

APPENDICES

Appendix 1 Member List of the Survey Team

1-1 Preparatory Survey (Outline Design 1) (Januray 15 – February 17, 2010)

Name		Organization
Mr. Yoshiyuki TAKAHASHI	Leader	Chief Representative, JICA Kenya Office
Ms. Sonoko TAKAHASHI	Project Coordinator	Assistant Director, Reproductive Health Division, Health Systems and Reproductive Health Group, Human Development Department, JICA
Mr. Shoichi TASHIRO	Project Manager / Architectural Planning	Yokogawa Architects & Engineers, Inc.
Mr. Koichi NAKAMURA	Architectural Design / Utility Planning	Yokogawa Architects & Engineers, Inc.
Mr. Sachie OKITA	Construction Planning / Quantity Survey	Yokogawa Architects & Engineers, Inc.
Mr. Makoto SUZUKI	Equipment Planning / Quantity Survey	Nihon Sekkei Medical Core, Inc.
Dr. Keiko KOBAYASHI	EPI Planning	KRI International Corporation
Mr. Sumio IKEDA	Utility Planning (voluntary)	Yokogawa Architects & Engineers, Inc.

1-2 Preparatory Survey (Outline Design 2) (July 5 – July 9, 2010)

Name		Organization
Mr. Masaaki KATO	Leader	Chief Representative, JICA Kenya Office
Ms. Sonoko TAKAHASHI	Project Coordinator	Assistant Director, Health Division 1, Health Group 1, Human Development Department, JICA
Mr. Shoichi TASHIRO	Project Manager / Architectural Planning	Yokogawa Architects & Engineers, Inc.
Mr. Sachie OKITA	Construction Planning / Quantity Survey	Yokogawa Architects & Engineers, Inc.

1-3 Outline Design Study Explanatory Mission (December 6 – December 10, 2010)

Name		Organization
Mr. Masaaki KATO	Leader	Chief Representative, JICA Kenya Office
Ms. Yasuyo KAWAMURA	Project Coordinator	Representative Health JICA Kenya Office
Mr. Shoichi TASHIRO	Project Manager / Architectural Planning	Yokogawa Architects & Engineers, Inc.
Mr. Makoto SUZUKI	Equipment Planning / Quantity Survey	Nihon Sekkei Medical Core, Inc.

Appendix 2 Survey Schedule

2-1 Preparatory Survey (Outline Design 1) (Januray 15 – February 17, 2010)

No.	Date	Day	Official Members		(a)	(b)	(c)	(d)	(e)	(f)
			Leader	Project Coordinator	PM/Architectural Planning	Architectural Design/Utility Planning	Construction Planning/Quantity Survey	Equipment Planning/Quantity Survey	EPI Planning	(Voluntary/Utility Planning)
			Mr. Yoshiyuki Takahashi	Ms. Sonoko Takahashi	Mr. Shoichi Tashiro	Mr. Koichi Nakamura	Mr. Sachie Okita	Mr. Makoto Suzuki	Ms. Keiko Kobayashi	Mr. Sumio Ikeda
Survey days	12	16	36	36	27	36	29	27		
1	1/14	Thu			Haneda 20:20 (Kansai, Doha)			Haneda 20:20 (Kansai, Doha)		
2	1/15	Fri			Nairobi 13:15 Meeting at JICA Office, Courtesy call to Div. of Vaccine & Immunization (DVI) and discussions (Survey schedule, etc.)			Nairobi 13:15 Accompanying (a)		
3	1/16	Sat			Observation of similar projects (hospitals and medical facilities)			Accompanying (a)	Accompanying (a)	
4	1/17	Sun			Team meeting, data filing		Haneda 20:20 (Kansai, Doha)	Team meeting, data filing		Haneda 20:20 (Kansai, Doha)
5	1/18	Mon			Discussion with DVI (Inception report, Questionnaire, Survey schedule, etc.) Survey of Nairobi National Depot	Commissioning the survey on natural conditions / discussions, Discussions with local consultants	Nairobi 13:15 Survey of Nairobi National Depot	Accompanying (a)	Research at DVI	Nairobi 13:15 Survey of Nairobi National Depot
6	1/19	Tue			Team A: Nairobi 8:00 Meru 11:00 Meru site survey	Team B: Nairobi 7:45 Eldoret 8:30 Eldoret site survey	Team A: accompanying (a)	Team B: accompanying (b)	Team B: accompanying (b)	Team B: accompanying (b)
7	1/20	Wed			Meru site survey Meru 15:00 Nairobi 18:00	Eldoret site survey Eldoret 12:00 Kakamega 15:30 Kakamega site survey	Accompanying (a)	Accompanying (b)	Accompanying (b)	Accompanying (b)
8	1/21	Thu			Nairobi 8:00 Nakuru 11:00 Nakuru site survey	Kakamega site survey	Accompanying (a)	Accompanying (b)	Accompanying (b)	Accompanying (b)
9	1/22	Fri			Nakuru site survey Nakuru 15:00 Nairobi 18:00	Kakamega 7:30 Kisumu 9:00 Kisumu site survey Kisumu 18:20 Nairobi 19:05	Accompanying (a)	Accompanying (b)	Accompanying (b)	Accompanying (b)
10	1/23	Sat		Haneda 19:50 (Kansai, Dubai)	Survey of construction situation / estimation (questionnaire delivery)	Market research relevant to utility planning / estimation (questionnaire delivery)	Survey of construction situation / estimation (questionnaire delivery)	Survey of equipment suppliers (questionnaire delivery)	Observation of similar projects (hospitals and medical facilities)	Market research relevant to utility planning / estimation (questionnaire delivery)
11	1/24	Sun		Nairobi 14:55 Team Meeting	Team meeting, data filing					
12	1/25	Mon	Team A: Nairobi 8:00 Garissa 13:00 Garissa site survey	Team B: Nairobi 8:00 Meru 11:00 Meru site survey	Team A: Nairobi 8:00 Garissa 13:00 Garissa site survey	Team B: Nairobi 8:00 Meru 11:00 Meru site survey	Team A: accompanying (a)	Team B: accompanying (b)	Team B: accompanying (b)	Team B: accompanying (b)
13	1/26	Tue	Garissa site survey	Meru site survey Meru 15:00 Nairobi 18:00	Garissa site survey	Meru site survey Meru 15:00 Nairobi 18:00	Accompanying (a)	Accompanying (b)	Accompanying (b)	Accompanying (b)
14	1/27	Wed		Nairobi 8:30 Mombasa 9:30 Mombasa site survey	Garissa site survey Garissa 13:00 Nairobi 18:00	Nairobi 8:30 Mombasa 9:30 Mombasa site survey	Accompanying (a)	Accompanying (b)	Accompanying (b)	Accompanying (b)
15	1/28	Thu		Mombasa site survey Mombasa 18:50 Nairobi 19:50	Discussion with DVI	Mombasa site survey Mombasa 18:50 Nairobi 19:50	Survey of construction situations / estimation (questionnaire delivery)	Accompanying (b)	Accompanying (b)	Accompanying (b)
16	1/29	Fri	Courtesy call to the Japanese Embassy, Ministry of Public Health & Sanitation, Discussions with DVI Site survey of Nairobi National Depot			Nairobi 7:00 Nyeri 9:30 Nyeri site survey Nyeri 17:00 Nairobi 19:30	Survey of construction situations / estimation (questionnaire delivery)	Accompanying (b)	Research at DVI, relevant to EPI situations Nairobi National Depot site survey	Accompanying (b)
17	1/30	Sat	Observation of similar projects (hospitals and medical facilities)							
18	1/31	Sun	Team meeting, data filing							
19	2/1	Mon	Discussions with DVI on the draft minutes			Survey of construction situations	Survey of construction situations / estimation (questionnaire delivery)	Accompanying (a)	Research relevant to EPI at Nairobi National Depot	Survey of utility / infrastructure relevant institutions / corporations
20	2/2	Tue	Discussions with DVI on the draft minutes			Survey of construction situations	Survey of construction situations / estimation (questionnaire delivery)	Accompanying (a)	Research at DVI, relevant to EPI situations Nairobi National Depot site survey	Survey of utility / infrastructure relevant institutions / corporations
21	2/3	Wed	Discussions with DVI on the draft minutes			Survey of construction situations	Survey of construction situations / estimation (questionnaire delivery)	Accompanying (a)	Research at DVI, relevant to EPI situations Nairobi National Depot site survey	Market research relevant to utility planning / estimation
22	2/4	Thu	Discussions with DVI on the draft minutes, Signing of the minutes			Commissioning topo & geo surveys / discussions, Discussions with local consultant	Research relevant to construction planning	Accompanying (a)	Research at DVI, relevant to EPI situations Nairobi National Depot site survey	Market research relevant to utility planning / estimation
23	2/5	Fri	Report to Japanese Embassy			Commissioning topo & geo surveys / discussions	Research relevant to construction planning	Accompanying (a)	Survey of cooperation from other donors	Market research relevant to utility planning / estimation
24	2/6	Sat		Nairobi 16:40 (Dubai, Kansai)	Survey of construction situations, Research relevant to construction planning			Survey of equipment suppliers (questionnaire delivery)	Observation of similar projects (hospitals and medical facilities)	Market research relevant to utility planning
25	2/7	Sun		Haneda 19:55	Team meeting, data filing					
26	2/8	Mon			Existing DVI Office Topographic survey	Nairobi 8:00 Garissa 13:00 Garissa site survey	Existing DVI Office Topographic survey	Accompanying (b)	Accompanying (b)	Accompanying (b)
27	2/9	Tue			Survey of health & medical conditions (base line survey) Commissioning topo/geo surveys, signing on the work execution contract	Garissa site survey Garissa 13:00 Nairobi 18:00	Quantity survey (construction) (questionnaire retrieval)	Accompanying (b)	Accompanying (b)	Accompanying (b)
28	2/10	Wed			Survey of construction situations	Nairobi 7:00 Nakuru 10:00 Nakuru site survey Nakuru 16:00 Nairobi 19:00	Quantity survey (construction) (questionnaire retrieval)	Accompanying (b)	Survey relevant to EPI situations Nairobi 14:15 (Doha, Kansai)	Accompanying (b)
29	2/11	Thu			Discussions with DVI	Survey of construction situations Research relevant to construction planning	Quantity survey Nairobi 14:15 (Doha, Kansai)	Survey of equipment suppliers (questionnaire delivery)	Haneda 20:40	Quantity survey Nairobi 14:15 (Doha, Kansai)
30	2/12	Fri			Discussions with DVI	Research of construction laws/regulations	Haneda 20:40	Survey of equipment suppliers (questionnaire delivery)		Haneda 20:40
31	2/13	Sat			Discussions w/ local consultants, Research relevant to construction			Market research relevant to equipment supply		
32	2/14	Sun			Team meeting, data filing					
33	2/15	Mon			Discussions with DVI	Survey of construction situations Research relevant to construction planning		Survey of equipment suppliers (questionnaire retrieval)		
34	2/16	Tue			Discussions with DVI, Signing technical note, Report to Japanese Embassy, JICA Office			Survey of equipment suppliers (questionnaire retrieval)		
35	2/17	Wed			Discussions with local consultant nairobi 14:15 (Doha, Kansai)	Confirmation of commissioned geographical surveys Nairobi 14:15 (Doha, Kansai)		Survey of equipment suppliers Nairobi 14:15 (Doha, Kansai)		
36	2/18	Thu			Haneda 20:40	Haneda 20:40		Haneda 20:40		

2-2 Preparatory Survey (Outline Design 2) (July 5 – July 9, 2010)

No.	Date	Day	Official Members		Consultant Members	
			Leader	Project Coordinator	PM / Architectural Planning	Construction Planning / Quantity Survey
			Mr. Masaaki Kato	Ms. Sonoko Takahashi	Mr. Shoichi Tashiro	Mr. Sachie Okita
1	7/4	Sun			Narita 20:50 (Doha)	
2	7/5	Mon			Nairobi 13:15	
			PM Site and infrastructural survey of the new Nairobi site Survey of existing structures, preparation for topographic survey and geotechnical investigations Discussions with local community council and officers of the existing facilities			
3	7/6	Tue	AM Site and infrastructural survey of the new Nairobi site Survey of existing structures, preparation for topographic survey and geotechnical investigations PM Discussions with MOPHS Discussions with JICA Kenya Office			
4	7/7	Wed	Discussions with DVI (minutes of discussions)			
5	7/8	Thu	Signing on the minutes of discussions, technical note Report to JICA Office Supplementary field survey on market prices Negotiation on topographic survey and geotechnical investigations, Signing on the contract			
6	7/9	Fri			Nairobi 14:15 (Doha)	
7	7/10	Sat			Narita 19:30	

2-3 Outline Design Study Explanatory Mission (December 6 – December 10, 2010)

No.	Date	Day	Official Members		Consultant Members	
			Leader	Project Coordinator	PM / Architectural Planning	Equipment Planning / Quantity Survey
			Mr. Masaaki Kato	Ms. Yasuyo Kawamura	Mr. Shoichi Tashiro	Mr. Makoto Suzuki
1	12/5	Sun			Narita 20:50 (Doha)	
2	12/6	Mon			Nairobi 12:30	
			Discussions with JICA Kenya Office 16:00			
3	12/7	Tue	Discussions with DVI Supplementary field survey			
4	12/8	Wed	Discussions with DVI (minutes of discussions), making draft minutes Supplementary field survey			
5	12/9	Thu	Discussions with DVI Signing on the minutes of discussions 15:00			
6	12/10	Fri			Nairobi 14:15 (Doha)	
7	12/11	Sat			Narita 19:05	

Appendix 3 List of Parties Concerned in the Recipient Country

Name	Title, Position
Ministry of Public Health & Sanitation	
• Mr. Mark K. Bor, CBS	Permanent Secretary
• Mr. Nimrod K. Waweru	Deputy Secretary
• Mr. J.M. Gitonga	Senior Public Health Officer
• Mr. N.N.Njagi	Deputy Principal Accountant Controller
Department of Family Health	
• Dr. Josephine Kibaru	Head - Department of Family Health, M.Med. DDMS
Division of Vaccines & Immunization (DVI)	
• Dr. Tatu Kamau	Head of DVI
• Dr. Dominic Mutie	Quality Assurance and Commodity Security
• Dr. Ali Arale	National Logistician
• Mr. Ernest Some	Cold Chain Medical Engineer
• Ms. Carol Ng'ang'a	Health Administrative Officer
Provincial Public Health & Sanitation-Eldoret	
• Dr. Waqo D. E. Jersa	Director
• Mr. Benadette Musavakwa	EPI Logistician
• Ms. Wendy J. Tirop	Logistician Nurse
• Mr. Stephen Gathu	DVI Senior Nurse
• Mr. Anthony T. Murachin	Medical Engineer & Technician
• Dr. Kariuki	District Medical Officer of Health
• Dr. Murima	Medical Superintendent
• Ms. Mary Nyabuti	Senior Nurse
• Mr. George W. Wanambisi	DVI Nurse
• Ms. Dorothy Mwangangi	Storekeeper
• Ms. Ahaka Consolata	DVI Nurse-West
• Ms. Rose Kale	DVI Nurse-East
• Dr. Lubamar M. B.	Medical Officer of Health-West
Eldoret KEMSA Depot	
• Mr. Abraham K. Komen	Regional Liaison Officer
KPLC-Eldoret	
• Mr. Chrispine Obilo	Linesman
• Mr. Matthews Okello	Linesman
Ministry of Public Works-Eldoret	
• Mr. Simeon P.T. Nyakundi	Mechanical Officer
• Mr. Sammy K.Sowek	Electrical Engineer
Nakuru KEMSA Depot	
• Mr. Joseph Odhiambo	Store Keeper
• Mr. Ann N. Muthoga	Storer

Provincial Public Health & Sanitation-Kakamega

- Dr. Ahiwaukha Q.B. Director
- Ms. Assumpta Matekwa Nurse Officer
- Mr. Hudson Malongo Vaccine
- Mr. Anyango Philip Amoko Medical Engineer

Kakamega KEMSA Depot

- Mr. Geoffry Semere Warehouse Officer

Ministry of Public Works-Kakamega

- Arch. Ernest K. Murey District works Officer

Provincial Public Health & Sanitation-Kisumu

- Dr. Peter O. Okoth Provincial Disease Prevent Control Officer
- Ms. Monica Ominchi Administration Officer
- Ms. Clementine Gwoswar Nurse
- Mr. Jared Miyombe Medical Engineer
- Mr. John W. Oaera Logistician

Kisumu KEMSA Depot

- Mr. Raphael Okun Warehouse (Nursing) Officer

Provincial Public Health & Sanitation-Embu

- Dr. Shi Kanga Provincial Disease Prevent Control Officer

District Public Health & Sanitation-Meru

- Dr. James Gitonga Medical Officer of Health
- Dr. Joe Kanja Medical Officer of Health: Pharmacist
- Mr. Leonard Miriti Health Administrative Officer
- Ms. Hallan M. Nguku Public Health Nurse
- Mr. Jackson K. Mboroki Public Health Officer
- Mr. Robert Kinoti DHRIO Health Officer
- Mr. Erastus Muriuki Hospital Bio-Medical Depot Engineer

Provincial Public Health & Sanitation-Mombasa

- Dr. Anisa Omar Director
- Mr. Joseph M. Kimwele Health Officer DPT
- Ms. Esha Yahya Clinical Officer
- Mr. Christopher Ziroh Medical Engineer
- Dr. Mohamed Hanif Pharmacist

Mombasa KEMSA Depot

- Mr. Katana Saroh Store Keeper
- Mr. Moses Okal Store Clerk

Provincial Public Health & Sanitation-Nyeri

- Dr. Onesmus Maina Director
- Ms. Florence N. Kungania EPI Logistician
- Mr. B-K. Ialofi Logistician

- Mr. Charles N. Chivri Logistician
- Nyeri KEMSA Depot**
- Mr. Paul Macharia Wise Officer
 - Mr. Jack Ndambiri Hospital Bio-Medical Depot Engineer

Provincial Public Health & Sanitation-Garissa

- Dr. Osman Warfa Director
- Dr. Njoroge Joseph Medical Superintendent
- Mr. Stephen Ngari Provincial Physical Planner
- Mr. John Njuguna Meteorological Superintendent

Garissa Medical Office

- Dr. Hussein Osman District Medical officer of Health

Ministry of Public Works

- Arch. C.J.M. Maweu Senior Principal Superintending Architect
- Arch. J.K. Kafuna Chief Superintending Architect

Kenya National Bureau of Statistics

- Mr. Abdul Kadir A.Awes Senior Manager Population & Social Statistics
- Mr. Christopher N. Omollo Senior Manager Population & Social Statistics

Japanese Embassy in Kenya

- Shigeo Iwatani Ambassador
- Takehiko Suzuki First Secretary
- Kaoru Yokotani Officer

JICA Kenya Office

- Yoshiyuki Takahashi Chief Representative (Preparatory Survei 1)
- Masaaki Kato Chief Representative (Preparatory Survey 2)
- Kyosuke Kawazoe Deputy Chief Representative
- Kazuko Kumon Programme Officer
- Kazumsa Sanui Programme Officer
- Elijah Kinyangi Programme Officer
- Yasuyo Kawamura Representative (Health)

Appendix 4 Minutes of Discussions

**MINUTES OF DISCUSSIONS
ON PREPARATORY SURVEY
ON THE PROJECT FOR THE REINFORCEMENT OF VACCINE STORAGE
IN THE REPUBLIC OF KENYA**

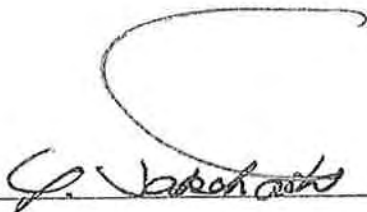
In response to a request from the Government of the Republic of Kenya (hereinafter referred to as "Kenya"), the Government of Japan decided to conduct a Preparatory Survey on the Project for the Reinforcement of Vaccine Storage in Kenya (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Kenya a Preparatory Survey Team (hereinafter referred to as "the Team"), which is headed by Mr. Yoshiyuki Takahashi, Chief Representative, JICA Kenya Office, and is scheduled to stay in the country from 15th January to 17th February, 2010.

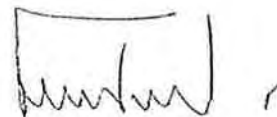
The Team held discussions with the officials concerned from the Government of Kenya and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Preparatory Survey Report.

Nairobi, 4th February, 2010



Mr. Yoshiyuki Takahashi
Chief Representative
JICA Kenya Office
Leader
Preparatory Survey Team
Japan International Cooperation Agency



Mr. Mark K. Bor, CBS
Permanent Secretary
Ministry of Public Health and Sanitation
The Republic of Kenya

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve immunization coverage in the Republic of Kenya through the reinforcement of efficient distribution and storage of vaccines by constructing necessary facilities and supplying and installing necessary equipment in the Nairobi National Vaccine Depot and eight (8) Regional Vaccine Depots.

2. Project sites

The sites of the Project are as follows:

- 2-1. Nairobi National Vaccine Depot: The site of the Project is located on Off Mombasa Road, Embakasi, Nairobi as shown in Annex-1-1.
- 2-2. Nyeri Regional Vaccine Depot: The site of the Project is Kenya Medical Supplies Agency (hereinafter referred to as "KEMSA") Nyeri, located on Hospital Road, Nyeri, Central Province.
- 2-3. Nakuru Regional Vaccine Depot: The site of the Project is KEMSA Nakuru, located on Nakuru-Kabarak Road, Nakuru, Rift Valley Province.
- 2-4. Eldoret Regional Vaccine Depot: The site of the Project is KEMSA Eldoret, located on Oloo Street, Eldoret, Rift Valley Province.
- 2-5. Kisumu Regional Vaccine Depot: The site of the Project is KEMSA Kisumu, located on Busia Road, Kisumu, Nyanza Province.
- 2-6. Mombasa Regional Vaccine Depot: The site of the Project is KEMSA Mombasa, located on Nairobi Highway at Changamwe, Mombasa, Coast Province.
- 2-7. Meru Regional Vaccine Depot: The site of the Project is located in the east of the compound of the Meru District Hospital on Mortuary Road, Meru, Eastern Province as shown in Annex-1-2.
- 2-8. Kakamega Regional Vaccine Depot: The site of the Project is located in the south of the compound of the Kakamega Provincial General Hospital on Fitina Road, Kakamega, Western Province as shown in Annex-1-3.
- 2-9. Garissa Regional Vaccine Depot: The site of the Project is located in the north of the compound of the District Office of Ministry of Public Health and Sanitation on Sankuri Road, Garissa, North Eastern Province as shown in Annex-1-4.

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3. Responsible and Implementing Agency

The Responsible Agency and the Implementing Agency is the Ministry of Public Health and Sanitation.

Organization chart of the above Agency and the ultimate user unit, Division of Vaccines and Immunization (hereinafter referred to as "DVI"), Department of Family Health, Ministry of Public Health and Sanitation, are shown in Annex-2-1 and Annex-2-2.

4. Items requested by the Government of Kenya

After discussions with the Team, the items described in Annex-3 (facilities) and Annex-4 (equipment) were finally requested by the Kenyan side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

5. Japan's Grant Aid Scheme

5-1. The Kenyan side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-5.

5-2. The Kenyan side will take the necessary measures, as described in Annex-6 and Annex-7, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

6. Schedule of the Study

6-1. The consultants will proceed to further studies in Kenya until 17th February, 2010.

6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents in May, 2010.

6-3. In case that the contents of the report is accepted in principle by the Government of Kenya, JICA will complete the final report and send it to the Government of Kenya by August, 2010.

7. Other relevant issues

7-1. The Kenyan side agreed to allocate budget and secure necessary measures to procure necessary vaccines with its own budget.

7-2. The Kenyan side agreed to allocate budget (operational and maintenance costs) and manpower (health service providers, cold chain technicians and any other personnel) necessary for the proper and sustainable operation and maintenance of the facilities and the equipment to be provided under the Project.

The Team requested that the Kenyan side should secure budget to implement the undertakings by the Kenyan side which should be completed before the beginning of civil works of the Project under the fiscal year (FY) 2010 budget (from July 2010 to June 2011). The Kenyan side agreed to it.

7-3. The Kenyan side agreed to coordinate with other related agencies of the Government of Kenya, including KEMSA, regarding the issues handled by such agencies.

7-4. Cold room and freezers installed between 2006 and 2009 in Kakamega by the Kenyan side in the provisional facility will be transferred to the new warehouse of Kakamega Regional Vaccine Depot by the Kenyan side. The Kenyan side agreed to allocate sufficient budget for such transfer.

7-5. Cold room for Meru Regional Vaccine Depot and cold room for Garissa Regional Vaccine Depot being procured by the Kenyan side and scheduled to be delivered by June 2010 will be transferred to the new warehouses by the Kenyan side. The Kenyan side agreed to allocate sufficient budget for such transfers.

7-6. Both sides agreed to the following architectural designing criteria of facility:

- (1) Quantity of vaccines, related materials and equipment
- (2) The number of staff
- (3) Function of the facilities

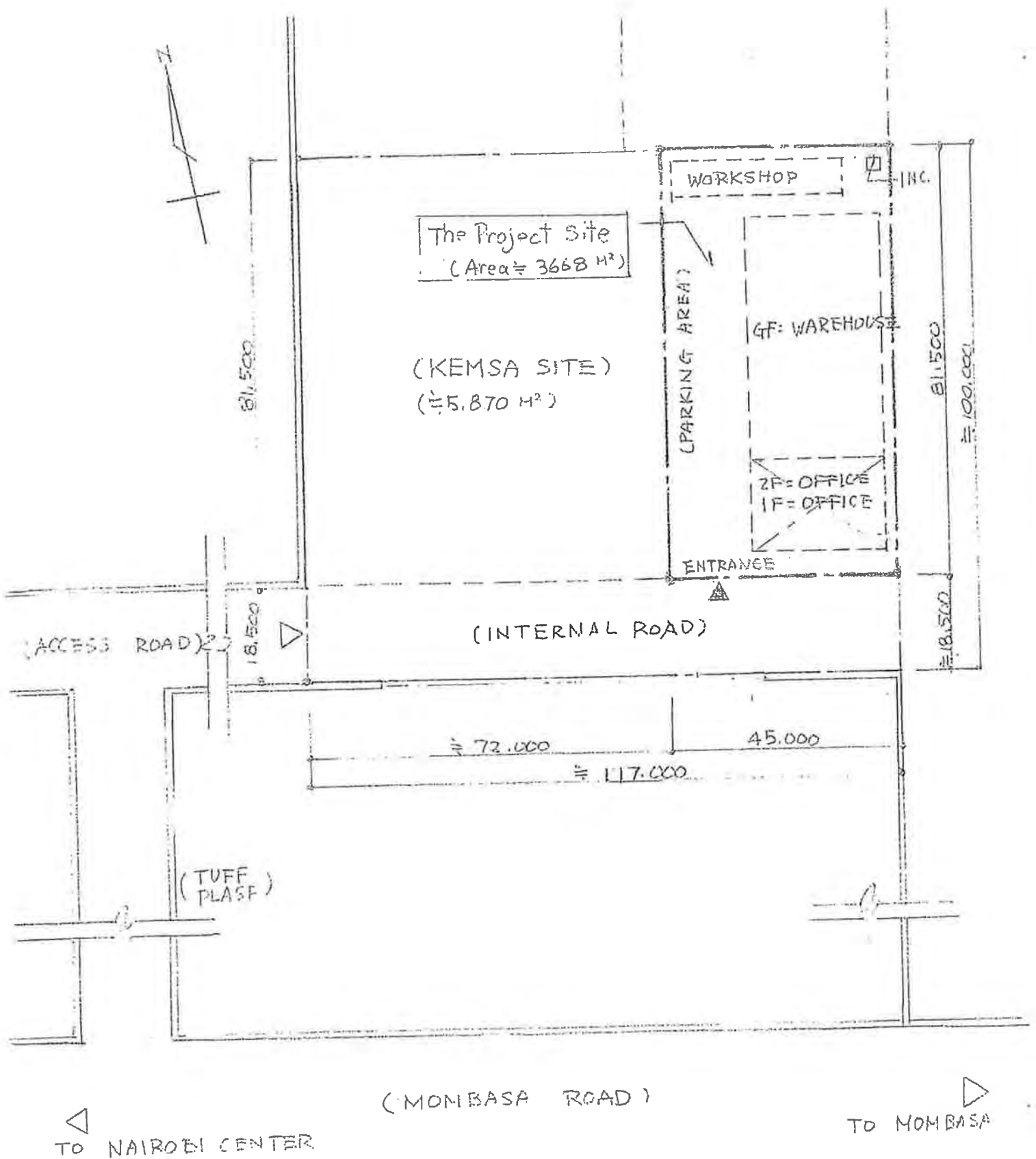
7-7. Both sides agreed to the following selection criteria of equipment:

- (1) Calculation of number of cold room(s), freezer room(s) and freezers based on volumes of vaccines that would be necessary ten (10) years from now. The Kenyan side will purchase additional equipment in the future, as and when necessary.
- (2) Available technical staff to operate and maintain the equipment
- (3) Technical and financial feasibility of operation and maintenance of equipment including procurement of spare parts and consumables

- Annex-1-1 Location Map for Nairobi
- Annex-1-2 Location Map for Meru
- Annex-1-3 Location Map for Kakamega
- Annex-1-4 Location Map for Garissa
- Annex-2-1 Organization Chart of the Ministry of Public Health and Sanitation
- Annex-2-2 DVI Organogram
- Annex-3 Facility List
- Annex-4 Equipment List
- Annex-5 Japan's Grant Aid
- Annex-6 Major Undertakings to be Taken by Each Government
- Annex-7 Major Undertakings to be Taken by the Kenyan Side in Each Site
- Annex-8 Undertakings by the Ministry of Public Health and Sanitation

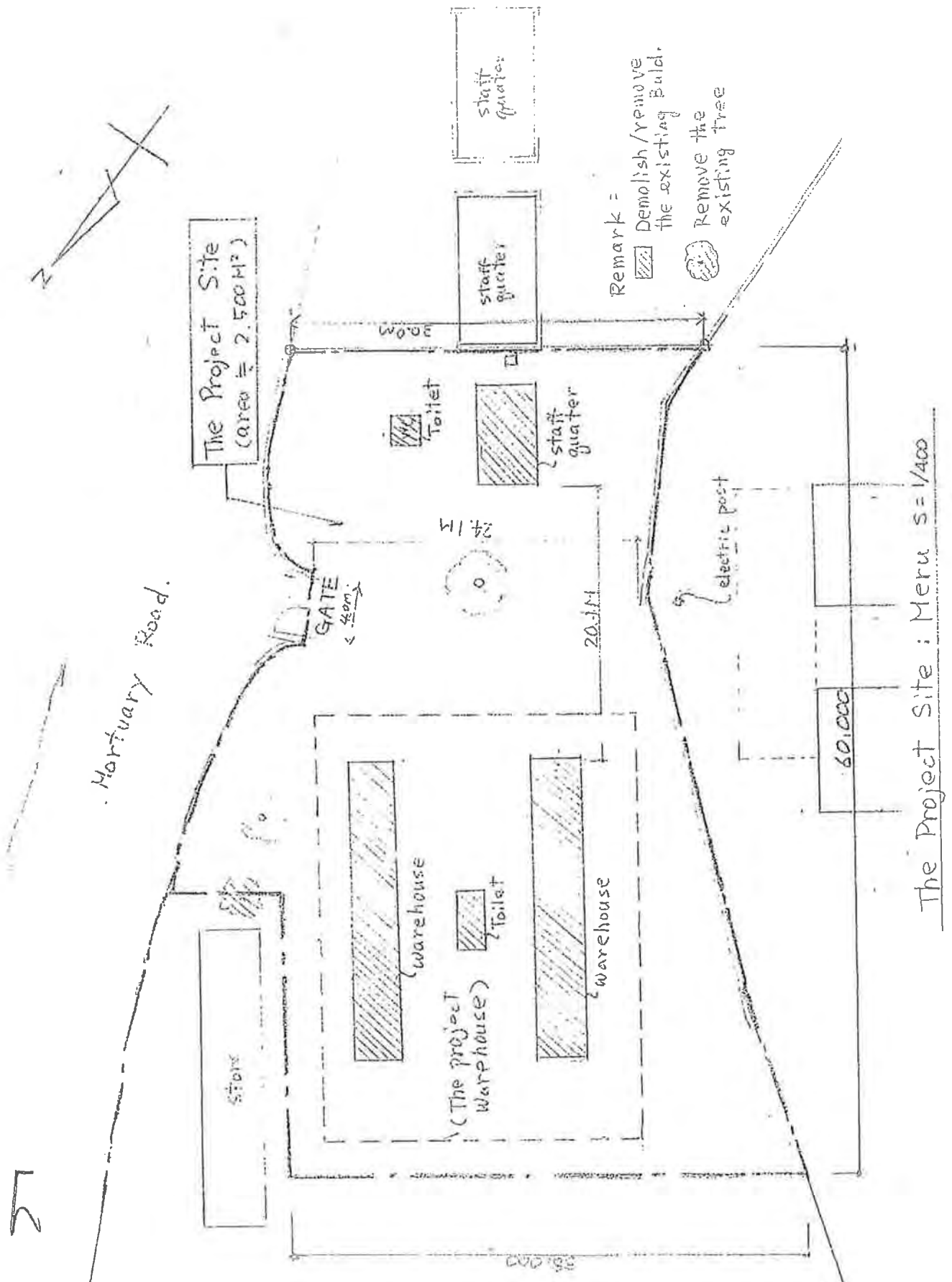
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Location Map for Nairobi



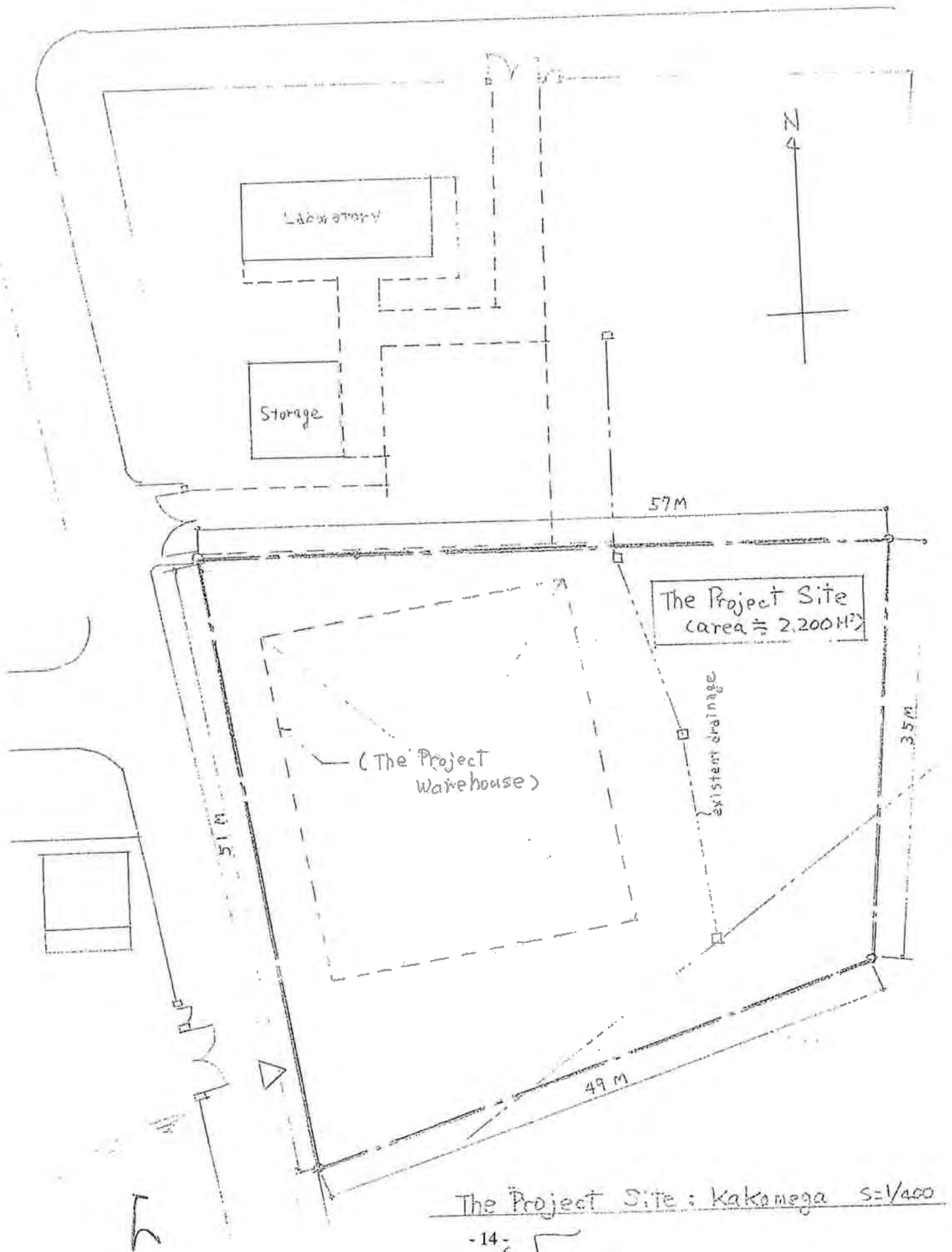
The Project Site : Nairobi s = 1/1000

Location Map for Meru



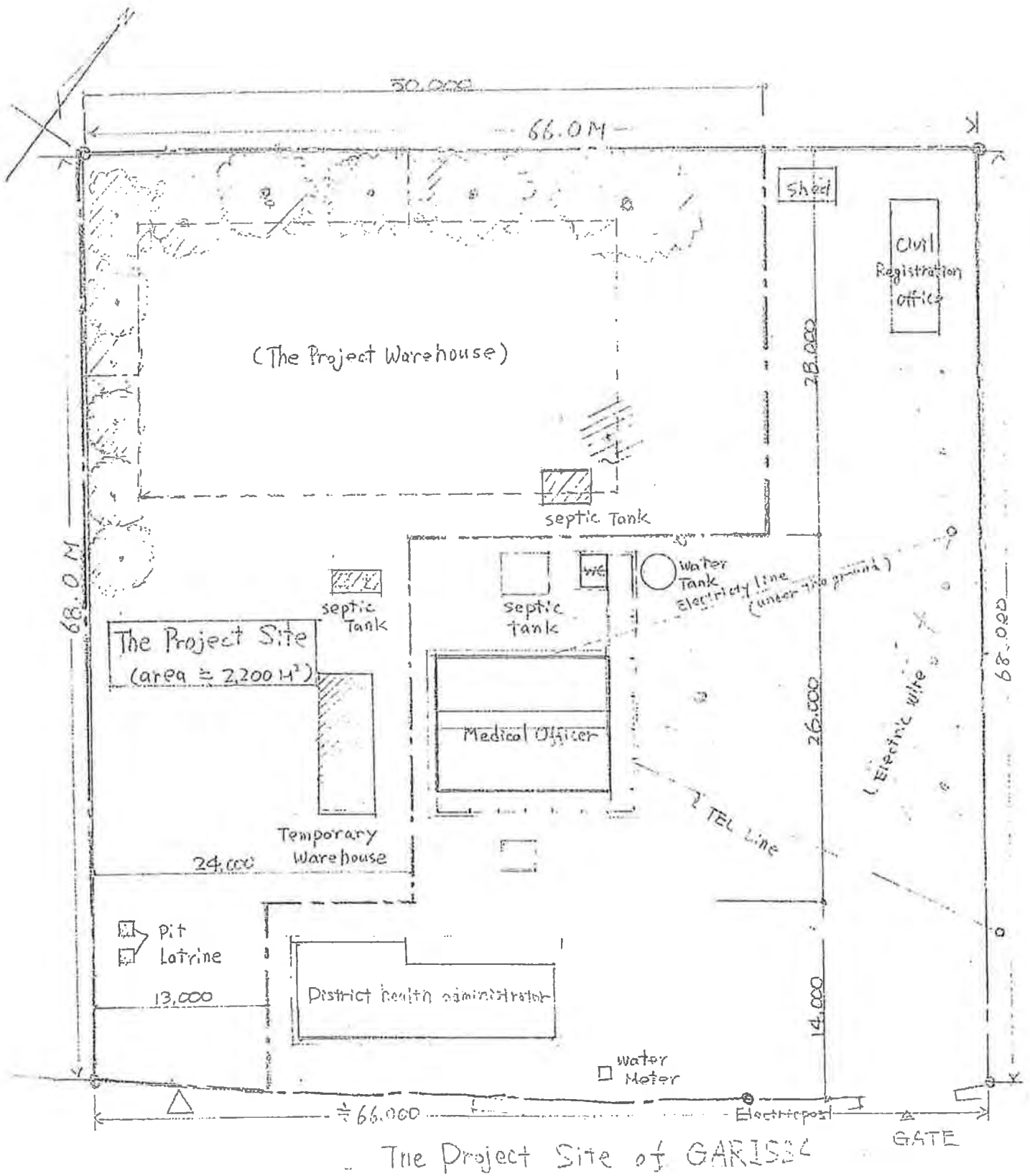
The Project Site : Meru s = 1/400



Location Map for Kakamega



The Project Site : Kakamega S=1/400

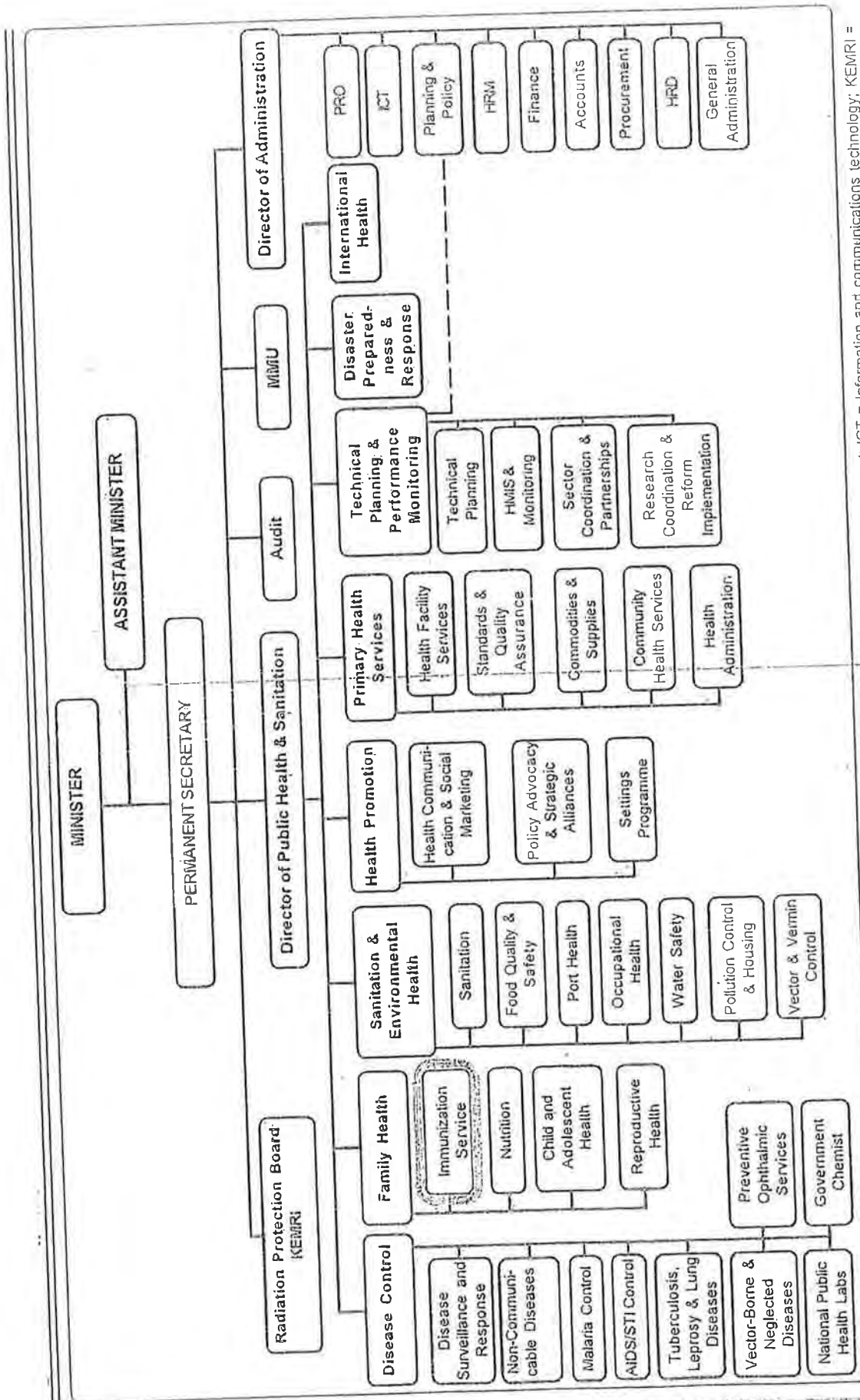
Location Map for Garissa



Remarks:  = Demolish/remove the existing Building
 = Remove the existing tree

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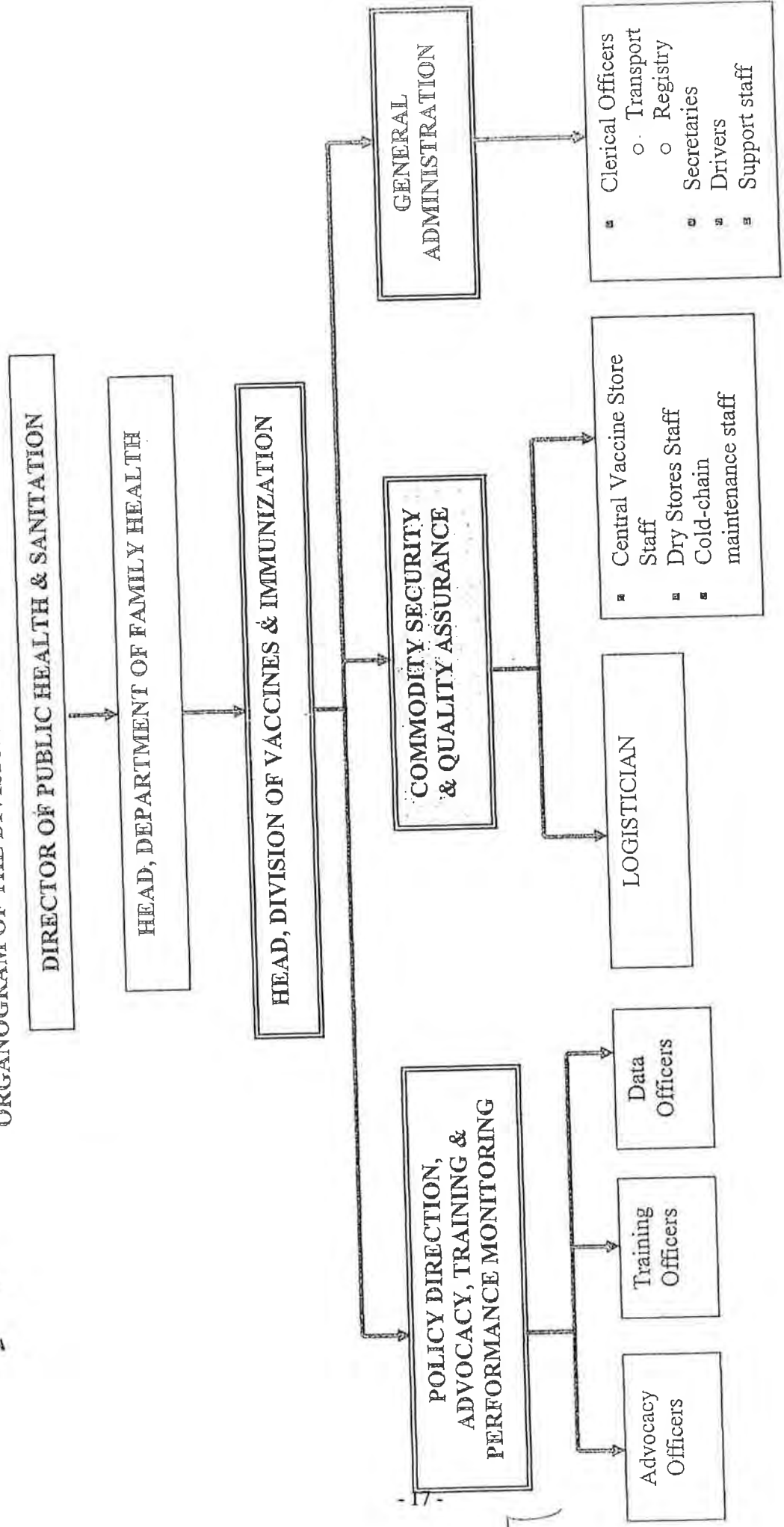
Organization Chart of the Ministry of Public Health and Sanitation



Key: HMIS = Health management information system; HRD = Human resources development; HRM = Human resources management; ICT = Information and communications technology; KEMRI = Kenya Medical Research Institute; MIMU = Ministerial Management Unit; PRO = Public Relations Office

DVI's Organogram

MINISTRY OF PUBLIC HEALTH & SANITATION
ORGANOGRAM OF THE DIVISION OF VACCINES & IMMUNIZATION



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Facility List

Item No.	Name of Facility
(1) Nairobi National Vaccine Depot	
1	Coordination offices for the Division of Vaccines and Immunization
2	Warehouse for the Nairobi National Vaccine Depot
3	Workshop
4	Incinerator
5	Generator
(2) Meru Regional Vaccine Depot	
1	Warehouse for the Regional Vaccine Depot
2	Generator
(3) Kakamega Regional Vaccine Depot	
1	Warehouse for the Regional Vaccine Depot
(4) Garissa Regional Vaccine Depot	
1	Warehouse for the Regional Vaccine Depot
2	Generator

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Equipment List

Item No.	Name of Equipment	Priority
(1) Nairobi National Vaccine Depot		
1	Cold room	A
2	Freezer room	A
3	Computerized fridge temperature monitoring system	B
4	Freezer	B
5	Forklift	A
6	Manual pallet lifter	A
7	Refrigeration equipment maintenance kit	B
(2) Nyeri Regional Vaccine Depot		
1	Freezer	A
2	Manual pallet lifter	B
3	Refrigeration equipment maintenance kit	B
(3) Nakuru Regional Vaccine Depot		
1	Cold room	A
2	Freezer	A
3	Manual pallet lifter	B
4	Refrigeration equipment maintenance kit	B
(4) Eldoret Regional Vaccine Depot		
1	Cold room	A
2	Freezer	A
3	Manual pallet lifter	B
4	Refrigeration equipment maintenance kit	B
(5) Kisumu Regional Vaccine Depot		
1	Freezer	A
2	Manual pallet lifter	B
3	Refrigeration equipment maintenance kit	B
(6) Mombasa Regional Vaccine Depot		
1	Cold room	A
2	Freezer	A
3	Manual pallet lifter	B
4	Refrigeration equipment maintenance kit	B
(7) Meru Regional Vaccine Depot		
1	Freezer	A
2	Manual pallet lifter	A
3	Refrigeration equipment maintenance kit	B
(8) Kakamega Regional Vaccine Depot		
1	Manual pallet lifter	A
2	Refrigeration equipment maintenance kit	B
(9) Garissa Regional Vaccine Depot		
1	Freezer	B
2	Manual pallet lifter	A
3	Refrigeration equipment maintenance kit	B

Remarks: A – It is necessary

B – It is necessary but further study is required

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JAPAN'S GRANT AID

The Government of Japan (hereinafter referred to as “the GOJ”) is implementing the organizational reforms to improve the quality of ODA operations, and as a part of this realignment, a new JICA law was entered into effect on October 1, 2008. Based on this law and the decision of the GOJ, JICA has become the executing agency of the Grant Aid for General Projects, for Fisheries and for Cultural Cooperation, etc.

The Grant Aid is non-reimbursable fund provided to a recipient country to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

The Japanese Grant Aid is supplied through following procedures :

- Preparatory Survey
 - The Survey conducted by JICA
- Appraisal & Approval
 - Appraisal by the GOJ and JICA, and Approval by the Japanese Cabinet
- Authority for Determining Implementation
 - The Notes exchanged between the GOJ and a recipient country
- Grant Agreement (hereinafter referred to as “the G/A”)
 - Agreement concluded between JICA and a recipient country
- Implementation
 - Implementation of the Project on the basis of the G/A

2. Preparatory Survey

(1) Contents of the Survey

The aim of the preparatory Survey is to provide a basic document necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the recipient country necessary for the implementation of the Project.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid

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Scheme from a technical, financial, social and economic point of view.

- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of a outline design of the Project.
- Estimation of costs of the Project.

The contents of the original request by the recipient country are not necessarily approved in their initial form as the contents of the Grant Aid project. The Outline Design of the Project is confirmed based on the guidelines of the Japan's Grant Aid scheme.

JICA requests the Government of the recipient country to take whatever measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization of the recipient country which actually implements the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA employs (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the Report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the appropriateness of the Project.

3. Japan's Grant Aid Scheme


(1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the recipient country to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Government of the recipient country to define the necessary articles to implement the Project, such as payment conditions, responsibilities of the Government of the recipient country, and procurement conditions.

(2) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will

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be recommended by JICA to the recipient country to continue to work on the Project's implementation after the E/N and G/A.

(3) Eligible source country

Under the Japanese Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When JICA and the Government of the recipient country or its designated authority deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals".

(4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by JICA. This "Verification" is deemed necessary to fulfill accountability to Japanese taxpayers.

(5) Major undertakings to be taken by the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as Annex.

(6) "Proper Use"

The Government of the recipient country is required to maintain and use properly and effectively the facilities constructed and the equipment purchased under the Grant Aid, to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Grant Aid.

(7) "Export and Re-export"

The products purchased under the Grant Aid should not be exported or re-exported from the recipient country.

(8) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account under the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). JICA will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to JICA under

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an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

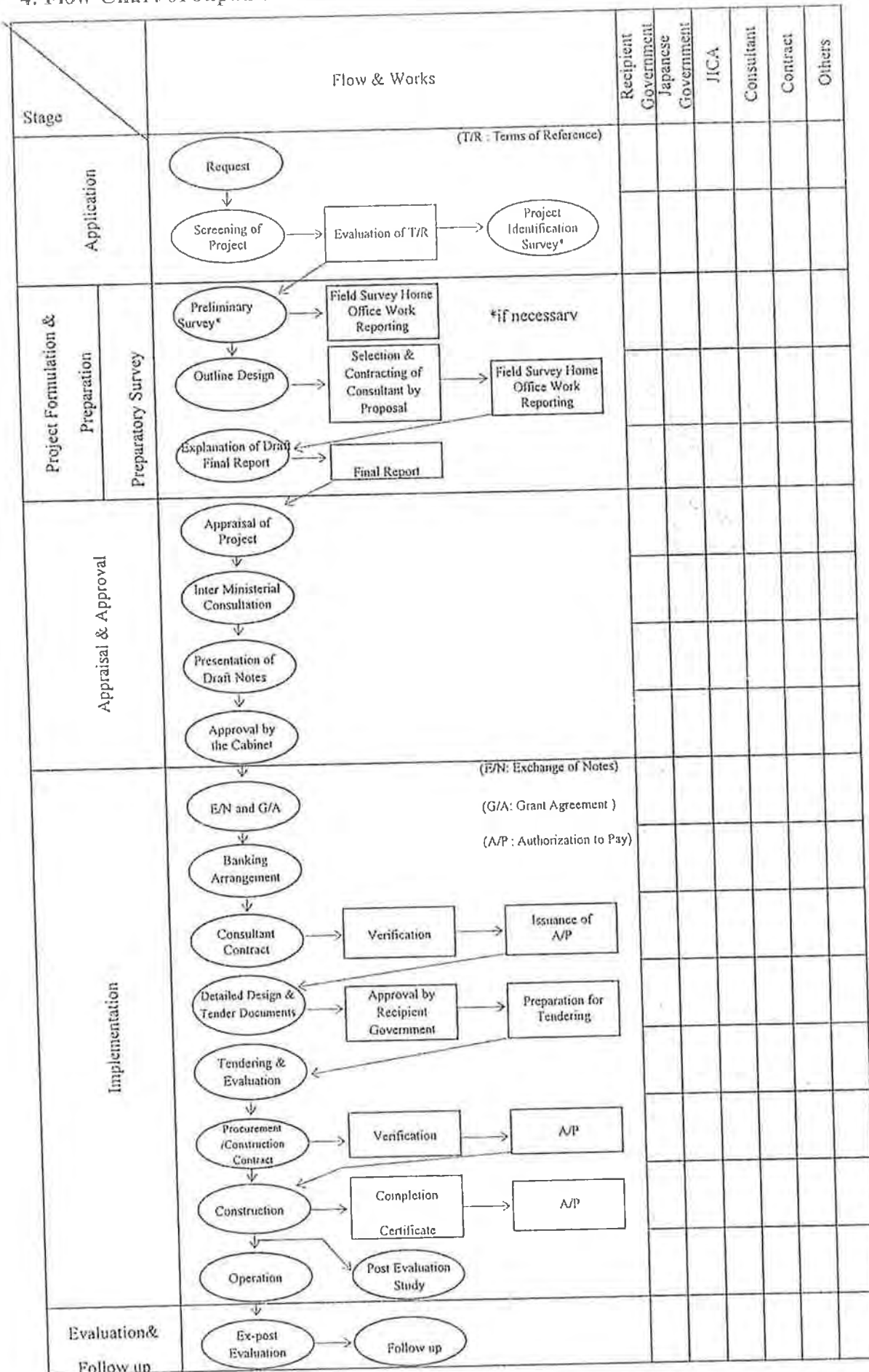
(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions paid to the Bank.

(10) Social and Environmental Considerations

A recipient country must carefully consider social and environmental impacts by the Project and must comply with the environmental regulations of the recipient country and JICA socio-environmental guidelines.

4. Flow Chart of Japan's Grant Aid Procedures



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Major Undertakings to be Taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure adequate land necessary for the implementation of the Project and to clear the sites		●
2	To construct the following facilities		
	1) The building	●	
	2) The gates and fences in and around the site		●
	3) The parking lot	●	
	4) The road within the site	●	
	5) The road outside the site		●
3	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the sites		
	1) Electricity		
	a. The distributing power line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm sewer and others to the site)		●
	b. The drainage system (for toilet sewer, common waste, storm drainage and others) within the site	●	
	4) Gas Supply		
	a. The city gas main to the site		●
	b. The gas supply system within the site	●	
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		●
	b. The MDF and the extension after the frame/panel	●	
	6) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
4	To ensure prompt unloading and customs clearance of the products at ports of disembarkation in the recipient country and to assist internal transportation of the products		
	1) Marine (Air) transportation of the Products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the Products at the port of disembarkation		●

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No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
	3) Internal transportation from the port of disembarkation to the project site	●	
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the purchase of the products and the services be exempted		●
6	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
7	To ensure that the Facilities and the products be maintained and used properly and effectively for the implementation of the Project		●
8	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project		●
9	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A		●
	1) Advising commission of A/P		●
	2) Payment commission		●
10	To give due environmental and social consideration in the implementation of the Project.		●

(B/A: Banking Arrangement, A/P: Authorization to pay)

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Major Undertakings to be Taken by Kenya Side in Each Site

1) Nairobi National Vaccine Depot

No.	Items
1	To secure land
2	To construct gates and fences in and around the site
3	To provide electricity line to the site
4	To provide water supply to the site
5	To provide drainage pipe to the site
6	To provide telephone line to the site
7	To provide construction work area

2) Nyeri Regional Vaccine Depot

No.	Items
1	To secure the space for cold room
2	To provide electricity, including electricity from the existing generator, for freezers

3) Nakuru Regional Vaccine Depot

No.	Items
1	To secure the space for cold room and freezers
2	To provide electricity, including electricity from the existing generator, for cold room and freezers
3	To provide drainage for cold room

4) Eldoret Regional Vaccine Depot

No.	Items
1	To secure the space for cold room and freezers
2	To provide electricity, including electricity from the existing generator, for cold room and freezers
3	To provide drainage for cold room

5) Kisumu Regional Vaccine Depot

No.	Items
1	To secure the space for cold room
2	To provide electricity, including electricity from the existing generator, for freezers

6) Mombasa Regional Vaccine Depot

No.	Items
1	To secure the space for cold room and freezers
2	To provide electricity, including electricity from the existing generator, to the site
3	To provide drainage for cold room

7) Meru Regional Vaccine Depot

No.	Items
1	To demolish/remove the existing buildings (2 warehouses, 1 staff quarter and 2 toilets)
2	To remove the existing trees
3	To level the site
4	To level the road in front of the gate
5	To move/transfer the existing cold room and freezers
6	To provide electricity to the site
7	To provide water supply to the site
8	To provide drainage pipe to the site
9	To provide telephone line to the site
10	To provide construction work area

8) Kakamega Regional Vaccine Depot

No.	Items
1	To level the site
2	To level the road in front of the gate
3	To move/transfer the existing cold room and freezers and generator
4	To provide electricity, including electricity from the existing generator, to the site
5	To provide water supply to the site
6	To provide drainage pipe to the site
7	To provide telephone line to the site
8	To provide construction work area

9) Garissa Regional Vaccine Depot

No.	Items
1	To demolish/remove the existing building (temporary warehouse and 2 pit latrines)
2	To demolish/remove the existing septic tanks
3	To remove the existing trees
4	To move/transfer the existing cold room and freezers
5	To provide electricity to the site
6	To provide water supply to the site
7	To provide drainage pipe to the site
8	To provide telephone line to the site
9	To provide construction work area

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Undertakings by the Ministry of Public Health and Sanitation

1) Nairobi National Vaccine Depot

No.	Items
1	Provide the Project site
2	Ensure easy accessibility to the Project site

2) Nyeri Regional Vaccine Depot

No.	Items
1	Provide the space for DVI's freezers
2	Provide electricity (including generator line) for DVI's freezers

3) Nakuru Regional Vaccine Depot

No.	Items
1	Provide the space for DVI's cold room and freezers
2	Provide electricity (including generator line) for DVI's cold room and freezers

4) Eldoret Regional Vaccine Depot

No.	Items
1	Provide the space for DVI's cold room and freezers
2	Provide electricity (including generator line) for DVI's cold room and freezers

5) Kisumu Regional Vaccine Depot

No.	Items
1	Provide the space for DVI's freezers
2	Provide electricity (including generator line) for DVI's freezers

6) Mombasa Regional Vaccine Depot

No.	Items
1	Provide the space for DVI's cold room and freezers
2	Provide electricity (including generator line) for DVI's cold room and freezers

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MINUTES OF DISCUSSIONS
ON PREPARATORY SURVEY (Outline Design No.2)
ON THE PROJECT FOR THE REINFORCEMENT OF VACCINE STORAGE
IN THE REPUBLIC OF KENYA

From January to February, 2010, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Preparatory Survey (Outline Design) Team on the Project for the Reinforcement of Vaccine Storage in Kenya (hereinafter referred to as "the Project") to the Republic of Kenya (hereinafter referred to as "Kenya"), and through discussion and field survey, JICA and the Kenyan side signed the Minutes of Discussions on 4th February, 2010.

Since the project site for the Nairobi National Vaccine Depot has been changed, JICA sent to Kenya a Preparatory Survey Team (Outline Design No.2) (hereinafter referred to as "the Team"), which is headed by Mr. Masaaki Kato, Chief Representative, JICA Kenya Office, and is scheduled to stay in the country from 5th July to 9th July 2010.

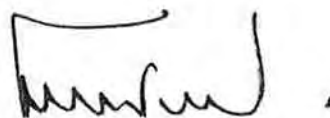
The Team held discussions with the officials concerned from the Government of Kenya and conducted a field survey in Nairobi.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Preparatory Survey Report.

Nairobi, 8th July, 2010



Mr. Masaaki Kato
Chief Representative
JICA Kenya Office
Leader
Preparatory Survey Team (Outline Design No. 2)
Japan International Cooperation Agency



Mr. Mark K. Bor, CBS
Permanent Secretary
Ministry of Public Health and Sanitation
The Republic of Kenya

ATTACHMENT

The following points are amended from the description referred in the Minutes of Discussion dated 4th February 2010.

1. Project sites for Nairobi National Vaccine Depot

The site of the Project for Nairobi National Vaccine Depot is located on Plot No. Zone 49 – Noonkopir T, Centre as shown in Annex-1-1 (Tentative map subject to topographic map by surveyor).

The letter from the Ministry of Public Health and Sanitation dated 14th June, 2010 with the attachment of the Letter of Allotment by the County Council of Olkejuado dated 14th June 2010 is shown in Annex-1-2.

2. Schedule of the Study

2-1. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents in October, 2010.

2-2. In case that the contents of the report is accepted in principle by the Government of Kenya, JICA will complete the final report and send it to the Government of Kenya by around January, 2011.

3. Other Relevant Issues

3-1 Scope of the Project

The issues discussed between the Kenyan side and the Team are as follows:

(1) Coordination offices for the Division of Vaccines and Immunization

The Team expressed its concern about the necessity of including coordination offices of the Division of Vaccines and Immunization for the Nairobi National Vaccine Depot at the new project site which is located in Kitengela, outside Nairobi city. The Kenyan side explained that it is indispensable to locate the coordination offices in the same unit with the warehouse and workshop for the Nairobi National Vaccine Depot, in order to ensure efficient and effective operation for vaccine management. The Team understood the necessity of such offices; however, the size of the offices could be minimized, while the possibility for further expansion would be included in the design, so that the Kenyan side could expand the offices upwards in future. Both sides also confirmed that cost estimation will be further studied by the Japanese side, and that the inclusion of offices will be subject to approval of the Government of Japan.

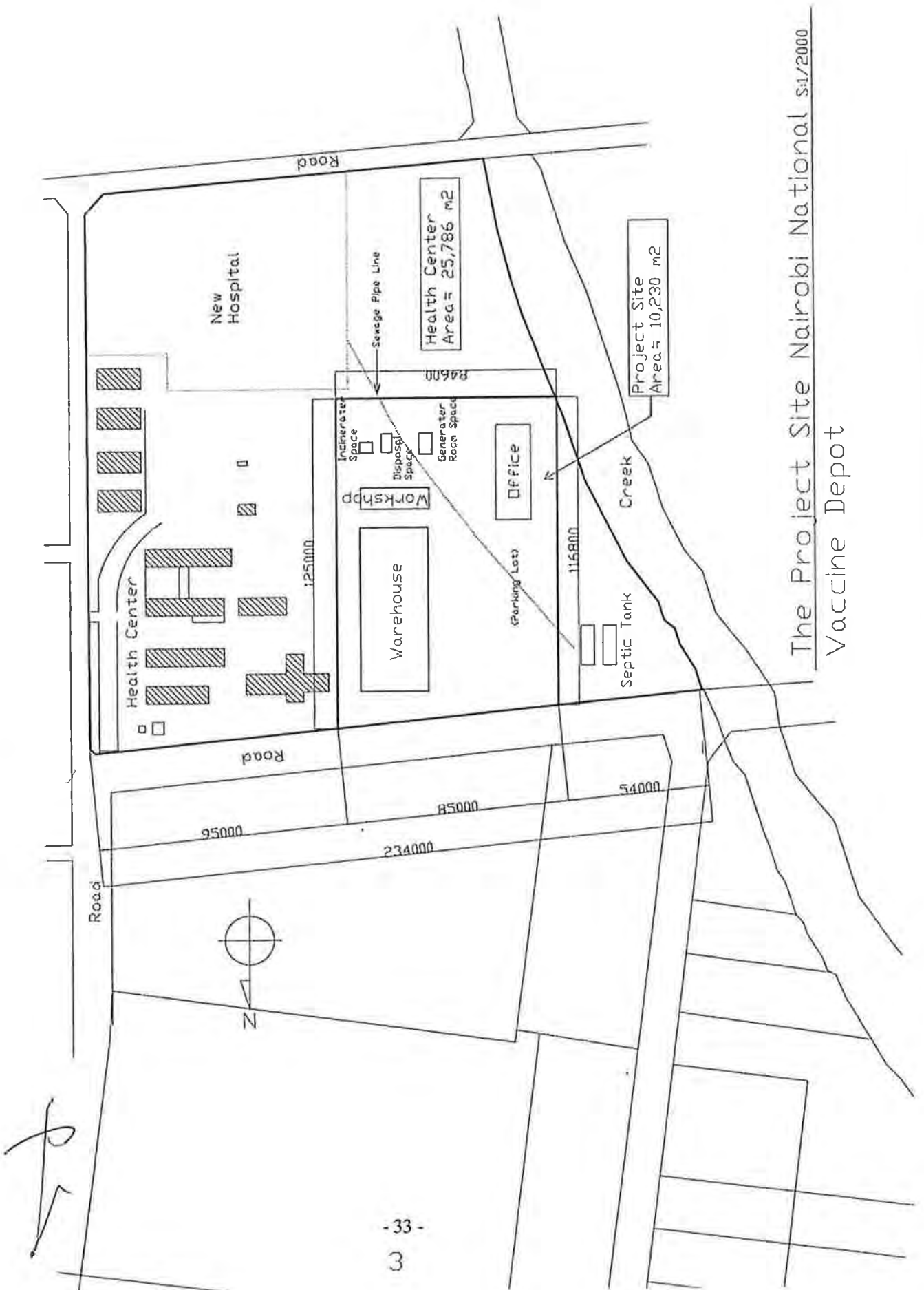
Annex-1-1 Location Map for Nairobi National Vaccine Depot

Annex-1-2 Letter from the Ministry of Public Health and Sanitation dated 14th June, 2010 with the attachment of the Letter of Allotment by the County Council of Olkejuado dated 14th June

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Location Map for Nairobi National Vaccine Depot



The Project Site Nairobi National s:1/2000
Vaccine Depot

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MINISTRY OF PUBLIC HEALTH AND SANITATION

Telegrams: "MINIHEALTH", Nairobi
Telephone Nairobi 0202717077
Email: psph@health.go.ke
When replying please quote

AFYA HOUSE
CATHEDRAL ROAD
P O Box 30016
NAIROBI

Ref. No. MPHS/FIN/12/A/4/27

Date: 14th June 2010

Masaaki KATO
Chief Representative
JICA Kenya Office
NAIROBI

Dear

RE: REQUEST REGARDING DOCUMENTS OF ALLOTMENT OF THE LAND IN KITENGELA FOR CONSTRUCTION OF VACCINES STORAGE FACILITY

Reference is made to your letter Ref.No. TC-22-075(EK) of 3rd June 2010 on above subject.

We are pleased to inform you that the County Council of Olkejuado has issued a Letter of Allotment to the Ministry of Health for Kitengela Health Centre land measuring 8.9 acres (copy attached). We are now in the process of acquiring the title deed for the same land from the Ministry of Lands. We expect the title deed to be ready very soon.

In view of the above we request that you proceed with dispatch of the second survey mission.

Thank you for your continued support.


AMB. BRUCE M. MADETE, MBS
FOR: PERMANENT SECRETARY



004103

Our Ref. No. ...OCC/LND/16/NOONKOPIR/TC/LOA/VOL. 3/12.

COUNTY
COUNCIL OF
OLKEJUADO



P.O. Box 11,
Telephone: 21212/3
KAJIADO

MINISTRY OF HEALTH
KITENGELA (NOONKOPIR) HEALTH CENTRE

Date 14th June 2010...

LETTER OF ALLOTMENT



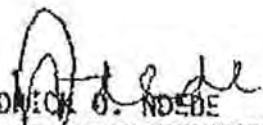
Plot No. ZONE 4₉ (8.9 ACRES) - NOONKOPIR T. CENTRE:

This is to confirm allotment of the above-referred plot to you by County Council of Olkejuado acceptance of which will be signified by initially paying:-

- a) Annual rent (revisable) Shs.
- b) Survey fees Shs. 3000.00
- c) Local Authority Services Charge Shs.
- d) Plot identification fees Shs.

CONDITIONS

1. This plot may be developed for... HEALTH CENTRE... use only.
2. The council may reposses (without compensation) any plot that remains undeveloped 2 (two) year after allocation.
3. Sale, sub-division or charge of the plot may only be done with the written consent of the council.
4. All building plans in respect of the plot shall be approved by the Council before execution.
5. This letter is only valid when signed by the Clerk to the Council.


FREDRICK O. NDEBE
CLERK TO COUNCIL





Issued without erasures or alterations whatsoever.

**MINUTES OF DISCUSSIONS
ON PREPARATORY SURVEY
ON THE PROJECT FOR THE REINFORCEMENT OF VACCINE STORAGE
IN THE REPUBLIC OF KENYA
(EXPLANATION ON DRAFT REPORT)**

Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Preparatory Survey (Outline Design) Team on the Project for the Reinforcement of Vaccine Storage in Kenya (hereinafter referred to as "the Project") to the Republic of Kenya (hereinafter referred to as "Kenya") from January to February, 2010, and also dispatched a Preparatory Survey Team (Outline Design No.2) on the Project to Kenya in July 2010, and through discussion, field survey, and technical examination of the survey results in Japan, JICA prepared a draft report of the survey.

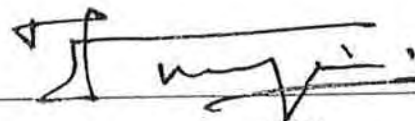
In order to explain and to consult Kenya on the component of the draft report, JICA sent to Kenya a Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Masaaki Kato, Chief Representative, JICA Kenya Office, from 6th December to 10th December, 2010.

In the course of discussions, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Preparatory Survey Report.

Nairobi, 9th December, 2010



Mr. Masaaki Kato
Chief Representative
JICA Kenya Office
Leader
Draft Report Explanation Team
Japan International Cooperation Agency



Mr. Francis K. Musyimi, CBS
Secretary Administration
Ministry of Public Health and Sanitation
The Republic of Kenya

ATTACHMENT

1. Components of the Draft Report

The Government of Kenya agreed and accepted in principle the components of the draft report explained by the Team.

2. Japan's Grant Aid Scheme

The Kenyan side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Kenya as explained by the Team and described in Annex-5, Annex-6, Annex-7, and Annex-8 of the Minutes of Discussions signed by both parties on 4th February, 2010.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the Government of Kenya by February 2011.

4. Confidentiality of the Project Design

Both sides confirmed that all information related to the Project design including detailed specifications of equipment and other technical information shall not be released to any outside parties before the signing of all the Contract(s) for the Project.

5. Other Relevant Issues

5-1 Confidentiality of the Project Cost Estimation

The Team explained the cost estimation of the Project as described in Annex-1. Both sides agreed that the Project Cost Estimation SHALL NOT be duplicated or released to any outside parties before the signing of all the Contract(s) for the Project. Both sides understand that the Project Cost Estimation described in Annex-1 is not final and is subject to change.

5-2 Project sites for National Vaccine Depot, Nairobi

Regarding the Project site for Nairobi National Vaccine Depot, the Certificate of Lease/Kitengela Government Land for the Proposed National Vaccines Depot dated 10th November, 2010 is shown in Annex 2.

The Kenyan side explained that no additional procedures are necessary for land acquisition for the Nairobi site as the lease certificate issued by the Commissioner of Lands is adequate.

5-3 Scope of Works

The issues discussed between the Team and the Kenyan side are as follows:

5-3-1 Kenyan side requested cage separation area within the dry storage for quarantine goods (vaccines and syringes) at Nairobi Central Depot. The Team will consider this request.

5-3-2 Kenyan side requested the relocation of compressors on the east side of cold storage room at Nairobi Central Depot so as to reduce noise disturbance to the adjacent offices. The Team will consider this request.

5-3-3 Kenyan side requested the relocation of the conference room in the coordination office at Nairobi Central Depot because of difficulties in access for visitors. The team promised to relocate it closer to the main entrance of the building.

5-3-4 Kenyan side requested to remove the middle entrance door of the workshop at Nairobi central Depot as two doors would be sufficient for depot operations. The Team agreed to it.

5-3-5 Kenyan side requested for connecting canopies between the main buildings and external toilets for Garissa and Meru Regional Vaccine Depots respectively. The Team explained that it will need to consult further on the feasibility of this request.

Based on the above, both sides agreed, as the scope of works of the Project, the outline of the Project described in Annex-3, and equipment list described in Annex-4.

5-4 Operation and Maintenance Cost

The Kenyan side agreed to secure and allocate necessary budget and staff for the proper and sustainable operation and maintenance of the facilities and the equipment to be provided under the Project as described in Annex-5, and in accordance with the maintenance organization in Annex 6.

5-5 Obligation Works to be undertaken by the Kenyan side

The Kenyan side agreed to implement necessary infrastructure and construction works related to the Project by appropriate time including securing necessary budget allocation to meet the costs for such works as described in Annex-2. The Team explained that the timely completion of the obligation works by the Kenyan side based on the schedule in Annex-7 is crucial for Japanese side to implement its portion of works as scheduled, and in case that works by the Kenyan side would be behind the schedule for certain period of time, the Japanese side might have to re-schedule its implementation schedule accordingly.

Apart from the recurrent cost mentioned in section 5-4, the Team explained that counterpart budget shall be needed for implementation of the Project. The Team requested that the Kenyan side secures the counterpart budget under the fiscal years (FY) 2011/2012 and 2012/2013 budget. The Kenyan side agreed to secure the necessary budget.



5-6 Tentative Schedule of the Project

The tentative schedule of the Project is described in Annex-8.

5-7 Utilization of Vaccine Storage Facilities

The Kenyan side explained that vaccines are acquired on regular basis and that all vaccines handled by the Government of Kenya are currently stored in the national and regional depot sites and will continue to expand the storage at the sites.

END

Annexes

Annex-1 The Certificate of Lease by the Kajiado District Land Registry dated 10th November, 2010

Annex-2 Project Cost Estimation

Annex-3 Outline of the Project

Annex-4 Equipment List

Annex-5 Operation and Maintenance Cost for Facilities and Equipment

Annex-6 Maintenance Organization

Annex-7 Undertakings by the Kenyan side

Annex-8 Tentative Schedule of the Project

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Annex-1 Certificate of Lease



REPUBLIC OF KENYA

THE REGISTERED LAND ACT.
(Chapter 300)

Certificate of Lease

TITLE No. _____ APPROXIMATE AREA
KITENGELA TOWNSHIP /462 3.737 Ha.

LESSOR OLKARIAPO COUNTY COUNCIL

RENT 72/=

TERM 99 Years FROM 1.9.2010

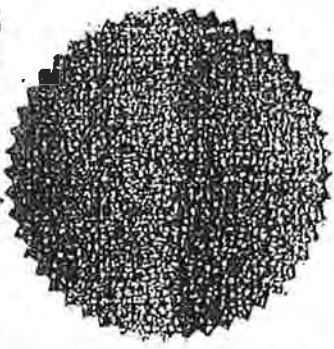
This is to certify that PERMANENT SECRETARY TO THE
TREASURY OF KENYA - AS TRUSTEE FOR MINISTRY OF PUBLIC HEALTH
AND SANITATION P.O. BOX 30007 NAIROBI =

Is (are) now registered as the proprietor(s) of the leasehold interest above referred to, subject to the agreements and other matters contained in the registered lease, to the entries in the register relating to the lease and to such of the overriding interests set out in section 30 of the Registered Land Act as may for the time being subsist and affect the land comprised in the lease.

GIVEN under my hand and the seal of the

MAJIDU District Registry

this 10th day of November 2010



P. N. B. O. 344
Land Register



REPUBLIC OF KENYA

THE REGISTERED LAND ACT
(Chapter 300)

Certificate of Lease

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MINISTRY OF PUBLIC HEALTH AND SANITATION

Telegrams: "MINIHEALTH",
Nairobi
Telephone Nairobi 0202717077
Email: psph@health.go.ke
When replying please quote

AFYA HOUSE
CATHEDRAL ROAD
P O Box 30016
NAIROBI

Ref. MPHS/FIN/12/A/4/35

Date: 11th November, 2010

Mr. Masaaki KATO
Chief Representative
JICA Kenya Office
NAIROBI.

Dear *Masaaki*,

RE: CERTIFICATE OF LEASE/KITENGELA GOVERNMENT LAND FOR THE PROPOSED NATIONAL VACCINES DEPOT

Forwarded herewith please find a copy of the Certificate of Lease for Kitengela Government land for the proposed National Vaccines Depot. The Certificate of Lease is equivalent to a Title deed and is issued in accordance with the Registered Land Act, Cap 300 of the Laws of Kenya. The original Certificate is available for verification in our offices.

The Commissioner of Lands granted a ninety nine (99) year lease to the Permanent Secretary Treasury against which the certificate is issued. The Certificate of Lease shall be the only Prima Facie evidence for the land ownership by the Government during the period of which the lease remains valid.

Thank you for your continued support.

Yours *sincerely*,

Mark K. Bor

Mark K. Bor, CBS
PERMANENT SECRETARY

Encl.

[Handwritten signature]

This page is closed due to the confidentiality.

Annex-3 Outline of the Project

	Facility	Structure/Areas	Component
Nairobi National Vaccine Depot	Warehouse	Structure: RC, partly S Floor Areas: 1,612.0m ²	Dry storage, Cold storage, Store, Office, Medical lab technologist room, Officer in charge of vaccine depot room, Dry storage manager room, Assistant room, Support staff room, Fire pump room, Security room, Kitchen, WC
	Coordination Office	Structure: RC, partly S Floor Areas: 507.0m ²	Head of DVI room, Deputy head of DVI room, Secretary room, Office, Data room, Conference room, Server room, Support staff room, Store, Kitchen, WC
	Workshop	Structure: RC, partly S Floor Areas: 210.0m ²	Workshop, Chief medical engineer's room, Medical engineer's room
	Generator House	Structure: RC, partly S Floor Areas: 40.0m ²	Generator room, Switch panel room
	Disposal Space	(Shed)	Separate space for combustible, incombustible and medical wastes
	Incinerator Space	(Shed)	Space for installing the incinerator
	Floor Areas	2,369m ²	
Regional Vaccine Depot	Kakamega	Structure: RC, partly S Floor Areas: 675.0m ²	Warehouse, Officer in charge of vaccine depot room, Secretary / Waiting room, Support staff room, Store, WC
	Meru	Structure: RC, partly S Floor Areas: 415.0m ²	Warehouse, Officer in charge of vaccine depot room, Secretary / Waiting room, Support staff room, Store, WC
	Garissa	Structure: RC, partly S Floor Areas: 395.0m ²	Warehouse, Officer in charge of vaccine depot room, Secretary / Waiting room, Support staff room, Store, WC
	Floor Areas	1,485m ²	
Total Floor Areas		3,814m ²	

Annex-4 Equipment List

No	Name of Equipment	Total Quantity
1	Cold room with 3-rooms, 40m ³ each	1
2	Cold room with 2-rooms, 40m ³ each	2
3	Cold room, 1-room, 30m ³ A	1
4	Cold room, 1-room, 30m ³ B	3
5	Freezer room with 2-rooms, 20m ³ each	1
6	Cold room/freezer room temperature monitoring system	1
7	Freezer	23
8	Forklift	1
9	Manual pallet lifter	10
10	Refrigeration gas charging station	9
11	Oxy-acetylene gas soldering set	9
12	Nitrogen gas cylinder set	9
13	Cabinet for Non-EPI vaccine	3
14	Automatic Voltage Regulator	23

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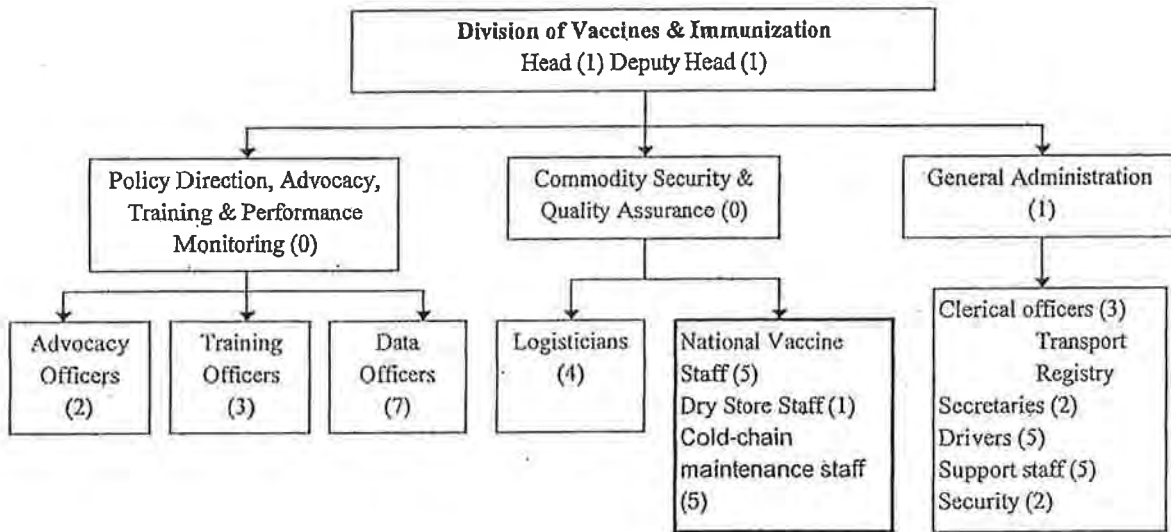
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Annex-5 Operation and Maintenance Cost for Facilities and Equipment

Annual Costs for Operation and Maintenance					(in KShs)
	Electricity	Water Supply/Sewage	Generator Energy	Equipment Repairs	Total
National Vaccine Depot (new)					
Nairobi	1,378,302	262,560	156,358	503,000	2,300,220
Regional Vaccine Depot (new)					
Kakamega	327,768	18,000	54,914	157,000	557,682
Meru	177,134	18,000	46,068	86,000	327,202
Garissa	148,081	18,000	52,843	86,000	304,924
Regional Vaccine Depot (existing)					
Nyeri	7,266	—	654	86,000	93,920
Mombasa	40,068	—	7,044	157,000	204,112
Kisumu	14,531	—	723	208,000	223,254
Eldoret	54,599	—	3,291	157,000	214,890
Nakuru	50,967	—	2,015	86,000	138,982
Total	2,198,716	316,560	323,910	1,526,000	4,365,186

Note: Figures for the regional vaccine depots (existing) indicate the expected annual cost increase due to the equipment supply in this project.

Annex-6 Maintenance Organization



Organization of the Division of Vaccines & Immunization



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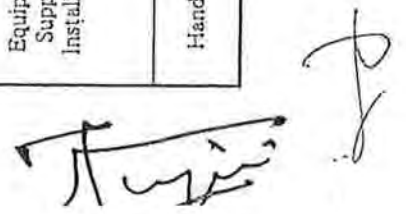
Annex-7 Undertakings by the Kenyan Side

Items		Nairobi	Kakamega	Meru	Garissa	Nyeri	Nakuru	Eldoret	Kisumu	Mombasa
1) To secure land	Completion	Jan. 2012	Jan. 2012	Feb. 2012	June. 2012	NA	NA	NA	NA	NA
2) To excavate and level the site	Completion	Jan. 2012	Jan. 2012	Feb. 2012	June. 2012	NA	NA	NA	NA	NA
3) To level the road in front of the gate	Completion	NA	NA	Feb. 2012	NA	NA	NA	NA	NA	NA
4) To demolish the existing buildings and trees, and remove them out of the site	Completion	NA	NA	Feb. 2012	June. 2012	NA	NA	NA	NA	NA
5) To acquire the permission for construction	Completion	Jan. 2012	Jan. 2012	Feb. 2012	June. 2012	NA	NA	NA	NA	NA
6) To connect infrastructure systems (electricity, water supply, drainage, telephone line, etc.) to the site	Completion	Jan. 2012	Jan. 2012	Feb. 2012	June. 2012	NA	NA	NA	NA	NA
7) To provide electricity, including electricity from the existing generator, for cold room and freezers, and to provide drainage for cold room	Completion	NA	NA	NA	NA	July. 2012	July. 2012	July. 2012	July. 2012	July. 2012
8) To provide construction work area	Completion	Jan. 2012	Jan. 2012	Feb. 2012	June. 2012	NA	NA	NA	NA	NA
9) To secure the issuance of the Banking Arrangement and the Authorization to Pay, and payment of required banking commissions (0.2% of the contract price)	Consultant	Aug. 2011								
	Contractor/ Supplier	Feb. 2012								
10) To procure general furniture for the buildings to be constructed in the project	Completion	Feb. 2013	Oct. 2012	Oct. 2012	Feb. 2013	NA	NA	NA	NA	NA
11) To construct fence around the site and a gate in it, and planting	Completion	Feb. 2013	Oct. 2012	Oct. 2012	Feb. 2013	NA	NA	NA	NA	NA
12) To destruct and reconstruct an incinerator in the premises of Kitengela Health Center	Completion	Feb. 2013	NA	NA	NA	NA	NA	NA	NA	NA
13) To secure the space for cold room and freezers	Completion	NA	NA	NA	NA	July. 2012	July. 2012	July. 2012	July. 2012	July. 2012
14) To move/transfer the existing cold rooms and freezers	Completion	Feb. 2013	NA	NA	NA	NA	NA	Oct. 2012	Oct. 2012	Oct. 2012

Annex-8 Tentative Schedule of the Project

		Months																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Project	E/N																					
	G/A																					
Detailed Design	○ Consultant agreement																					
	□ Verification of consultant agreement by JICA																					
Tender Assistance	■ Survey and discussions for detailed design																					
	□ Approval of design documents by the Client																					
Supervision of Construction Works	□ Preparation of tender documents																					
	□ Evaluation of tender / Contract with contractors (for construction / equipment)																					
Equipment Supply / Installation	□ Construction works of Nairobi National Vaccine Depot (12 months)																					
	□ Construction works of Meru Regional Vaccine Depot (7 months)																					
Handover	□ Construction works of Kakamega Regional Vaccine Depot (8 months)																					
	□ Construction works of Garissa Regional Vaccine Depot (7 months)																					
Equipment Supply / Installation	□ Equipment manufacturing																					
	□ Installation and commissioning Meru/Kakamega/5 Existing Depots																					
Handover	□ Installation and commissioning Nairobi/Garissa																					
	□ Handover of Meru Depot																					
Handover	□ Handover of Kakamega Depot																					
	□ Handover of Nairobi Depot																					
Handover	□ Handover of Garissa Depot																					
	□ Handover of Meru Depot																					

Note:  : Works in Kenya  : Works in Japan



Appendix 5 Other Relevant Data

5-1 Location Map of Existing Facilities



- 1: DVI Office
- 2: DVI Warehouse (freezer)
- 3: DVI Warehouse (cold rooms)
- 4: Warehouses near the airport
- 5: KEMSA Warehouse

Appendix 5-2 Estimation of Demanded Valid Storage Volume

Item	Site	Nairobi	Kakamega	Meru	Garissa	Remarks
Dry Storage volume of 43 items: 2010		537,483				
Target population of Nairobi Depot (national): 2010		1,540,008				
Amount per-child (V1)		0.0003490	0.0003490	0.0003490	0.0003490	Calculated by Storage volume at Nairobi Depot/Target population (national): 2010
Target population of each site: 2020		2,101,174	287,912	134,722	117,180	Target population of Garissa= residents 98,288 + refugees 18,892 = 117,180
Annual dry storage volume: 2020 (V) =		733.34	100.49	47.02	40.90	
Amount per carry-in/out /2 = (A)		366.67	50.24	23.51	20.45	Storage volume when the stock are carried-in/out twice a year
Diluents storage volume: 2020 (Annual)		36.20	4.80	2.40	2.00	Annual storage volume
Diluent: each amount to be carried-in/out in 2020		18.10	1.20	0.60	0.50	Nairobi Depot: Storage volume when the stock are carried-in/out twice a year Regional Depots: Storage volume when the stock are carried-in/out 4 times a year
Droppers storage volume: 2020 (Annual)		18.20	2.40	1.20	1.20	Annual storage volume
Droppers: each amount to be carried-in/out in 2020		9.10	0.60	0.30	0.30	Nairobi Depot: Storage volume when the stock are carried-in/out twice a year Regional Depots: Storage volume when the stock are carried-in/out 4 times a year
Syringes & safety boxes storage volume: 2020 (V) =		1,354.80	185.20	86.60	75.40	Stored in the Dry Storage warehouse
Amount per carry-in/out /4 = (B)		338.70	46.30	21.65	18.85	Storage volume when the stock are carried-in/out 4 times a year
(A) + (B) = Total (2020)		705.37	96.54	45.16	39.30	
Design Dry Storage Capacity		715.52	98.40	47.20	40.20	Stored in the Dry Storage
Difference between target and design storage volume		10.15	1.86	2.04	0.90	Facility of Garissa Depot shall be designed in consideration of refugees.
Freezer rooms to be installed in the Project		2	0	0	0	
Cold rooms to be installed in the Project		8	0	0	0	
Coldrooms installed by DVI		0	1	1	1	
Total Coldrooms		8	1 + *1 = 2	1	1	*1: One more coldroom will be installed by the Kenyan side in the future.
Freezers to be installed in the Project		0	0	2	1	
Freezers installed by DVI		7	6	1	2	Refugees shall be considered for Garissa Depot.
Total Freezers		7	6	3	3	
Additional installation intended in the future		3	2	1	1	Additional freezers will be installed by the Kenyan side in the future.
Total Freezers in the future		10	8	4	4	For the purpose of calculating the required electric power capacity

Note: Storage amount in m3

Demanded Valid Storage Volume

705.37 m3

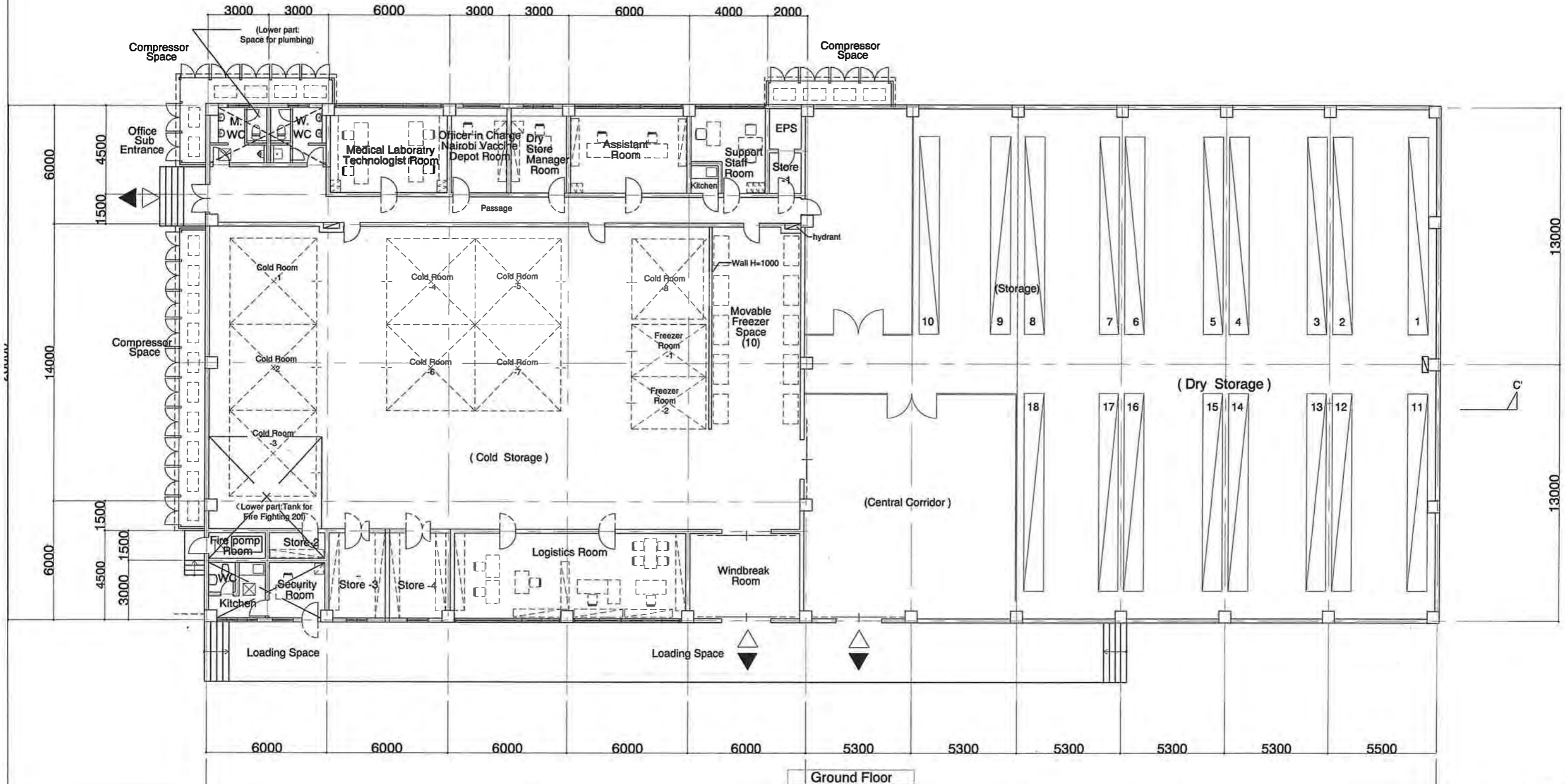
(No. L x W x H x Ratio)

- 1 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 2 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 3 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 4 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 5 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 6 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 7 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 8 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 9 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3
- 10 : 10.0 x 1.0 x 5.2 x 0.8 = 41.60 m3

(No. L x W x H x Ratio)

- 11 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- 12 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- 13 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- 14 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- 15 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- 16 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- 17 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- 18 : 9.0 x 1.0 x 5.2 x 0.8 = 37.44 m3
- Total = 715.52 m3

Floor Area = 1,612.00m2



Ground Floor

Demanded Valid Storage Volume
96.54 m³

Expression of Calculation of Valid Storage Volume

(No. L x W x H x Ratio)

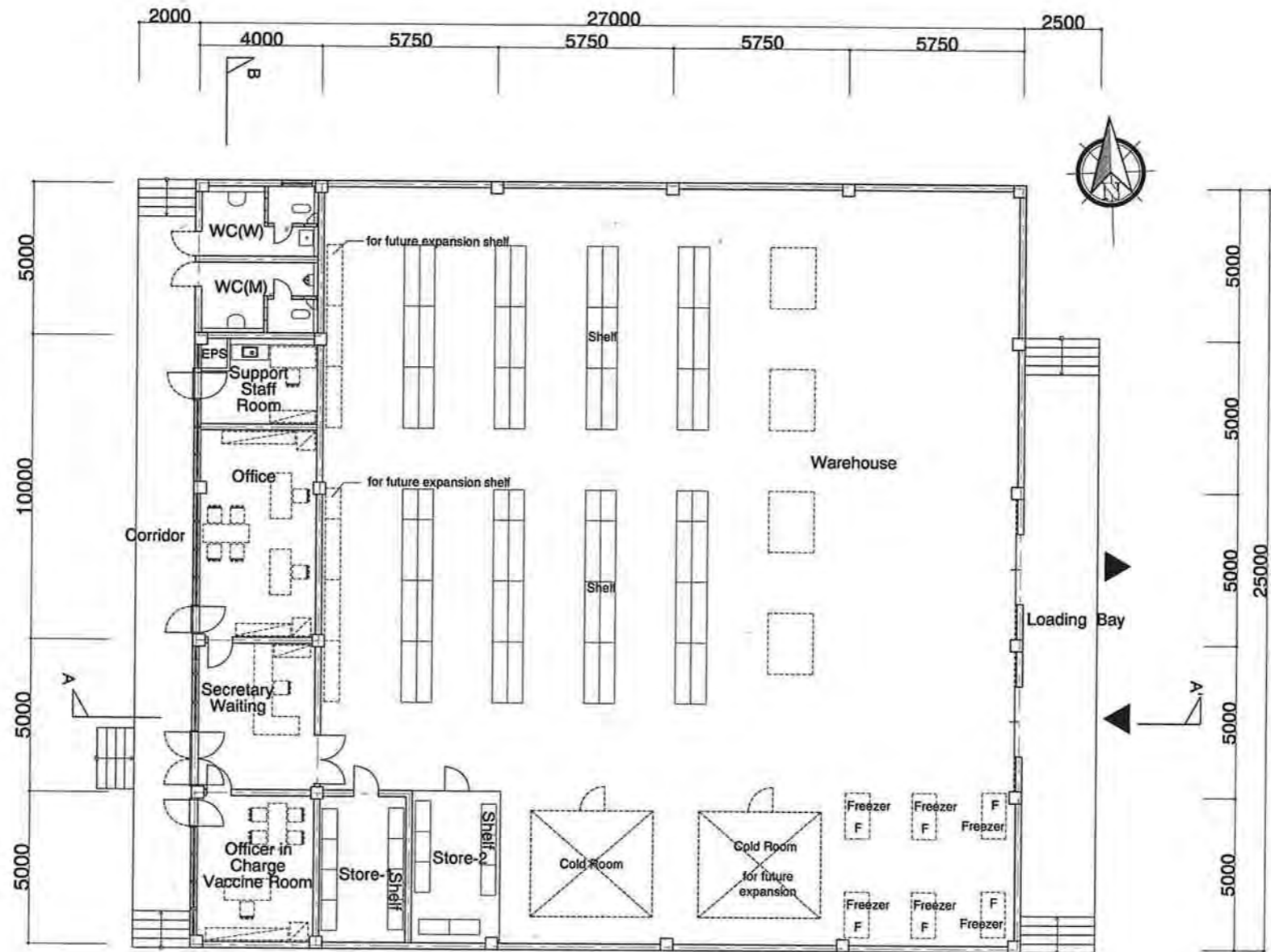
- 1 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
- 2 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
- 3 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
- 4 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
- 5 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 6 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 7 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 8 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 9 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 10 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 11 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 12 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 13 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³
- 14 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³
- 15 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³
- 16 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³
- 17 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³
- 18 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³
- 19 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³
- 20 : 7.0 x 0.5 x 2.0 x 0.7 = 4.90 m³

Total = 98.40 m³

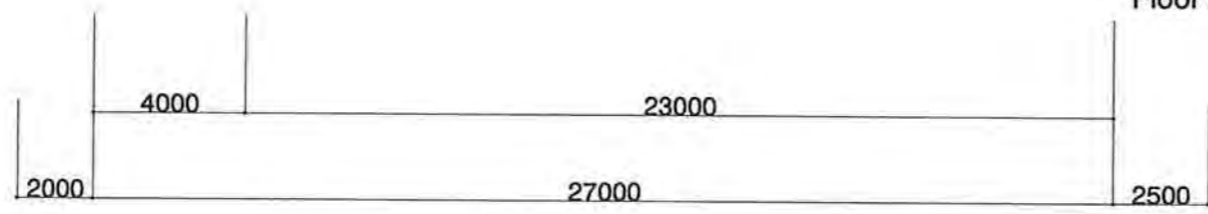
Spare Space for Future

- 21 : 6.0 x 0.5 x 2.0 x 0.7 = 4.20 m³
- 22 : 7.0 x 0.5 x 2.0 x 0.7 = 4.70 m³

All Total = 107.30 m³



Floor Area = 675.00m²



kakamega Depot

Demanded Valid Storage Volume
45.16 m³



Expression of Calculation of Valid Storage Volume

(No. L x W x H x Ratio)

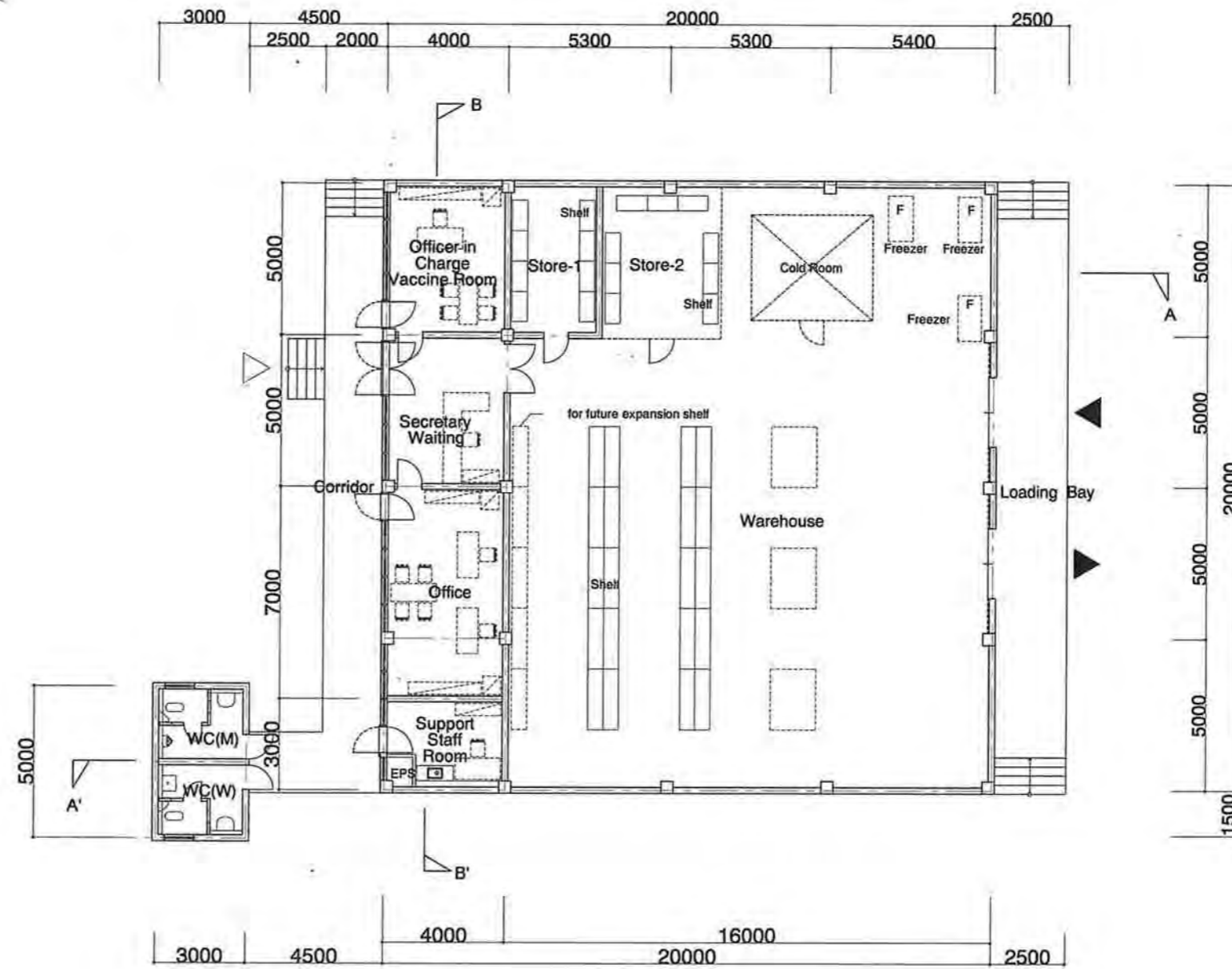
- 1 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
- 2 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
- 3 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
- 4 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³
- 5 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³
- 6 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³
- 7 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³

Total = 47.20 m³

Spare Space for Future

- 8 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³

All Total = 54.2 m³



Floor Area = 415.00m²

Meru Depot



YOKOGAWA ARCHITECTS & ENGINEERS, INC.

THE PROJECT FOR THE REINFORCEMENT OF VACCINE STORAGE
IN THE REPUBLIC OF KENYA

Name of Drawing

Meru
Depot Plan

Rack
Layout

2010.04.09

Number of Drawing

RL-04

Scale
1:200

Demanded Valid Storage Volume
39.30 m³

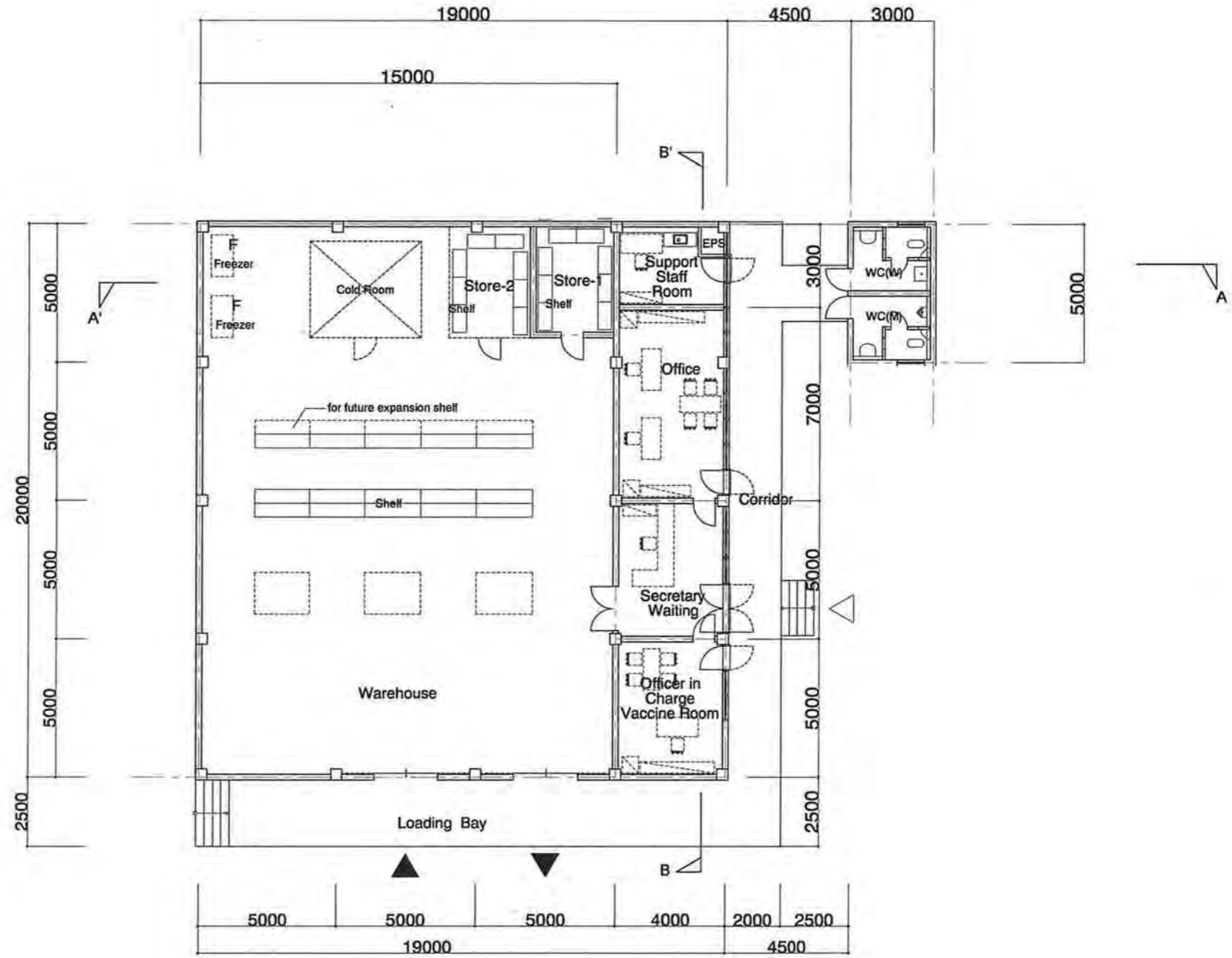
Expression of Calculation of Valid Storage Volume

(No. L x W x H x Ratio)

- 1 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
 - 2 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
 - 3 : 2.0 x 2.0 x 2.0 x 0.8 = 6.40 m³
 - 4 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³
 - 5 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³
 - 6 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³
- Total = 40.20 m³

Spare Space for Future

- 7 : 10.0 x 0.5 x 2.0 x 0.7 = 7.00 m³
- All Total = 47.2 m³



Garissa Depot

Floor Area = 395.00m²

Appendix 5-3
Topographic Map



RAMANI GEOSYSTEMS
P.O BOX 15353-00509
TEL +(254) 20 604823
FAX: +(254) 20 602035
EMAIL: info@ramani.co.ke

CLIENT:
YUKOGAWA ARCHITECT
& ENGINEERS

TOPOGRAPHICAL SURVEY
LOCATION:
Kitengela-Nairobi Site

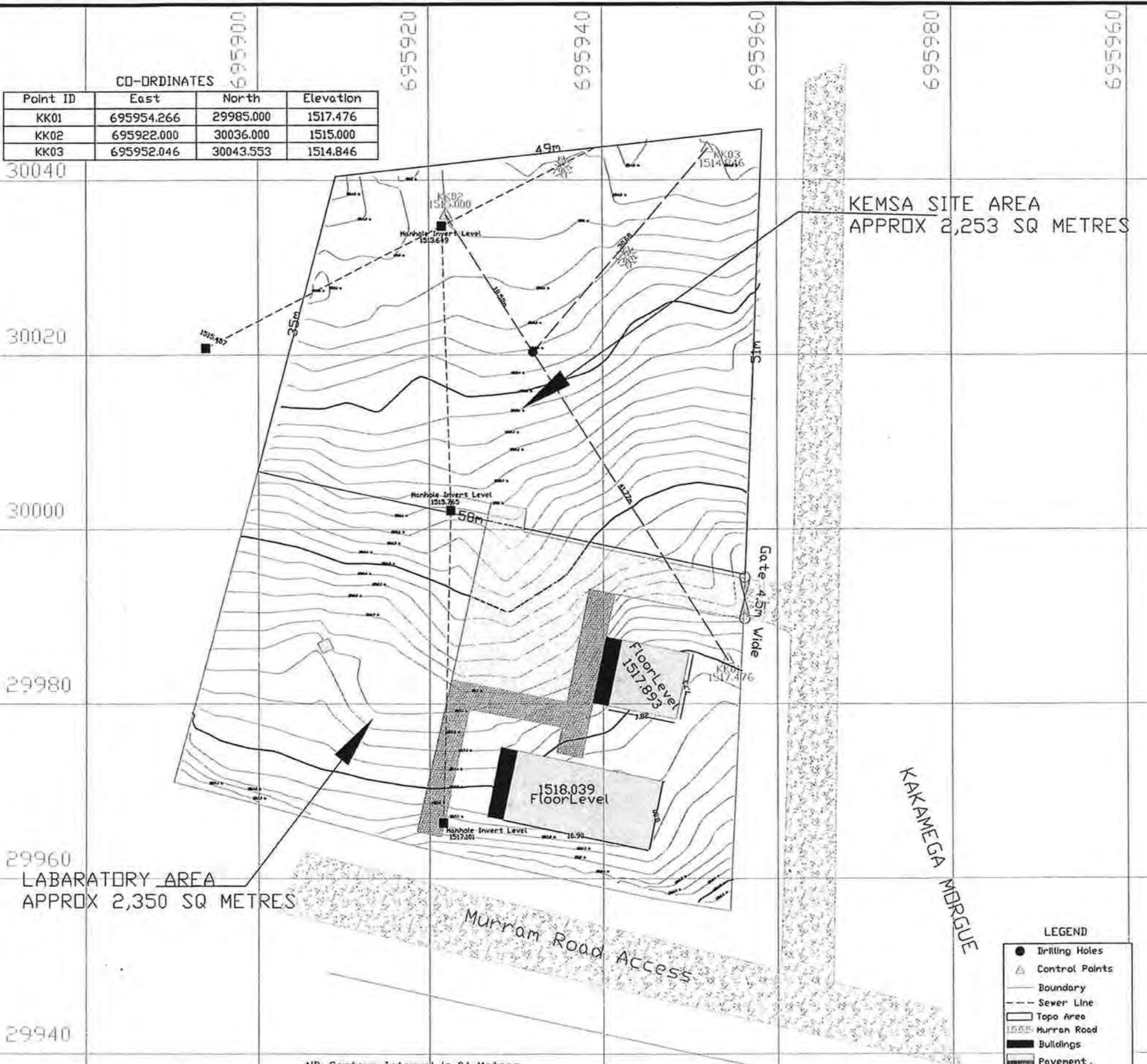
SURVEYED BY
Ramaní Geosystems
JOB No.1709 30295
CHECKED BY W ABIERO
Sign:
DATE: JULY/2010

This Map is not an authority on Boundaries

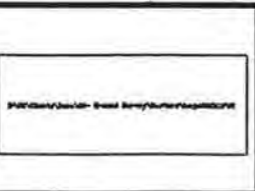
PROJECTION: UTM
DATUM: WGS84
ZONE: 37 NORTH

UNIT: METRES
SCALE 1:750
AT SHEET

EDITION 1
SHEET 1/1



CO-ORDINATES			
Point ID	East	North	Elevation
KK01	695954.266	29985.000	1517.476
KK02	695922.000	30036.000	1515.000
KK03	695952.046	30043.553	1514.846

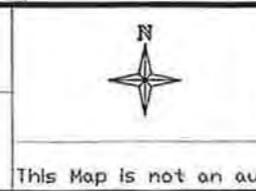


RAMANI GEOSYSTEMS
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 EMAIL: info@ramani.co.ke

CLIENT:
 YUKOGAWA ARCHITECT
 & ENGINEERS

TOPOGRAPHICAL SURVEY
 LOCATION:
 Kakamega Site

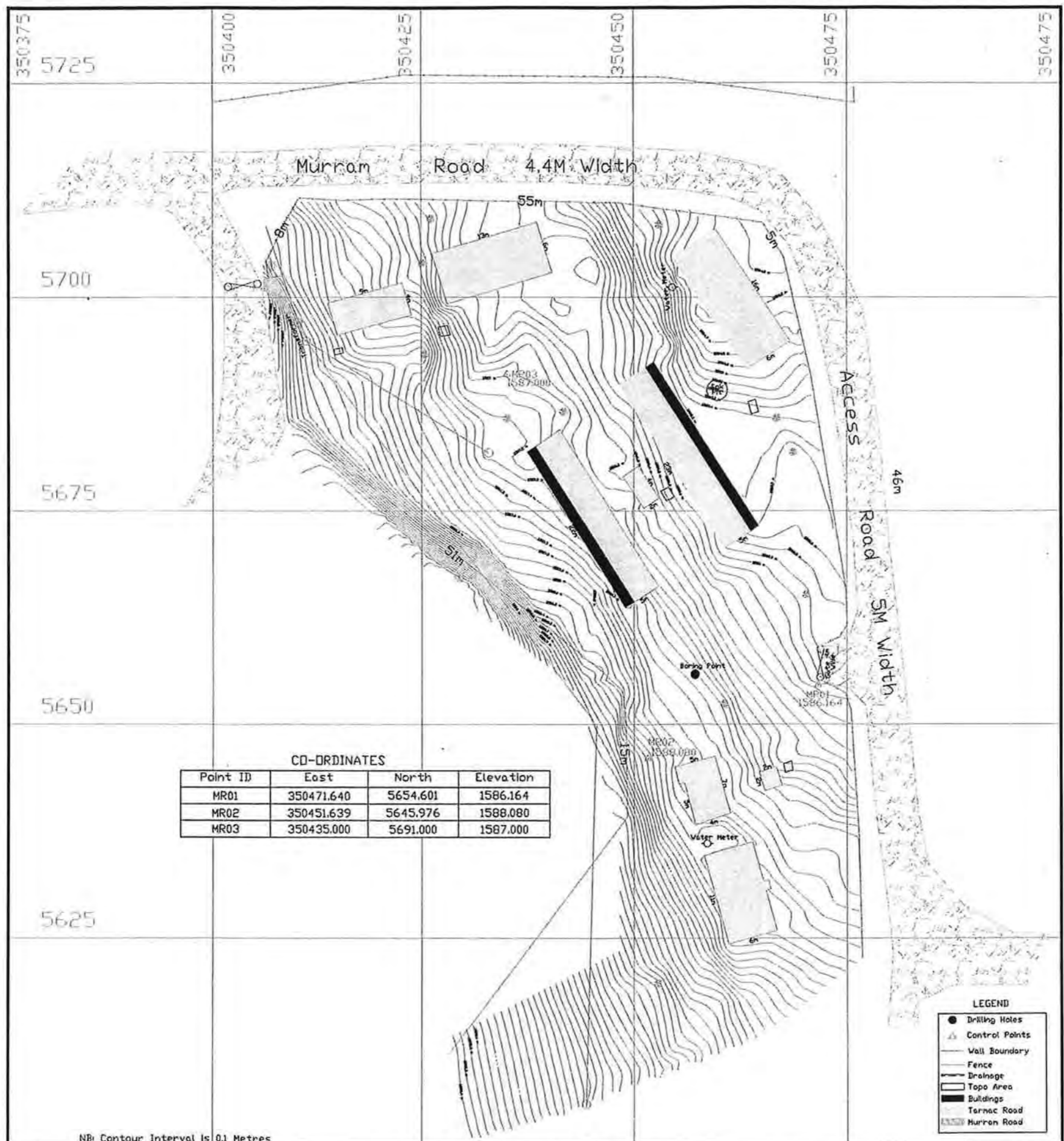
SURVEYED BY
 Ramani Geosystems
 JOB NO: 1709 30138
 CHECKED BY W. ABIERO
 Sign:
 DATE: MARCH/2010



PROJECTION: UTM
 DATUM: WGS84
 ZONE: 37 SOUTH

UNIT: METRES
 SCALE: 1:500
 EDITION: 1
 SHEET: 1/1

This Map is not an authority on Boundaries



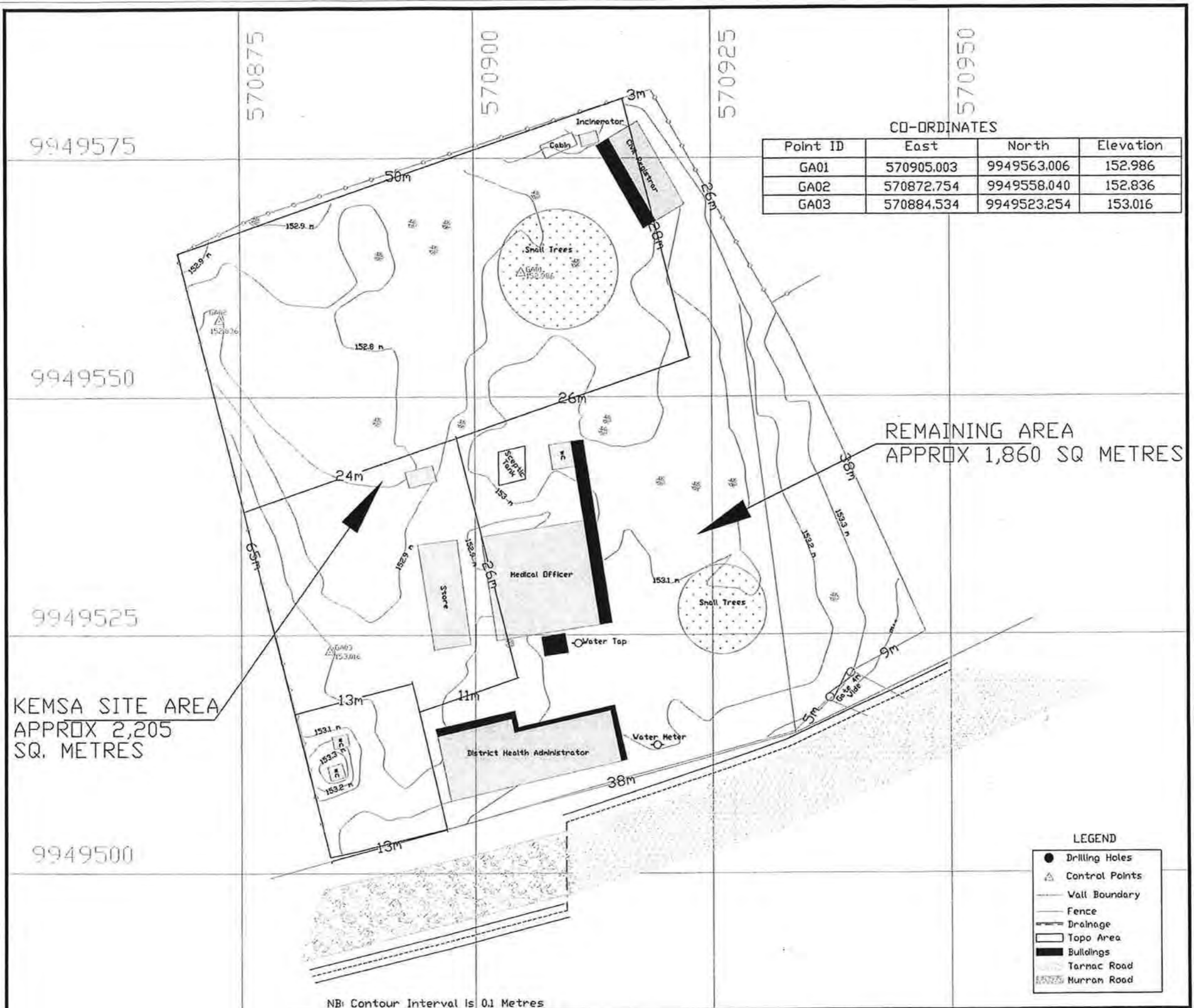
CD-ORDINATES

Point ID	East	North	Elevation
MR01	350471.640	5654.601	1586.164
MR02	350451.639	5645.976	1588.080
MR03	350435.000	5691.000	1587.000

LEGEND

●	Drilling Holes
△	Control Points
—	Wall Boundary
—	Fence
—	Drainage
□	Topo Area
■	Buildings
—	Tarmac Road
—	Murram Road

	RAMANI GEOSYSTEMS P.O. BOX 15353-00509 TEL: +(254) 20 604823 FAX: +(254) 20 602035 EMAIL: info@ramani.co.ke	CLIENT: YUKOGAWA ARCHITECT & ENGINEERS	TOPOGRAPHICAL SURVEY LOCATION: Meru Site	SURVEYED BY Ramani Geosystems JOB: ND1769 30138 CHECKED BY V. ABJERO Sign: _____ DATE: MARCH/2010		PROJECTION: UTM DATUM: WGS84 ZONE: 37 NORTH	UNIT: METRES SCALE: 1:500
This Map is not an authority on Boundaries						EDITION 1	SHEET 1/1



CO-ORDINATES

Point ID	East	North	Elevation
GA01	570905.003	9949563.006	152.986
GA02	570872.754	9949558.040	152.836
GA03	570884.534	9949523.254	153.016

KEMSA SITE AREA
APPROX 2,205
SQ. METRES

REMAINING AREA
APPROX 1,860 SQ METRES

LEGEND

●	Drilling Holes
△	Control Points
—	Wall Boundary
—	Fence
—	Drainage
□	Topo Area
■	Buildings
—	Tarmac Road
—	Murrum Road

NB: Contour Interval is 0.1 Metres

	RAMANI GEOSYSTEMS P.O BOX 15353-00509 TEL: +(254) 20 604823 FAX: +(254) 20 602035 EMAIL: info@ramani.co.ke	CLIENT: YUKOGAWA ARCHITECT & ENGINEERS	TOPOGRAPHICAL SURVEY LOCATION: Garissa Site	SURVEYED BY Ramani Geosystems JOB NO: 1709 30138 CHECKED BY W. ABIERO Sign: _____ DATE: MARCH/2010.		PROJECTION: UTM DATUM: WGS84 ZONE: 37 SOUTH	UNIT: METRES SCALE: 1:500
	This Map is not an authority on Boundaries						EDITION 1