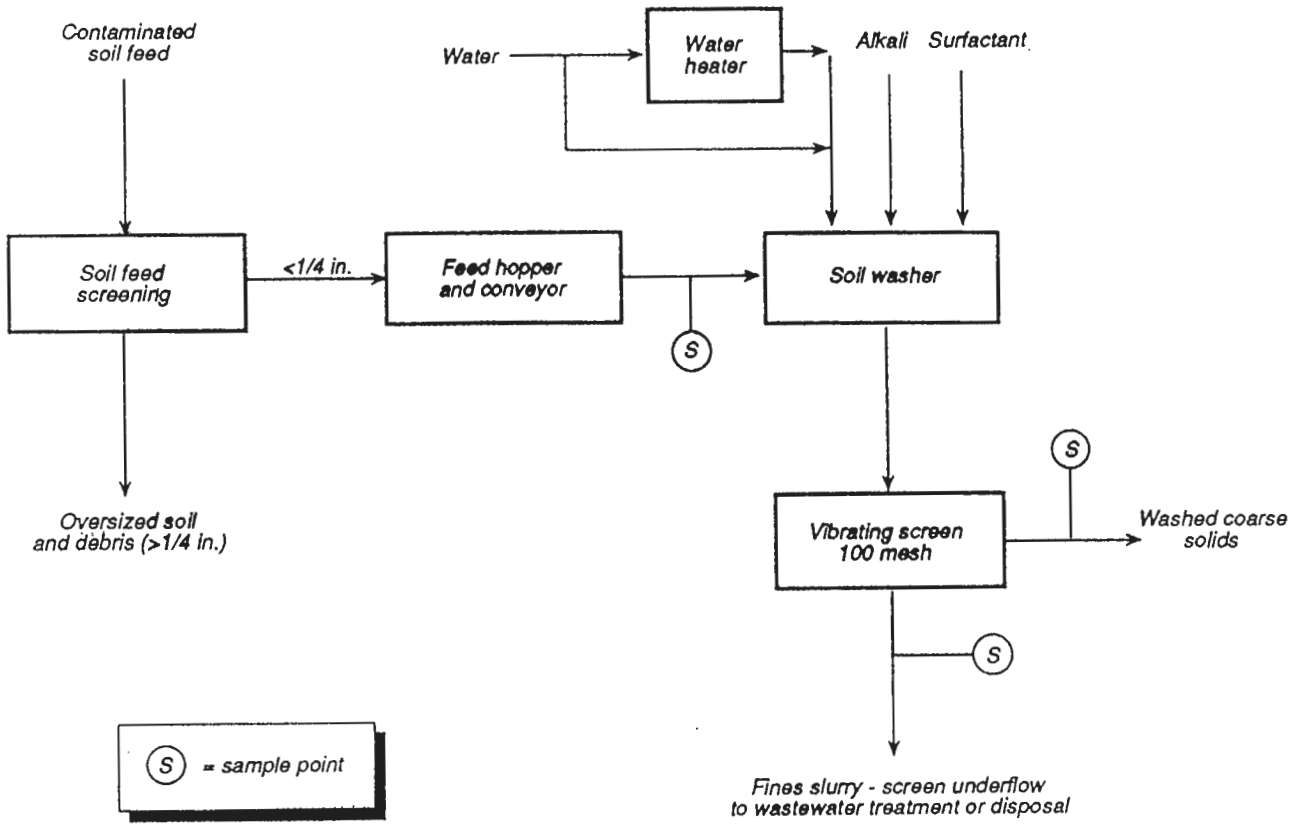
- Excavation and Treatment of Soils with Concentrations Above TCLP Criteria
- Excavation of Sediments in Reeder Creek
- Excavation of Remaining Soils with Lead Concentrations Above 500 mg/Kg
- Disposal of All Excavated Soils in an *On-Site* Subtitle D Landfill
- Long Term Groundwater Monitoring
- Runoff Prevention
- Site Revegetation
- Sediment Sampling in Reeder Creek


N
PROPOSED LOCATION OF
SUBTITLE D LANDFILL
PROPOSED LOCATION OF
OF SEDIMENTATION POND
MW-4
W-19
W-18
W-17
W-16
W-15
MW-21/OB-17
W-13
W-12
W-11
MW-10
MW-32
MW-41
MW-26
MW-17
W-7
W-30
W-32
W-33
W-34
W-35
MW-22
MW-16
MW-18
W-5
W-24
MW-27
MW-24
W-38
MW-11
MW-1
W-8
100 0 100 200
(feet)
PAD C-NO SCALE
LEGEND:
BURNING PAD DESIGNATION
GROUND CONTOUR AND ELEVATION
WETLAND & DESIGNATION
MONITORING WELL & DESIGNATION
UTILITY POLE
TREE
BRUSH
PARSONS
PARSONS ENGINEERING SCIENCE, INC.
SENECA ARMY DEPOT ACTIVITY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPEN BURNING GROUNDS
ENVIRONMENTAL ENGINEERING
ALTERNATIVE 6 ON-SITE SUBTITLE D
LANDFILL GENERAL ARRANGEMENT
1" = 200'
MARCH 1996
A

ALTERNATIVE 6: Soil Washing

- **Excavation of All Soils with Lead Concentrations Above 500 mg/Kg Including Soils Exceeding TCLP Criteria**
- **Excavation of Sediments in Reeder Creek**
- **Soil Washing with Coarse Soil Backfilled and Fine Soil to Off-Site Treatment and Disposal**
- **Long Term Groundwater Monitoring**
- **Runoff Prevention**
- **Site Revegetation**
- **Sediment Sampling in Reeder Creek**

SOIL WASHING PROCESS



MINUTES
RESTORATION ADVISORY BOARD
AUGUST 20, 1996 MEETING MINUTES

1. Attendance:

Government RAB Members Present:

Stephen M. Absolom, BRAC Environmental Coordinator, SEDA/Army Co-Chair
Carla Struble, U.S. Environmental Protection Agency
Kamal Gupta, NYS Department of Environmental Conservation

Government RAB Members Not Present:

Dan Geraghty, NYS Department of Health

Community RAB Members Present:

Dick Durst/Community Co-Chair, Anne Herman, Henry Van Ness,
Carmen Serrett, Brian Dombrowski, Richard Sisson, Al Legasse,
David Wagner, Harold Kugelmass, Estelle Coleman

Community RAB Member Not Present:

Lucinda Sangree, Frank Ives, Mary Ann Krupsak,
Richard Lewis, Russell Miller, Diane Demuth

Government and Technical Support Personnel Present:

LTC Stephen Brooks, SEDA Commander
Thomas Enroth, SEDA Environmental Engineer
Janet Fallo, SEDA Environmental Engineer
Jerry Whitaker, SEDA Base Transition Coordinator
Beverly Lombardo, SEDA Public Affairs Officer
Susan Cooper, SEDA Secretary
Randy Battaglia, U.S. Army Corps of Engineers, NY District, SEDA Resident Office
Dorothy Richards, U.S. Army Corps of Engineers, Huntsville Division
Eliza Schacht, Parsons Engineering Science, Inc.
Robert Mutaw, Woodward-Clyde
Rick Newill, Woodward-Clyde
Marsden Chen, New York State Department of Environmental Conservation
Bruce Nelson, Malcom Pirnie

Others Present (from sign-in sheet):

Chris Raddell, Community Member/Contractor
Nellie Legasse, Community Member
Karl Bechler, Community Member
Bob Gagnon, Community Member/Contractor
Patricia Jones, LRA
M. Zackowski, Community Member

2. LTC Stephen Brooks welcomed members and support staff to the August Restoration Advisory Board in the NCO Club and delivered opening remarks.

3. Stephen Absolom outlined the evening's agenda and asked for introductions. Al Legasse expressed concerns about water, a valuable resource to the community. Minutes from the May RAB meeting were then approved and accepted into record. June minutes were discussed and corrections noted with final minutes to be provided by September's meeting.

4. Bob Mutaw of Woodward-Clyde provided a briefing on locating environmental sites as it applies to BRAC. The overview consisted of the Environmental Baseline Survey's category definitions, parcel qualifiers, methods used to research sites, and findings.

5. Eliza Schacht, Parsons Engineering Science, Inc. then gave a presentation on the Proposed Remedial Action Plan for the Open Burning (OB) Grounds at Seneca. After discussing the background of the 30-acre site, field sampling was explained and residual compounds identified. Remediation objectives were listed and remedial alternatives shown with their evaluating criteria and cost estimates. The Preferred Alternative, Alternative 4, suggests Off-Site Disposal to a licensed, permitted facility as the most cost effective for $2.9 to $4.5 million with a proposed start date for remediation of October 1997.

6. Execution of the Final Charter ensued. All comments from the last meeting were incorporated into the draft final and sent to RAB members prior to the meeting. The Charter was signed by the Army and Community Co-Chairs.

7. General discussion items follow:

a. A request was made to provide RAB members with maps better illustrating the OB/OD Grounds' contamination sites identified in para 5 above. These documents will be provided before the September meeting.

b. A question on cost difference for off-site disposal was raised. Costs for landfilling off-site is presently very competitive compared to costs incurred from on-site disposal and construction. Concerns for off-site disposal as a means of "passing our problem to someone else" were discussed. The current known methods of safe disposal were fully explained by Marsden Chen of the New York State Department of Environmental Conservation. He also stated that he would provide permitted landfill specifications to Steve Absolom for distribution to RAB members.

c. Reuse efforts at the OB Grounds was questioned. Before offered for reuse, the area would be checked for unexploded conventional ordnance by individuals trained in that area.

d. Radon testing on the installation was brought up. It was reported that all buildings were tested with only two being above the levels established as safe.

e. Possible topics for future presentations generated several viable options.

(1) A presentation by the Local Redevelopment Authority (LRA) to include future uses of the depot as well as the correlation between the RAB and LRA's activities and their impacts.

(2) Risk Assessment for residential and/or industrial scenarios and how it's developed in accordance with USEPA and State guidance.

(3) Radiological contamination--it's impact, extent, future impact, and findings.

(4) Ongoing activity and status/milestones of Ash Landfill, Remedial Investigation for the Fire Training Areas and Deactivation Furnaces and what was found.

8. The next Restoration Advisory Board meeting will be held on September 17, 1996 at 7:00 p.m. at the SEDA NCO Club.

9. The meeting was adjourned at 9:25 p.m.

Respectfully submitted,

Susan R. Cooper

SUSAN R. COOPER
Secretary

APPROVED AS SUBMITTED:

STEPHEN M. ABSOLOM
U.S. Army Co-Chair

RICHARD A. DURST
Community Co-Chair