

SITE DEPLOYMENT WORK PACKAGE

CLIENT NAME: INFORMATION AND COMMUNICATIONS TECHNOLOGY AUTHORITY (ICTA)

CONTRACT NUMBER: PURCHASER/ICTA/OT/11/2022-2023/LOT 5

PROJECT SITE: Farm Office
 2-Sugoi_____

CONTRACTOR: BARAN TELECOM NETWORKS (K) LTD

REF: Farm Office 2
 -sugoi_____

DATE: _____ of _____ 2023

SITE NAME		
	COUNTY	Uasin Gishu
	CONSTITUENCY	Turbo
	WARD	Kapkong
	Building/Floor	Farm office, equipment room
	Road	Access Road
	GPS coordinates	0.5861111, 35.0797222
	Town	Kosachei
ICTA Contact Person		Leornad Kiplangat
Email		leopard.kiplangat@ict.go.ke
Mobile No.		+254728096902
INSTITUTION NAME		Baran Telecommunication Network
INSTITUTION CONTACT PERSON		Samuel Kamau
INSTITUTION CONTACT NUMBER		+254729431746
INSTITUTION CONTACT EMAIL		SKWaithera@btn-solutions.co.ke
ALTERNATIVE CONTACT NAME		Gerald Keitani
ALTERNATIVE CONTACT NUMBER		+254708458158
ALTERNATIVE CONTACT EMAIL		GKeitany@btn-solutions.co.ke

Deployment Start Date:	12/18/2023
Deployment End Date:	
Contractor Engineer:	Geofrey Giriama
Phone Number	0717945895

Fiber Link Summary

	Site Name	Latitude	Longitude	Google Maps Plus Code
Homing Site	Farm office 2	0.586161	35.079805	H3PJ+8CQ Leseru, Kenya
Terminal Site Name				

Fiber Link TX Summary

Side A Name	Side B Name	Fiber Distance	Service	RX-Core 1	RX-Core 2
Farm office 2	Manhole closure	0.65 Km	Service A/B: Mbps	dBm	dBm

[Attach OTDR TESTS]

Network Properties	Side A	Client Side
Site Name		
Router OEM		
Router Model Number		
Router OEM Part Number		
Router Serial Number		
Router MAC ADDRESS		
IP Address & Subnet(s)		
DHCP pool 1		
DHCP pool 2		
SFP Make, Model Serial Number		
Fall Back Mgmt IP & Port		
Login Username		
Login Password		
Ports Patched (in Use)		
Free Ports (Unused)		
Switch 1 OEM		
Switch 1 Model Number		
Switch 1 OEM Part Number		
Switch 1 Serial Number		
Switch 1 MAC ADDRESS		
Login Username		

Login Password

No password

Ports Patched (in Use)
Free Ports (Unused)
Switch 2 OEM
Switch 2 Model Number
Switch 2 OEM Part Number
Switch 2 Serial Number
Switch 2 MAC ADDRESS
Login Username
Login Password
Ports Patched (in Use)
Free Ports (Unused)
Firewall OEM
Firewall Model Number
Firewall OEM Part Number
Firewall Serial Number
Firewall MAC ADDRESS
IP Address & Subnet(s)
Login Username
Login Password
Ports Patched (in Use)
Free Ports (Unused)
AP Controller OEM
AP Controller Model Number
AP Controller OEM Part Number
AP Controller Serial Number
AP Controller MAC ADDRESS
Login Username
Login Password
AP Capacity
APs Currently managed
Available AP mgmt. Capacity
Ports Patched (in Use)

Free Ports (Unused)

WiFi Access Point Details	AP 1	AP 2	AP 3	AP 4	AP 5
WiFi AP OEM					
WiFi AP Model Number					
WiFi AP OEM Part Number					
WiFi AP Serial Number					
WiFi AP MAC ADDRESS					
# of External Antennas					
Max Concurrent SSIDs					
Number of G/Bit Ports					
Number of F/E Ports					
Number of SFP Ports					
Ports Patched (in Use)					
Free Ports (Unused)					
Coordinates					
GMaps Plus Code					
# of SSIDs Configured					
WiFi SSID 1 ID					
WiFi SSID 1 Password					
WiFi SSID 1 VLAN ID					
WiFi SSID 1 IP SUBNET					
MAX WiFi SSID 1 HOSTS					
Client Start IP Address					
Client End IP Address					
WiFi SSID 2 ID					
WiFi SSID 2 Password					
WiFi SSID 2 VLAN ID					
WiFi SSID 2 IP SUBNET					
MAX WiFi SSID 2 HOSTS					
Client Start IP Address					
Client End IP Address					
WiFi SSID 3 ID					
WiFi SSID 3 Password					
WiFi SSID 3 VLAN ID					
WiFi SSID 3 IP SUBNET					
MAX WiFi SSID 3 HOSTS					
Client Start IP Address					
Client End IP Address					
WiFi SSID 4 ID					
WiFi SSID 4 Password					
WiFi SSID 4 VLAN ID					
WiFi SSID 4 IP SUBNET					
MAX WiFi SSID 4 HOSTS					
Client Start IP Address					
Client End IP Address					

WiFi Access Point Details	AP 6	AP 7	AP 8	AP 9	AP 10
WiFi AP OEM					
WiFi AP Model Number					
WiFi AP OEM Part Number					
WiFi AP Serial Number					
WiFi AP MAC ADDRESS					
# of External Antennas					
Max Concurrent SSIDs					
Number of G/Bit Ports					
Number of F/E Ports					
Number of SFP Ports					
Ports Patched (in Use)					
Free Ports (Unused)					
Coordinates					
GMaps Plus Code					
# of SSIDs Configured					
WiFi SSID 1 ID					
WiFi SSID 1 Password					
WiFi SSID 1 VLAN ID					
WiFi SSID 1 IP SUBNET					
MAX WiFi SSID 1 HOSTS					
Client Start IP Address					
Client End IP Address					
WiFi SSID 2 ID					
WiFi SSID 2 Password					
WiFi SSID 2 VLAN ID					
WiFi SSID 2 IP SUBNET					
MAX WiFi SSID 2 HOSTS					
Client Start IP Address					
Client End IP Address					
WiFi SSID 3 ID					
WiFi SSID 3 Password					
WiFi SSID 3 VLAN ID					
WiFi SSID 3 IP SUBNET					
MAX WiFi SSID 3 HOSTS					
Client Start IP Address					
Client End IP Address					
WiFi SSID 4 ID					
WiFi SSID 4 Password					
WiFi SSID 4 VLAN ID					
WiFi SSID 4 IP SUBNET					
MAX WiFi SSID 4 HOSTS					
Client Start IP Address					
Client End IP Address					

Uninterrupted Power Supply (UPS)	Details	Install Remarks
UPS OEM Make		
UPS OEM Model Number		
UPS OEM Part Number		
UPS Serial Number		
UPS MAC address		
Rated power (VA)		
UPS Total Output Ports		
Used Load Ports		
Free Load Ports		
Number of Batteries		
Runtime on battery power		
Load upon installation		
Bypass mode configuration		
Alarms at Installation (if any)		
Load Current at Installation		
UPS SNMP agent configuration		
UPS MIB information		
Shutdown time delay		
IP address		
Expected runtime at full load		
Load configuration/details		

POWER & COOLING	Uo M	QUANTIT Y	Location Installed	Specification & Install Remarks
Power cable	M	20	Farm office 2	6mm ² 4 core cable
Yellow green earthing cable	M	20	farm office 2	6mm ²
Circuit breaker	EA	1	farm office 2	Havels 10A
Power Distribution Board	EA	1	farm office 2	Havels 4 - way
Battery pack with battery rack	EA			MAKE & MODEL:
Air Conditioning unit	EA			MAKE, MODEL & SERIAL NUMBERS:

POWER EQUIPMENT BOM	UoM	QUANTITY	Location Installed	Install Remarks
HDPE pipe (26/32mm)	M	16	Start: Lat; 0.5858333 Long; 35.0797222 End:: lat; 0.5861111 Long; 35.0797222	Good condition
HDPE pipe ϕ 110mm (PN10)	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
7 way 14/10mm MicroDuct	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
4 way 14/10mm MicroDuct	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Warning Tape	M	10	Start: lat; 0.5858333 Long; 35.0797222 End: Lat; 0.5861111 Long; 35.0797222	Good condition
Marker posts	PCS		Coordinates: [lat, long]	
Plastic directional Marker	PCS		Coordinates: [lat, long]	
Dressed wooden pole – 8m	PCS	1	Lat; 0.58624 Long; 35.079801	Good condition
Dressed wooden pole – 12m	PCS		Coordinates: [lat, long]	
Concrete poles – 8m	PCS		Coordinates: [lat, long]	
Concrete poles – 10m	PCS		Coordinates: [lat, long]	
Two thimble eye bolt	M		Coordinates: [lat, long]	
Underground OFC 4 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Underground OFC 6 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Underground OFC 12 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Underground OFC 24 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Underground OFC 48 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Underground OFC 96 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Underground OFC 144 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
ADSS OFC 4 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
ADSS OFC 6 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
ADSS OFC 12 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	

ADSS OFC 24 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
ADSS OFC 48 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
ADSS OFC 96 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
ADSS OFC 144 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Micro OFC 4 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Micro OFC 6 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Micro OFC 12 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Micro OFC 24 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Micro OFC 48 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Micro OFC 96 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Micro OFC 144 Core	M		Start: Coord: [lat, long] End: Coord: [lat, long]	
Optical Splitter 1:2	PCS		Coordinates: [lat, long]	
Optical Splitter 1:4	PCS		Coordinates: [lat, long]	
Optical Splitter 1:8	PCS		Coordinates: [lat, long]	
FDT 24 Core	PCS		Coordinates: [lat, long]	
FDT 48 cores	PCS		Coordinates: [lat, long]	
FDT 96 core	PCS		Coordinates: [lat, long]	
O.F. Cable Splicing &Test	CORE	26	lat, 0.586648 long, 35.0802	Good condition
O.F Cable Termination &Test	CORE	4	lat, 0.5850000 long, 35.0830556,	Good condition
Siemon indoor cat.6 UTP Cable	M	160	Farm office 2, room 2&3	Good condition
Siemon Outdoor Cat.6 UTP Cable	M		Building+ Floor+Room	
CAT6 Cable Termination and Test	PCS	3	Lat, 0.5858333 Long, 35.0797222	Good condition
Flexible corrugated PVC ≤ 50mm	M	5	Farm office 2, Equipment Room	Good condition
Metal Trunking size 25×50mm	M	10	Farm Office 2 equipment room	Good condition
Metal Trunking size 50×100mm	M	3	Farm Office 2 equipment room	Good condition
Metal Trunking size 50×150mm	M		Building+ Floor+Room	
Minor Civil Work for LAN Service	M	5	Farm Office 2 equipment room	Good condition

Reinforced concrete Handhole

Reinforced concrete manhole

Optical Fibre Patch cord 1m

Optical Fibre Patch cord 3m

Optical Fibre Patch cord 5m

Optical Fibre Patch cord 10m

Optical Fibre Patch cord 20m

Optical Fibre Patch cord 30m

Siemon Cat 6 Patch-cord 1M

Siemon Cat 6 Patch-cord 2M

Siemon Cat 6 Patch-cord 3M

Siemon Cat 6 Patch-cord 5M

Siemon Cat 6 Patch-cord 10M

SFP+ SM 10KM, 1310nm, 1G

SFP+ MM 10KM, 1310nm, 1G

Dome closure 12 core

Dome closure 24 core

Dome closure 48 core

Dome closure 60 core

Dome closure 72 core

Dome closure 84 core

Dome closure 96 core

Dome closure 144 core

Bolein 6U Cabinet

Bolein 9U Cabinet

Bolein 12U Cabinet

Bolein 18U Cabinet

Bolein 22U Cabinet

Bolein 42U Cabinet

ODF 12 Core

ODF 24 Core

ODF 48 Core

ODF 60 Core

		Coordinates: [lat, long]	Dimensions:
M		Coordinates: [lat, long]	Dimensions:
PCS		Device1<>Device2	MODE: CONNECTOR:
PCS		Device1<>Device2	MODE: CONNECTOR:
PCS		Device1<>Device2	MODE: CONNECTOR:
PCS		Device1<>Device2	MODE: CONNECTOR:
PCS		Device1<>Device2	MODE: CONNECTOR:
PCS		Device1<>Device2	MODE: CONNECTOR:
PCS		Device1<>Device2	
PCS		Device1<>Device2	
PCS		Device1<>Device2	
PCS		Device1<>Device2	
PCS		Device1<>Device2	
PCS		Device+Port Number	
PCS		Device+Port Number	
PCS		Coordinates: [lat, long]	
PCS		0.58653, 35.08023	Good condition
PCS	1	Coordinates: [lat, long]	Good condition
PCS		Lat, 0.5861111 Long, 35.0800000	Good condition
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Building+ Floor+Room	
PCS	1	Farm Office, equipment room	good condition
PCS		Building+ Floor+Room	
PCS		Building+ Floor+Room	
PCS		Building+ Floor+Room	
PCS		Building+ Floor+Room	
PCS		Coordinates: [lat, long]	
PCS	1	0.58631, 35.0799	Good Condition
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	

ODF 72 Core

PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS	2	Coordinates: 0.58624 35.079801 0.586323 35.08023	Good condition
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	
PCS		Coordinates: [lat, long]	

ODF 84 Core

ODF 96 Core

ODF 144 Core

Tension Clamp

Tangent Clamp

Jhooks

ADSS cable manager

Stay Rod

Downlead Clamp

NETWORK LAYOUT

[Site photos and description]

CAPACITY AND PERFORMANCE AT COMMISSIONING

[Number of client devices using the network at commissioning, screenshots from AP controllers]

REPAIRS CLEANUP POST INSTALLATION

[What was done to repair any damage caused during the installation process, photos of repairs to the customer satisfaction, cleanup of site after the setup]

ACCESS AND SECURITY

[Who is left with keys to the cabinet, contacts to be called for access to site how is site secured from vandalism and handover remarks with the ICTO of site]

Ping test

[Screenshot of ping tests]

iPerf test

[Screenshot of iPerf tests]

Speed test

[Screenshot of speed tests]

CONFIGURATION

[Attach configuration scripts for each installed active device]

Photo

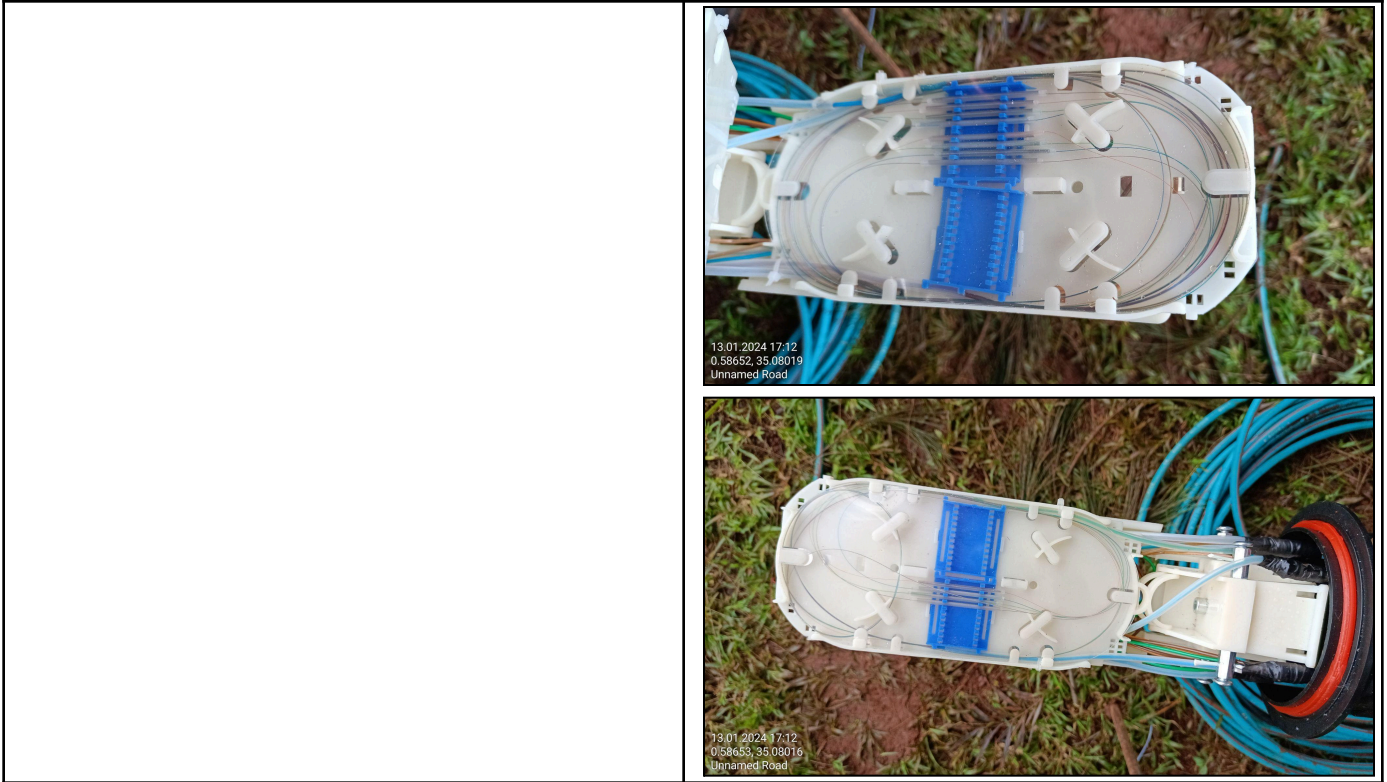
[Photo of setup done at customer premises]

Power cable	Yellow green earthing cable
Circuit breaker	Power Distribution Board
Battery pack with battery rack	Battery termination
Air Conditioning indoor unit mounting	Air Conditioning outdoor unit mounting
Air Conditioning piping indoor	Air Conditioning outdoor
Air Conditioning circuit breaker	Air Conditioning protector
Air Conditioning socket	Air Conditioning drainage pipe installation
Air Conditioning remote mounting	Air Conditioning indoor unit display
Air Conditioning indoor unit labels	Air Conditioning outdoor unit labels
Air Conditioning unit service contact labels	A/C outdoor unit service interval labels
Air Conditioning unit installation date labels	Air Conditioning unit gas level
Uninterrupted Power Supply (UPS) mounting	Uninterrupted Power Supply labelling
Uninterrupted Power Supply cable management	Uninterrupted Power Supply (UPS) cable labelling
Uninterrupted Power Supply Display on Site Load	Uninterrupted Power Supply Display Charging
Uninterrupted Power Supply Monitoring	Uninterrupted Power Supply Input Power
HDPE pipe (26/32mm)	HDPE pipe ϕ 110mm (PN10)

7 way 14/10mm MicroDuct	4 way 14/10mm MicroDuct
Warning Tape	Marker posts
Plastic directional Marker	
Dressed wooden pole – 8m pole 1	
 <p>, Uasin Gishu County, Kenya Unnamed Road, Kenya Lat 0.58624° Long 35.079801° 18/01/24 10:36 AM GMT +03:00</p>	Dressed wooden pole – 8m pole n
Dressed wooden pole – 12m pole 1	Dressed wooden pole – 12m pole n

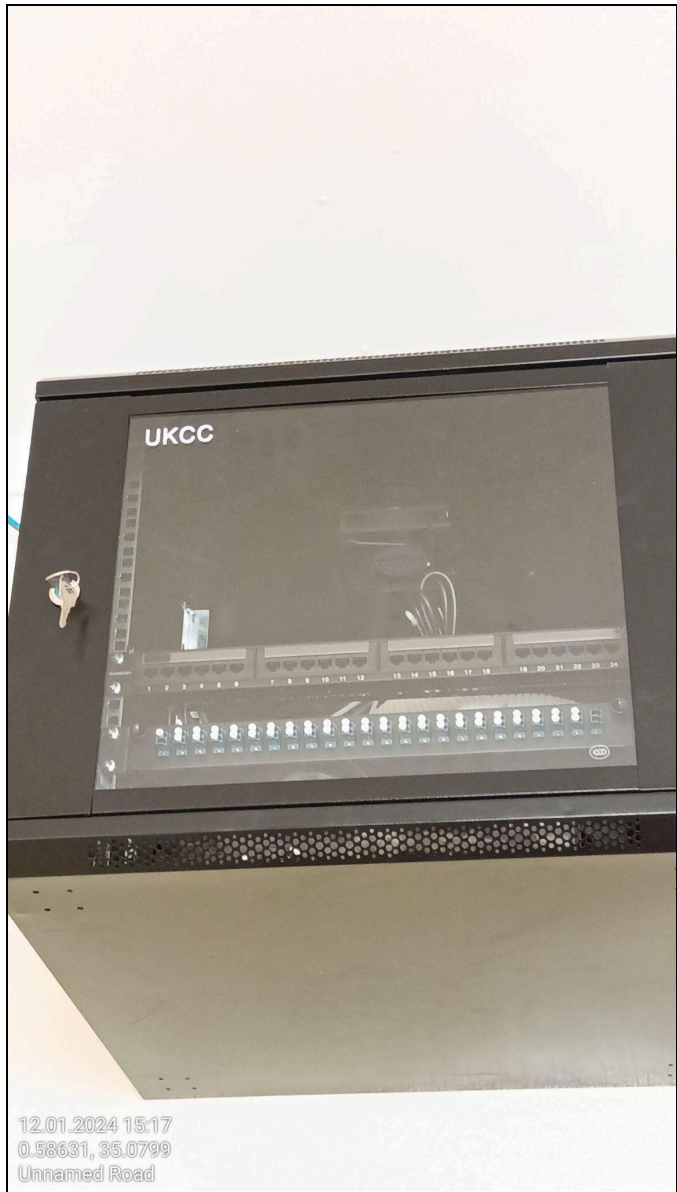
Concrete poles – 8m pole 1	Concrete poles – 8m pole n
Concrete poles – 10m pole 1	Concrete poles – 10m pole n
Two thimble eye bolt 1	Two thimble eye bolt n
Underground OFC 4 Core	Underground OFC 6 Core
Underground OFC 12 Core	Underground OFC 24 Core
Underground OFC 48 Core	Underground OFC 96 Core
Underground OFC 144 Core	
ADSS OFC 4 Core	ADSS OFC 6 Core
ADSS OFC 12 Core	ADSS OFC 24 Core
ADSS OFC 48 Core	ADSS OFC 96 Core
ADSS OFC 144 Core	Micro OFC 4 Core
Micro OFC 6 Core	Micro OFC 12 Core
Micro OFC 24 Core	Micro OFC 48 Core
Micro OFC 96 Core	Micro OFC 144 Core
Optical Splitter 1:2	Optical Splitter 1:4
Optical Splitter 1:8	FDT 24 Core
FDT 48 cores	FDT 96 core
OFC Installation Civil Work- Underground (0 to point m)	OFC Installation Civil Work- Underground (m to point z)

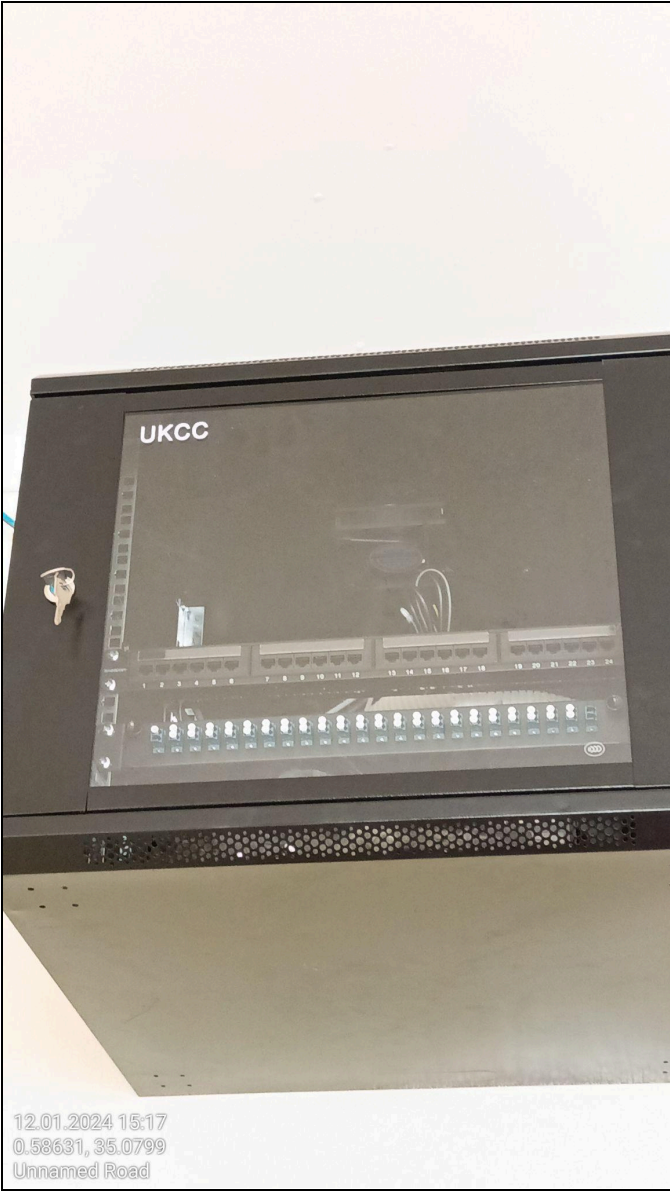
OFC Installation Civil Work-Overhead (0 to point m)	OFC Installation Civil Work-Overhead (m to point z)
Installation of Handhole (Ø515mm Hn	Installation of Handhole (Ø515mm H2
O.F. Cable Splicing &Test	O.F Cable Termination &Test
Siemon indoor cat.6 UTP Cable	Siemon Outdoor Cat.6 UTP Cable
CAT6 Cable Termination and Test	Flexible corrugated PVC pipe ≤ 50mm
Metal Trunking size 25×50mm	Metal Trunking size 50×100mm
Metal Trunking size 50×150mm	Minor Civil Work for LAN Service
Reinforced concrete manhole	Optical Fibre Patch cord 1m
Optical Fibre Patch cord 3m	Optical Fibre Patch cord 5m
Optical Fibre Patch cord 10m	Optical Fibre Patch cord 20m
Optical Fibre Patch cord 30m	Siemon Cat 6 Patch-cord 1M
Siemon Cat 6 Patch-cord 2M	Siemon Cat 6 Patch-cord 3M
Siemon Cat 6 Patch-cord 5M	Siemon Cat 6 Patch-cord 10M
SFP+ SM 10KM, 1310nm, 1G	SFP+ MM 10KM, 1310nm, 1G
Dome closure 12 core	Dome closure 24 core





Dome closure 48 core	Dome closure 60 core
Dome closure 72 core	Dome closure 84 core

Dome closure 96 core	Dome closure 144 core
Bolein 6U Cabinet	Bolein 9U Cabinet
Bolein 12U Cabinet	Bolein 18U Cabinet
	 <p>12.01.2024 15:17 0.58631, 35.0799 Unnamed Road</p>
Bolein 22U Cabinet	Bolein 42U Cabinet
ODF 12 Core	ODF 24 Core

	
ODF 48 Core	ODF 60 Core
ODF 72 Core	ODF 84 Core
ODF 96 Core	ODF 144 Core
Tension Clamp	Tangent Clamp
Jhooks	ADSS cable manager
Stay Rod	Downlead Clamp

