



**REPUBLIC OF KENYA**

**MINISTRY OF ICT, INNOVATION AND YOUTH AFFAIRS  
STATE DEPARTMENT OF ICT & INNOVATION**

**P. O. BOX 30025-00100  
NAIROBI**

**ADDENDUM FOR  
TENDER NO: MOICT/SDICT/ONT/010/2021-2022**

**TENDER FOR SUPPLY, INSTALLATION AND COMMISSIONING OF  
NETWORK INFRASTRUCTURE  
AT KERICHO DISTRICT HOSPITAL LEVEL IV, KERICHO COUNTY**

**ISSUE DATE: 25<sup>TH</sup> AUGUST, 2021**

**TENDER CLOSING DATE: 8<sup>TH</sup> SEPTEMBER, 2021 AT 10.00 A.M**

## 1.0 INTRODUCTION

The Client (Ministry of ICT, Innovation and Youth Affairs, State Department of ICT & Innovation) organized a Pre-Tender Site Survey on 17<sup>th</sup> August 2021. The aim was to give the Bidders an opportunity to familiarize with the ground requirements, understand the Tender drawings and identify the omission, adjustments to be considered to ensure installed solution meets the expectation of the intended work. Having gone through the site survey the following issues were raised and addressed as follows:

## 2.0 ISSUES AND CLARIFICATIONS

No.	ISSUES THAT CAME UP	CLARIFICATION
1.	The following service points/blocks were missing in the tender document: Administration, Doctor's Plaza, County public Health, Drugs/General Stores/Kephi Office, Kitchen/BioMed/Procurement, Public Heath/Chest Clinic, Ward 2, Ward 3, Ward 4, Ward 6, Security, Customer care, Library and Eye Ward	The bill of material, price schedule and network design drawings have been amended to reflect the requirements accordingly as specified in section 3.0, 4.0 and 5.0 of this addendum.
2.	There is a new mortuary Building that is currently under construction.	There won't be installation of Network in the new mortuary building since the structure is still at the foundation stage. Installation will however be done for the current morgue.
3.	Trunking has been done in the administration block. This is providing service to an agency partnering with the hospital on the ground floor of administration block.	We propose to re-use the existing trunking where possible. However, new cabling will be done on the existing trunking without interfering the existing cables. A new cabinet will be introduced to separate the new network. Cabling will be done on 1 <sup>st</sup> floor and 2 <sup>nd</sup> Floor of the Administration Block.
4.	Topology to be used to interconnect network cabinets to the MDF.	All block cabinets and their respective switches will be interconnected through Optic Fibre Cable uplinks from the Main Distribution Switch at the MDF.
5	Specifications for Self-Cooling Cabinet in the tender Document were not clear.	The Specifications for Self-cooling Cabinet has been amended as per the section 2.1 of this addendum

### 2.1 SELF-COOLING CABINET WITH A POWER SOLUTION

The bidder shall provide a self-cooling cabinet that will include power system, Main Distribution Frame (MDF), Optical Distribution Frame (ODF), battery, environment monitoring and temperature control modules.

No	Technical Specifications	Compliance (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the bid document)
<b>Requirements</b>			
1.	The solution shall provide efficient power consumption		
2.	It shall easily be deployed in rugged outdoor environments with a temperature range from 41°C to		

	53°C including high humidity		
3.	Power to the cabinet shall be switched off from within the cabinet. Proper power socket cables to be supplied with the cabinets. The bidder shall be required to provide a 6- Way Power Distribution board		
4.	It shall meet IP55 protection ratings, allowing for installation in adverse conditions such as close to salt water		
5.	Its door shall be installed with air conditioner		
6.	It shall support remote monitoring and alarms for easier Operations and Maintenance (O&M)		
7.	It shall monitor environmental and power parameters		
8.	The cabinet shall have at least 48V LED lamps with a protective circuit breaker		
9.	The cabinet shall have an AC Distribution Unit with an input Voltage range of 220VAC-240VAC		
10.	The cabinet shall have DC Distribution Unit with an output voltage range between 42-58VDC		
11.	The cooling system shall consist of air conditioners with a cooling capacity of at least 800W, forced air exhaust, heat exchanger and thermoelectric conditioner		
12.	It shall have automatic microclimate control system, security and fire alarms which can engage locally or remote control		
13.	It shall have advanced heat dissipation system to reduce power consumption and noise		
14.	The cabinet should be made of Galvanized steel		
15.	It shall have a fire extinguisher system		
16.	The cabinet shall be at least 38U 19 “ mounting racks, which can install 4pcs lead-acid batteries and telecommunication equipment		
17.	The cabinet shall have four 100AH each with 12VDC Lead-acid battery		
18.	The cabinet shall have Temperature sensor, door sensor, water sensor, smoke sensor among others		
19.	The cable inlets should be at the bottom of the cabinet		
20.	Doors should be equipped with a locking system		
21.	It should have a 2year Warranty		

### 3.0 PRICE SCHEDULE

#### Bill of Quantities/Schedule of Rates

Below is the amended proposed bill of quantities for guidance. The bidder shall provide final bill of quantity as per their proposed design.

#### 3.1 Kericho District Referral Hospital

NO.	Description	Unit of Measurement	Qty	Unit Cost	Total Cost
1.	F/UTP Category 6A Outlets Module (Data points)	No	632		
2.	Flash Mount Faceplates – F/UTP Category 6A Double	No	316		

3.	F/UTP Category 6A Wall UTP-RJ45Patch cord (1M)	No	660		
4.	F/UTP Category 6A Wall UTP-RJ45Patch cord (3M)	No	632		
5.	F/UTP Category 6A Wall UTP-RJ45Patch cord (5M)	No	10		
6.	F/UTP Category 6A 24 PATCH PANEL 1 U568A/B	No	27		
7.	Cable managers 2U	No	27		
8.	Galvanized Metallic Trunking 150mm x50mm & accessories for installing 632 Data Points and access points	Lot	Lot		
9.	F/UTP Category 6A Pure Copper Ethernet Cable for installing 660 Data Points and access points	Lot	Lot		
10.	Fiber Patch Panel (At least 8 core)	No	14		
11.	Fiber Patch Panel (24 core)	No	2		
12.	Fiber Cable 8 Core plus Ducts to interlink all the cabinets/switches	lot	Lot		
13.	Fiber Patch Cord 1M	No	40		
14.	1G SFP transceivers	No	40		
15.	18U Network Cabinet with a 4Way Horizontal Mount Power Distribution Unit (PDU)	No	14		
16.	38U Self-Cooling, maintenance free Network Cabinet with Horizontal Mount Power Distribution Unit (PDU)	No	1		
17.	Rack mountable UPS- 1.5 KVA	No	14		
18.	Rack mountable UPS- 3 KVA	No	0		
19.	Decommissioning of Old Cables	Lot	Lot		
20.	48 Port Distribution/Aggregation Switch	No	1		
21.	48 Port POE+ Switch with Stacking Modules	No	11		
22.	24 Port POE Switch with Stacking Modules	No	7		
23.	Wireless Access Points (Indoor)	No	28		
24.	Wireless Controller	No	1		
25.	Civil Works-Pulling, Termination, Labelling, Documentation and Testing of Horizontal and Backbone Cabling,	Lot	Lot		
26.	Installation of Active Devices, IP Schemes and Configuration.	Lot	Lot		
27.	Testing, Training and Handover	Lot	Lot		
28.	Provision of Project Implementation Committee transport services as specified in Section V no 17	Round Trip	5		
29.	Annual SLA Support for one Year	Year	1		
30.	SFP – single mode	No	2		
31.	Fiber Optic Pig tail -10M	No	2		
	<b>TOTAL</b>				

Name of Tenderer: \_\_\_\_\_

Authorized Signature of Tenderer: \_\_\_\_\_ Date \_\_\_\_\_

#### 4.0 BILL OF MATERIALS

**NOTE:** The bill of materials is just an estimate; the bidder is required to carry out a survey in order to get actual material required and provision for them in the quote. The client is not liable for any omission.

#### The Bill of Materials:

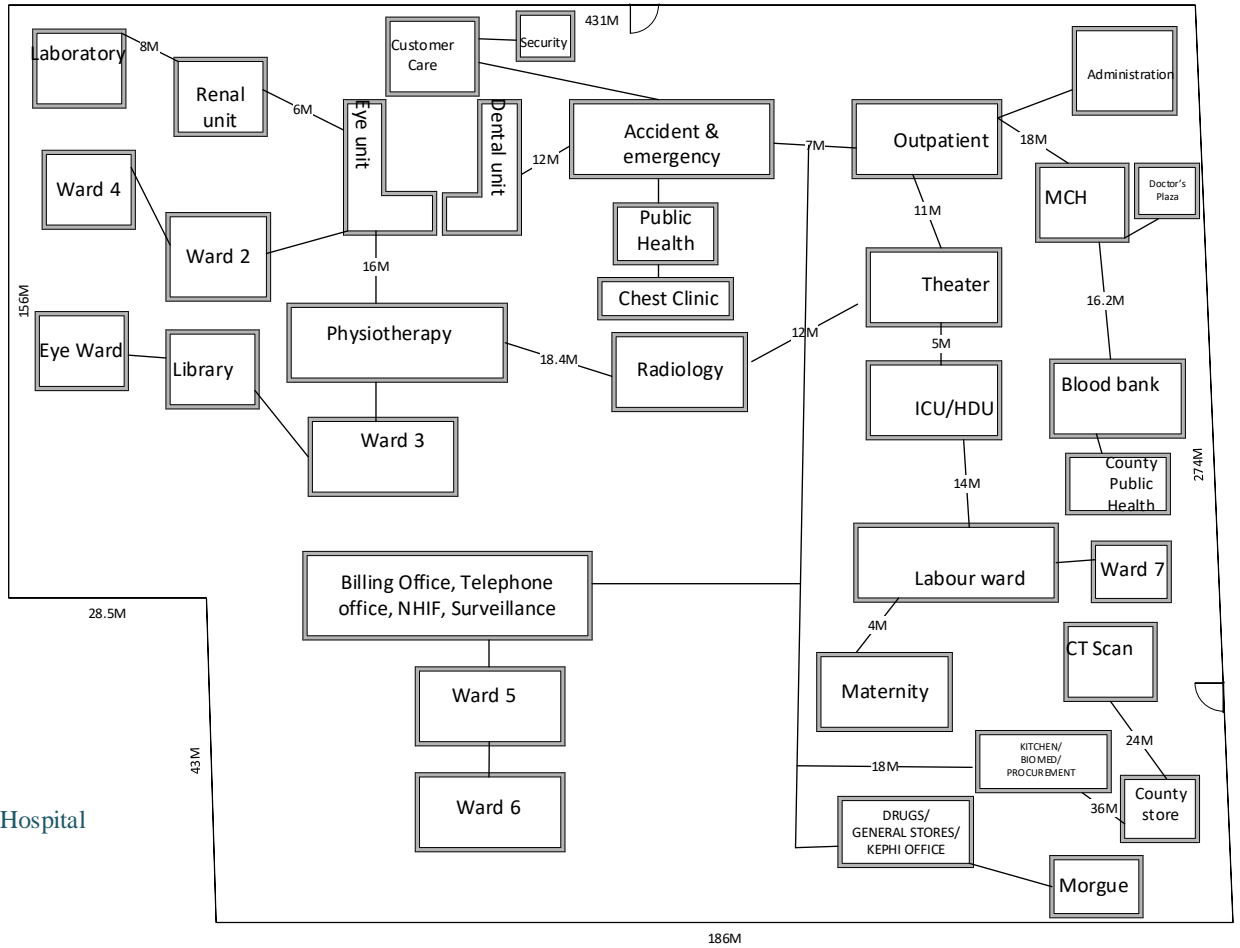
##### 4.1 Kericho District Referral Hospital

NO.	Description	Unit of Measurement	Qty
1.	F/UTP Category 6A Outlets Module (Data points)	No	632
2.	Flash Mount Faceplates – F/UTP Category 6A Double	No	316
3.	F/UTP Category 6A Wall UTP-RJ45Patch cord (1M)	No	660
4.	F/UTP Category 6A Wall UTP-RJ45Patch cord (3M)	No	632
5.	F/UTP Category 6A Wall UTP-RJ45Patch cord (5M)	No	10
6.	F/UTP Category 6A 24 PATCH PANEL 1 U568A/B	No	27
7.	Cable managers 2U	No	27
8.	Galvanized Metallic Trunking 150mm x50mm & accessories for installing 632 Data Points and access points	Lot	Lot
9.	F/UTP Category 6A Pure Copper Ethernet Cable for installing 660 Data Points and access points	Lot	Lot
10.	Fiber Patch Panel (At least 8 core)	No	14
11.	Fiber Patch Panel (24 core)	No	2
12.	Fiber Cable 8 Core plus Ducts to interlink all the cabinets/switches	lot	Lot
13.	Fiber Patch Cord 1M	No	40
14.	1G SFP transceivers	No	40
15.	18U Network Cabinet with a 4Way Horizontal Mount Power Distribution Unit (PDU)	No	14
16.	38U Self-Cooling, maintenance free Network Cabinet with Horizontal Mount Power Distribution Unit (PDU)	No	1
17.	Rack mountable UPS- 1.5 KVA	No	14
18.	Rack mountable UPS- 3 KVA	No	0
19.	Decommissioning of Old Cables	Lot	Lot
20.	48 Port Distribution/Aggregation Switch	No	1
21.	48 Port POE+ Switch with Stacking Modules	No	11
22.	24 Port POE Switch with Stacking Modules	No	7
23.	Wireless Access Points (Indoor)	No	28
24.	Wireless Controller	No	1
25.	Civil Works-Pulling, Termination, Labelling, Documentation and Testing of Horizontal and Backbone Cabling,	Lot	Lot
26.	Installation of Active Devices, IP Schemes and Configuration.	Lot	Lot
27.	Testing, Training and Handover	Lot	Lot
28.	Provision of Project Implementation Committee transport services as specified in Section V no 17	Round Trip	5
29.	Annual SLA Support for one Year	Year	1
30.	SFP – single mode	No	2
31.	Fiber Optic Pig tail -10M	No	2
	<b>TOTAL</b>		

## 5.0 HOSPITAL BLOCKS WITH PROPOSED NETWORK DATAPOINTS

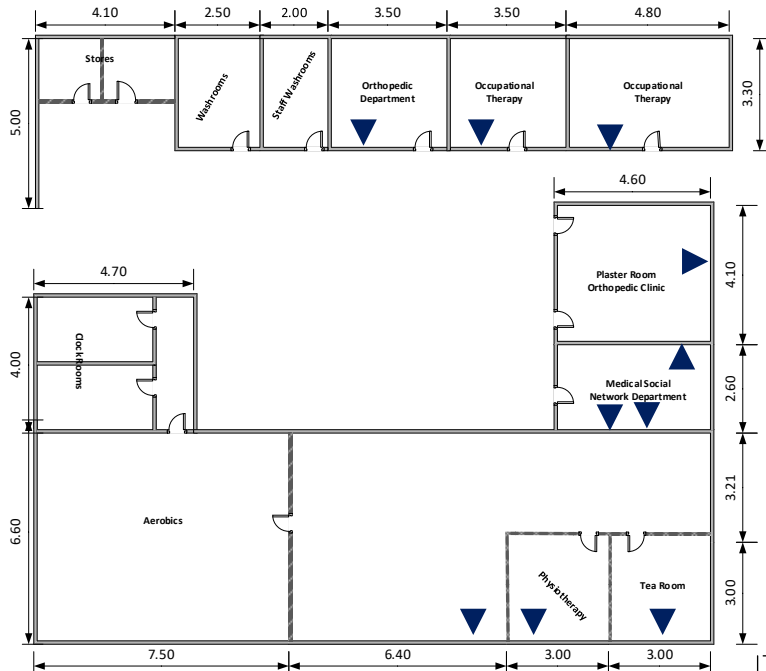
**NOTE:** The network drawing and position of datapoints is just proposal the final position will be determined during sign off of network design before implementation. The bidder is required to carry out a survey in order to get actual length and material required and provision for them in the quote. The client is not liable for any omission. The drawings are not to scale.

### 5.1 Hospital Blocks Overview



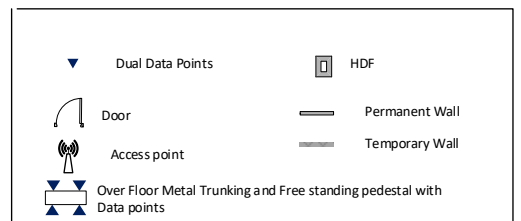
Kericho District Hospital  
MAN Layout

Kericho District Hospital  
Physiotherapy  
Proposed Network Layout

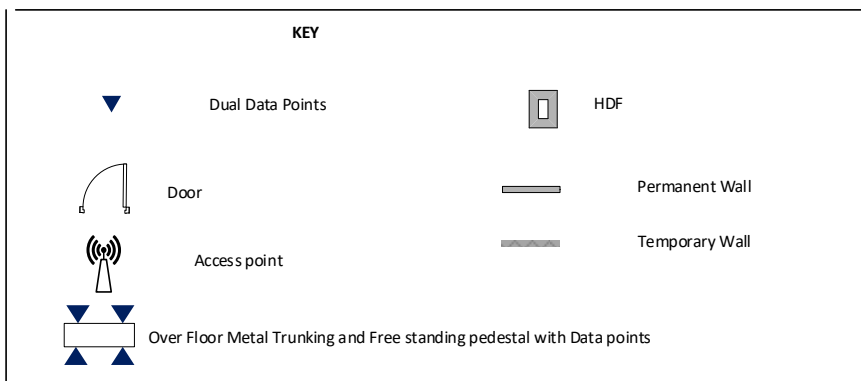
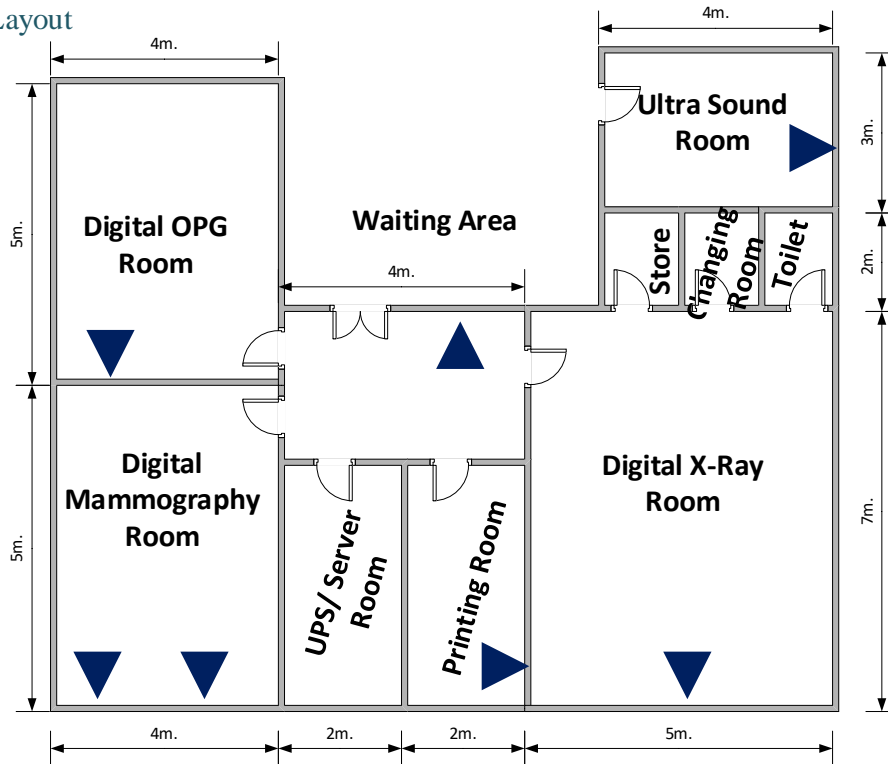


Double: 10  
Total Ports: 20  
Perimeter=117.5m

**KEY**

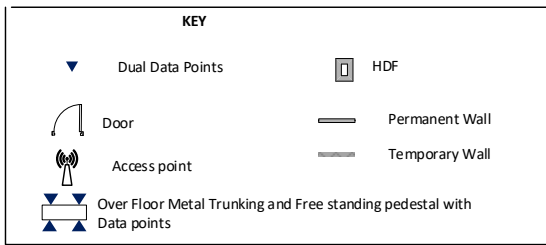
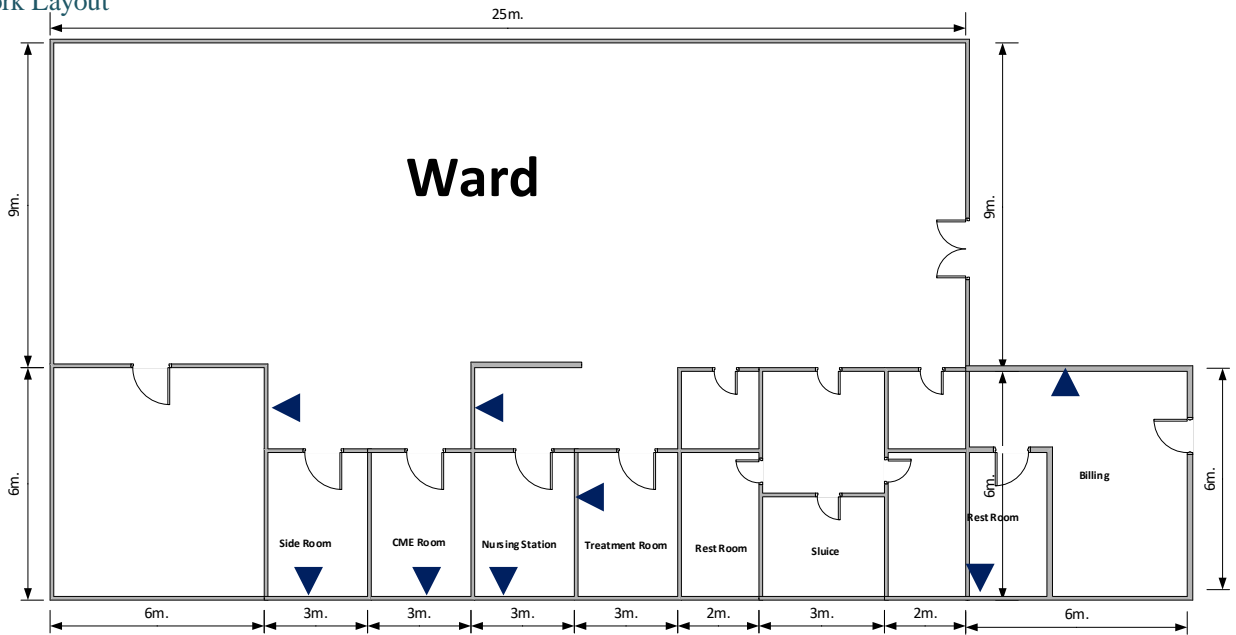


Kericho District Hospital  
 Radiology  
 Proposed Network Layout



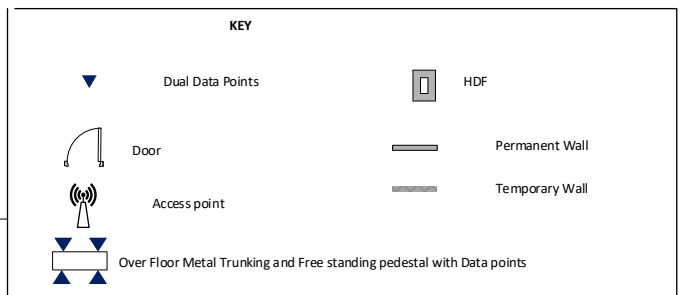
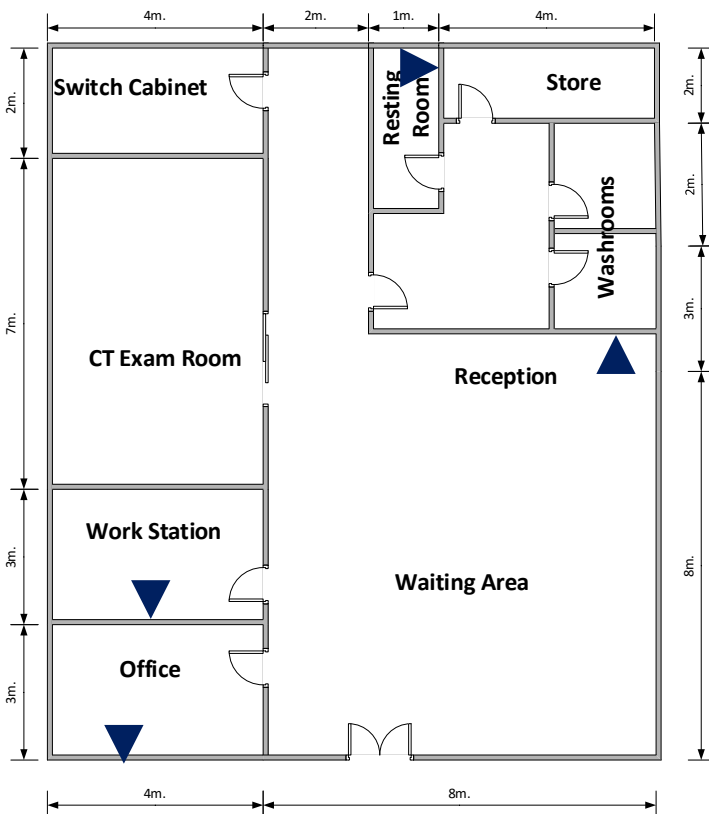
Double : 7  
 Total Ports :14  
 Perimeter=53m

Kericho District Hospital  
 Ward-5  
 Proposed Network Layout



Double: 8  
 Total Ports: 16  
 Perimeter=92 m

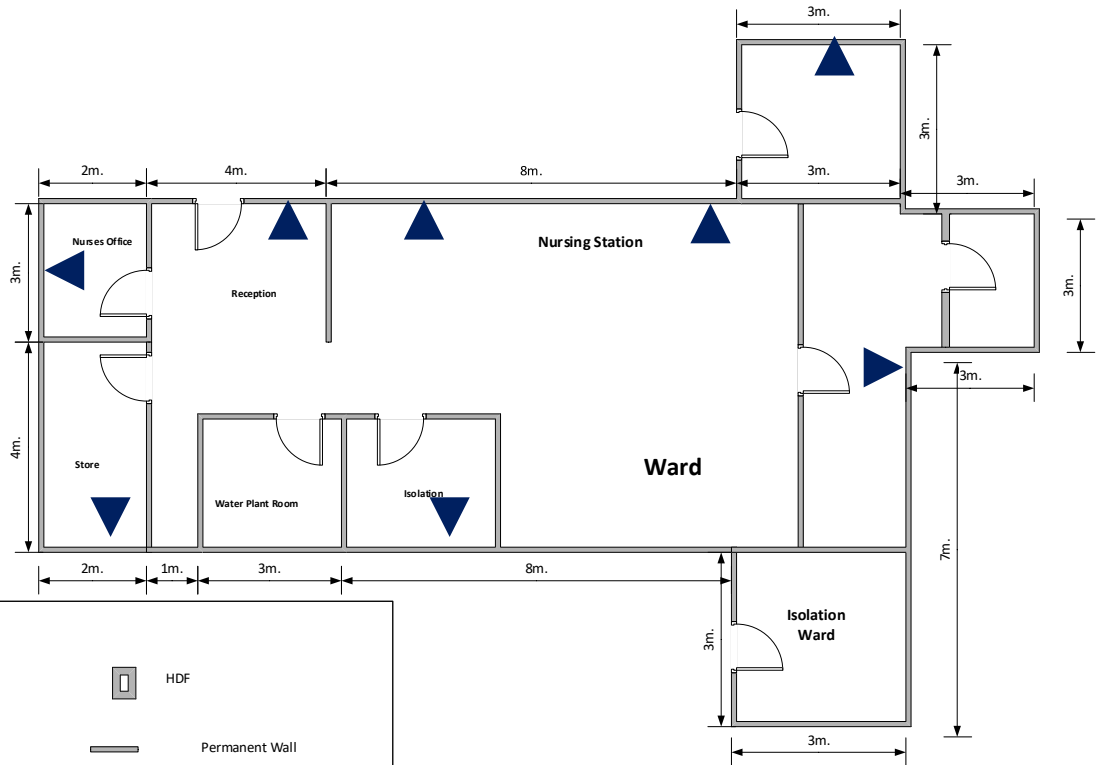
Kericho District Hospital  
 CT Centre  
 Proposed Network Layout



Double: 4  
 Total Ports: 8  
 Perimeter=54m

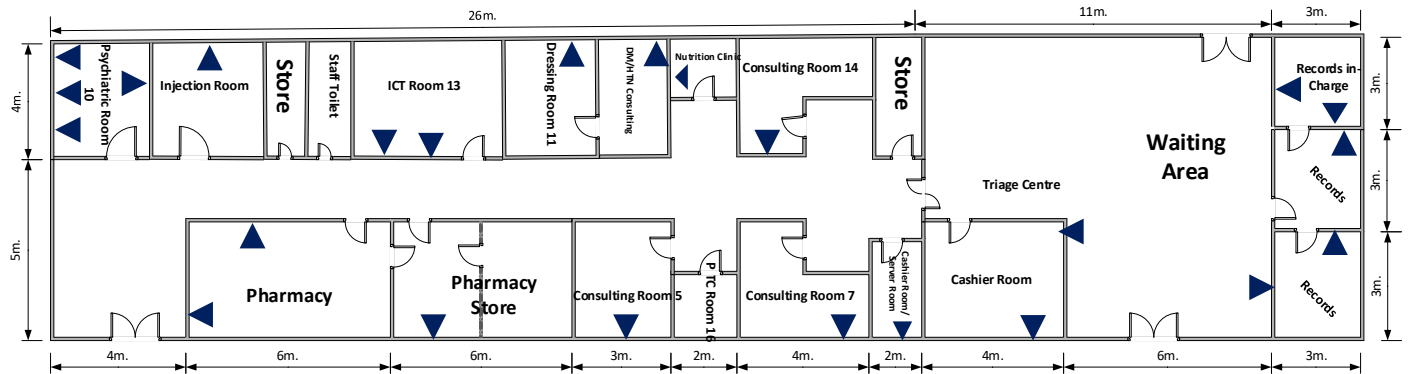


Kericho District Hospital  
Renal Dialysis  
Proposed Network Layout



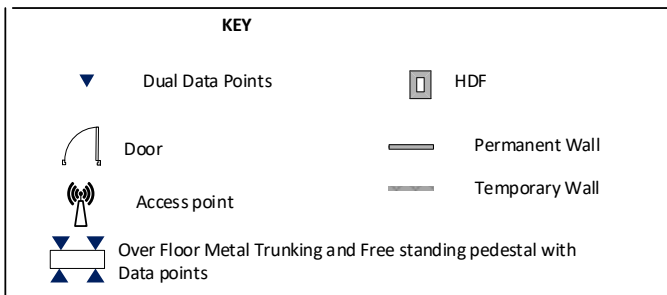
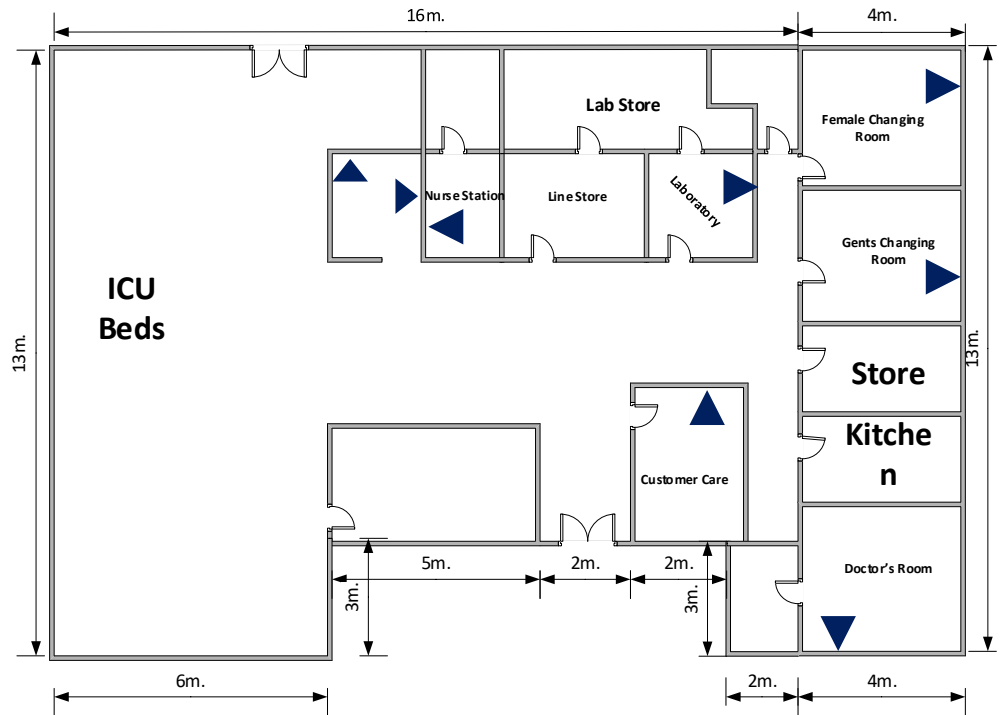
Double : 8  
Total Ports : 16  
Perimeter : 66m

Kericho District Hospital  
Outpatient Department  
Proposed Network Layout



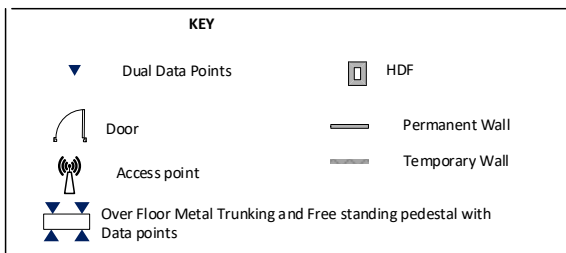
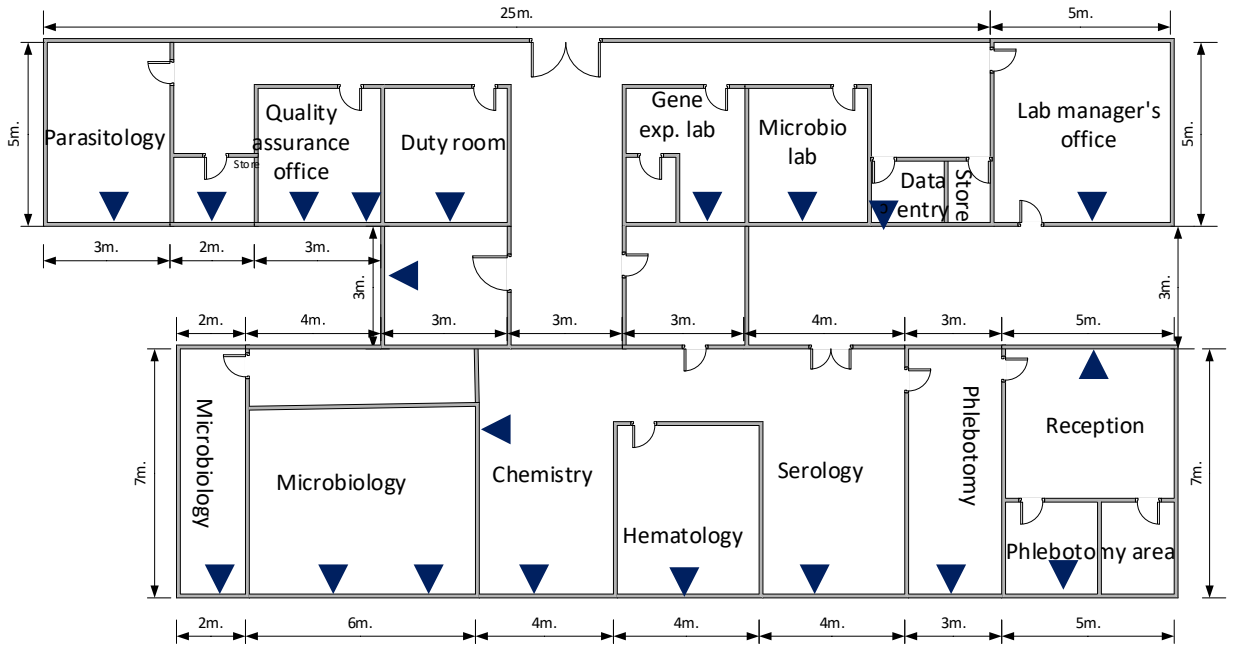
Double: 24  
Total Ports: 48  
Perimeter=98m

Kericho District Hospital  
 ICU/HDU  
 Proposed Network Layout



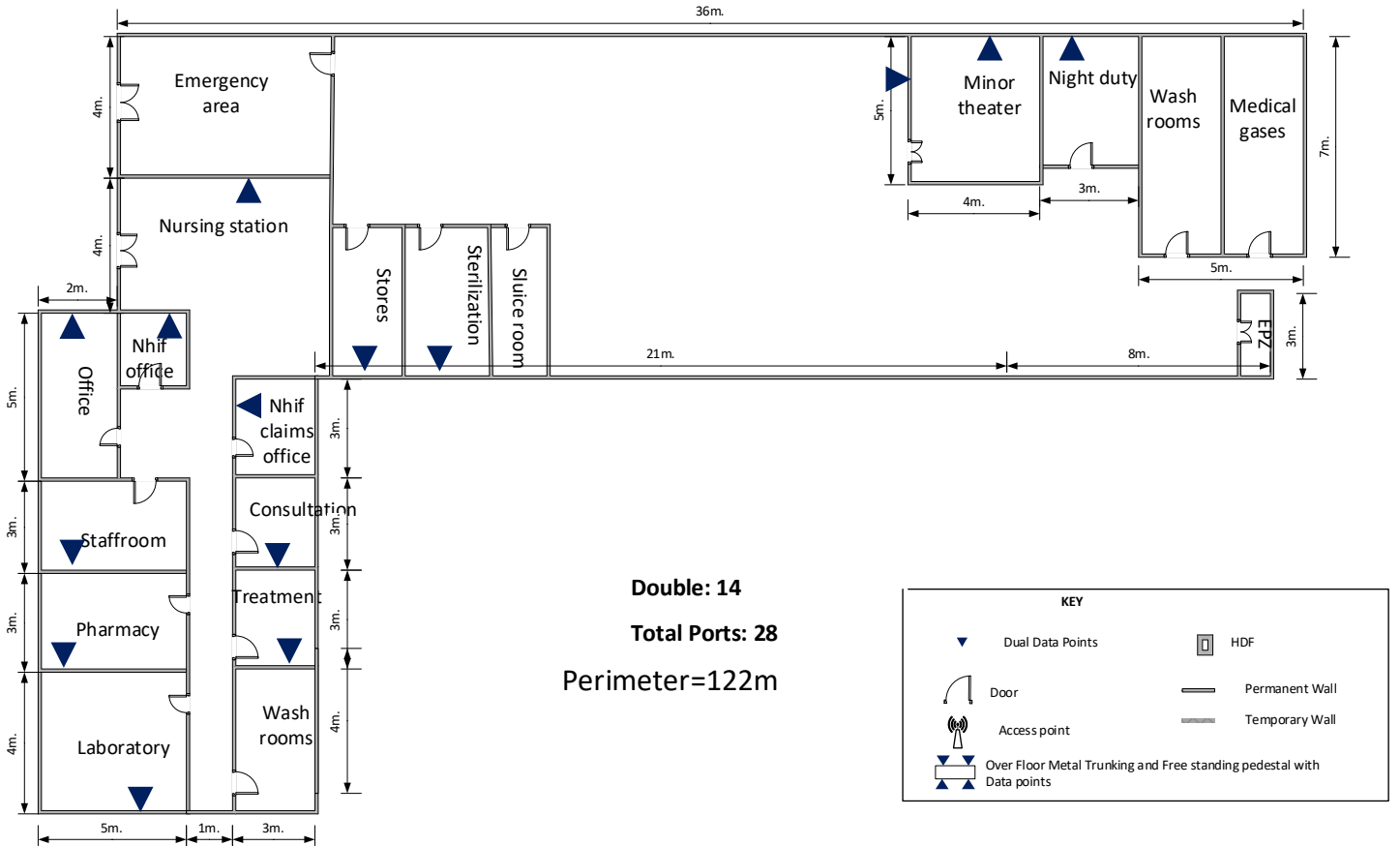
Double: 8  
 Total Ports: 16  
 Perimeter=93m

Kericho District Hospital  
 Laboratory Department  
 Proposed Network Layout

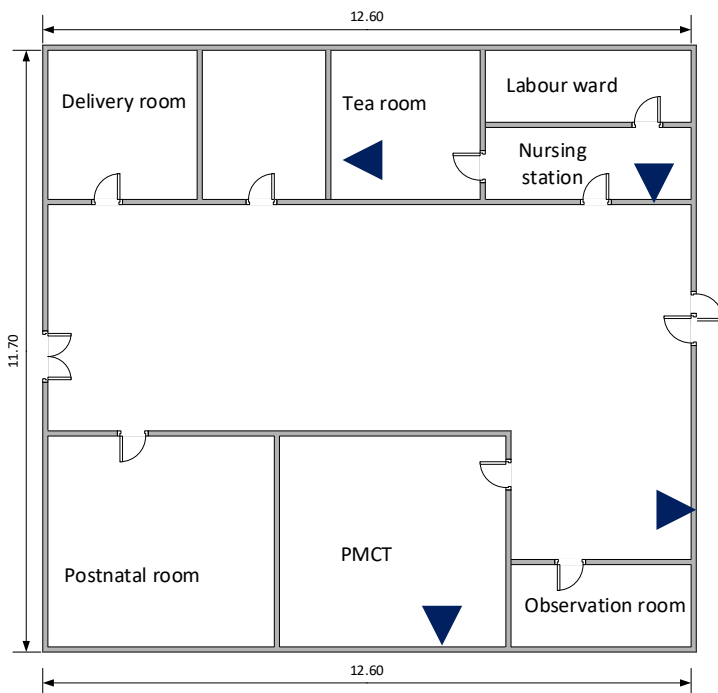


Double: 20  
 Total Ports: 40  
 Perimeter=102m

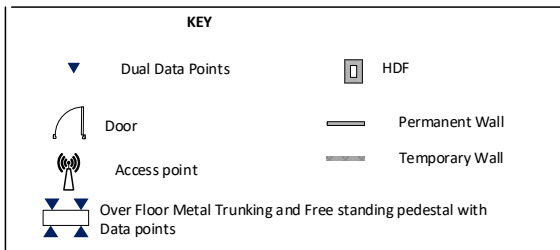
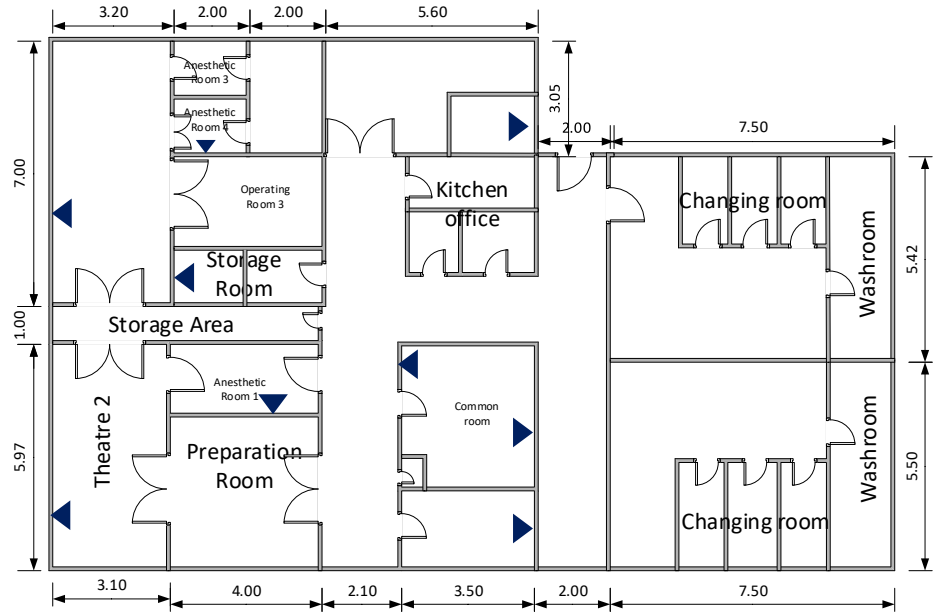
Kericho District Hospital  
Emergency and Accident  
Proposed Network Layout



Kericho District Hospital  
Kericho CRH(labour ward)  
Proposed Network Layout

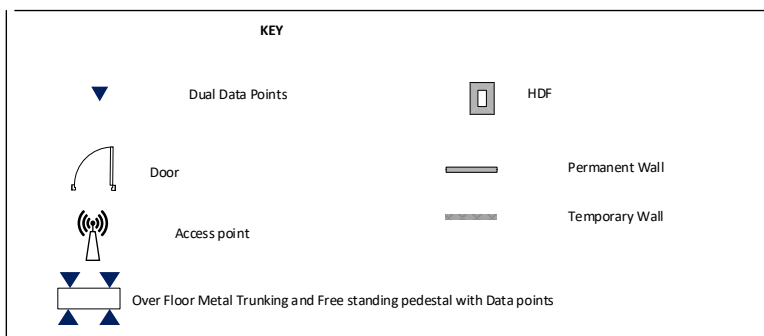
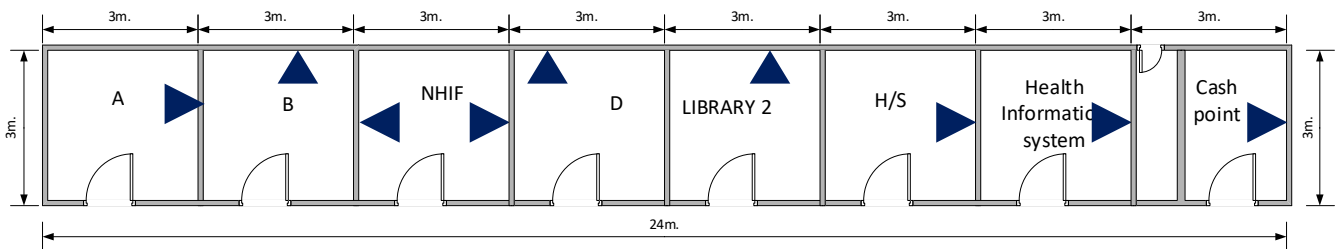


Kericho District Hospital  
Theatre  
Proposed Network Layout



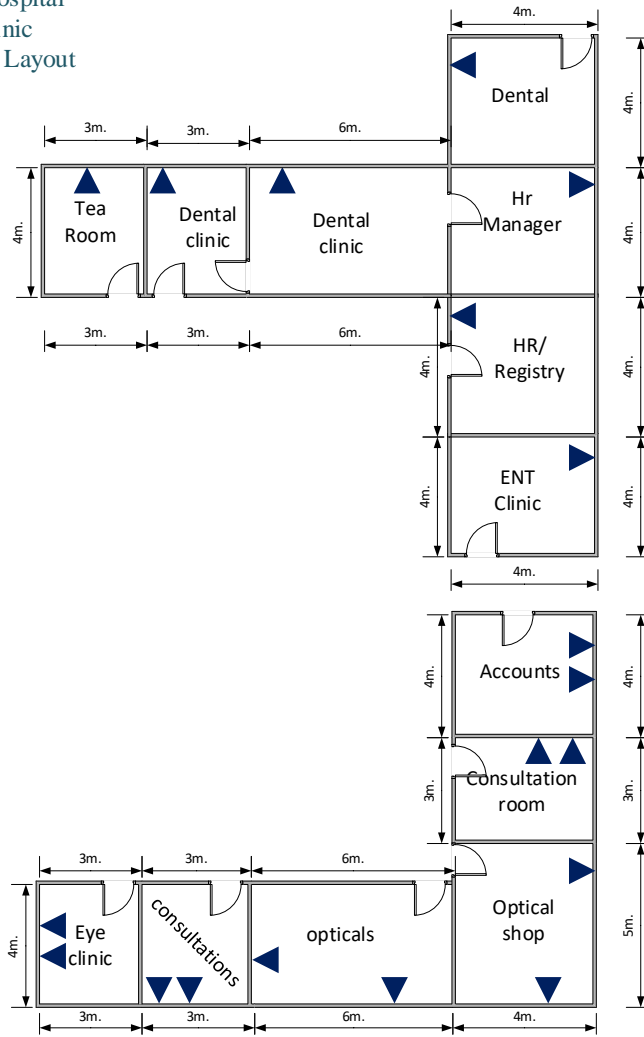
**Double: 9**  
**Total Ports: 18**  
**Perimeter=72.3m**

Kericho District Hospital  
Billing Office  
Proposed Network Layout

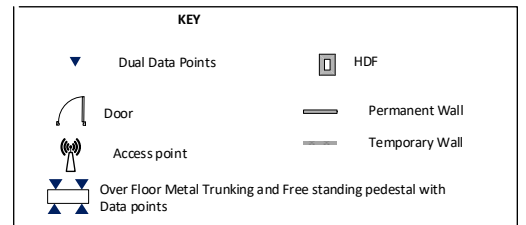


**Double: 9**  
**Total Ports: 18**  
**Perimeter=54m**

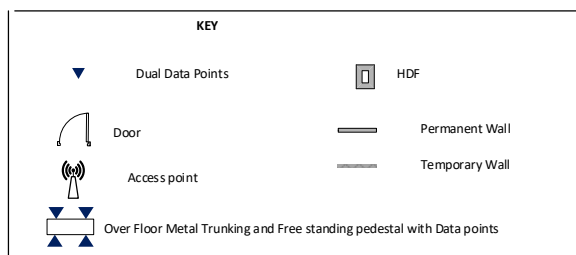
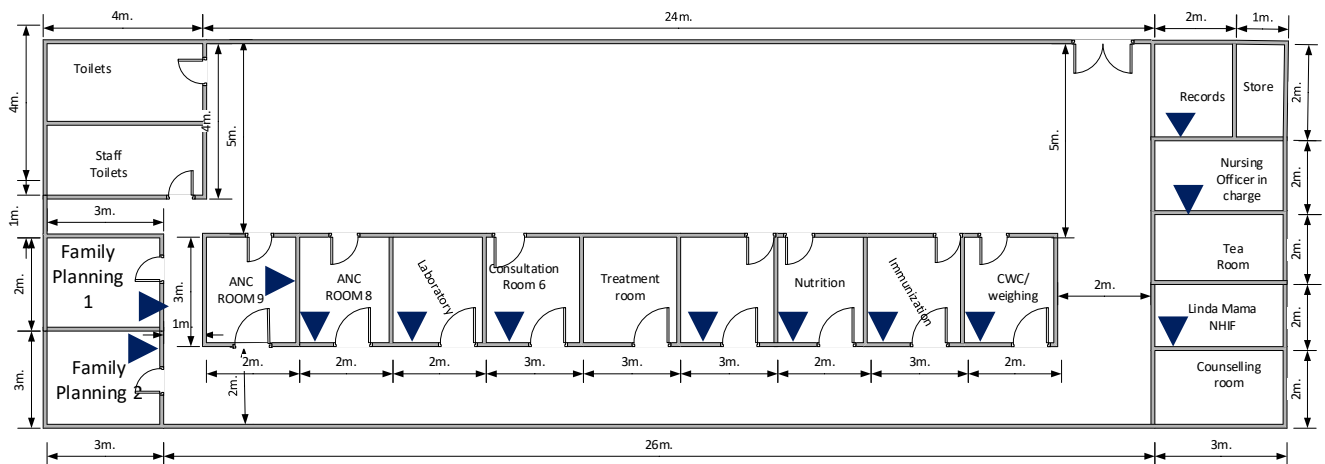
Kericho District Hospital  
Eye and Dental Clinic  
Proposed Network Layout



Double: 19  
Total Ports: 38  
Perimeter: 112m

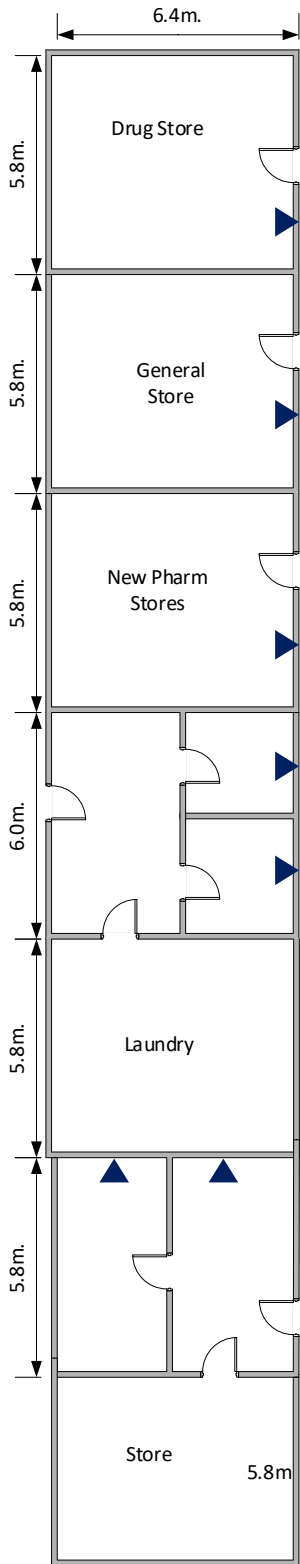


Kericho District Hospital  
MCH  
Proposed Network Layout



Double: 13  
Total Ports: 26  
Perimeter=84m

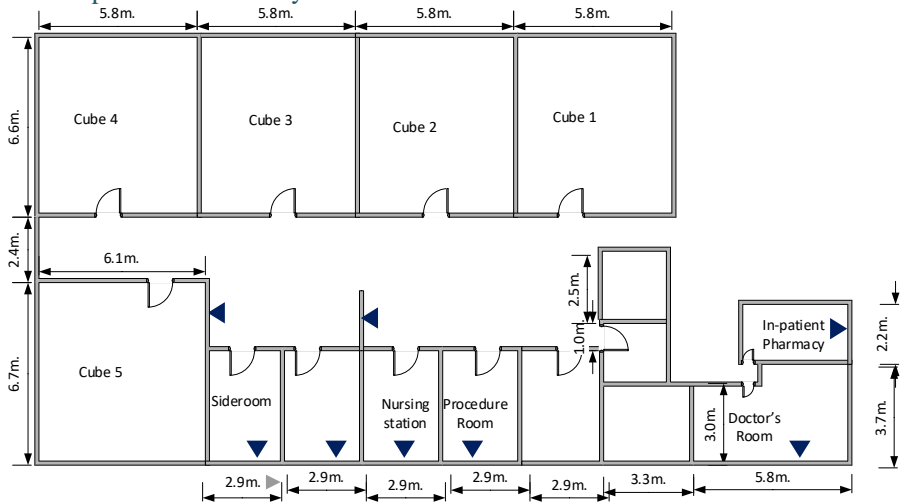
# Kericho District Hospital Drugs/General Stores/KEPHI Office Proposed Network Layout



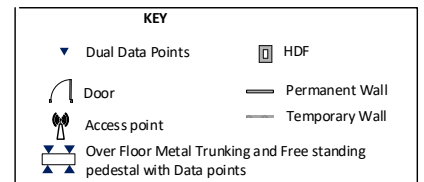
Double:7  
Total datapoints: 14  
Perimeter: 94.4

KEY	
	Dual Data Points
	Door
	Access point
	Over Floor Metal Trunking and Free standing pedestal with Data points
	HDF
	Permanent Wall
	Temporary Wall

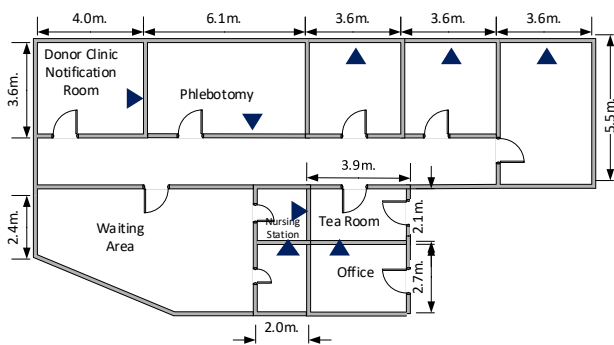
Kericho District Hospital  
WARD 6  
Proposed Network Layout



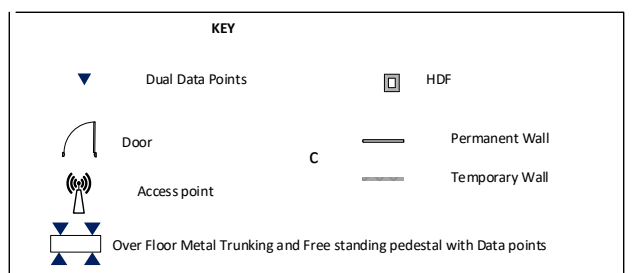
Double: 8  
Total Ports: 16  
Perimeter=148.9m



Kericho District Hospital  
Blood Bank  
Proposed Network Layout

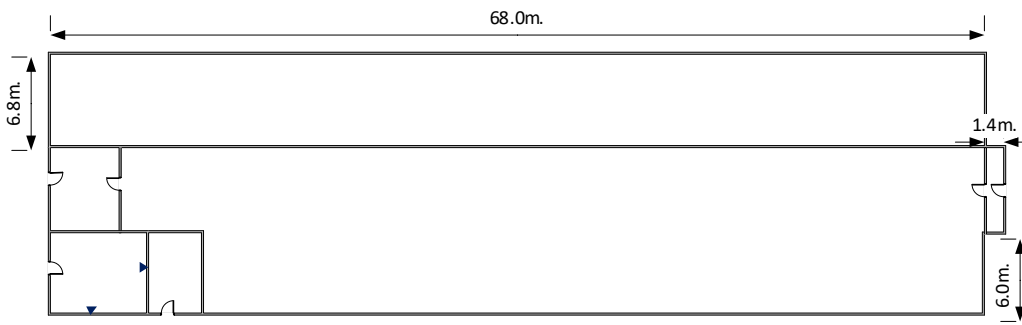


Double: 8  
Total Ports: 16  
Perimeter=58.1





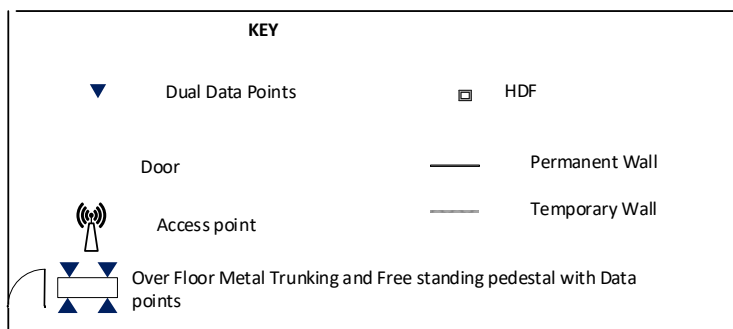
Kericho District Hospital  
Morgue  
Proposed Network Layout



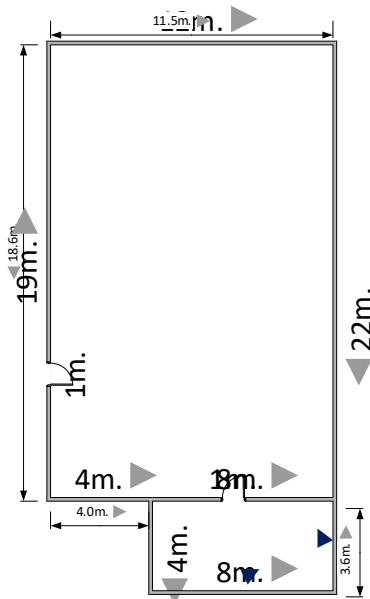
Double: 2

Total Ports: 4

Perimeter =158.5



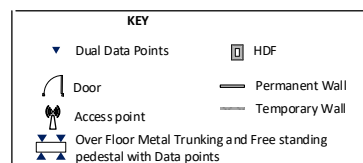
Kericho District Hospital  
County Store  
Proposed Network Layout



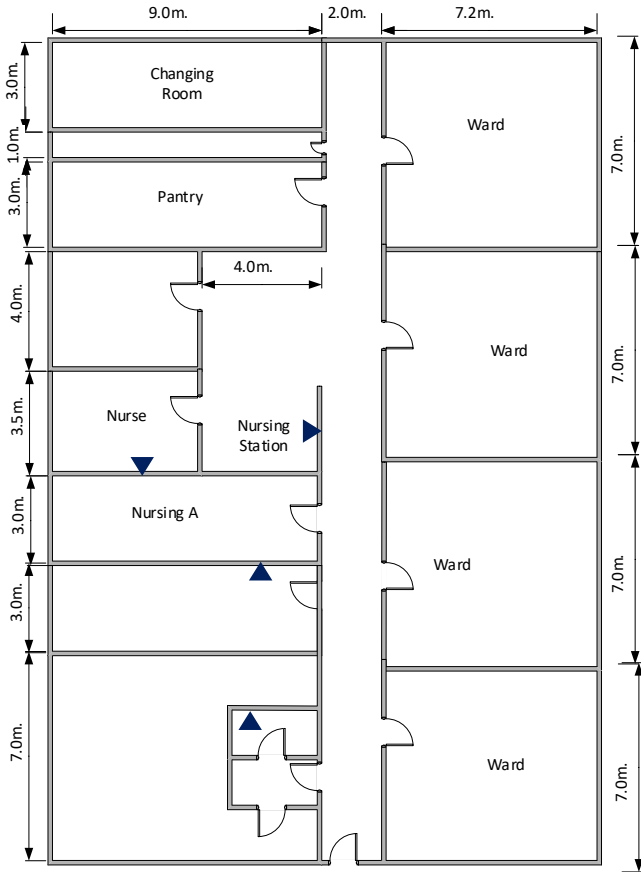
Double: 2

Total Ports: 4

Perimeter : 67.8



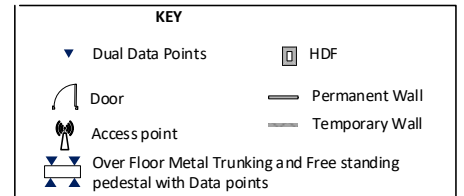
Kericho District Hospital  
 Maternity  
 Proposed Network Layout



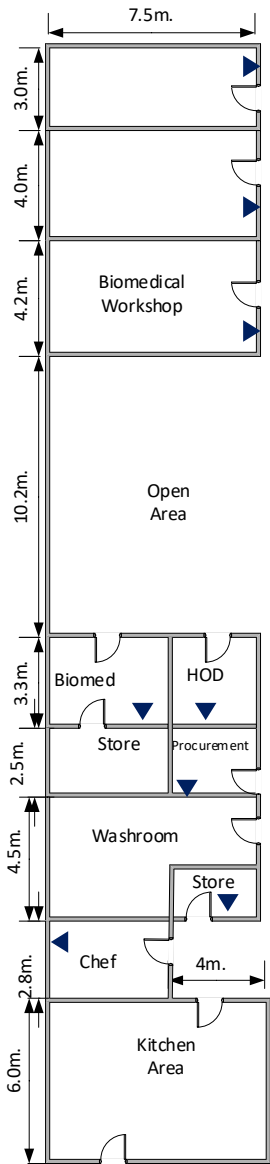
Double: 4

Total Ports: 8

Perimeter : 92.4



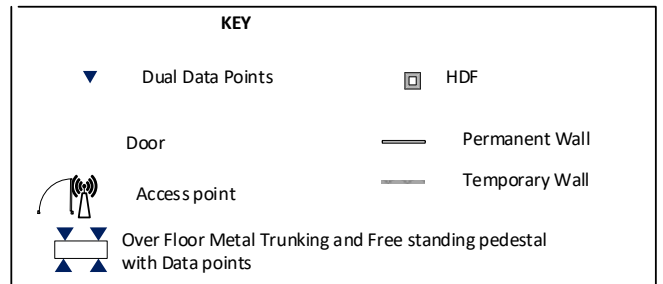
# Kericho District Hospital Kitchen/BioMed/Procurement Proposed Network Layout



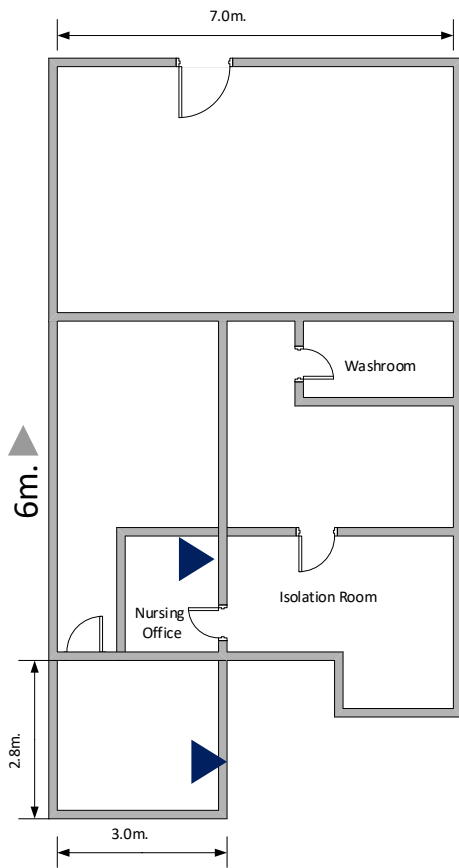
Double: 8

Total Ports: 16

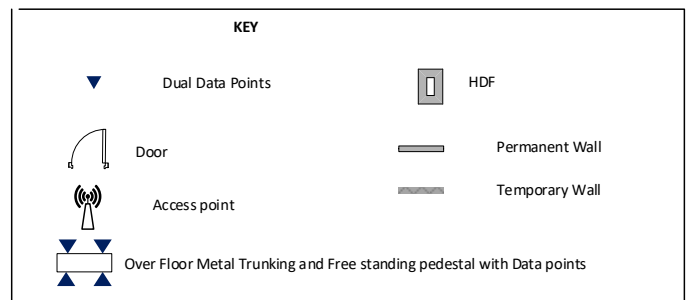
Perimeter : 39.8



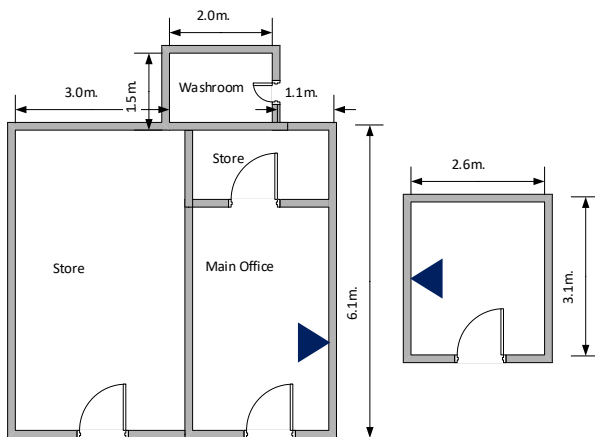
Kericho District Hospital  
Ward 2  
Proposed Network Layout



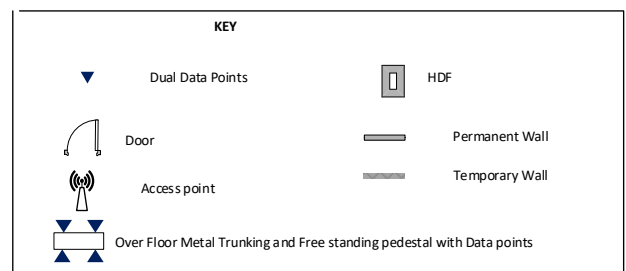
Double: 2  
Total Ports: 4



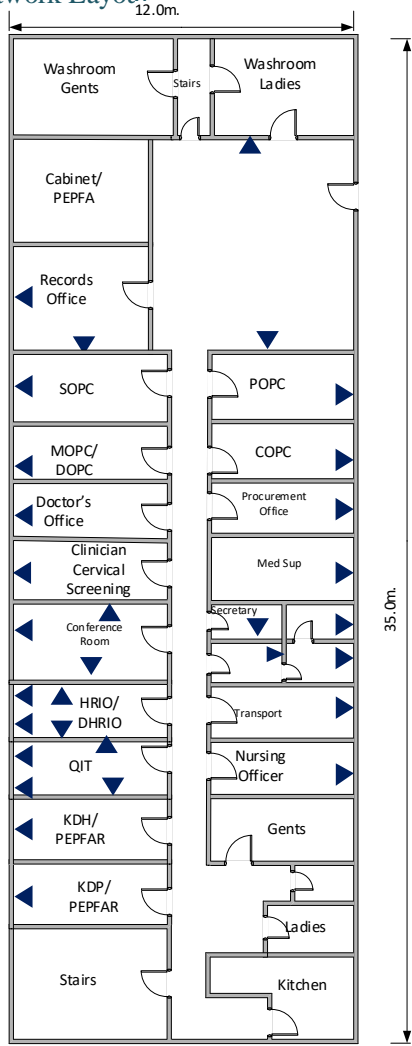
Kericho District Hospital  
County Public Health  
Proposed Network Layout



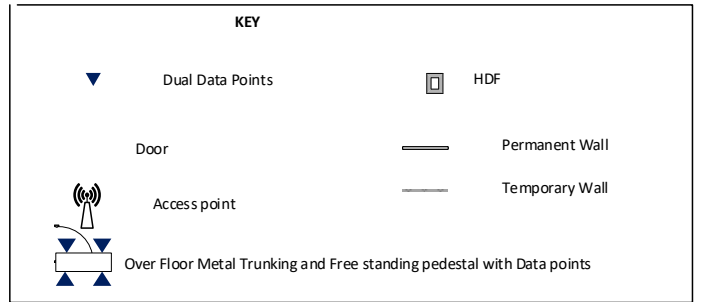
Double: 2  
Total Ports: 4  
  
Perimeter : 47.2



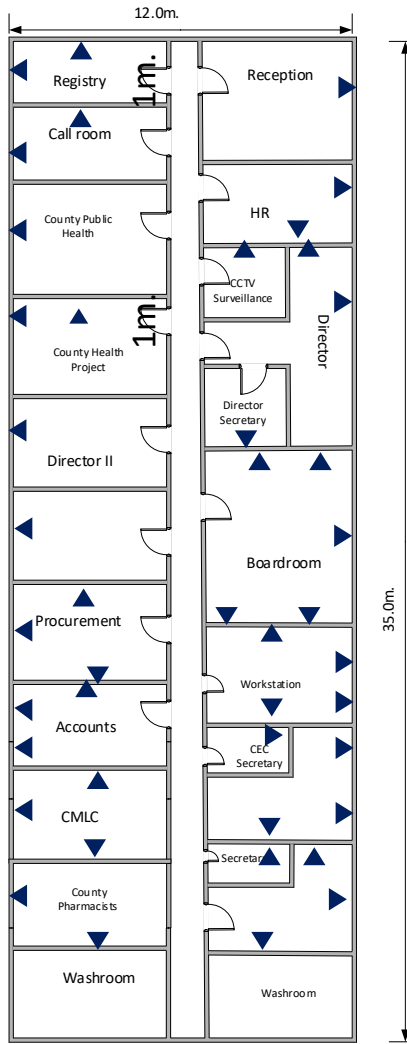
Kericho District Hospital  
Administration First Floor  
Proposed Network Layout



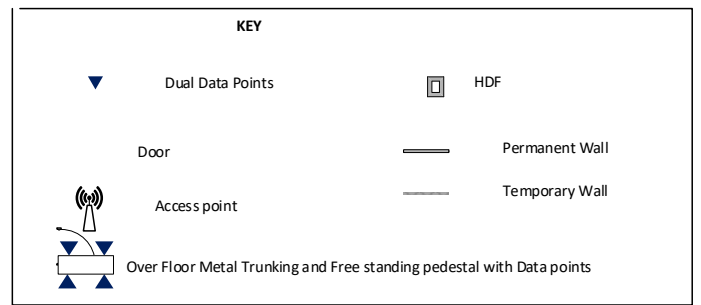
Double: 31  
Total Ports: 62  
Perimeter: 94



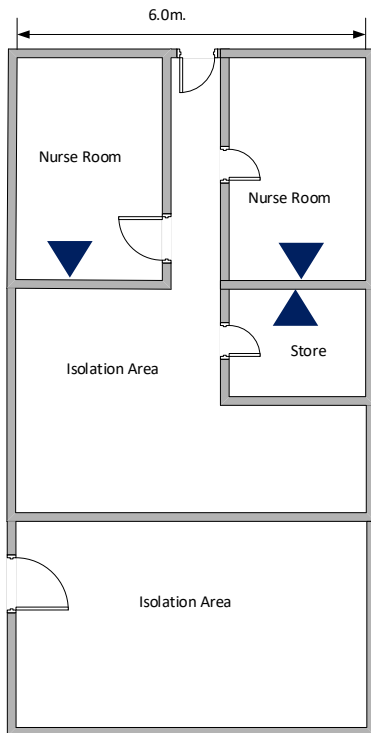
Kericho District Hospital  
 Administration Second Floor  
 Proposed Network Layout



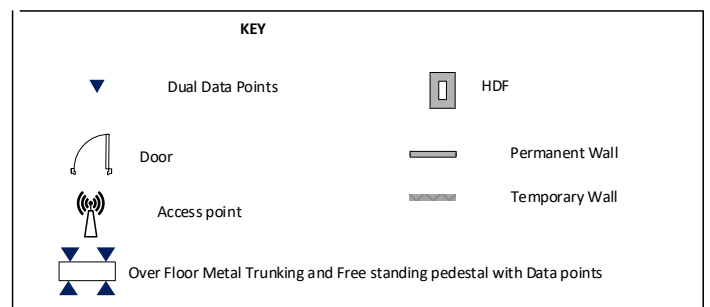
Double: 44  
 Total Ports:88  
 Perimeter: 94



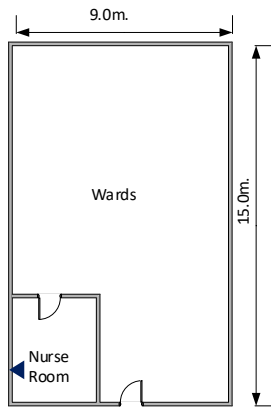
Kericho District Hospital  
 Ward 4  
 Proposed Network Layout



Double: 3  
 Total Ports: 6



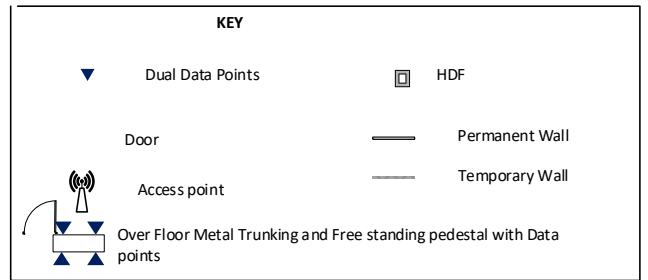
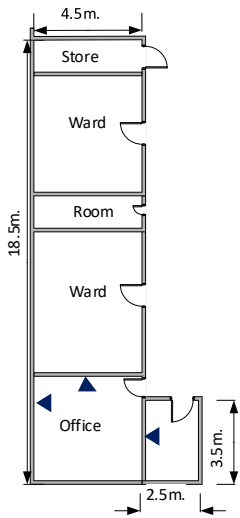
Kericho District Hospital  
 Ward 7  
 Proposed Network Layout



Double: 4

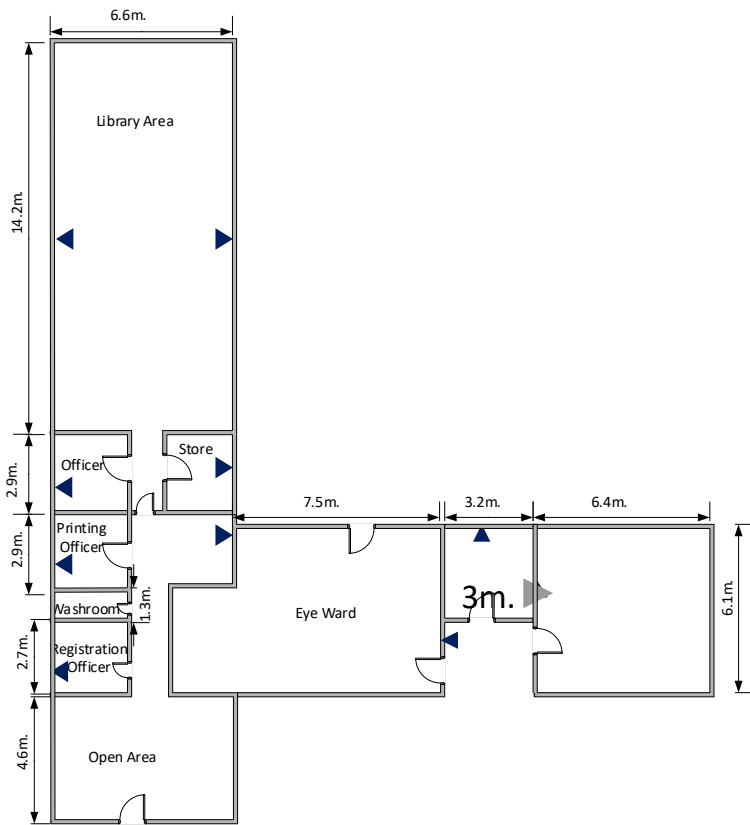
Total Ports: 8

Perimeter: 98





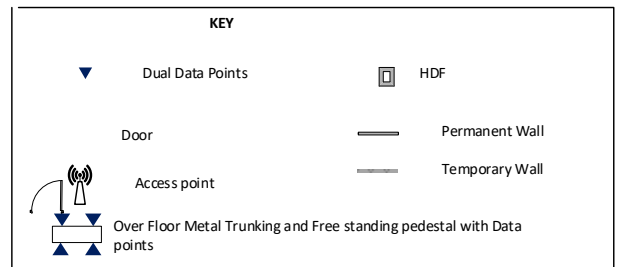
Kericho District Hospital  
 Health Records and Information Department – Library  
 And Eye Ward  
 Proposed Network Layout



Double: 9

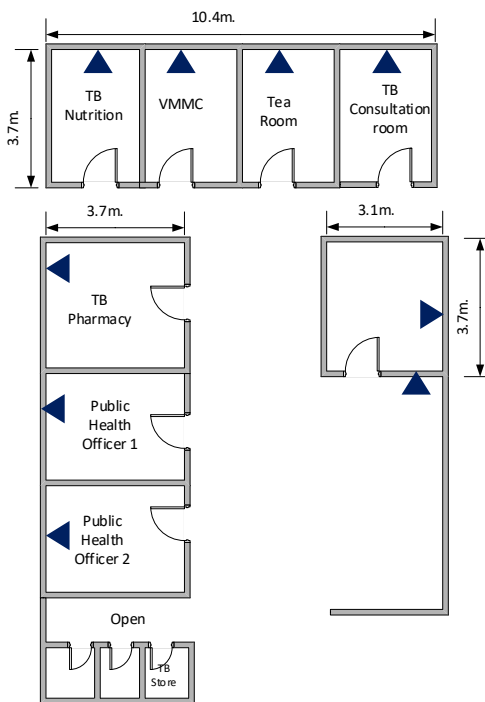
Total Ports: 18

Perimeter: 93.68



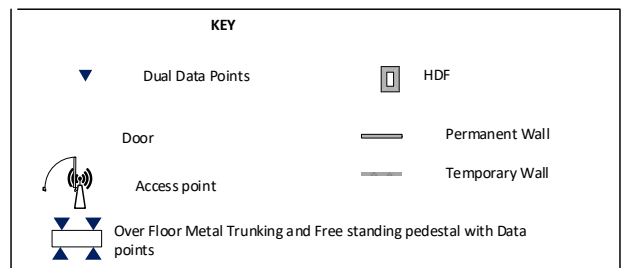
Kericho District Hospital  
 Public Health  
 Proposed Network Layout

Chest Clinic

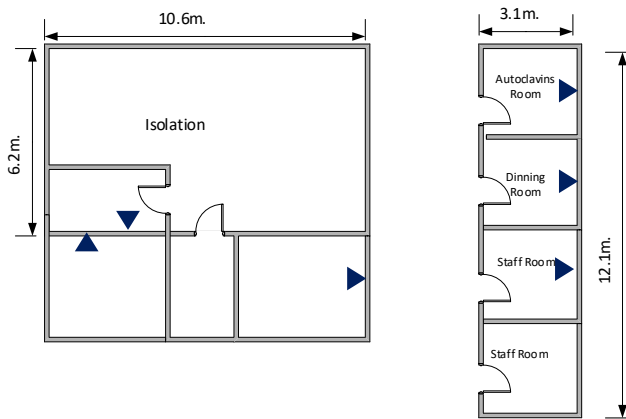


Double: 9

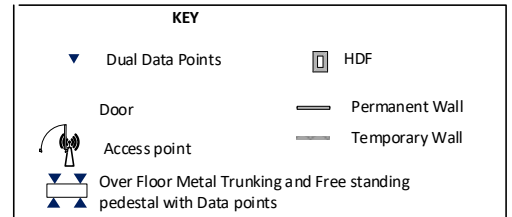
Total Ports: 18



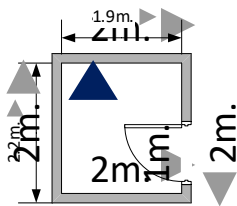
Kericho District Hospital  
Ward 3  
Proposed Network Layout



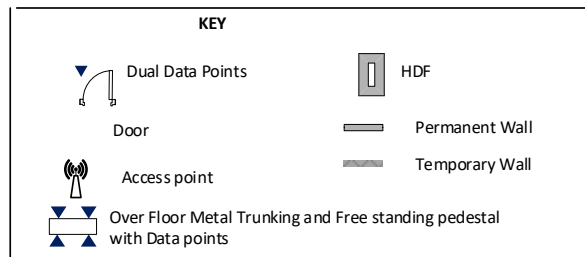
Double: 6  
Total Ports: 12



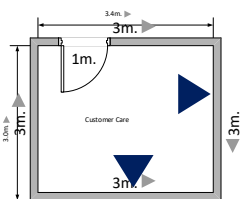
Kericho District Hospital  
Security Office  
Proposed Network Layout



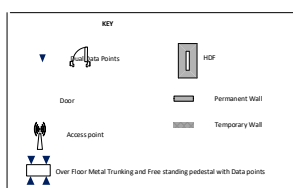
Double: 1  
Total Ports: 2  
Perimeter: 8.2



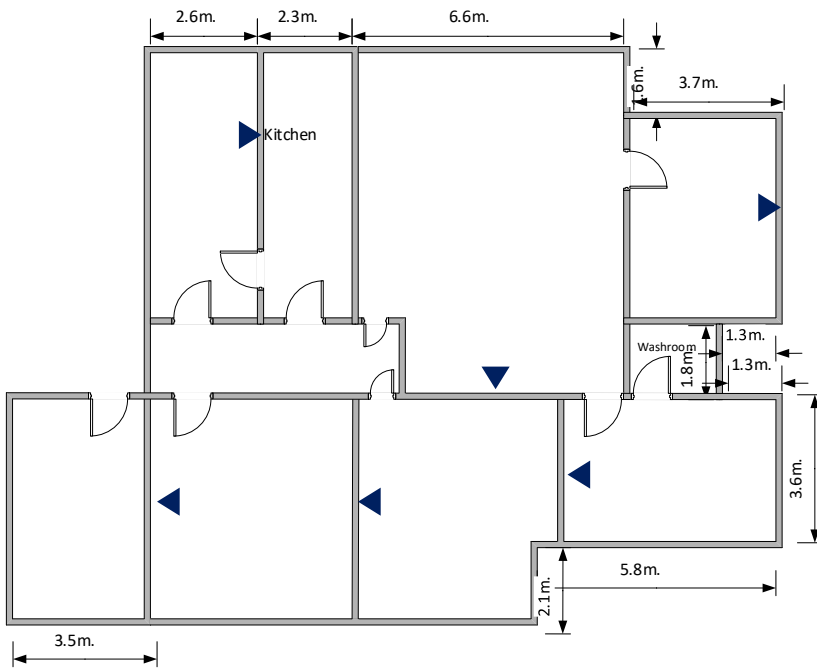
Kericho District Hospital  
Customer Service  
Proposed Network Layout



Double: 2  
Total Ports: 4  
Perimeter: 12.8



Kericho District Hospital  
Doctor's Plaza  
Proposed Network Layout



Double: 6

Total Ports: 12

Perimeter: 116.8