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11901 Samuel, Garden Grove, CA 92840-2546

	Building Crack Ratio (η)	0.00038	[unitless]
	Building Foundation Slab Thickness (L_{crack})	0.100	[m]
Exposure Parameters			
	Exposure Duration for Carcinogens (ED_c)	25	[years]
	Exposure Frequency for Carcinogens (EF_c)	250	[days/year]
	Averaging Time for Carcinogens (AT_c)	70	[years]
	Exposure Duration for Non-Carcinogens (ED_{nc})	25	[years]
	Exposure Frequency for Non-Carcinogens (EF_{nc})	250	[days/year]
	Averaging Time for Non-Carcinogens (AT_{nc})	25	[years]

CALCULATE RESULTS

RESULTS

Unsaturated Zone Effective Diffusion Coefficient (**D_{eff}**)	0.001699	[cm2/s]
Unsaturated + Capillary Zone Effective Diffusion Coefficient (**D^T_{eff}**)	0.001780	[cm2/s]

"A" Parameter	1.591e-4	Based on parameter analysis: Advection is the dominant mechanism across foundation. Diffusion through soil is the overall rate-limiting process for the subsurface to indoor-air pathway.
"B" Parameter	1218.	
"C" Parameter	0.004918	

Johnson & Ettinger Attenuation Factor (α) 1.541e-4

	INDOOR AIR RESULTS FOR GROUND WATER SAMPLE DATA					
	Low Prediction[1]		Best Estimate		High Prediction[2]	
Indoor Air Concentration	4.990e-7 [μg/m3]	4.198e-8 [ppbv]	5.714e-7 [μg/m3]	4.807e-8 [ppbv]	1.555e-6 [μg/m3]	1.308e-7 [ppbv]
Cancer Risk	2.197e-10		2.516e-10		6.847e-10	
Hazard Quotient	0.		0.		0.	

1 "Low Prediction" concentration produced with BEST ESTIMATE moisture content and DEEPEST depth to contamination.

2 "High Prediction" concentration produced with HIGHEST moisture content and SHALLOWEST depth to contamination.

CLEAR ALL

FORMAT REPORT FOR PRINTER

What do these results mean?

Comments or suggestions

Top ^

Home | Glossary | Notation | Links | References | Calculators

WCMS
Last updated on Thursday, September 15, 2011

http://www.epa.gov/athens/learn2model/part-two/onsite/JnE_lite_forward.html

APPENDIX H

GEOPHYSICAL REPORT

Phase 1 Draft Geophysical Report 15 June 2011
Slope site geophysical survey report

6102

- Camp Carroll, Korea-

Geophysical Investigation

Draft Report on Phase 1

15. June

SEKOGEO Co., Ltd.

6/03

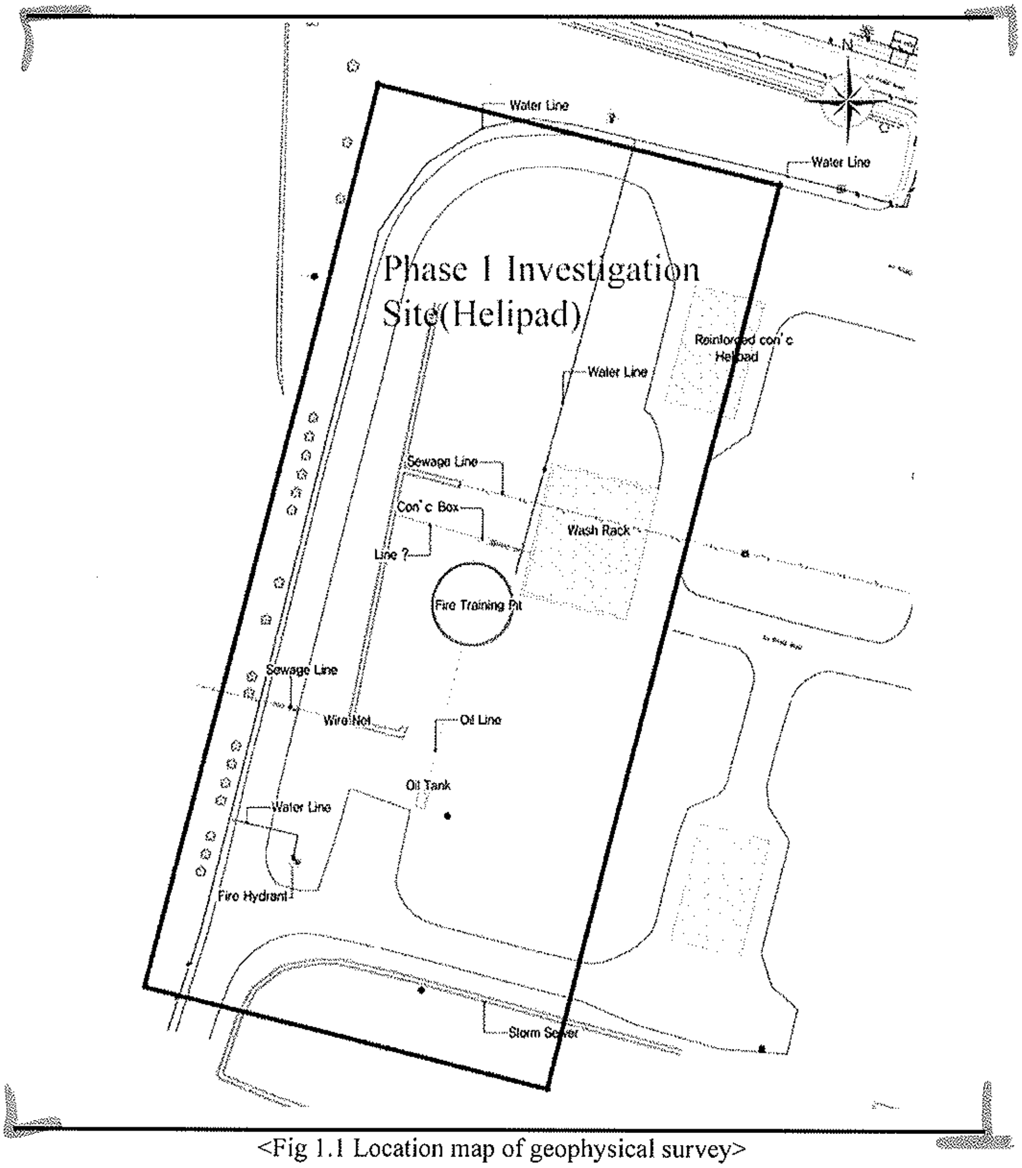
1. Purpose and extent of Geophysical survey

1.1 Purpose of survey

This non-destruction ground penetrating radar(GPR), DC Resistivity, Magnetic survey has an intention that " Helipad site at Camp Carroll" applies with fundamental data of plan by detecting depth and location of conductivity objects.

1.2 Range of survey

The site is located in Camp Carroll, Chilgok-Gun, Gyeongsangbuk-Do, Korea and GPR & DC Resistivity lines is below see fig1.1



<Fig 1.1 Location map of geophysical survey>

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<Table 1. Survey design parameters and information of survey method>

Magnetic	Point Spacing	Total point
	1m	14,480m

GPR	Antenna(MHz)	Line spacing	Penetration depth	Total survey line	Length of survey line	Total length
	Shielded 100	2.0m	5.0~6.0m	90	80m	7,200m

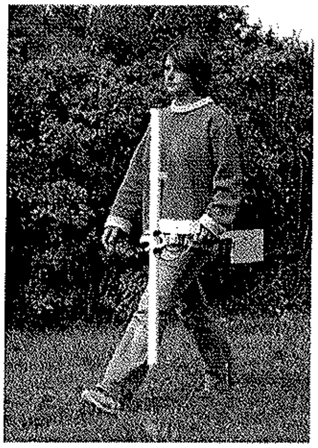
Resistivity	Array	Pole Spacing	Penetration depth	Total survey line	Length of survey line	Total length
	Dipole-Dipole	2.0m, 4.0m	15.0m	20	50~180m	1,844m

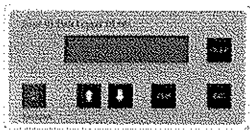
1.3 Committed equipments

Magnetic Gradiometer(Bartington Instruments Co., Ltd England)

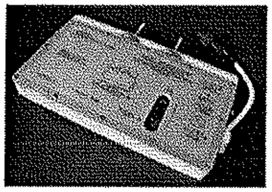
Grad601 single-sensor
- Fluxgate sensor
- Selectable 0.01nT or 1nT resolution
- 125k readings
- Low power : 24 hour operation

DL601 Data logger
BC601 Battery Cassette
Carrying Bar





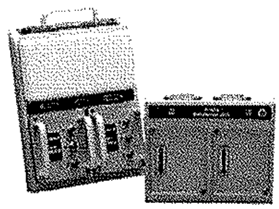
DL601 Data logger



BC601 Battery Cassette

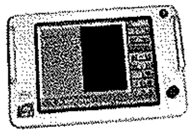
GPR(Mala-Geoscience Co., Ltd Sweden)

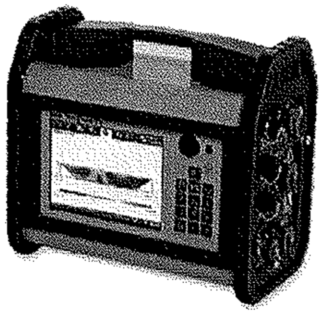
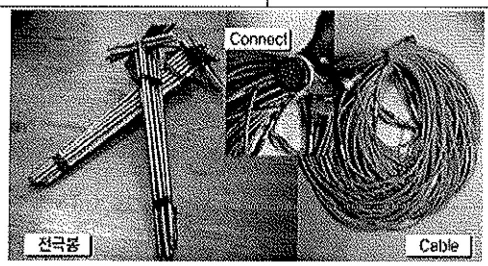
RAMAC/GPR
- ProEX
  (Professional Explorer Control unit)
- Shielded Electronics
- Antenna (100MHz Shielded)
- XV Monitor
- Encoder wheel



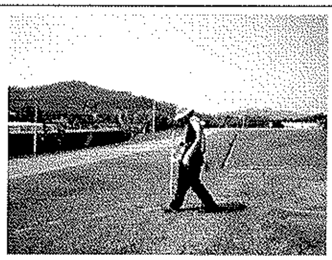
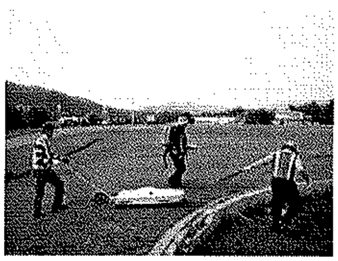
ProEX

100MHz Antenna)

Interpretation S/W (Ground Vision v.1.4.5, GPR Slicer)	 XV Monitor	 Ground Vision v.1.4.5 GPR Slicer

DC Resistivity(ABEM Instruments Co., Ltd Sweden)		
Terrameter LS - Output : 2,500 mA - Ch. No. : 12 Channel Auto. - USB port(2EA) - LAN(PC connect)	 Terrameter LS	 Dipro for Windows v.4.0
Electric Poles(41pcs) Cables(21 take out, 2set) Interpretation S/W - Dipro for Windows v.4.0	 Poles & Cables	

<Fig. 1.2 Survey equipment photographs>

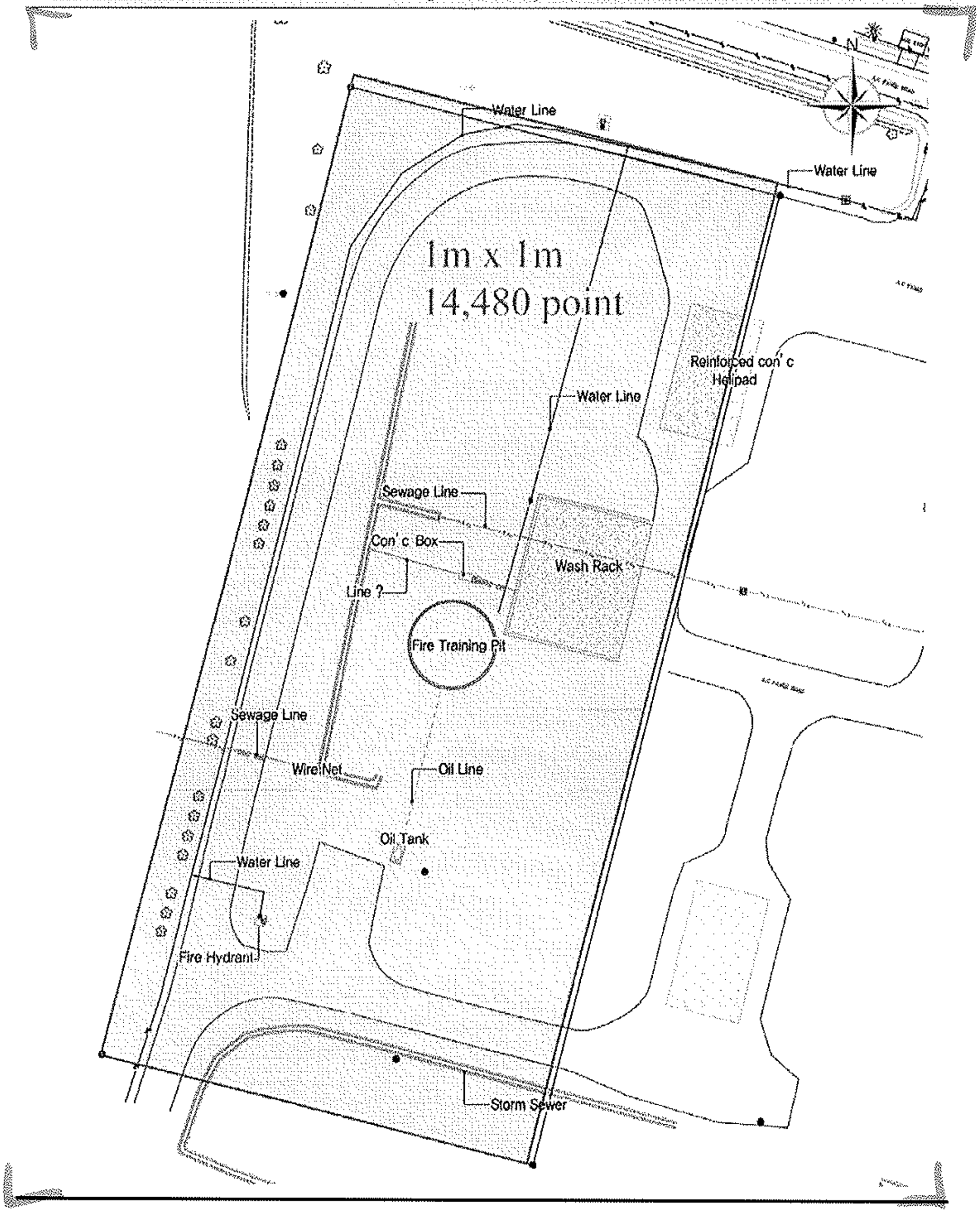
Magnetic	GPR	ER
		

<Fig. 1.3 Survey field photographs>

2. Results of Geophysical survey

2.1 Magnetic survey

Magnetic survey lines



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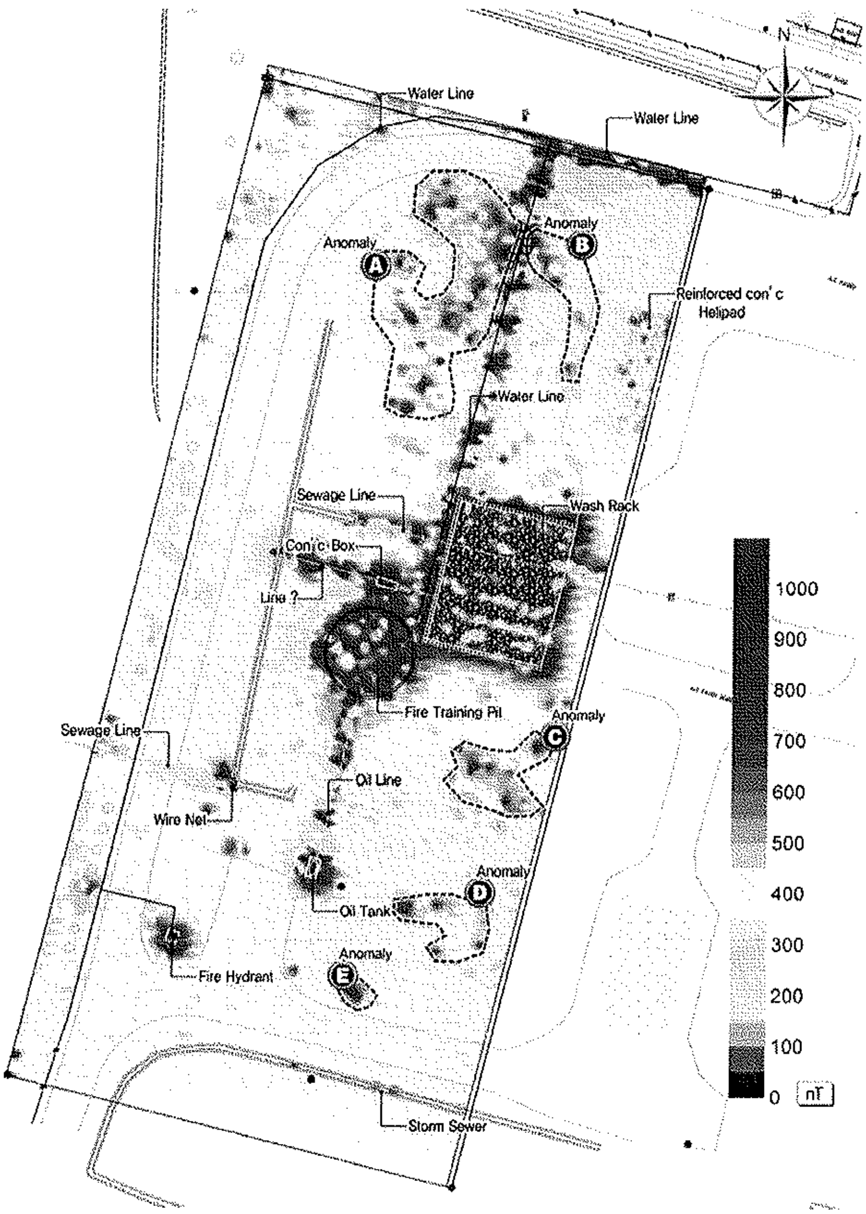
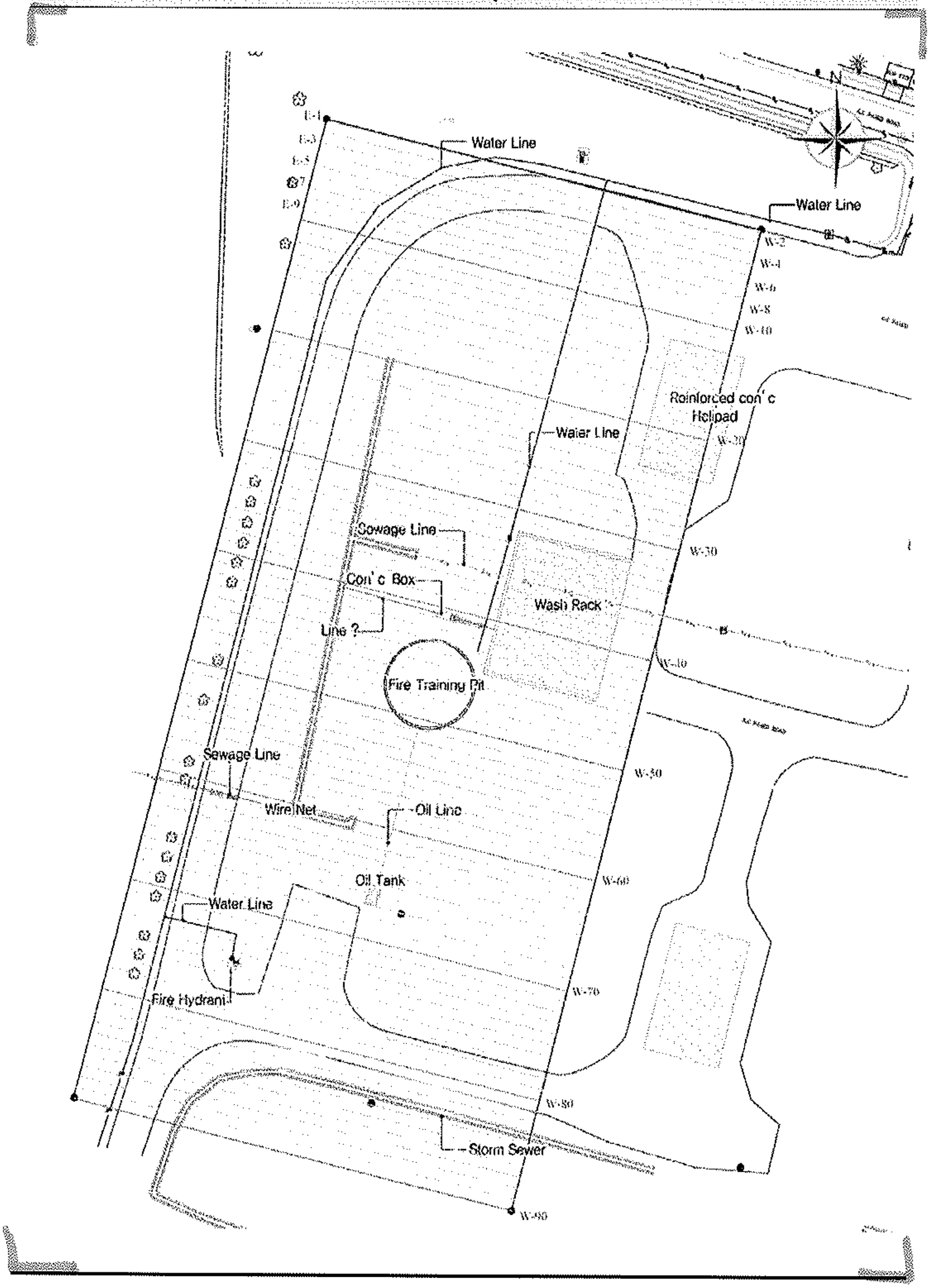
Magnetic result(Horizontal image)



- Red color is existence there is possibility of conductivity objects.
- Also, concrete zone(Wash rack, Fire training pit, Helipad), surface metal(oil tank, wire net, fire hydrant) and subsurface metal(water line, sewage line) is very high value then it's excluded.
- Anomaly A, B, C, D : Unknown depth, conductivity objects.
- Anomaly E : Unknown depth, small conductivity objects.

2.2 GPR survey

GPR survey lines



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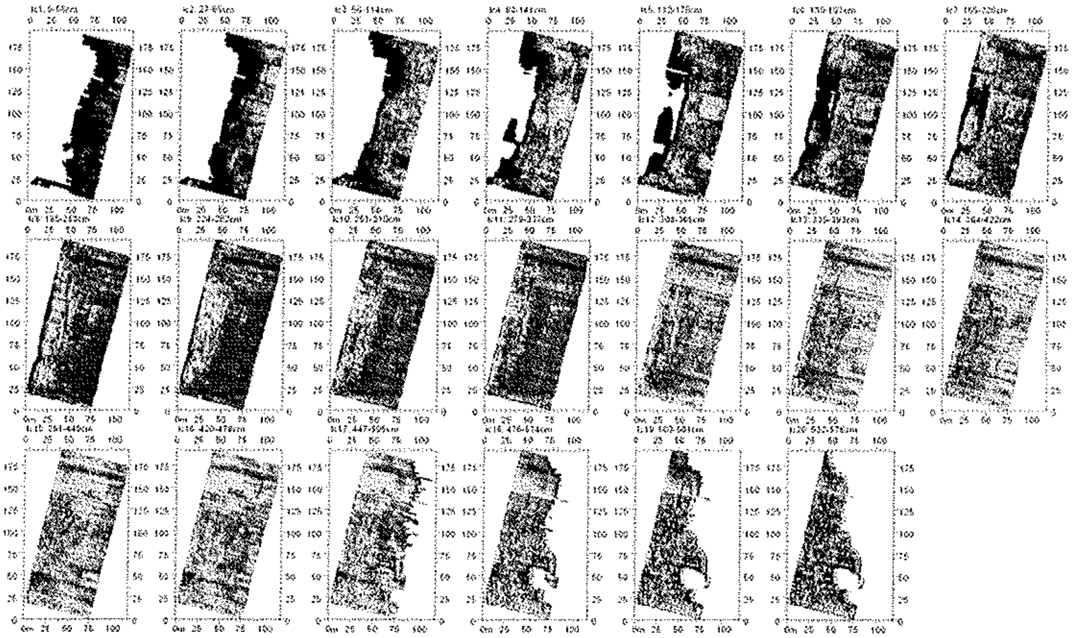
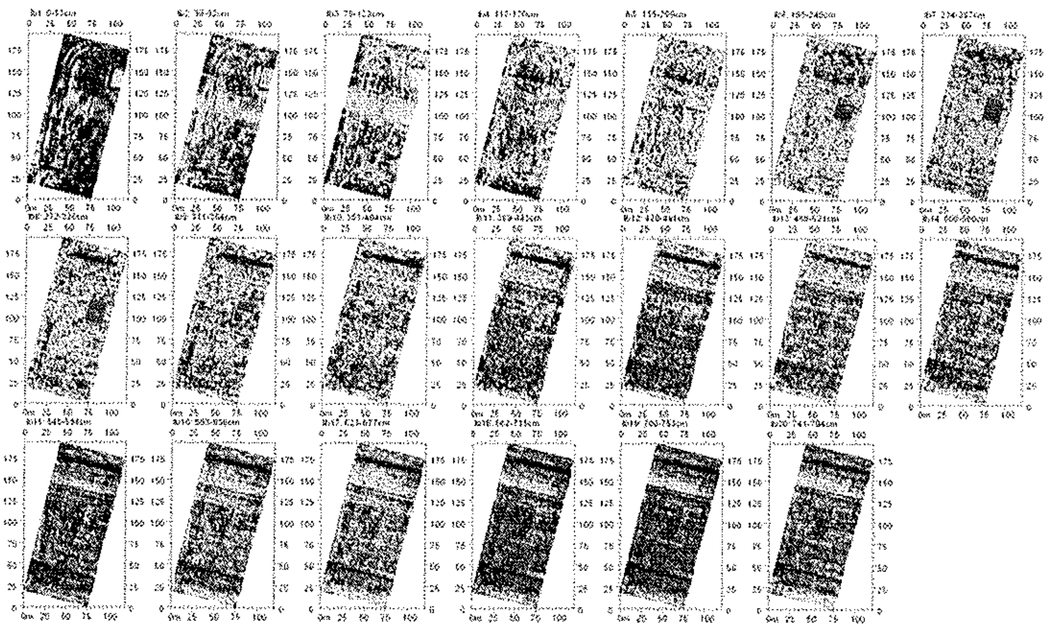
3D result(Horizontal images with elevation)

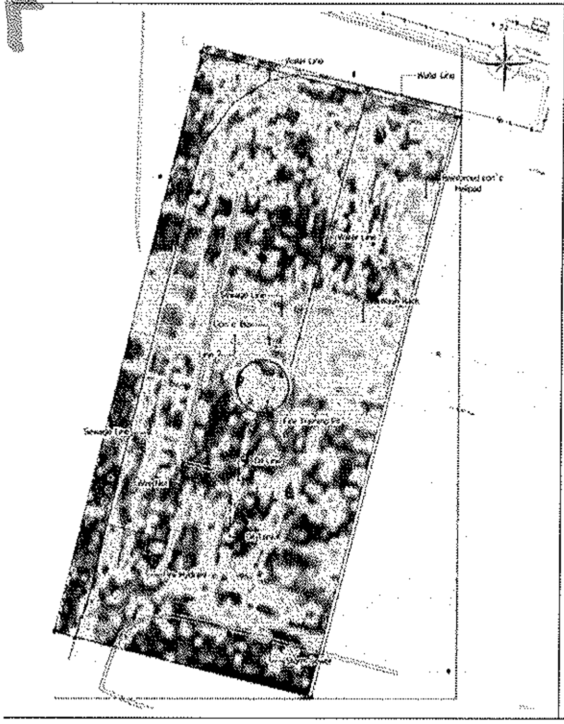


3D result(Horizontal images without elevation)

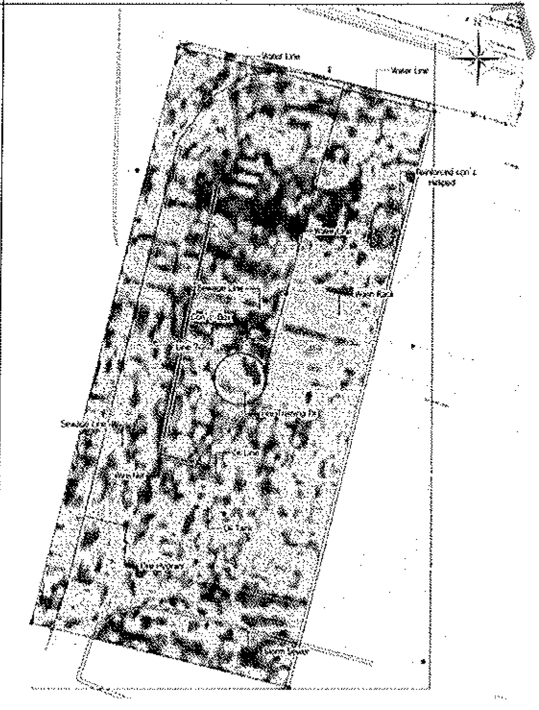


6110

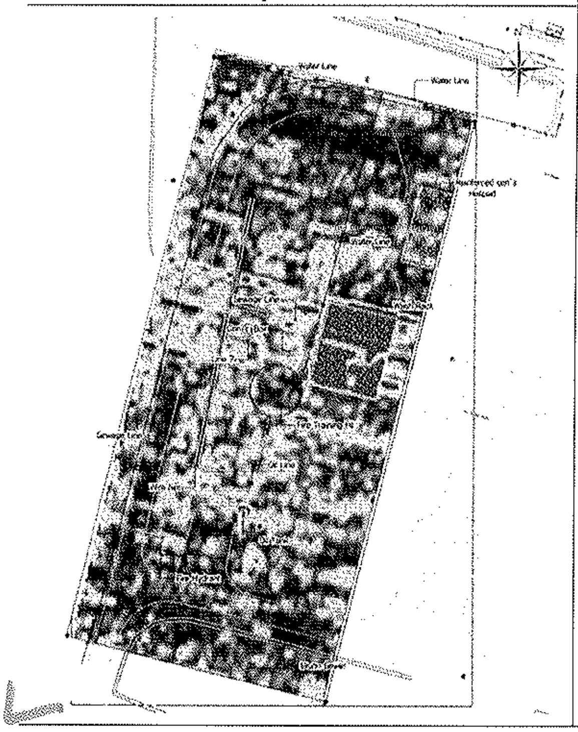
Depth 1.0m result



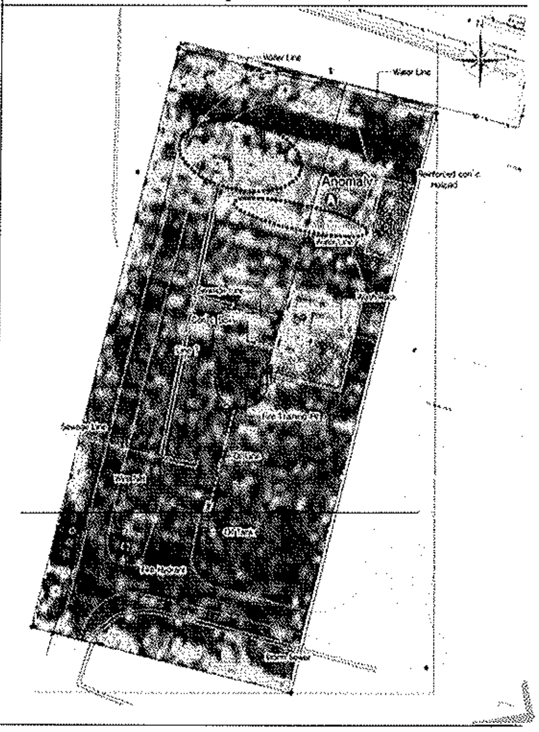
Depth 2.0m result



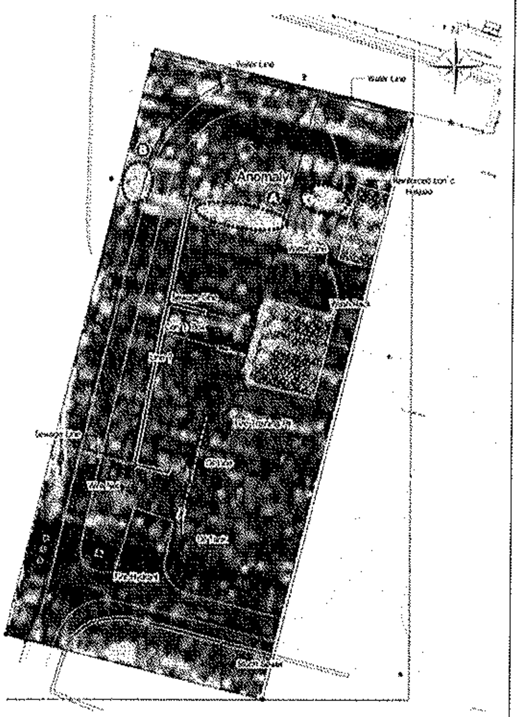
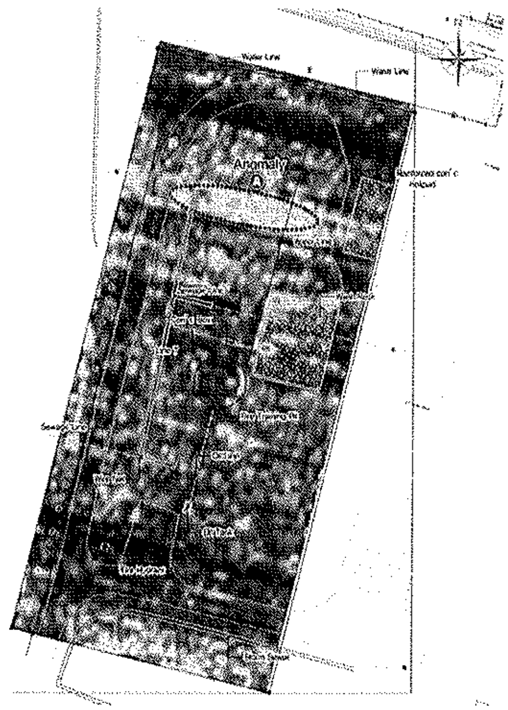
Depth 3.0m result



Depth 4.0m result



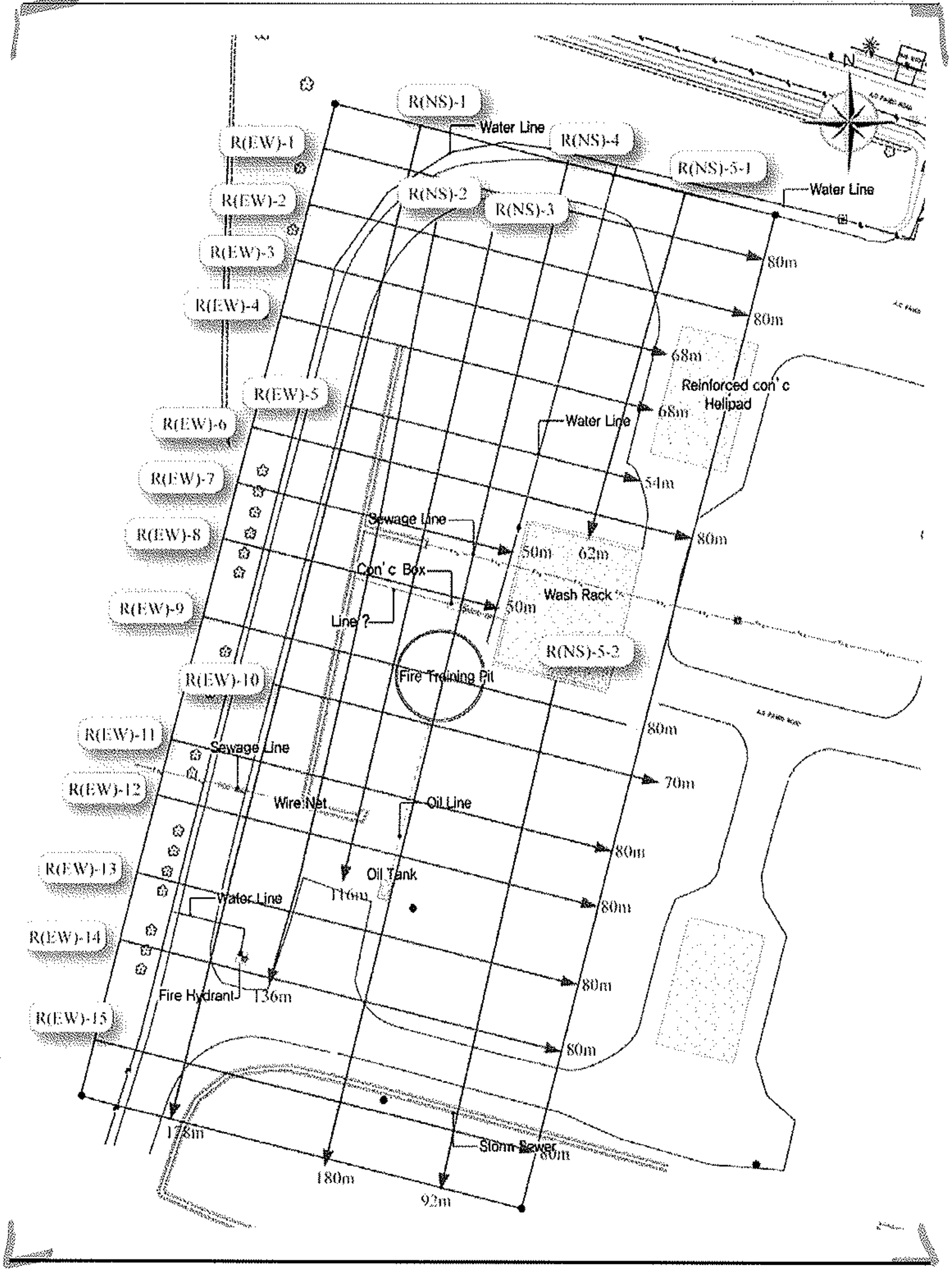
6111

◉ Depth 5.0m result	◉ Depth 6.0m result
	

- The general GPR signal aspect was normal reading.
- The red color is existence there is possibility of conductivity objects or stratum.
- Also, concrete zone(Wash rack, Fire training pit, Helipad) is very strong signal then it's excluded.
  - Anomaly A, B : 4~6m depth, conductivity objects or geological structure.

2.3 DC Resistivity survey

ER survey lines



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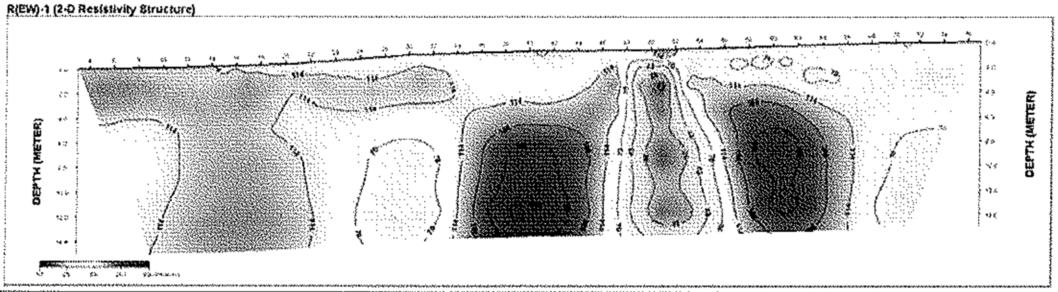
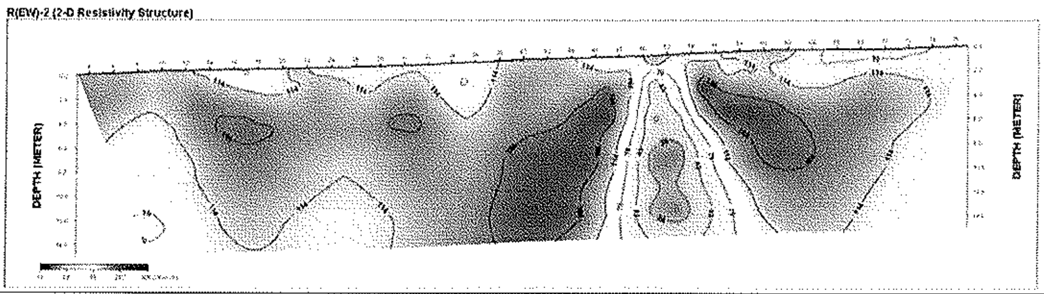
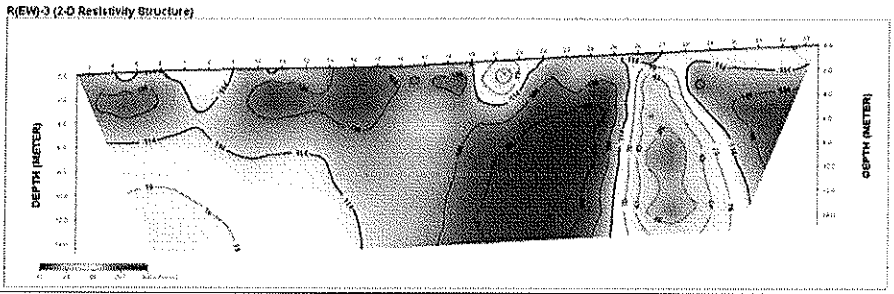
R(EW)-1



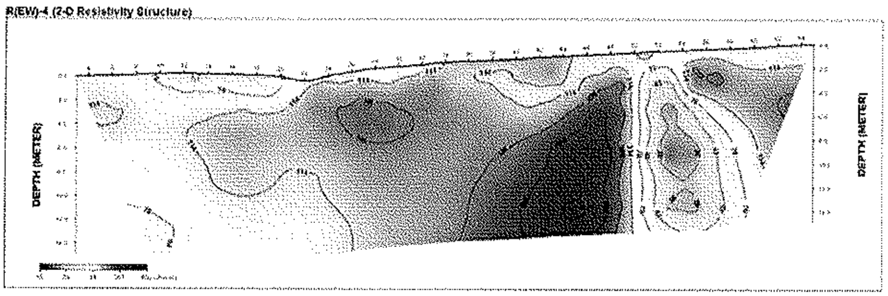
R(EW)-2



R(EW)-3



R(EW)-4



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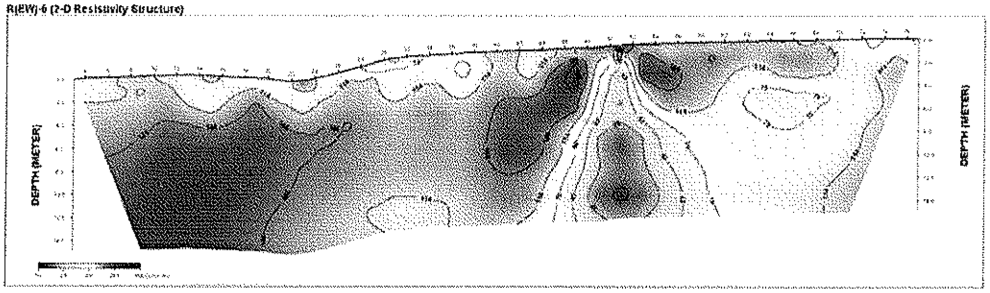
R(EW)-5

R(EW)-5 (2-D Resistivity Structure)

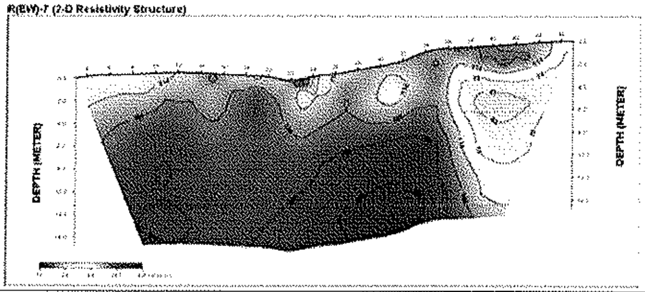
R(EW)-6

R(EW)-6 (2-D Resistivity Structure)



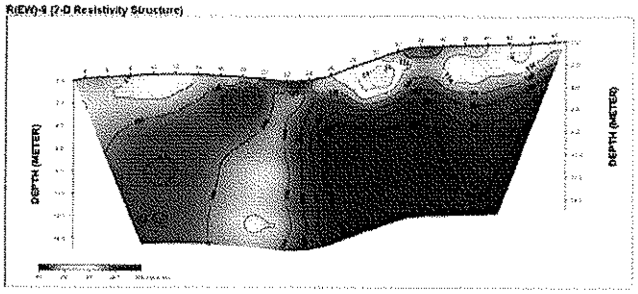
R(EW)-7

R(EW)-7 (2-D Resistivity Structure)

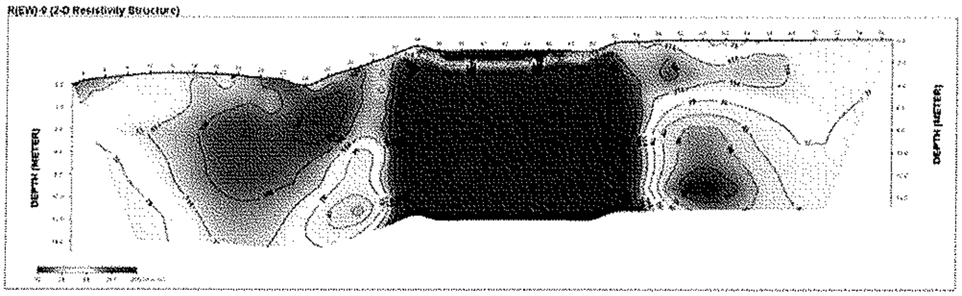


R(EW)-8

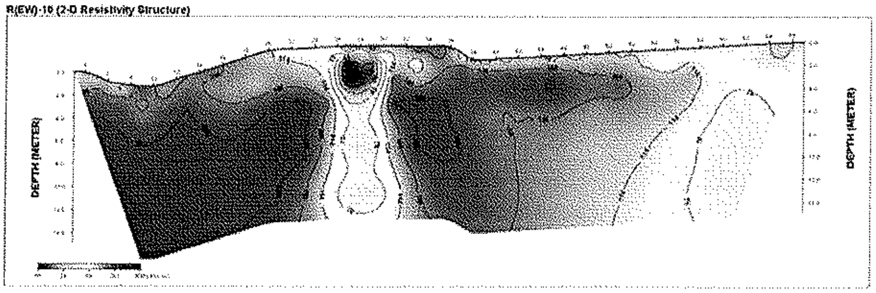
R(EW)-8 (2-D Resistivity Structure)



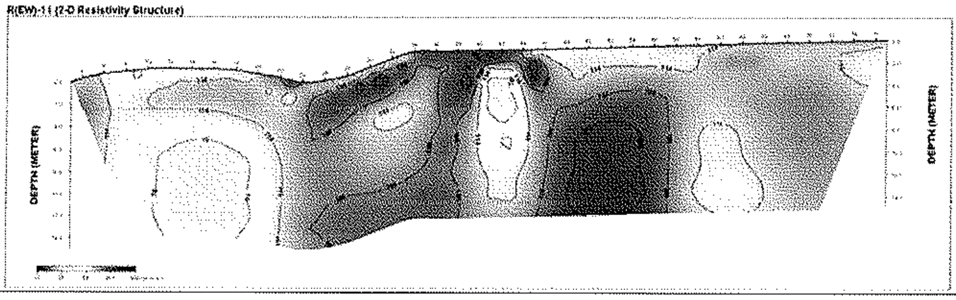
R(EW)-9



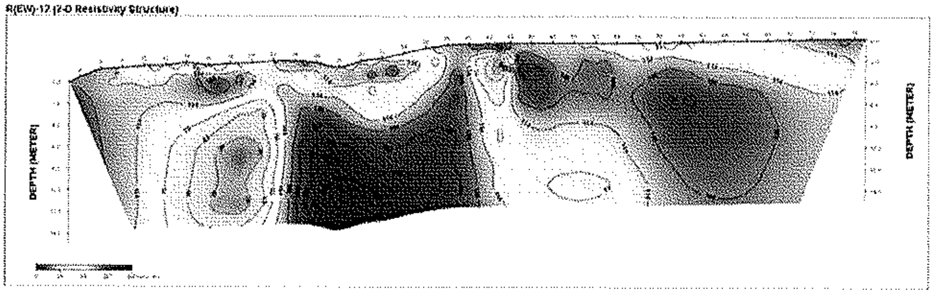
R(EW)-10



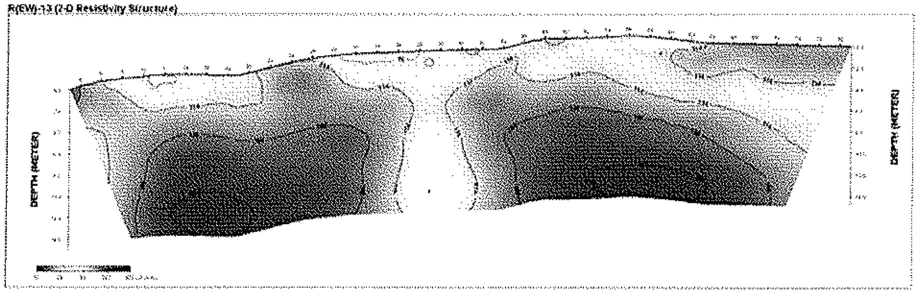
R(EW)-11



R(EW)-12

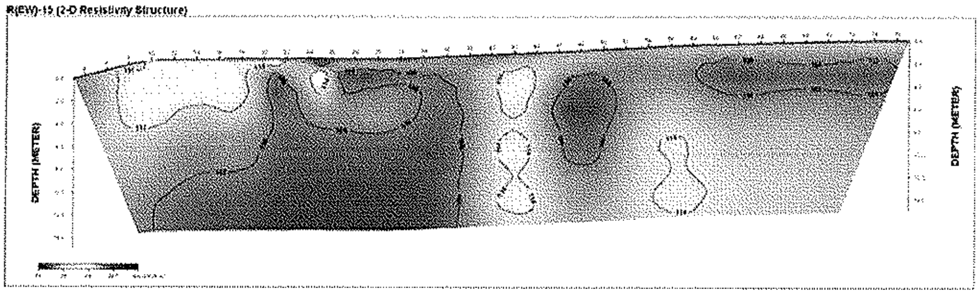


R(EW)-13



R(EW)-14

R(EW)-15



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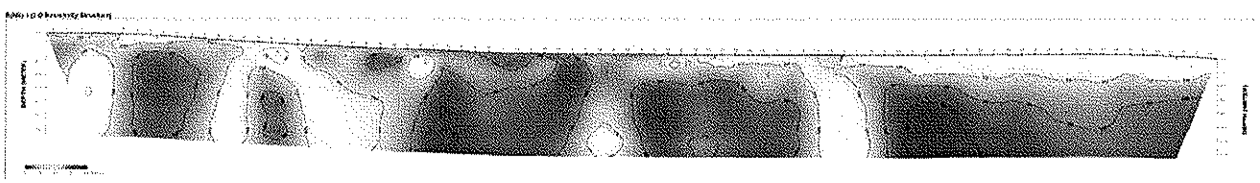
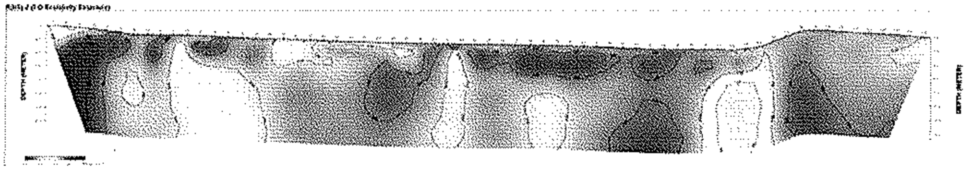
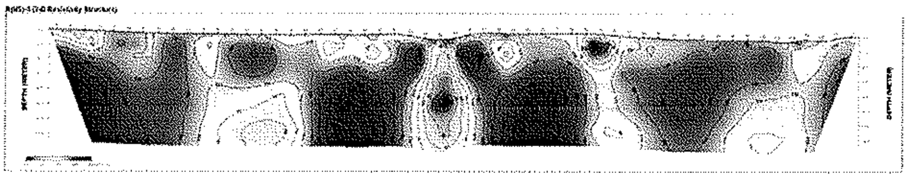
R(NS)-1



R(NS)-2



R(NS)-3



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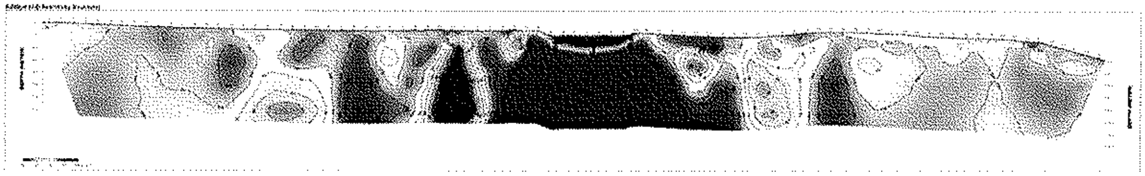
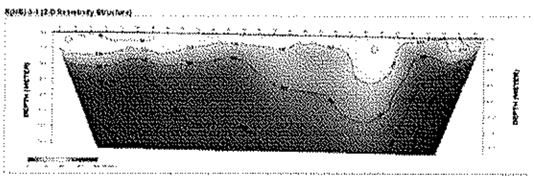
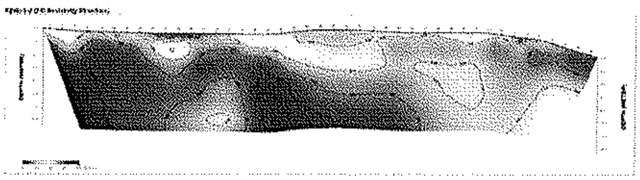
⓿ R(NS)-4



⓿ R(NS)-5





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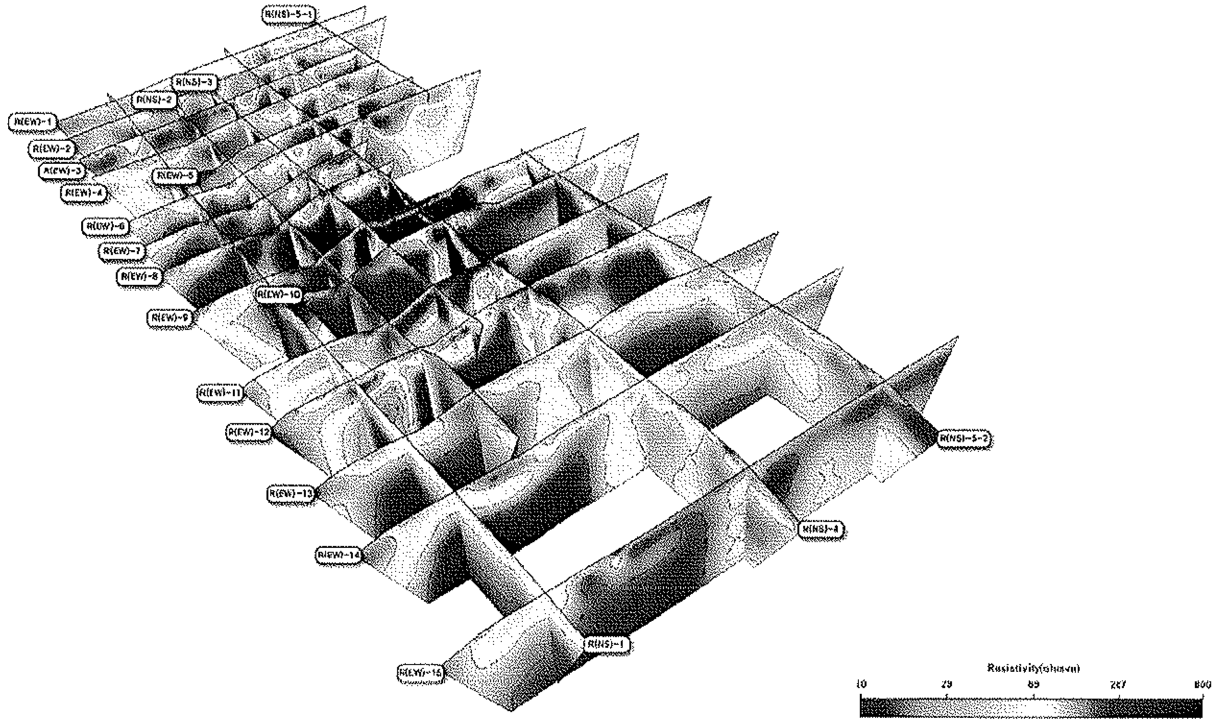
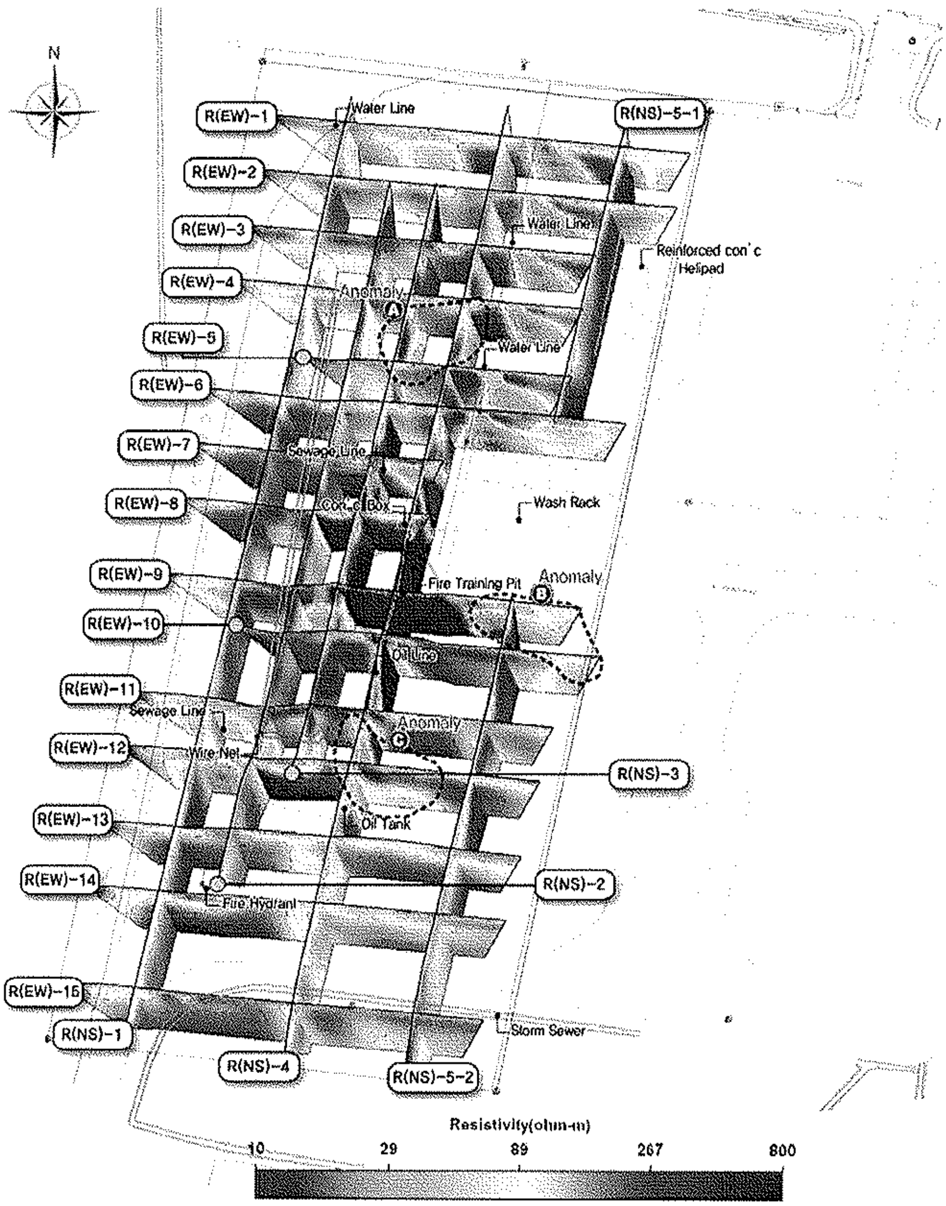
ⓒ Fence Diagrams



◉ Fence Diagrams result



- Almost resistivity range below 800 ohm-m low value.
- Low resistivity anomaly(below 70 ohm-m, blue to green color).
  - Anomaly A, B, C : weak soil, contain water soil, conductivity objects.
  - The others low resistivity area : water lines, sewage lines(steel), concrete box.

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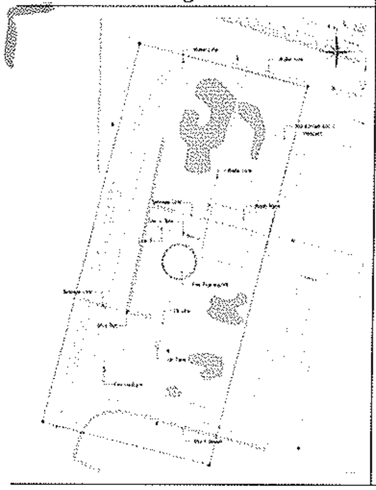
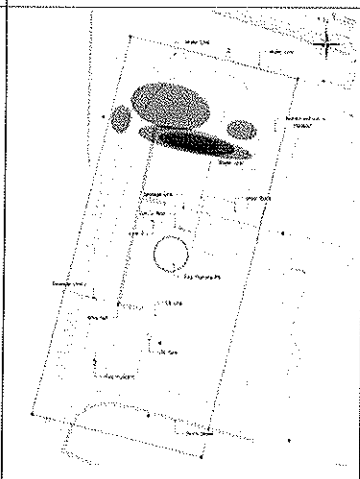
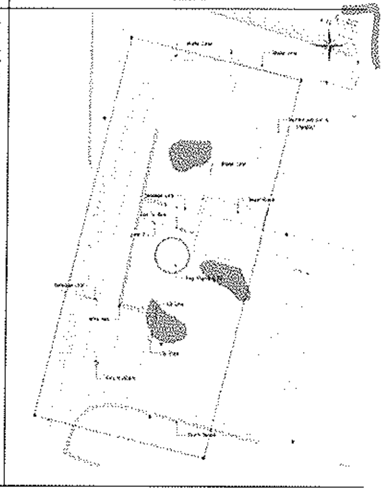
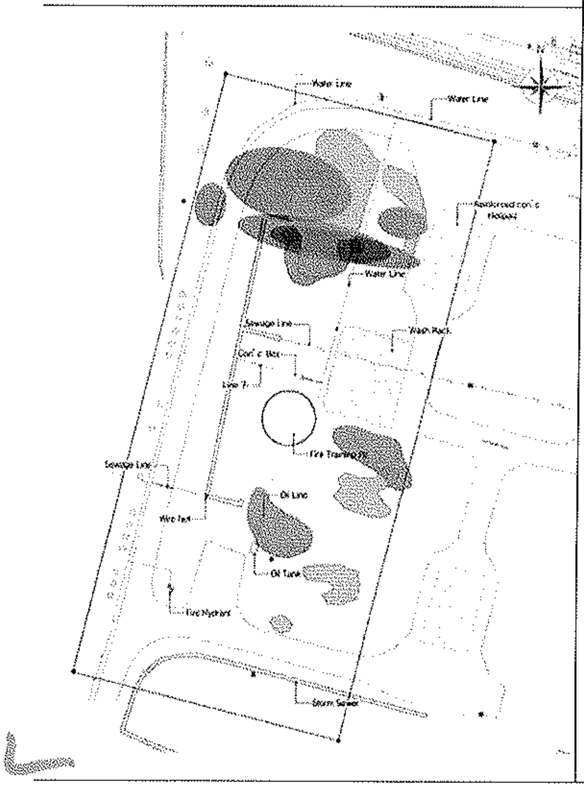
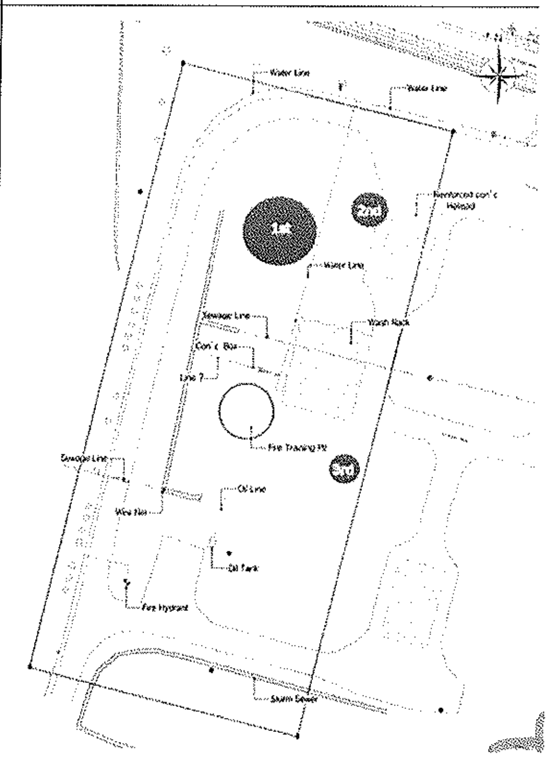
3. Conclusion

This surveying has an intention that "Helipad site at Camp Carroll" applies with fundamental data of basis design by detecting depth and location of conductivity objects (drums).

For this, data acquired by Magnetic, DC Electrical resistivity, GPR 100MHz antenna, according to analysis of acquired data we come to the below conclusion.

◎ Confirmation anomaly area

Magnetic	GPR	ER
		

Magnetic+GPR+ER	Final Anomaly area
	

Magnetic survey result detected 5 anomaly zones.

GPR survey result detected 4 anomaly zones.

ER survey result detected 3 anomaly zones.

3 anomaly zones overlapped(Magnetic & GPR & ER survey).

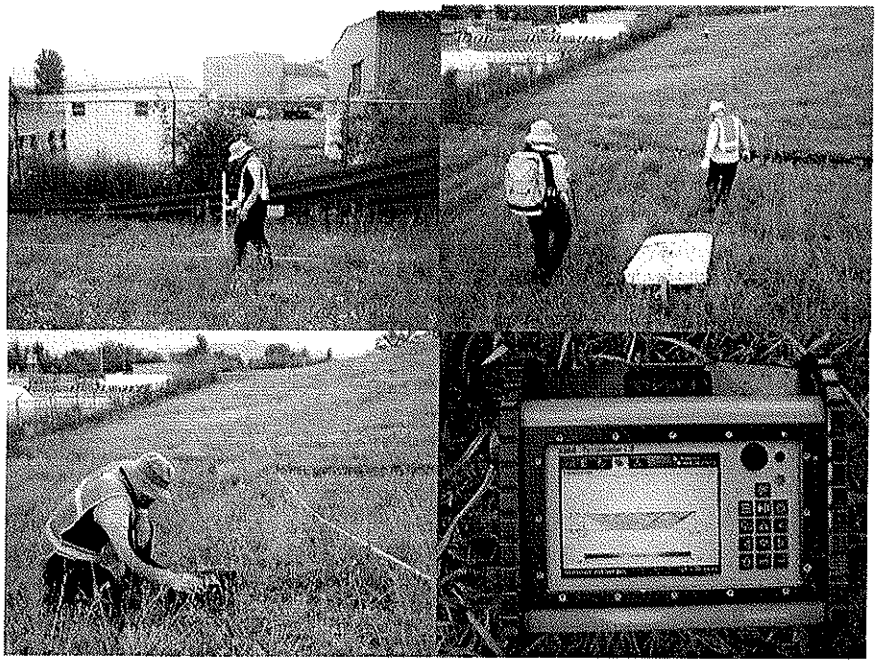
Based on the above detected anomaly 3 zones we may estimates that is weak soil, contain water soil or conductivity objects. We need drilling and soil sampling for more correct.

1^{st} zone is high possibility compare to 2^{nd}, 3^{rd}zone.

US Army Corps of Engineers
Far East District®

SLOPE SITE GEOPHYSICAL SURVEY REPORT

Camp Carroll
U.S. Army Garrison Daegu, Republic of Korea



August 10, 2011

Prepared By:

Environmental Section, Geotechnical and Environmental Engineering Branch
Engineering Division, U.S. Army Corps of Engineers, Far East District

In Association With:

SEKOGEO Co., Ltd
Gyeonggi-Do, Anyang-Si, Dongan-Gu, Pyeongchon-Dong, 126-1, Republic of Korea

Beautiful Environmental Construction Co., Ltd
Gyeonggi-Do, Seongnam-Si, Jungwon-Gu, Sangdaewon-Dong, 190-1, Republic of Korea

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EXECUTIVE SUMMARY

This report presents the results of a geophysical survey that was conducted for the Slope site located on Camp Carroll, Republic of Korea (ROK). The Slope site is located to the south and southwest immediately adjacent to three sites at the southeastern portion of Camp Carroll where geophysical investigations have already been completed (Figure ES-1). The Slope site was identified as the location where drums of hazardous material and waste were allegedly buried between the years 1977 and 1982 by an eyewitness. The purpose of the survey was to identify and locate buried foreign objects, especially steel drums and delimit the approximate vertical and horizontal coordinates of the burial if they exist.

Geophysical Survey Procedure

The Slope site survey area measures approximately 30 m to 50 m from north to south and 140 m east to west. The geophysical survey was conducted using three non-intrusive techniques: magnetic gradiometry, ground penetrating radar (GPR), and electrical resistivity imaging (ERI).

The magnetic gradiometry survey utilized a grid system with 1 m intervals. Including endpoints, this resulted in 4,762 intersections points. Magnetic readings were taken at each of the intersection points using a Bartington Instrument Ltd (United Kingdom) model Grad601 gradiometer.

The GPR survey was conducted using a MALÅ GeoScience (Sweden) model ProExTM Professional Explorer GPR. The survey utilized a 2 m interval transects in the east-west direction (36 transects). An input frequency of 100 megahertz (MHz) was selected.

The ERI survey was conducted using an ABEM Instrument AB (Sweden) model Terrameter LS direct current resistivity meter. The survey was conducted along three transects.

Geophysical Survey Results and Conclusions

The survey results were combined and a final interpretation of the data and subsurface anomaly zones are shown on Figure ES-2. The conclusions are summarized as follows:

- The Magnetic Gradiometry survey results indicated one subsurface anomaly. The anomaly is attributed to interference from the nearby metal chain link fence and building structure.
- The GPR survey results indicate six subsurface anomalies. The anomalies are attributed to subsurface geologic features such as changes in soil stratum and disturbed soil (soil that has been excavated and backfilled).
- The ERI survey results indicate two subsurface anomalies. The survey results indicate that the anomalies are most likely due to geological structures such as fracture zone in bedrock and ground water level.

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- The combined results indicate that the subsurface anomalies that were identified during the geophysical survey can be attributed to existing structures at the site and activities such as excavation and backfilling. The results do not indicate the presence of buried foreign objects such as steel drums.

Figure ES-1. Slope Site Geophysical Survey Location Map

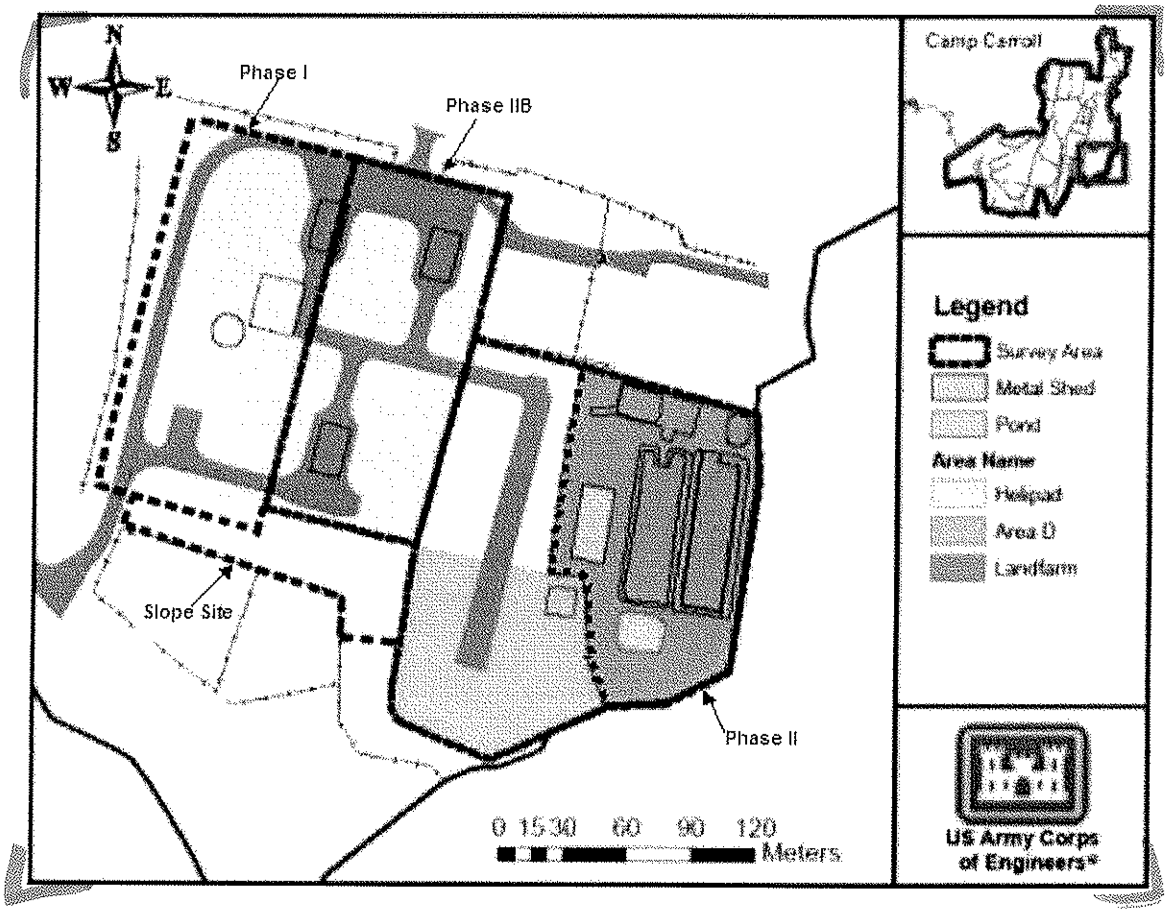

Figure ES-2. Slope Site Subsurface Anomalies

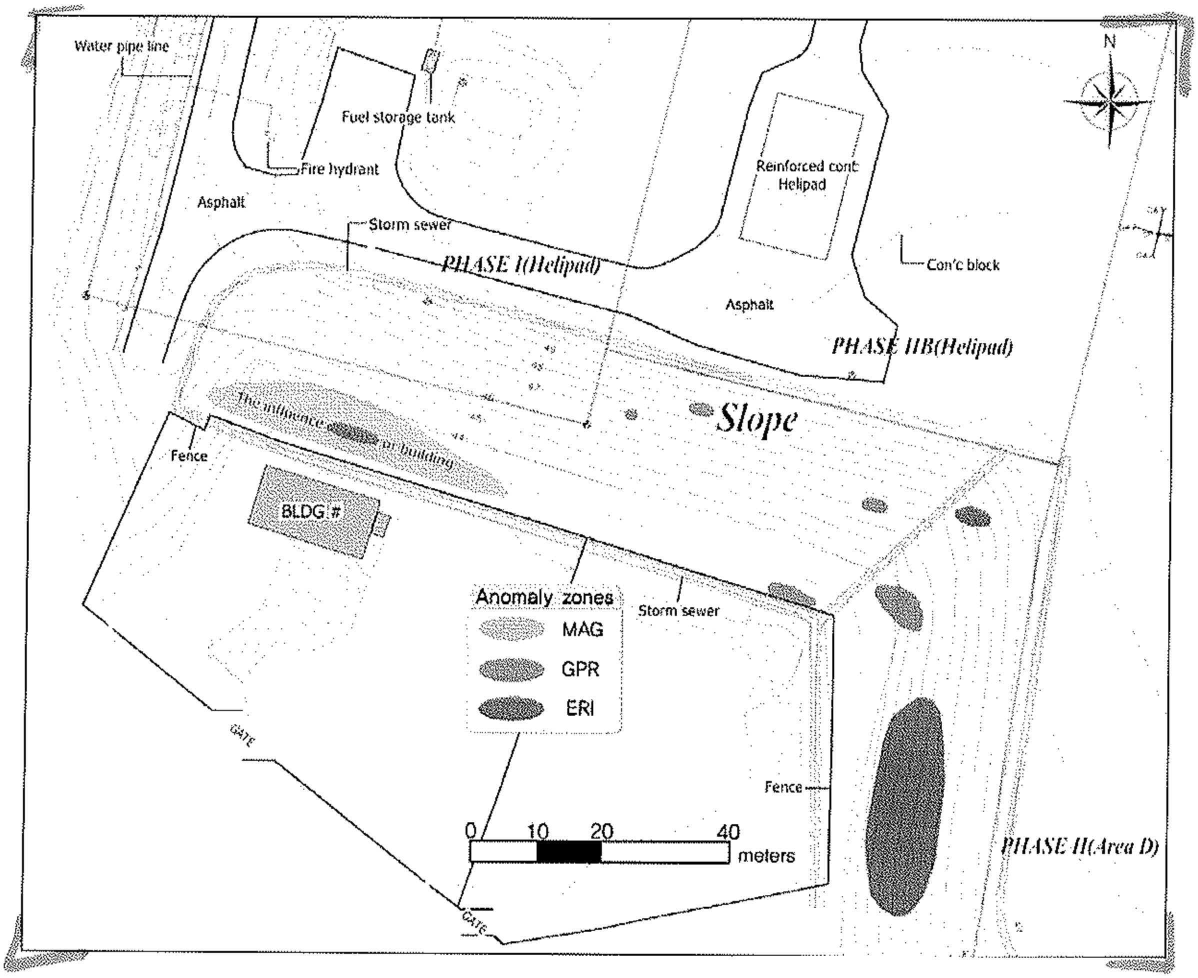

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TABLE OF CONTENT

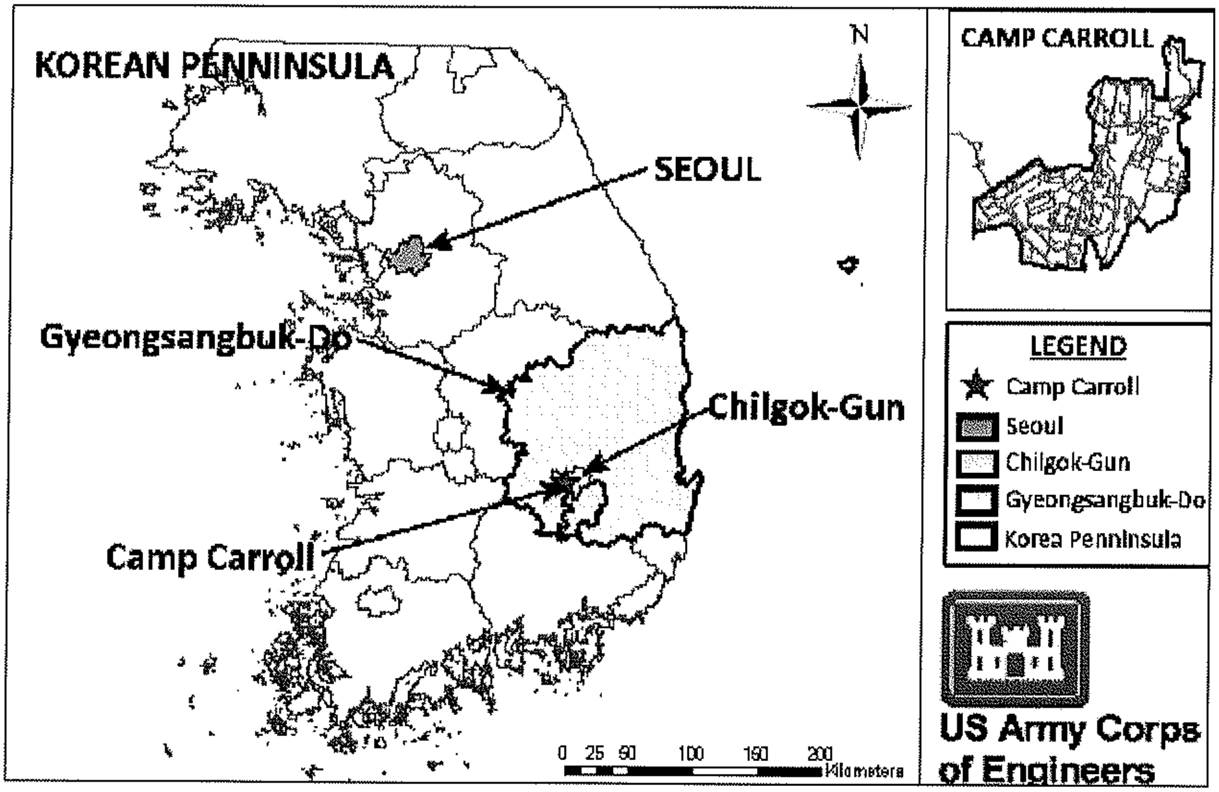
1. INTRODUCTION

This report presents the results of a geophysical survey that was conducted for the Slope site located on Camp Carroll, Republic of Korea (ROK). The purpose of the geophysical survey was to identify and locate foreign objects, especially steel drums that may have been buried in the area. The survey will also delimit the approximate vertical and horizontal coordinates of subsurface anomalies that potentially indicate the presence of foreign objects.

1.1 Site Description and Background

U.S. Army Garrison (USAG) Daegu Camp Carroll (Camp Carroll) is located in Chilgok-Gun, Gyeongsanbuk-Do, adjacent to the village of Waegwan in the south-central portion of the ROK. The general location of the camp is shown on Figure 1-1. Urban areas bound Camp Carroll on the northwest, west and southwest. Hilly, forested areas bound the base on the north and east. Agricultural fields (mostly rice paddies) border the camp on the northeast and the south. The Naktong River flows from north to south approximately 0.5 kilometers west of Camp Carroll.

Figure 1-1. Camp Carroll Location Map



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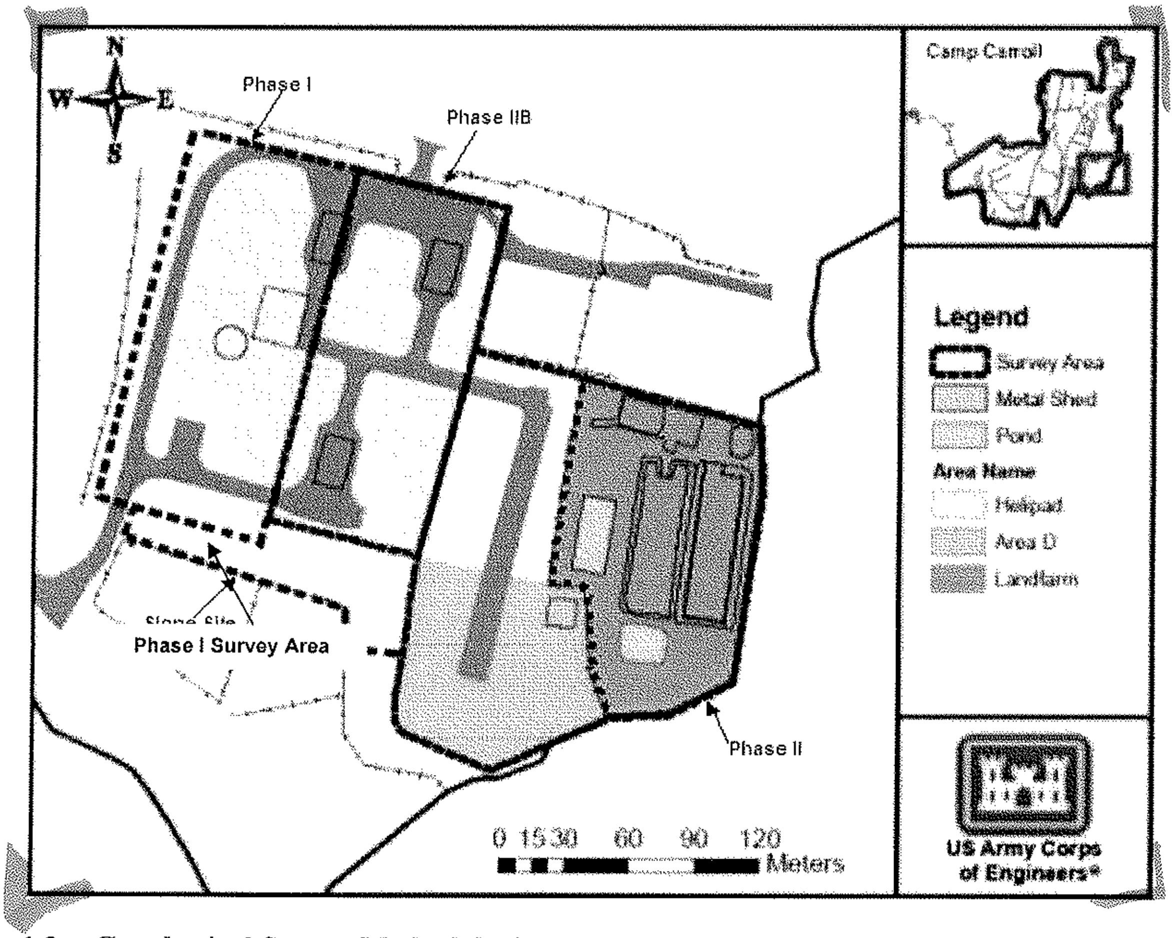
The Slope site is located to the southwest and immediately adjacent to the Helipad, Area D and Landfarm sites at southeastern portion of Camp Carroll (Figure 1-2), where geophysical survey have already been completed during Phase I, II and IIB. The site is unpaved, covered with grass and slopes down about 3 m (10 ft) to the south. The area was recently identified as the location where drums of hazardous material and waste were buried by an eyewitness. The purpose of the survey was to identify and locate buried foreign objects, especially steel drums, should they be present, and delimit the approximate vertical and horizontal coordinates of buried foreign objects.

Figure 1-2. Phase I (Helipad) Site Geophysical Survey Location Map



1.2 Geophysical Survey Methodologies

The geophysical survey for the Phase I area was conducted using three non-intrusive techniques: magnetic gradiometry, ground penetrating radar (GPR), and electrical resistivity imaging (ERI). Three separate techniques were employed for the survey in order to ensure optimum coverage and the ability to identify and locate subsurface anomalies. The following sections provide brief descriptions of each technique, along with some of the strengths and limitations associated with each technique.

1.2.1 Magnetic Gradiometry

Magnetic gradiometry is a more refined technique under the broader category of magnetic geophysical survey. Magnetic surveying in general is a passive method based on the measurement of localized perturbations to the Earth's magnetic field caused by the presence of buried ferrous targets. Magnetic gradiometry determines the vertical gradient of the magnetic field, and are more sensitive to small or weakly magnetic targets than the typical single sensor, total field magnetometer. The limitation with magnetic survey techniques is that they will not identify non-magnetic materials, such as glass, plastics, wood, and non-ferrous metals such as copper and aluminum.

Typically, data is collected in a systematic manner across a field site and then presented as a contoured map in units of nanotesla (nT) or nT per meter (nT/m), which can be interpreted to produce a map of the subsurface. The amplitude and shape of an individual anomaly will reflect the dimensions, orientation and magnetic susceptibility of the buried target.

1.2.2 Ground Penetrating Radar

In GPR surveys, electromagnetic waves of frequencies between 50MHz and 2.5GHz (microwave band of the radio spectrum) are transmitted into the ground. This energy is reflected back to the surface when it encounters significant contrasts in dielectric properties. The amount of energy reflected is dependent on the contrast in electrical properties encountered by the radio waves. A receiver measures the variation in the strength of the reflected signals with time. The resulting profile is called a "scan." Multiple scans generated by traversing the antenna across the ground surface are used to build two-dimensional cross sections (radargrams) of the subsurface.

The advantage of GPR is that it can be used in a variety of media, including rock, soil, ice, fresh water, pavements and structures. Also, because GPR is sensitive to differences in dielectric properties, it can be used to detect non-ferrous objects, changes in material, and voids and cracks. The limitation with GPR is that signal resolution is dependent on the input signal frequency. Higher frequencies provide higher resolution, but higher frequencies provide less penetration depth. Lower frequencies penetrate deeper into the ground but provides less resolution and hence less accuracy. Another potential limitation with GPR is that the difference between dielectric constants of different materials or layers may be too small to classify, and interpretation of data is less straightforward than magnetic techniques.

1.2.3 Electrical Resistivity Imaging

ERI, also called electrical resistivity tomography (ERT) measures ground resistance by introducing an electric current into the subsurface via two grounded electrodes. The current passing through the ground sets up a distribution of electrical potential in the subsurface. The difference in electrical potential is measured using a second set of electrodes. The transmitting and receiving electrode pairs are referred to as dipoles. Using Ohm's law, this voltage can be converted into a resistance reading in units of ohm-meters (ohm-m) for the ground between the two potential electrodes. By varying the unit length of the dipoles as well as the distance between them, the horizontal and vertical distribution of electrical properties can be recorded.

To build a vertical cross-sectional image of ground resistance, a string of connected electrodes are deployed along a straight line with an inter-electrode spacing of a. Once the resistance measurements have been made, the line is re-surveyed with an inter-electrode spacing of $2a$, $3a$, $4a$, etc. For example, if a = 1 m (the initial spacing between the electrodes is 1 m), the next survey along the same line would be conducted for electrodes spaced at 2 m, followed by a survey with electrodes spaced at 3 m, etc. Each increase in the inter-electrode spacing increases the effective depth of the survey. The vertical cross sections are combined to generate a fence diagram output.

2. GEOPHYSICAL SURVEY PROCEDURE

This section provides a description of the field procedures and instrumentation used in the Phase II area geophysical survey. The Slope site survey area measures approximately 30 m to 50 m from north to south and 140 m east to west. The specifications of the instruments are provided in Appendix A for reference. The results of the survey are presented in Section 3.

2.1 Magnetic Gradiometry Survey

The magnetic gradiometry survey was conducted using a Bartington Instrument Ltd (United Kingdom) model Grad601 gradiometer equipped with a single Grad-01-1000L high stability fluxgate gradient sensor. The data generated was recording using a DL601 Data Logger.

A grid with 1 m intervals was established over the entire survey area. Including endpoints, this resulted in 4,762 intersections points between the north-south and east-west running gridlines as shown on Figure 2-1. Magnetic readings were taken at each of the intersection points.

2.2 GPR Survey

The GPR survey was conducted using a MALÅ GeoScience (Sweden) model ProExTM Professional Explorer GPR. The survey utilized a 2 m interval transects in the east-west direction (36 transects), each transect covering a length of 28 m to 78 m. The GPR survey gridlines are shown on Figure 2-2.

Based on site geology, soil type, subsurface conditions and the anticipated depth of buried materials at 5 m to 6 m below ground surface (bgs), an input frequency of 100 megahertz (MHz) was selected to provide the best resolution.

2.3 ERI Survey

The ERI survey was conducted using an ABEM Instrument AB (Sweden) model Terrameter LS direct current resistivity meter. The survey was conducted along three transects as shown on Figure 2-3.

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Figure 2-1. Magnetic Gradiometry Survey Area

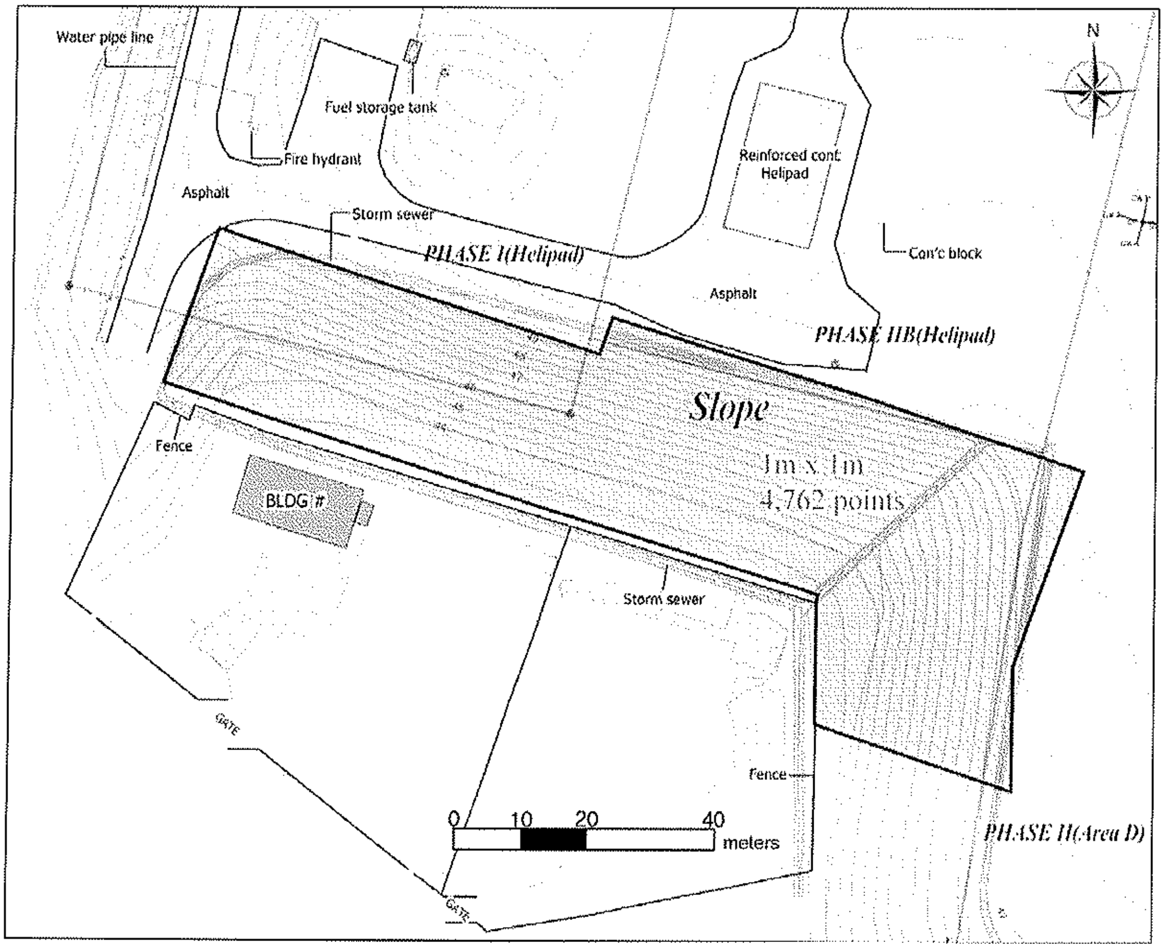

Figure 2-2. GRP (100MHz) Survey Transects

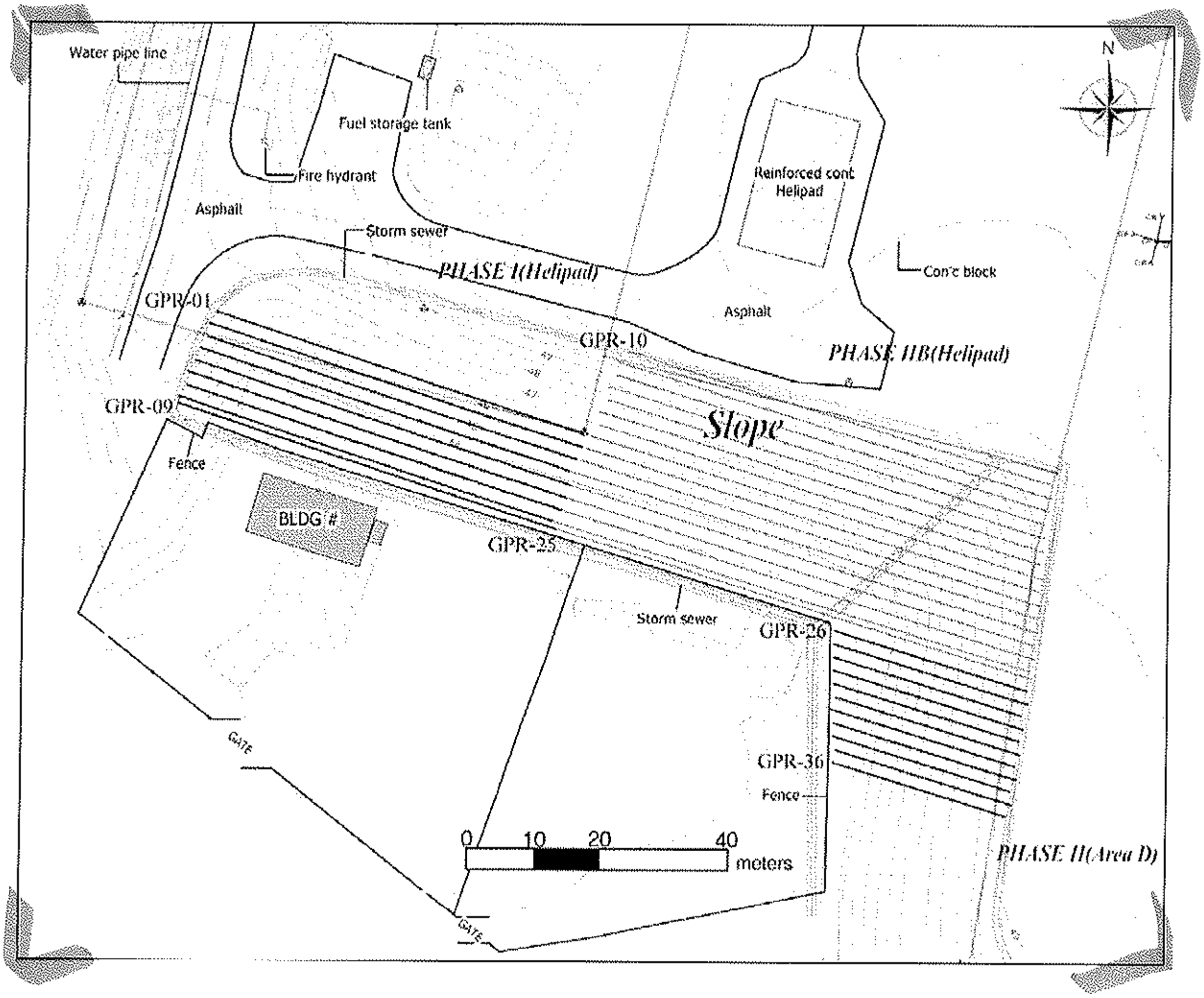

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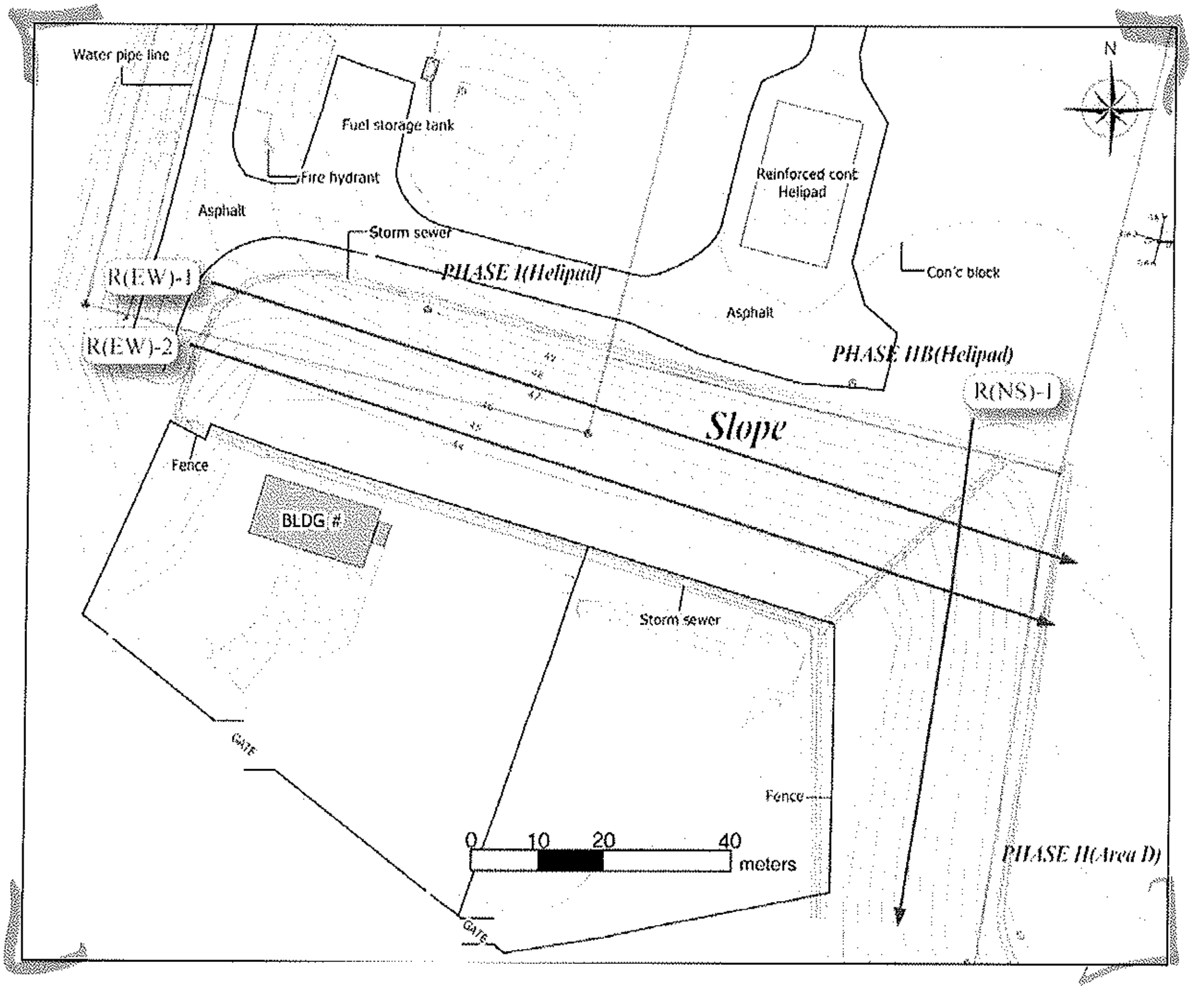
Figure 2-3. ERI Survey Transects



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3. GEOPHYSICAL SURVEY RESULTS

This section provides a brief summary of the geophysical survey results and summaries. The 2-dimentional sections from the GPR survey and vertical cross section output from the ERI survey are provided in Appendix B. Photographs documenting field survey activities are provided in Appendix C. Raw data output from the survey instruments will be provided in electronic format. The raw data files are incorporated by reference as part of this report.

3.1 Magnetic Gradiometry Result

The magnetic gradiometry survey result is presented as a single diagram on Figure 3-1. The result is summarized as follows:

- Magnetic field in the area averages in the 400 nT/m to 500 nT/m range.
- The red, blue and green colored areas on Figure 3-1 indicate the possible presence of buried conductive materials.
- The results indicate one anomaly, which is attributed to influenced by a chain link fence and building structures.

3.2 GPR Result

The GPR survey result using a 100 MHz input signal frequency is presented as a series of 2D vertical cross sectional radargrams. The radargrams that indicate subsurface anomalies are shown on Figures 3-2. Complete radargrams are provided in Appendix B. The result is summarized as follows:

- The anomalies indicate the possible presence of foreign objects at a depth of about 4.0 m bgs.
- The 2D radargrams indicate detected six subsurface anomalies. The anomalies indicate relatively small conductive objects and boulders.

3.3 ERI Results

The ERI survey result is presented as a Fence diagram on Figure 3-3. The result is summarized as follows:

- The ground resistivity in the area ranges from about 90 ohm-m to 300 ohm-m.
- Locations with low resistivity anomalies (less than 70 ohm-m) are shown in blue and green.
- Two low resistivity anomalies have been tentatively identified as follows:
    - Anomaly A occurs at approximately 10 m to 12 m bgs
    - Anomaly B occurs at approximately 5 m to 12 m bgs

Figure 3-1. Magnetic Gradiometry Survey Result

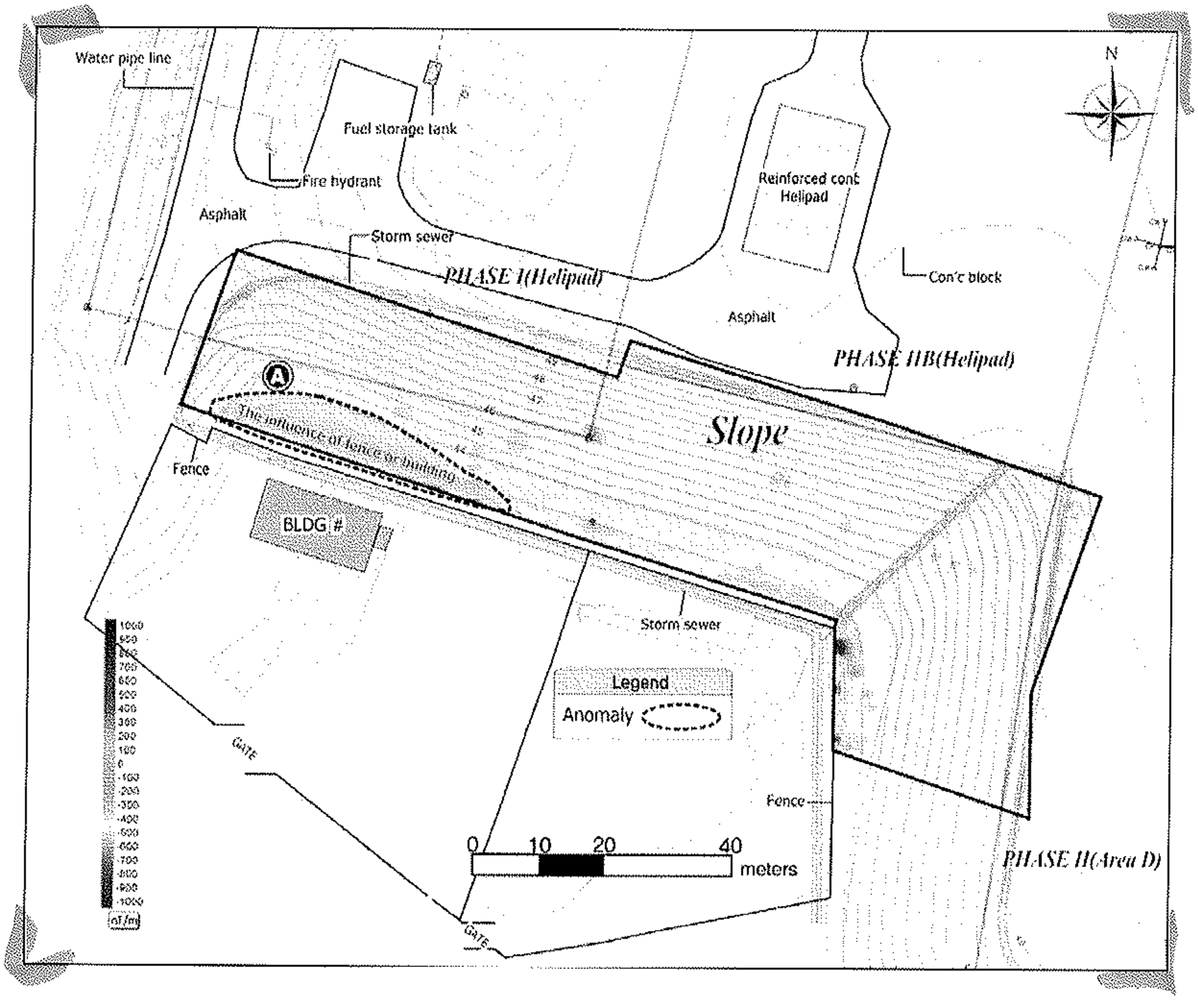

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Figure 3-2. GPR 2D section Results

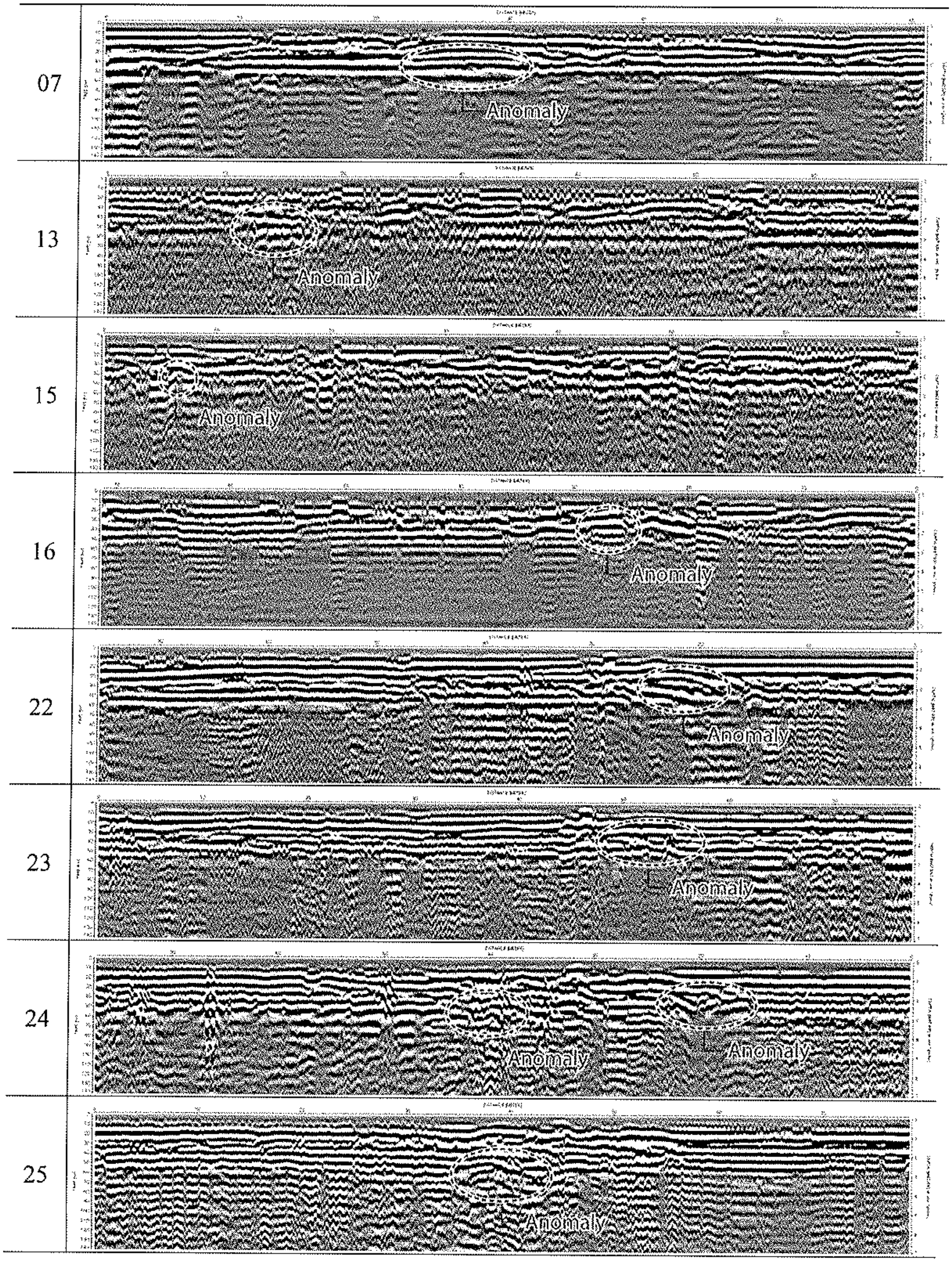

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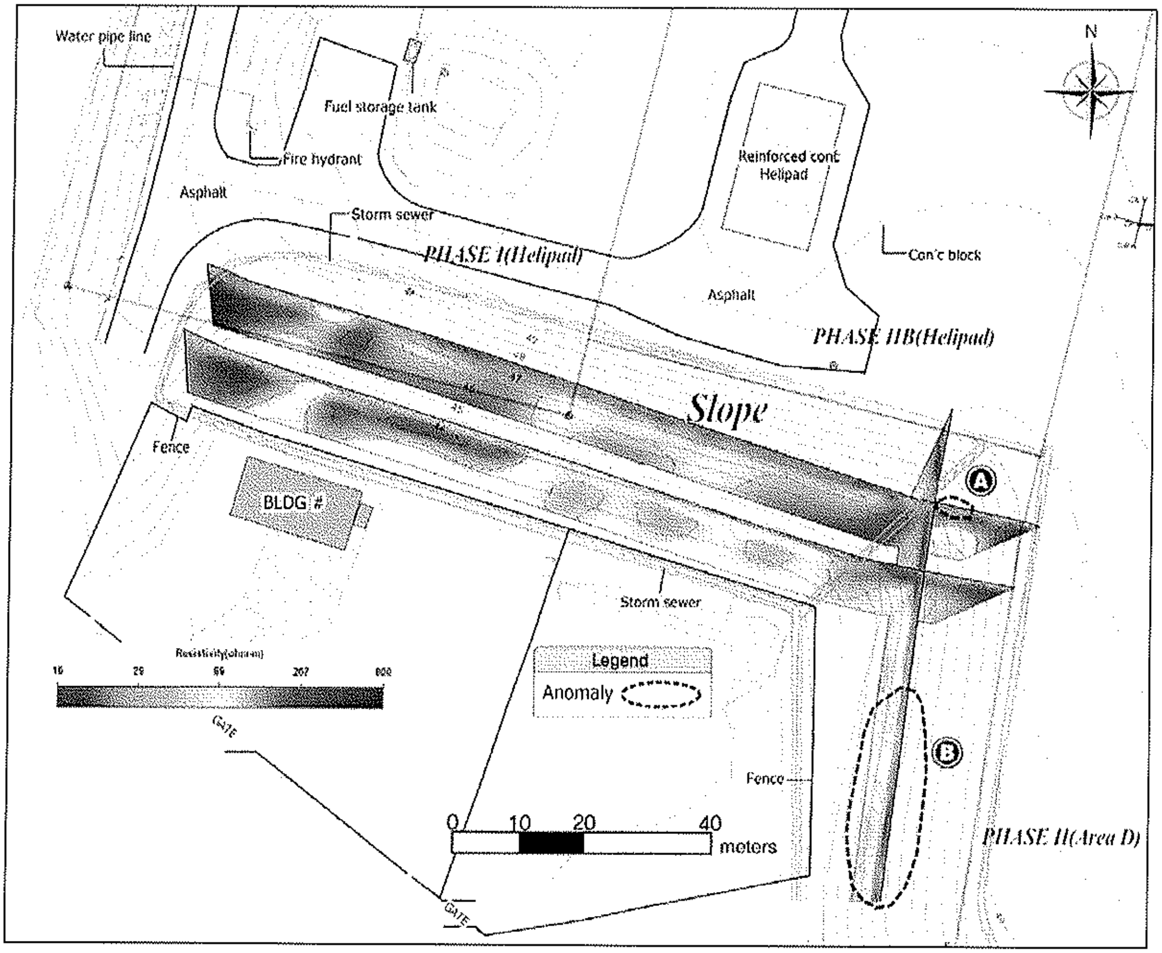
Figure 3-3. ERI Result



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4. CONCLUSIONS

The locations where confirmed subsurface anomalies are indicated by the Magnetic Gradiometry, GPR and ERI surveys are shown on Figures 4-1 through 4-3. A final interpretation of the data and subsurface anomaly zones are shown on Figure 4-4. The conclusions are summarized as follows:

- The Magnetic Gradiometry survey results indicated one subsurface anomaly. The anomaly is attributed to interference from the nearby metal chain link fence and building structure.
- The GPR survey results indicate six subsurface anomalies. The anomalies are attributed to subsurface geologic features such as changes in soil stratum and disturbed soil (soil that has been excavated and backfilled).
- The ERI survey results indicate two subsurface anomalies. The survey results indicate that the anomalies are most likely due to geological structures such as fracture zone in bedrock and ground water level.
- The combined results indicate that the subsurface anomalies that were identified during the geophysical survey can be attributed to existing structures at the site and activities such as excavation and backfilling. The results do not indicate the presence of buried foreign objects such as steel drums.

Figure 4-1. Magnetic Gradiometry Confirmed Subsurface Anomalies

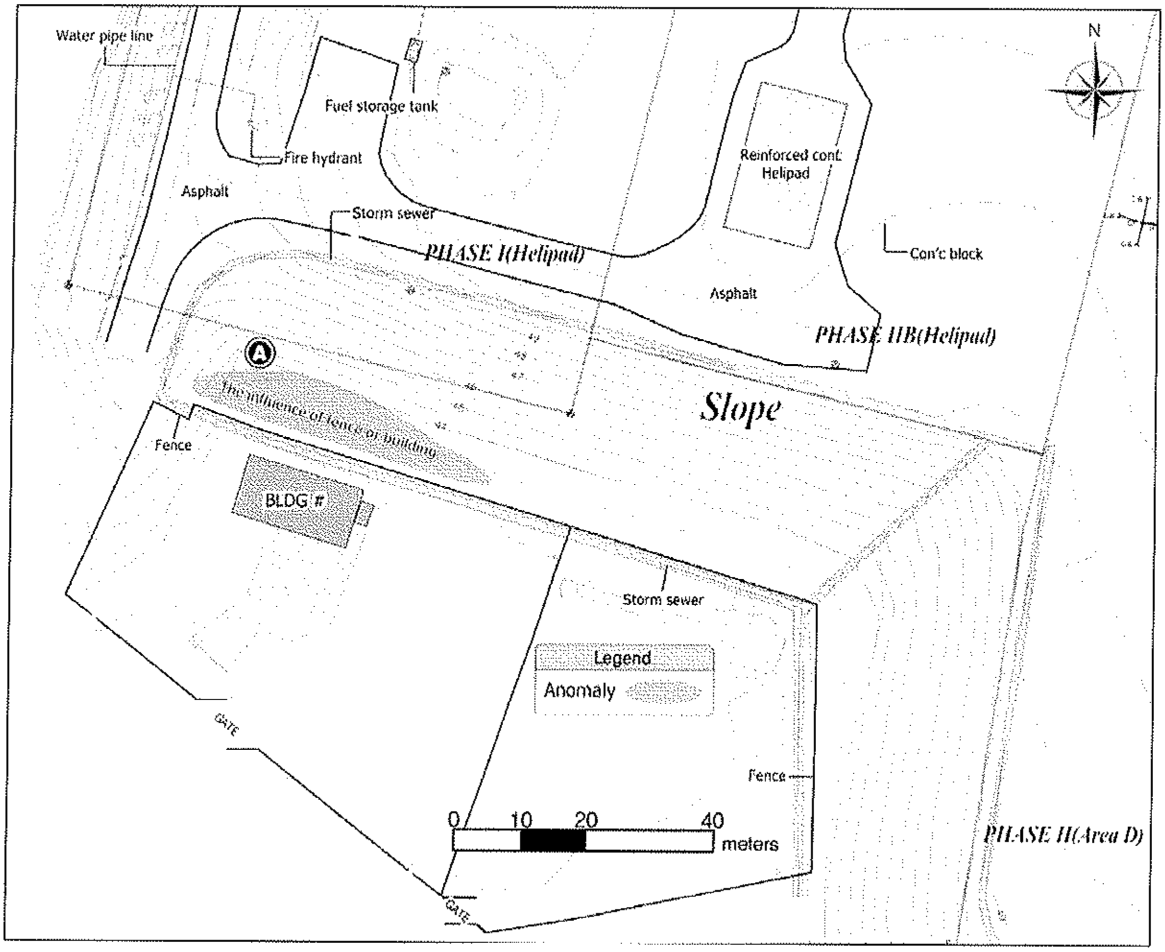

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Figure 4-2. GPR Confirmed Subsurface Anomalies

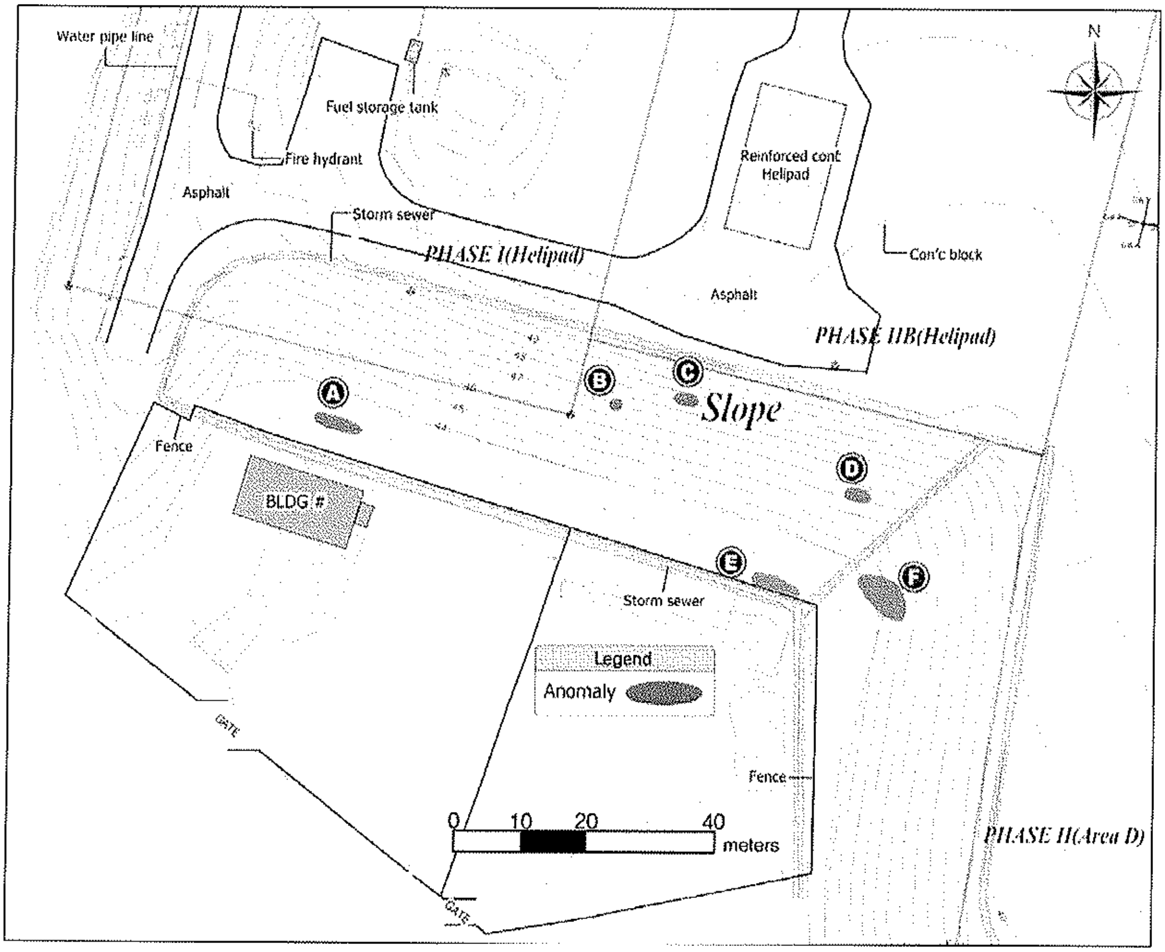

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Figure 4-3. ERI Confirmed Subsurface Anomalies

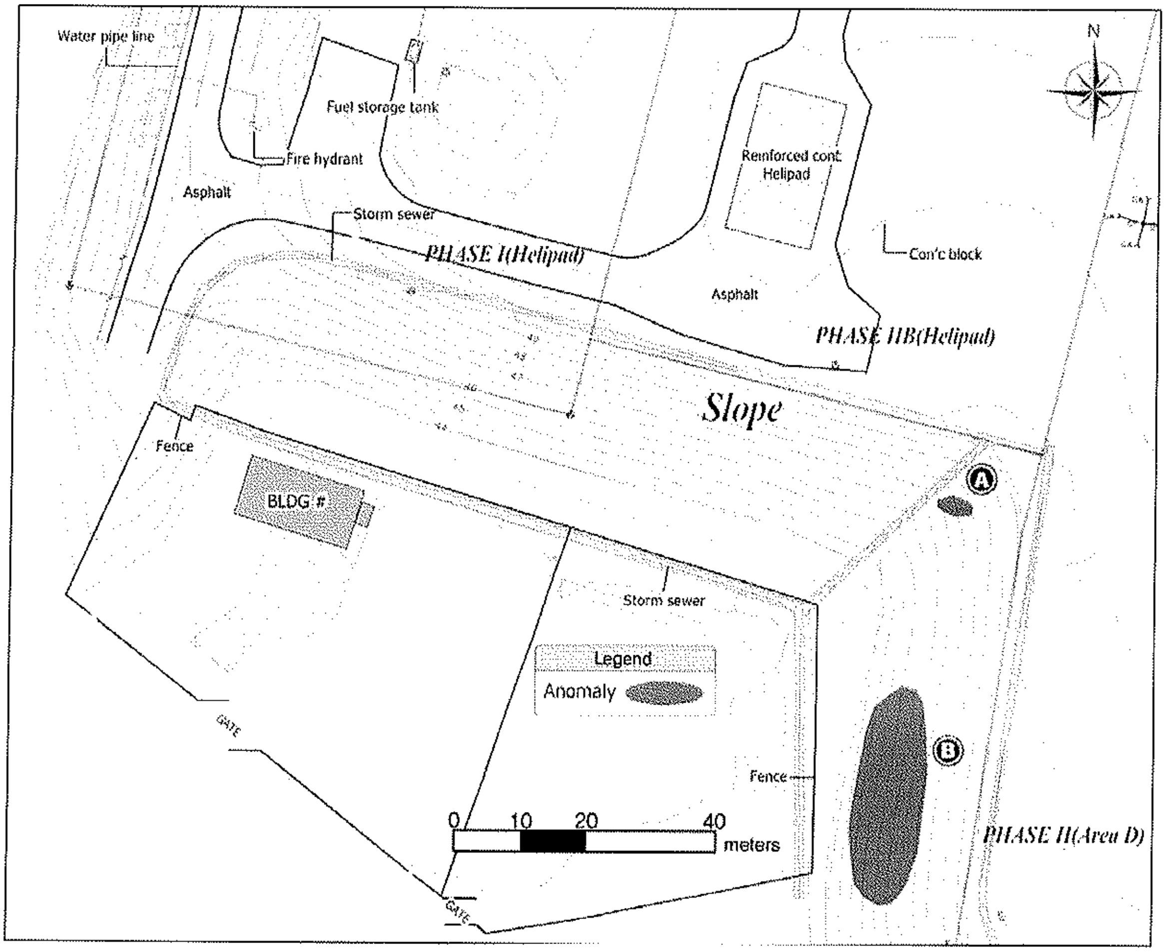

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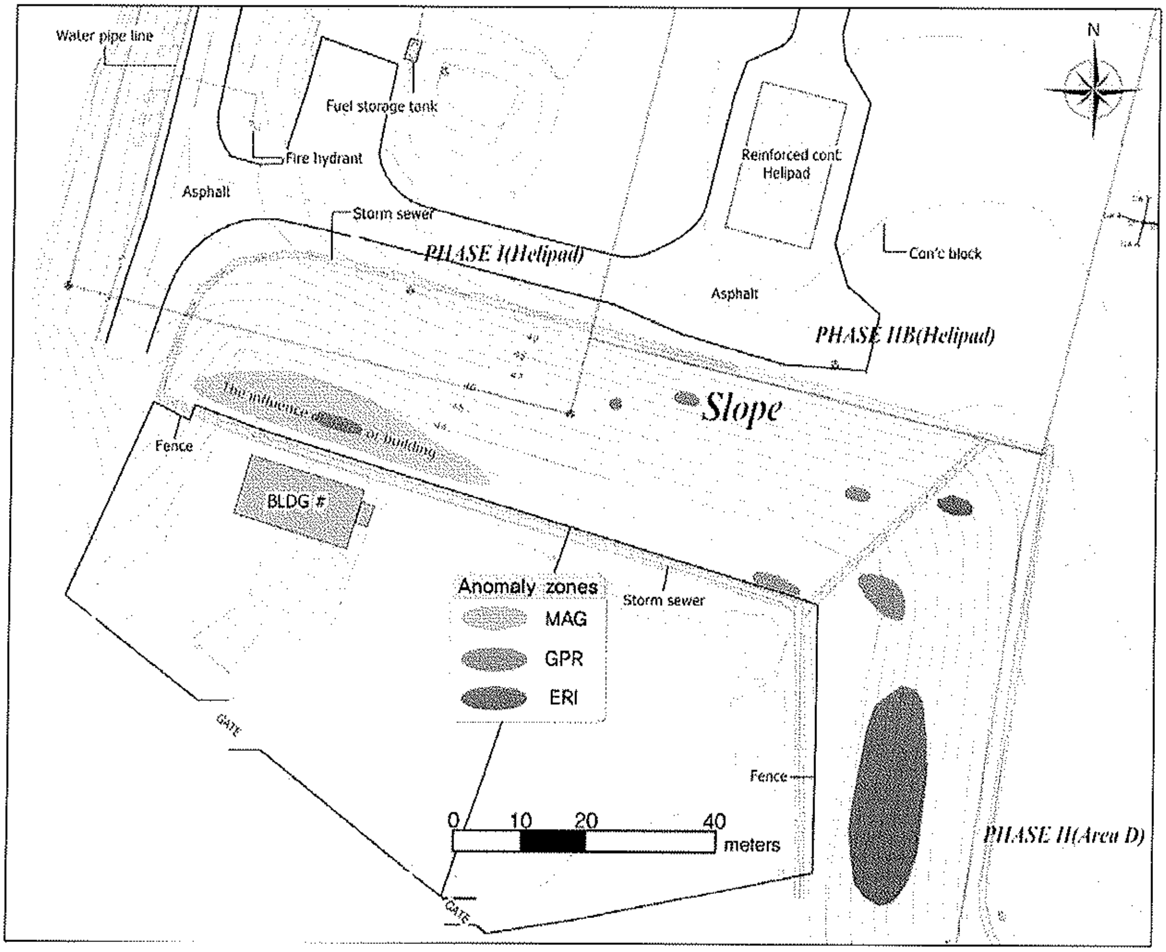
Figure 4-4. Final Interpretation of Subsurface Anomaly Zone



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APPENDIX A
GEOPHYSICAL SURVEY INSTRUMENT SPECIFICATIONS

Bartington Instrument Ltd model Grad601 gradiometer
MALÅ GeoScience model ProEx™ Professional Explorer GPR
ABEM Instrument AB model Terrameter LS

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APPENDIX B
GPR 2-DIMENSIONAL SECTIONS AND ERI VERTICAL CROSS SECTIONS

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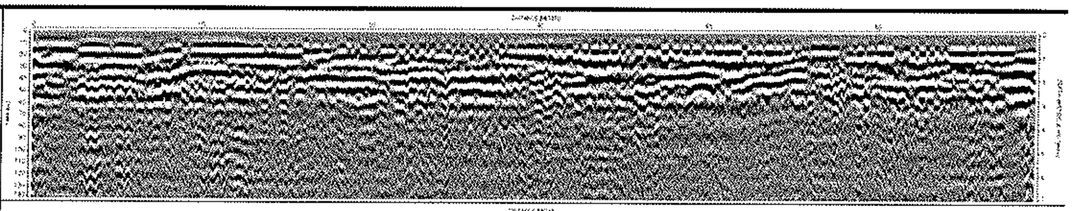
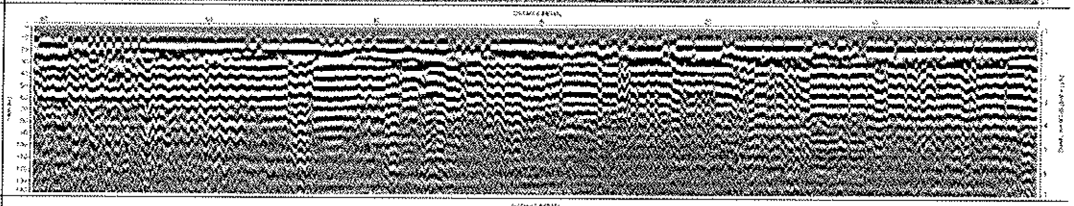
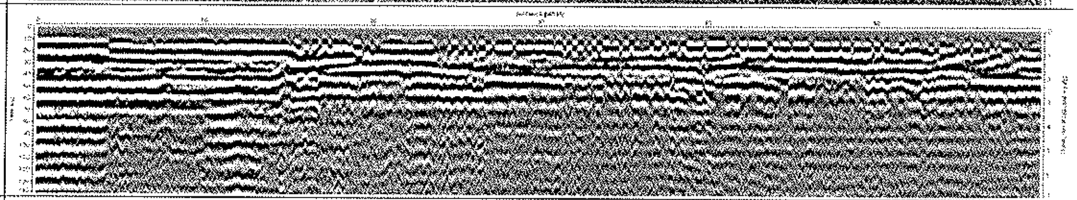
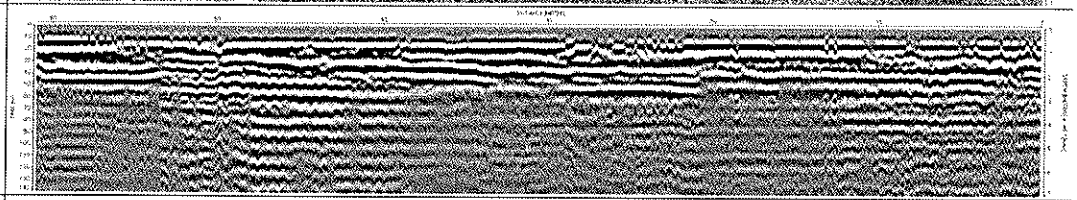
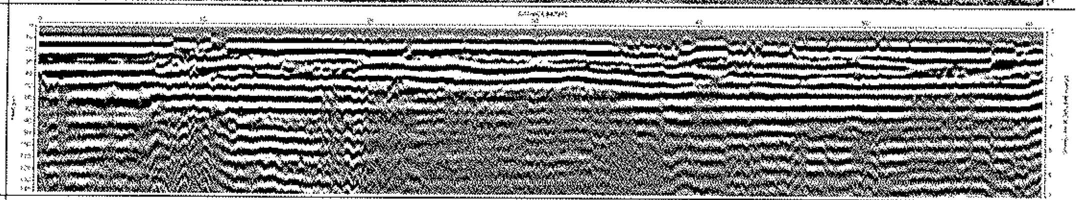
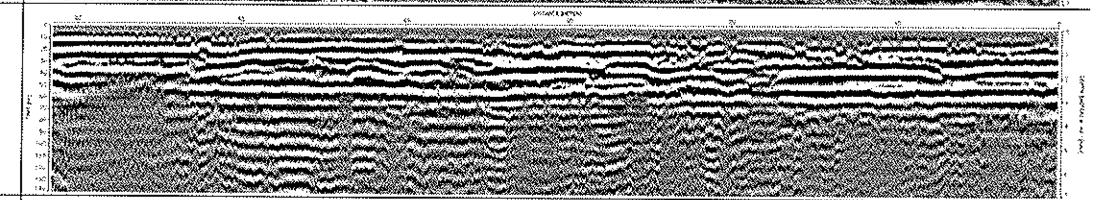
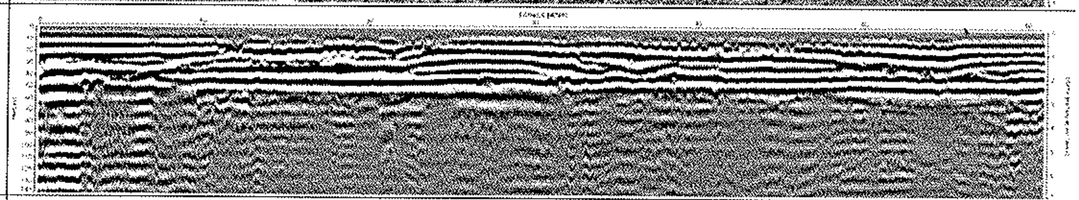
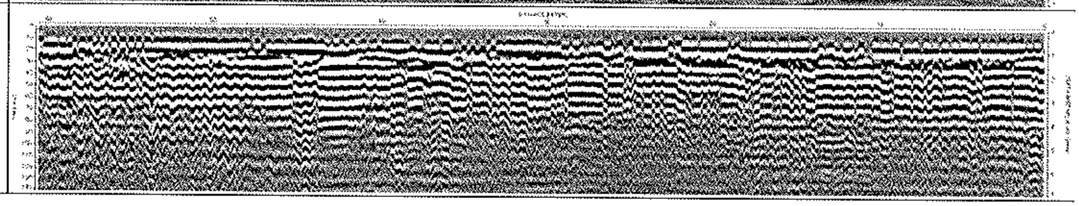
1. 100MHz GPR2D sections of Slope

1	
2	
3	
4	
5	
6	
7	
8	

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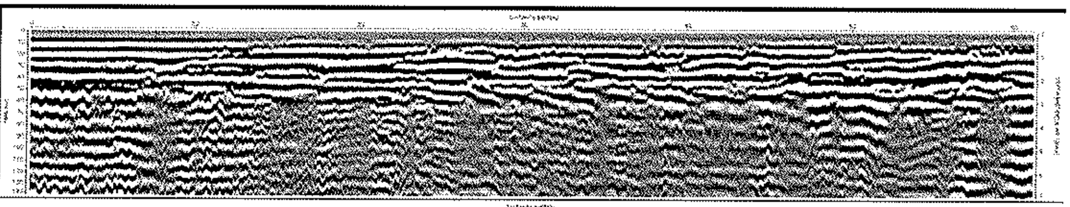
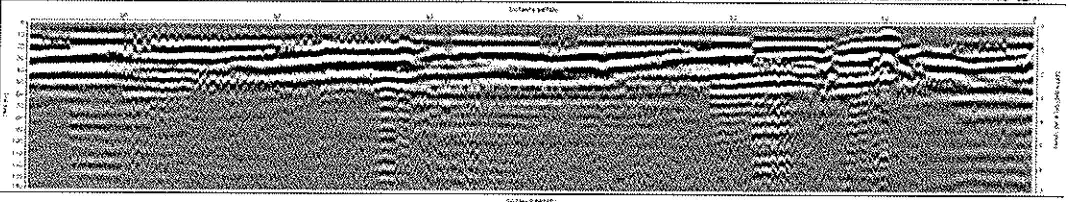
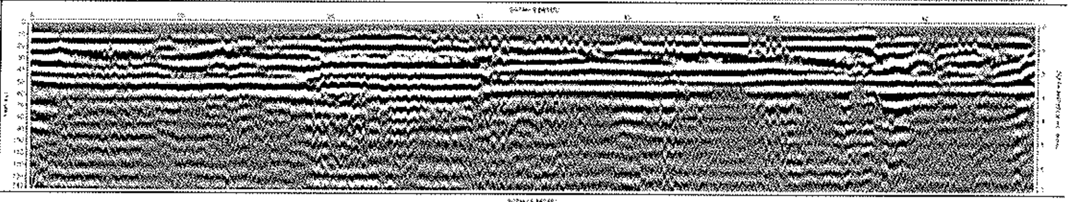
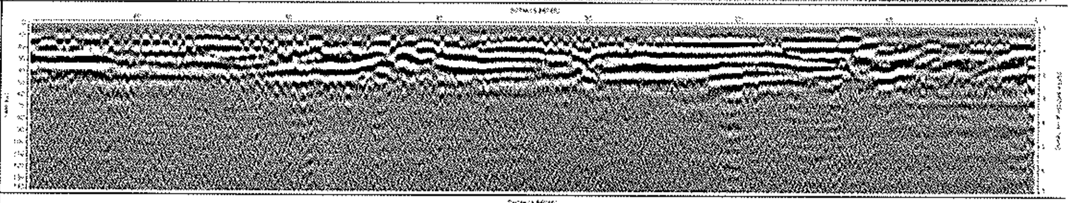
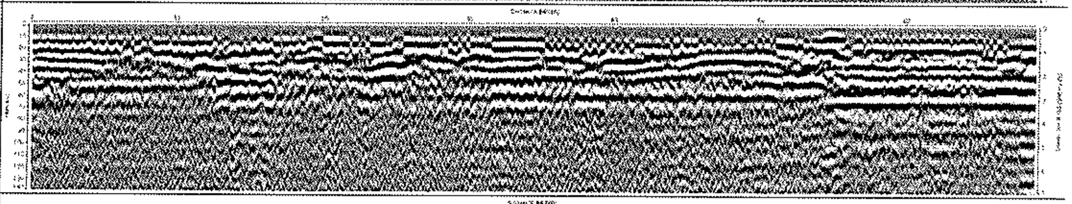
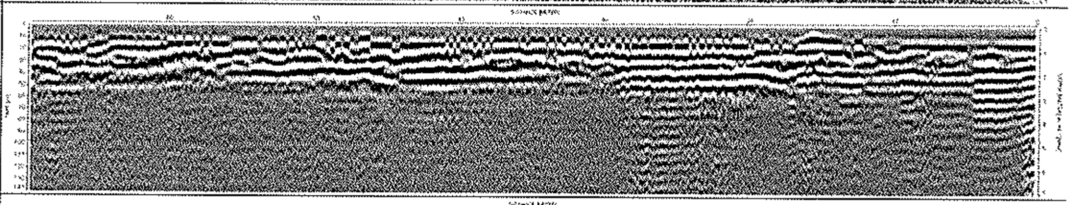
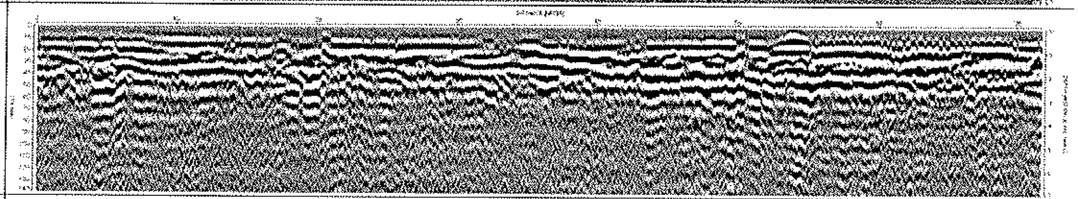
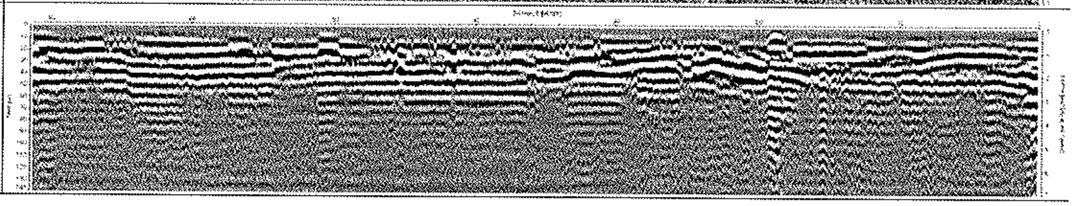
9	
10	
11	
12	
13	
14	
15	
16	

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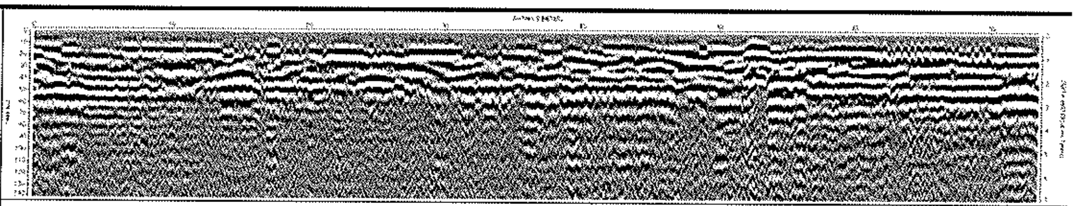

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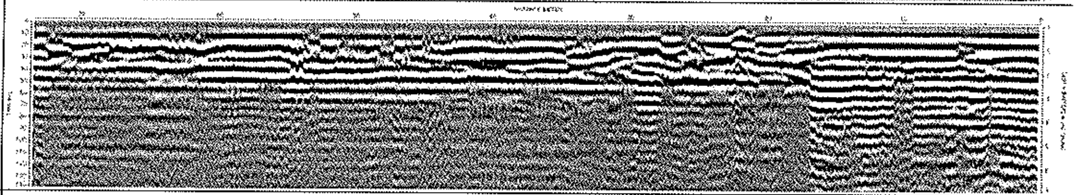

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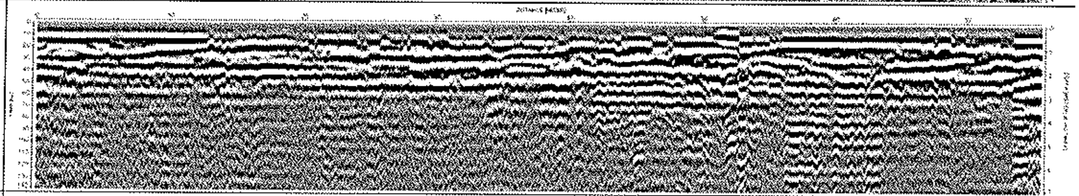

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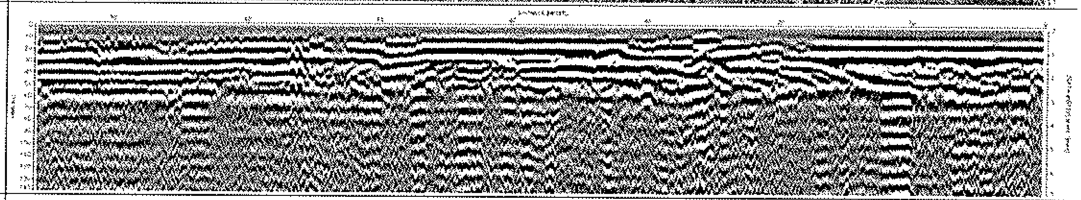

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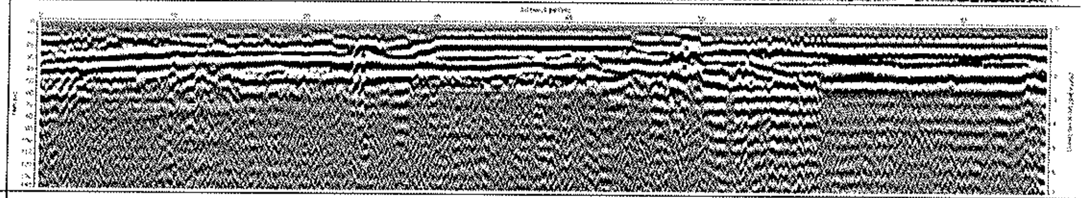

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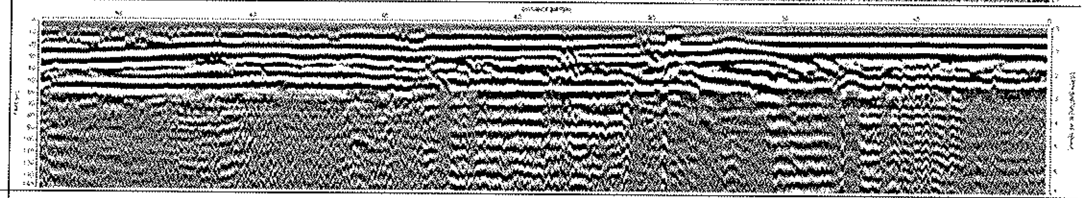

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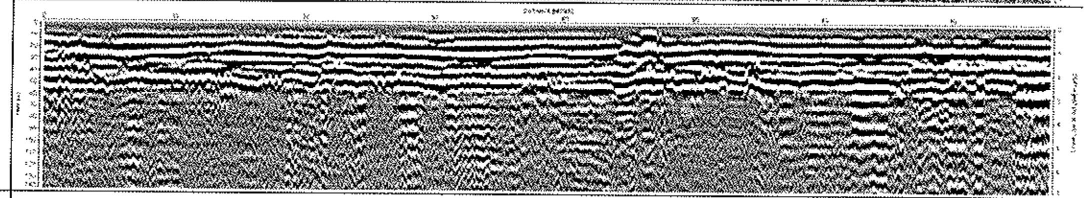

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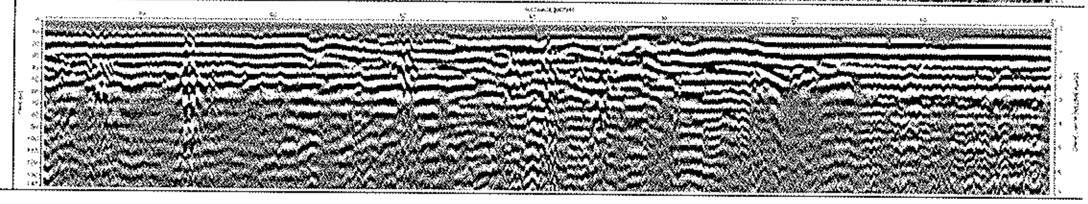
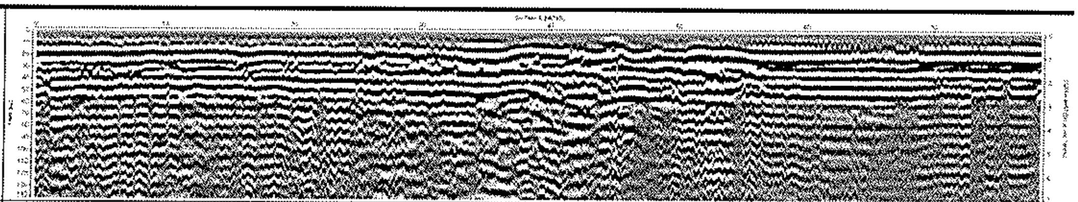
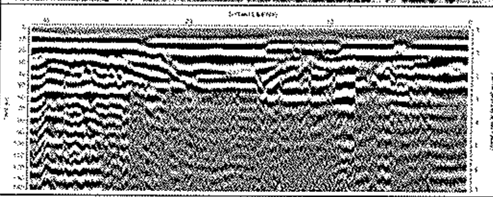
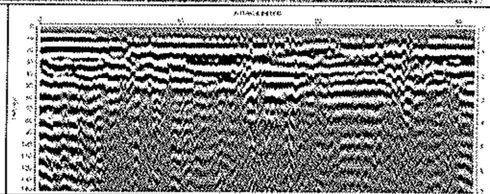
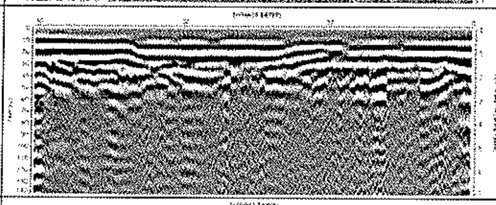
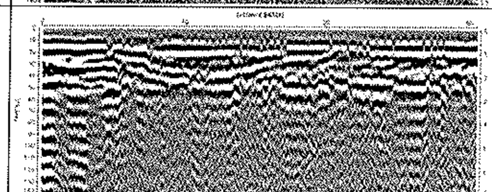
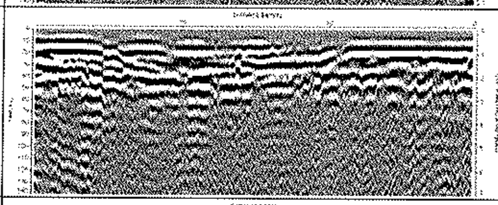
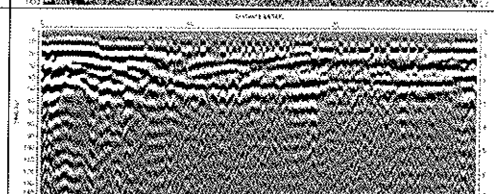
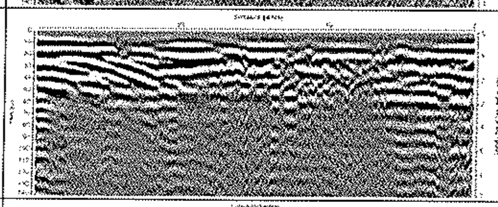
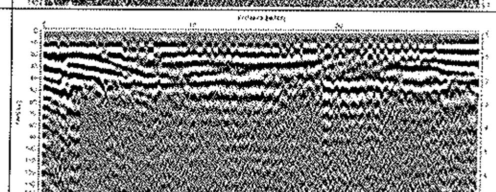
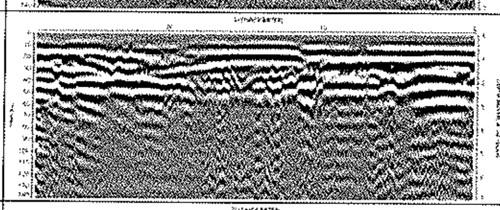
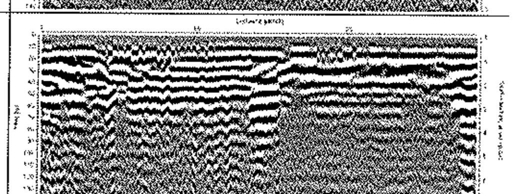
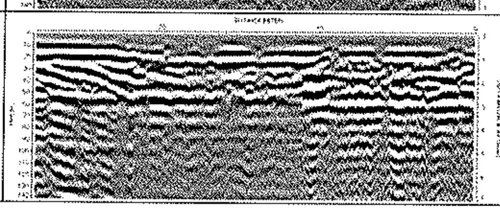
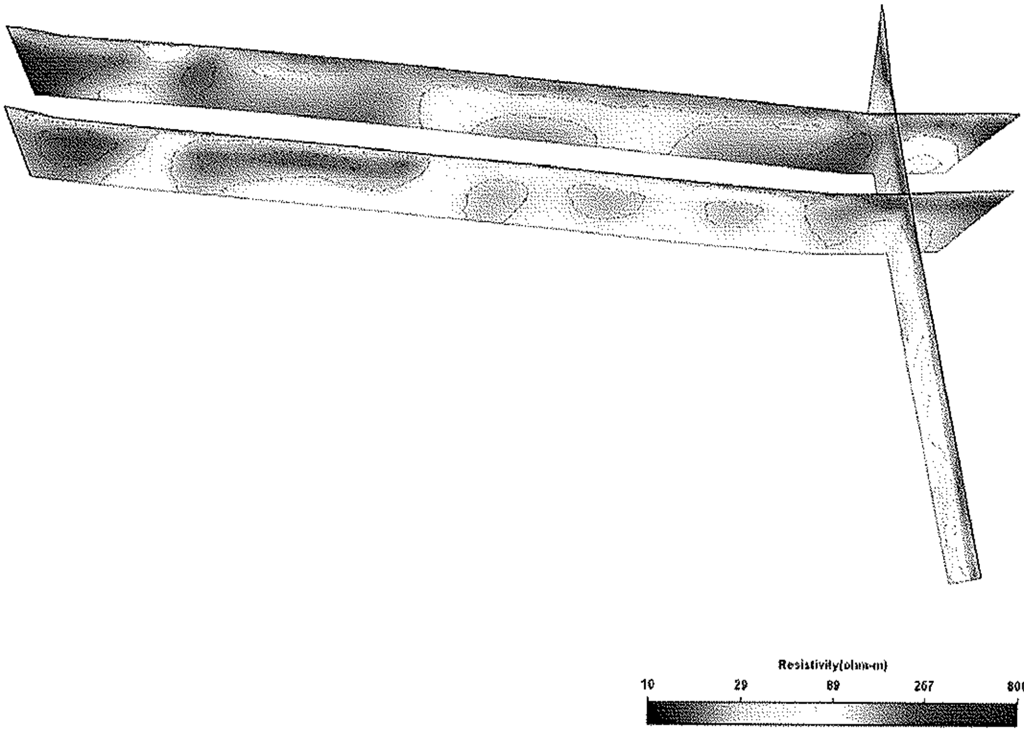
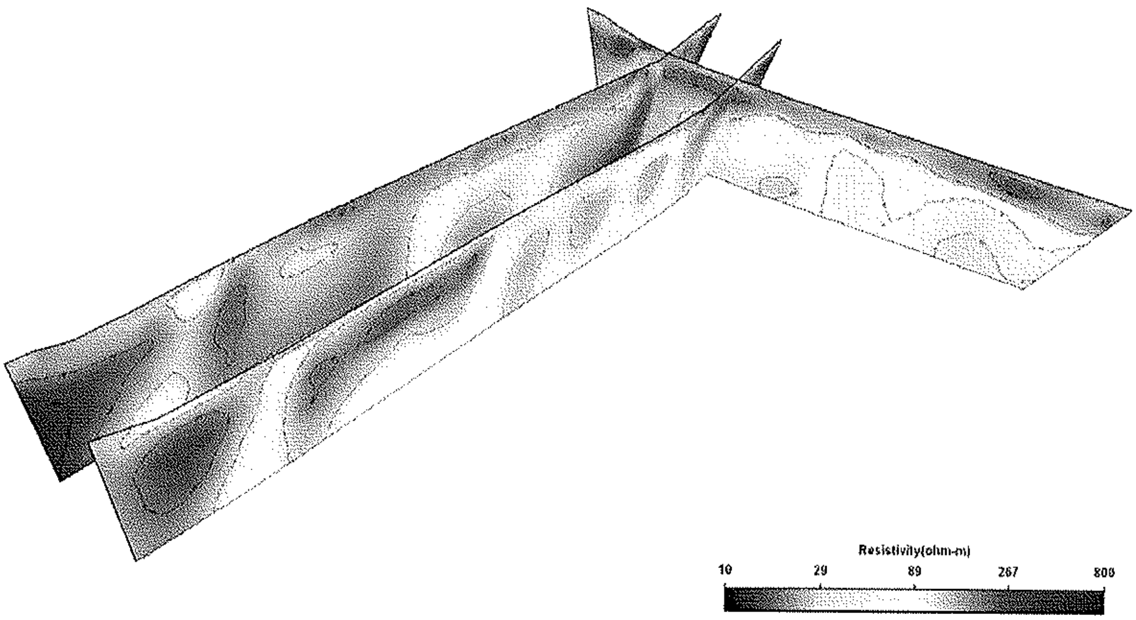


25			
26		27	
28		29	
30		31	
32		33	
34		35	
36			

2.ERI vertical cross sections

Fence Diagram





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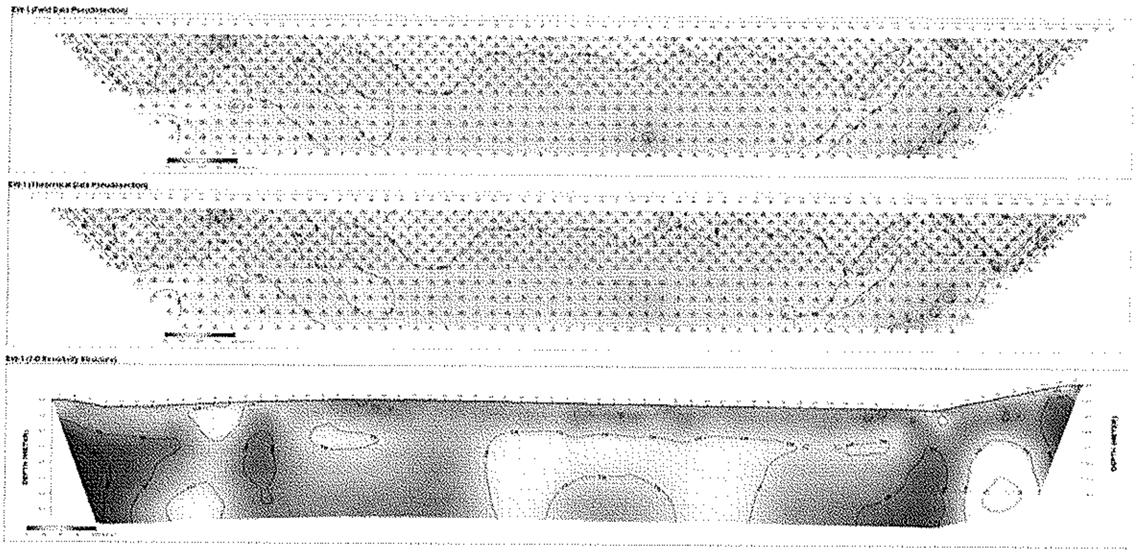

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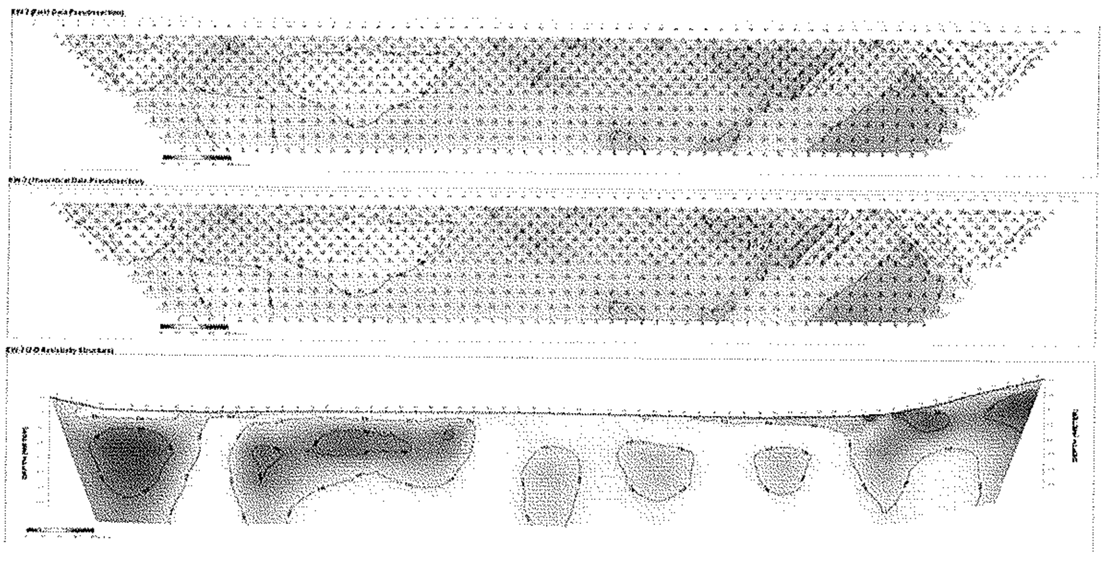
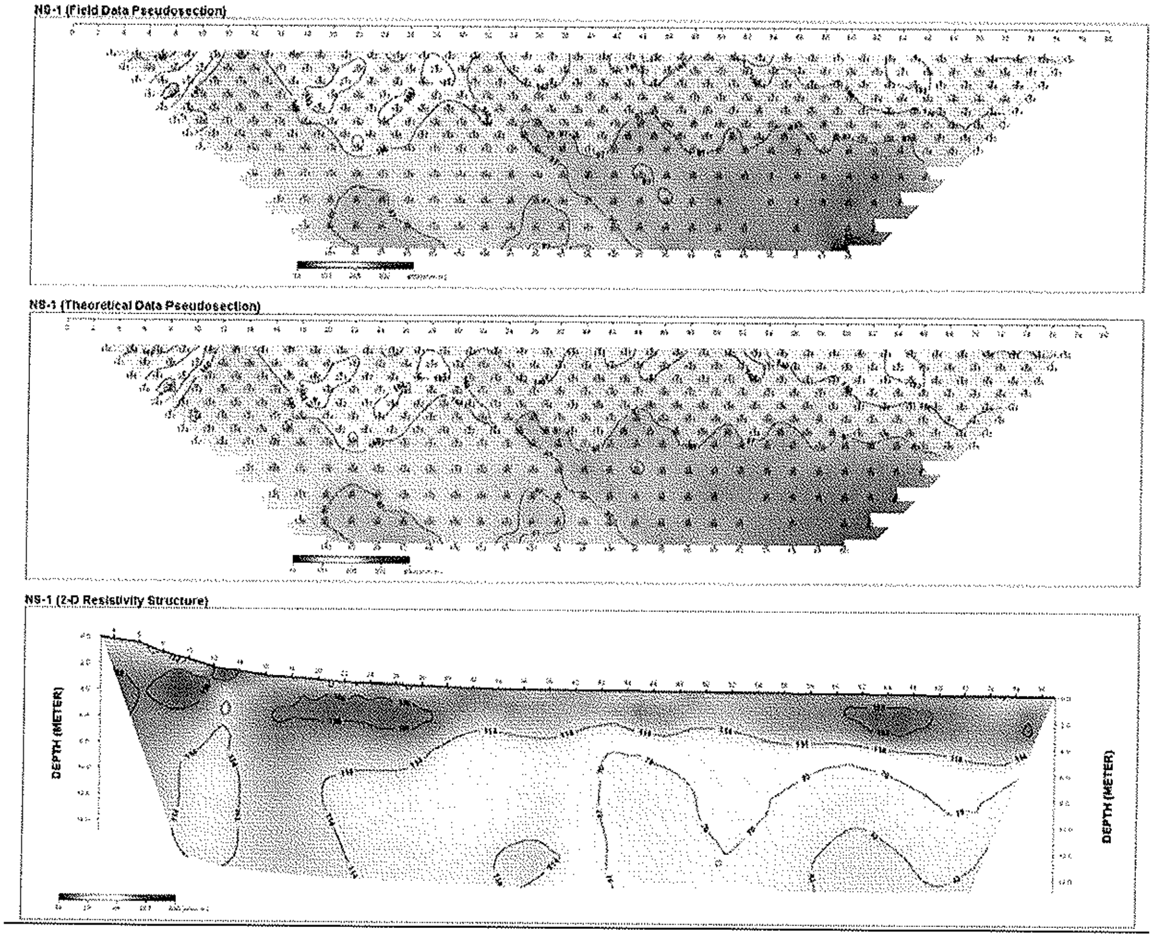


R(NS)-1


NS-1 (Field Data Pseudosection)
NS-1 (Theoretical Data Pseudosection)
NS-1 (2-D Resistivity Structure)
DEPTH (METER)
DEPTH (METER)

APPENDIX C
FIELDWORK PHOTOGRAPHS

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