

# **Appendices**

## **Appendices 5 Minutes of Discussions (M/D)**

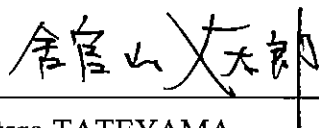
**MINUTES OF DISCUSSIONS**  
**ON THE PREPARATORY SURVEY FOR THE PROJECT FOR**  
**THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK**  
**DEVELOPMENT**  
**(Explanation on Draft Preparatory Survey Report)**

On the basis of the discussions and field survey in the Republic of Maldives (hereinafter referred to as "Maldives") in October 2015, and the subsequent technical examination of the results in Japan, the Japan International Cooperation Agency (hereinafter referred to as "JICA") prepared a draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") on the Project for the Digital Terrestrial Television Broadcasting Network Development (hereinafter referred to as "the Project").

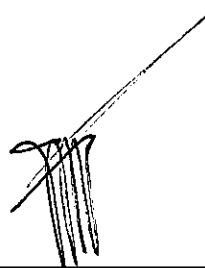
In order to explain the Draft Report and to consult with the concerned officials of the Government of Maldives on its contents, JICA sent to Maldives the Preparatory Survey Team for the explanation of the Draft Report (hereinafter referred to as "the Team"), headed by Jotaro TATEYAMA, Deputy Director, Team 1, Transportation and ICT Group, Infrastructure and Peacebuilding Department, JICA, and is scheduled to stay in the country from 9 June to 16 June, 2016.

As a result of the discussions, both sides confirmed the main items described in the attached sheets.

Male, 16 June, 2016



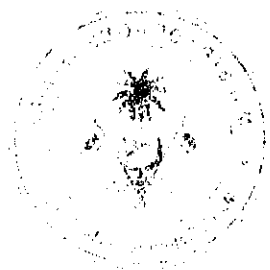
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Jotaro TATEYAMA  
Leader  
Preparatory Survey Team  
Japan International Cooperation Agency  
Japan



\_\_\_\_\_  
Umar Naseer  
Minister  
Ministry of Home Affairs  
The Republic of Maldives



\_\_\_\_\_  
Ibrahim Khaleel  
Managing Director  
Public Service Media



(Witness)



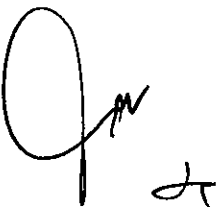
Hiroshi SAITO  
Resident Representative  
JICA/JOCV Maldives Office  
Japan International Cooperation Agency

(Witness)



Aishath Azeema  
Joint Secretary  
Ministry of Foreign Affairs  
The Republic of Maldives

CC: Mohamed Shabyb, President, Maldives Broadcasting Commission





## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to improve access to information of the national and resolve regional disparities on information through development of a digital terrestrial television network, thereby contributing to mitigating vulnerability and further social and economic development.

### 2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as “the Preparatory Survey for the Project for the Digital Terrestrial Television Broadcasting Network Development”.

### 3. Project Site

Both sides confirmed that the sites of the Project are to cover most of Maldives, which is shown in Annex 1.

### 4. Line Agency and Executing Agency

Both sides confirmed the line agency and the executing agency as follows. The organization charts are shown in Annex 2.

4-1. The line agency is Ministry of Home Affairs (hereinafter referred to as “MoHA”), which would be the agency to supervise the executing agency.

4-2. The executing agency is the Public Service Media (hereinafter referred to as “PSM”). The executing agency shall coordinate with all the relevant agencies to ensure smooth implementation of the Project and ensure that the undertakings are taken by relevant agencies properly and on time.

### 5. Contents of the Draft Report

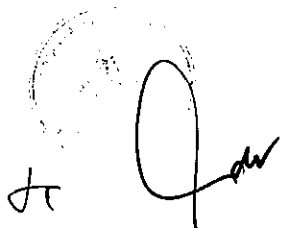
After the explanation of the contents of the Draft Report by the Team, the Maldives side agreed in principle to its contents.

### 6. Cost Estimation

Both sides confirmed that the Project cost estimation described in the Draft Report was provisional and would be examined further by the Government of Japan for its final approval.

### 7. Confidentiality of the Cost Estimation and Specifications

Both sides confirmed that the Project cost estimation and technical specifications in the Draft Report should never be duplicated or disclosed to any third parties until all the



contracts of the Project are concluded.

8. Japanese Grant Scheme

The Maldives side understands the Japanese Grant Scheme and its procedures as described in Annex 4, Annex 5, and Annex 6, and necessary measures to be taken by the Government of Maldives.

9. Project Implementation Schedule

The Team explained to the Maldives side that the expected implementation schedule is as attached in Annex 7.

10. Expected outcomes and Indicators

Both sides agreed that key indicators for expected outcomes are as follows. The Maldives side has responsibility to monitor the progress of the indicators and achieve the target in year 2021.

[Quantitative Effect]

	Items	Baseline (2016)	Expected result (2021)
1	Terrestrial broadcasting coverage	83.23% in analogue	91.23% in digital
2	The number of channels available in the atolls	1	8

[Qualitative Effect]

- The environment is set to resolve the regional disparities on information.
- It is expected that the cultural, educational and knowledge level of the nation will be improved by providing various options to the viewers.
- It will improve convenience of access to information by providing the information that meets regional needs with data broadcasting.
- Disaster information could be distributed on time by EWBS and one-seg service enables to access to disaster or weather information while moving.

11. Undertakings Taken by Both Sides

Both sides confirmed to undertakings described in Annex 8. The Maldives side assured to take the necessary measures and coordination including allocation of the necessary budget which is preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated at the Detailed Design stage. Contents of Annex 8 will be updated as the Detailed Design progresses, and will finally be used in the contract document.





Only the items in Annex 8 that need special attention are described in the followings.

#### 11-1 Land acquisition

The Maldives side shall acquire the lands for transmitting and relay stations and submit an official letter to JICA/JOCV Maldives Office to inform the results by August 15, 2016.

#### 11-2 Approval of EIA

The Maldives side shall obtain approval of EIA for the identified eleven sites by E/N. The Maldives side shall submit an official letter to JICA/JOCV Maldives Office to inform the results by August 31, 2016.

#### 11-3 Location of Network Operation Center (NOC)

The Maldives side shall secure space for NOC. The location is the first floor of the TV Maldives Building of PSM. Necessary renovation shall complete before delivery of NOC equipment to the site. The renovation progress shall be regularly communicated to JICA/JOCV Maldives Office.

#### 11-4 Allocation of frequency

The Maldives side shall allocate frequencies as Annex 9 for digital terrestrial broadcasting as well as microwave transmission links.

#### 11-5 Establishment of the Digital broadcasting Network Operator (DBNO)

The Maldives side shall establish the DBNO, with necessary legal and institutional arrangement, by August 31, 2016. The DBNO shall make agreements with private broadcasting stations on their participation to the DBNO by August 31, 2016.

#### 11-6 Removing designated equipment and obstacles

The Maldives side shall remove designated equipment and obstacles as well as land clearance from the Project sites prior to delivery of the equipment provided by the Project to the Project sites.

#### 11-7 Power supply

The Maldives side shall provide power supply to all the Transmitting and Relay Stations as well as backup power facility to NOC equipment prior to delivery of the equipment provided by the Project to the Project sites.

### 12. Monitoring during the Implementation

The Project will be monitored and reported every quarter by the executing agency and using the Project Monitoring Report (PMR) in Annex 10.

### 13. Ex-Post Evaluation

JICA will conduct ex-post evaluation three (3) years after the project completion with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact,



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Sustainability) of the Project. Result of the evaluation will be publicized. The Maldives side is required to provide necessary support for them.

#### 14. Schedule of the Study

JICA will complete the Final Report of the Preparatory Survey in accordance with the confirmed items and send it to the Maldives side around September, 2016.

#### 15. Environmental and Social Considerations

##### 15-1 General Issues

##### 15-1-1 Environmental Guidelines and Environmental Category

The JICA mission explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as 'the Guidelines') is applicable for the Project. The Project is categorized as B because the Project is not located in a sensitive area, nor has it sensitive characteristics, nor falls it into sensitive sectors under the Guidelines, and its potential adverse impacts on the environment are not likely to be significant.

##### 15-1-2 Environmental Checklist

The environmental and social considerations including major impacts and mitigation measures for the Project are summarized in the Environmental Checklist attached as Annex 11. Both sides confirmed that in case of major modification of the content of the Environmental Checklist, the Maldives side shall submit the modified version to JICA in a timely manner.

##### 15-2 Environmental Issues

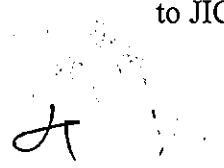
##### 15-2-1 Environmental Impact Assessment (EIA)

Both sides confirmed that the EIA report will be approved by Environment Protection Agency by August 31, 2016. As a result of the EIA report, in case that the further mitigation measures are required, the measures shall be discussed and agreed between both sides.

##### 15-2-2 Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) of the Project is as Annex 12. Both sides agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and EMoP, which may be updated during the detailed design stage.

Both sides agreed that during the environmental and social consideration studies for EIA report to be implemented by the Maldives side, the Maldives side shall conduct the study on ecosystems and obtain baseline data, of which JICA confirms the result. Based on the result of the study, the Maldives side shall revise EMP and EMoP as needed and report it to JICA.



## 15-4 Environmental and Social Monitoring

### 15-4-1 Environmental Monitoring

Both sides agreed that the Maldives side will submit results of environmental monitoring to JICA by using the monitoring form attached as Annex 13.

### 15-4-2-Information Disclosure of Monitoring Results

Both sides confirmed that the Maldives side will disclose results of environmental and social monitoring to local stakeholders through their website.

The Maldives side agreed JICA will disclose results of environmental and social monitoring submitted by the Maldives side as the monitoring forms attached as Annex 12 on its website.

## 16. Other Relevant Issues

### 16-1 Operation and Maintenance of the Facilities (Equipment)

The team explained the importance of operation and maintenance of the facilities constructed by the Project considering that proper asset management impacts greatly on life-span of the facilities and its maintenance cost. The Maldives side shall secure enough staff and budgets necessary for appropriate operation and maintenance of the facilities. The annual operation and maintenance costs are estimated and shown in Annex 8.

### 16-2 Eligible source countries

The team explained that the following items could be procured from eligible source countries in view of quality assurance and economic rationality of those products as well as bid competitiveness.

No	Item	Eligible source country
1	Power amplifier	Germany
2	Antenna system	Thailand, Australia
3	Network system	Sweden
4	Antenna tower and pole	Thailand, China
5	NOC equipment (Network)	Sweden
6	Maldives Meteorological Service studio equipment (Network)	Sweden

### 16-3 Cooperation among Relevant Organizations

The Maldives side shall work closely with the Maldives Broadcasting Commission and Communication Authority of Maldives (CAM) to complete the DTTB master plan, the DTTB migration plan, and Legal Framework and Guidelines by the specified timeline in Annex 8.



#### 16-4 Development of the transmitting stations by the Maldives side

In order to realize the target of migration to digital terrestrial television broadcasting by the government of Maldives, which is to cover every household in the country, the Maldives side shall develop the additional eight (8) transmitting stations in 2017 and 2018. Its budget shall be secured by Public Service Media, supported by Ministry of Home Affairs.

#### 16-5 Independence of the DBNO

In order to provide fair services to participating broadcasting stations to the DBNO, the Maldives side shall make legal and institutional arrangement of the DBNO so that the DBNO is able to operate independently as well as politically neutral from any intervention.

#### 16-6 Receivers

In order to achieve smooth migration to digital terrestrial television broadcasting, penetration of receivers is indispensable. PSM shall promote policies for penetration of receivers, including assistance to poor households to obtain receivers.

#### 16-6 Disclosure of Information

Both sides confirmed that the study results excluding the Project cost will be disclosed to the public after completion of the Preparatory Survey. All the study results including the project cost will be disclosed to the public after all the contracts for the Project are concluded

(End)

Annex 1: Project Site

Annex 2: Organization Chart

Annex 3: Project Cost Estimation

Annex 4: Japanese Grant

Annex 5: Flow Chart of Japanese Grant Procedures

Annex 6 Financial Flow of Japanese Grant

Annex 7: Project Implementation Schedule

Annex 8: Major Undertakings to be taken by Each Government

Annex 9: Frequency Allocation

Annex 10: Project Monitoring Report (template)

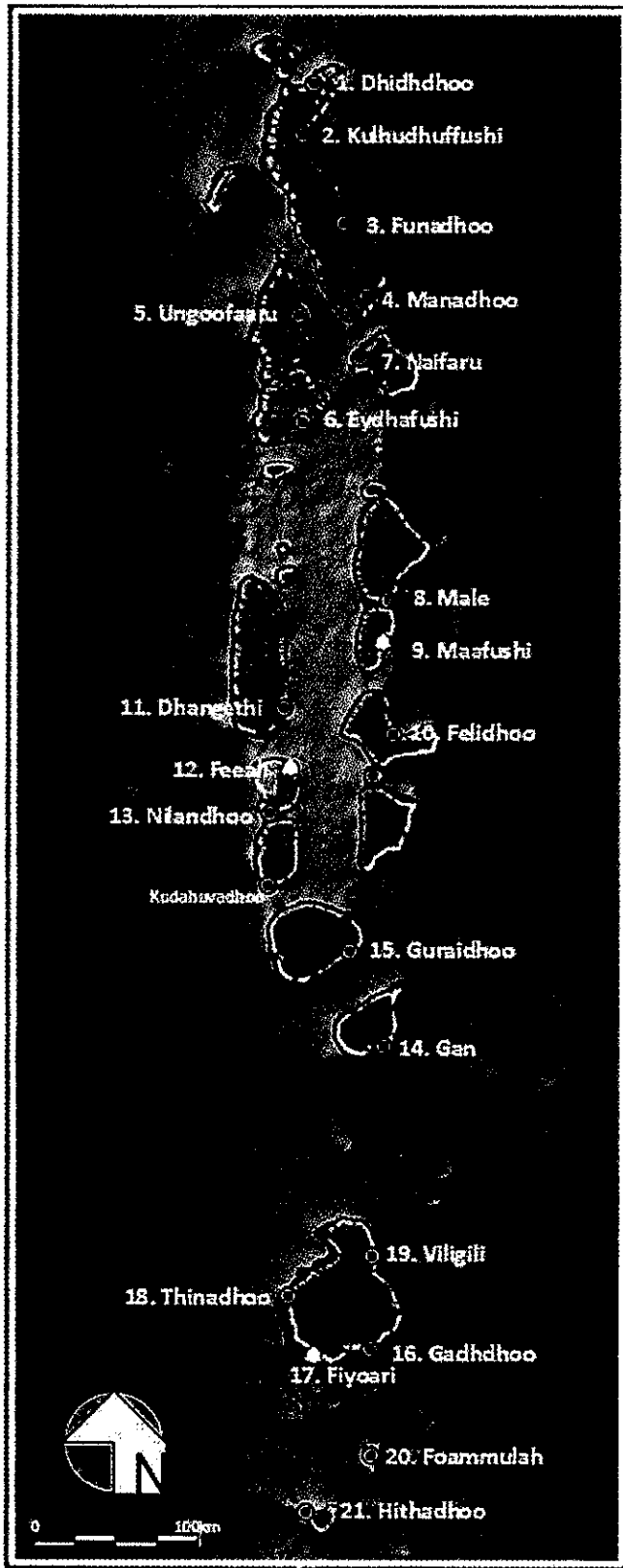
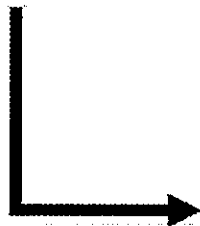
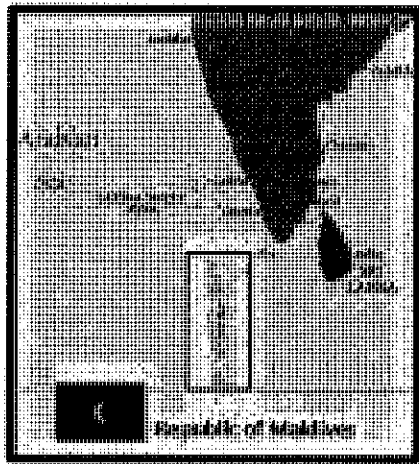
Annex 11: Environmental Check List

Annex 12: Environmental Management Plan / Environmental Monitoring Plan

Annex 13: Environmental and Social Monitoring Form



Project Sites



- Network Operation Center
- ⊙ Transmitting Station
- Micro Wave Relay Station

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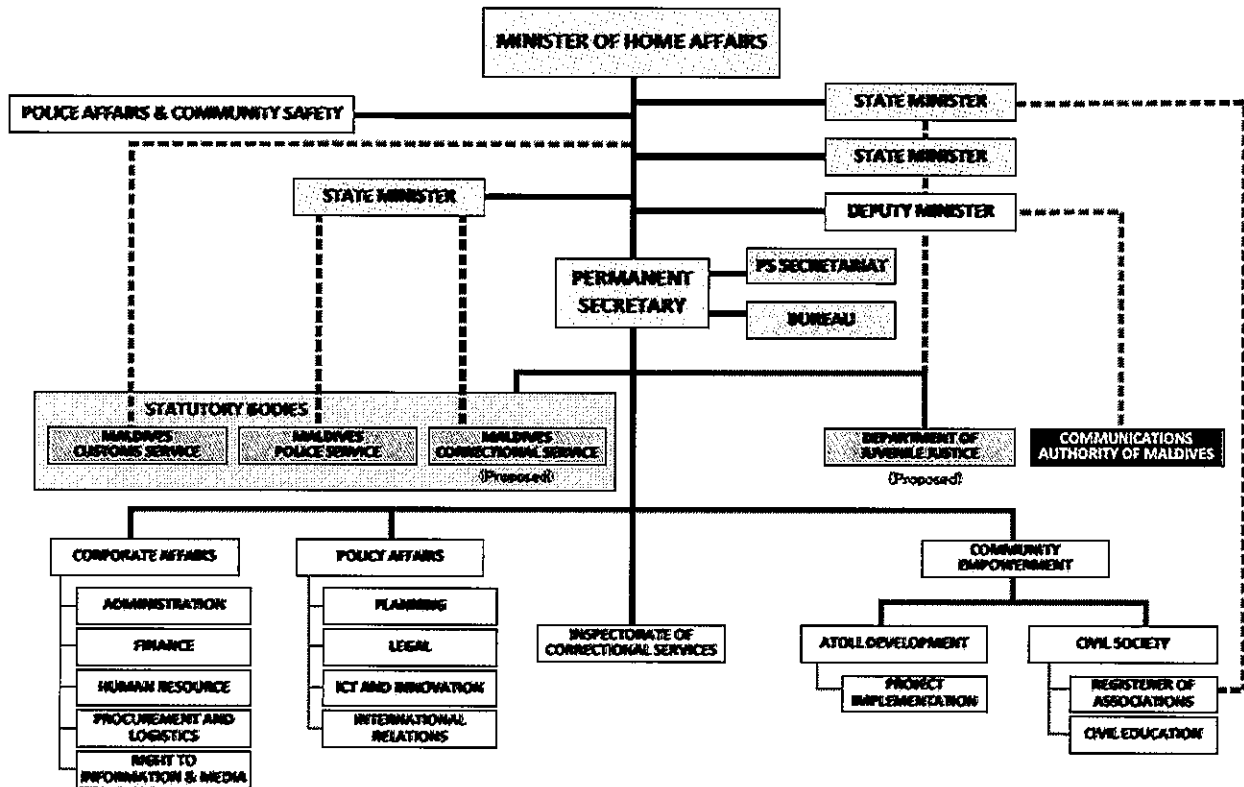
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Organization Charts

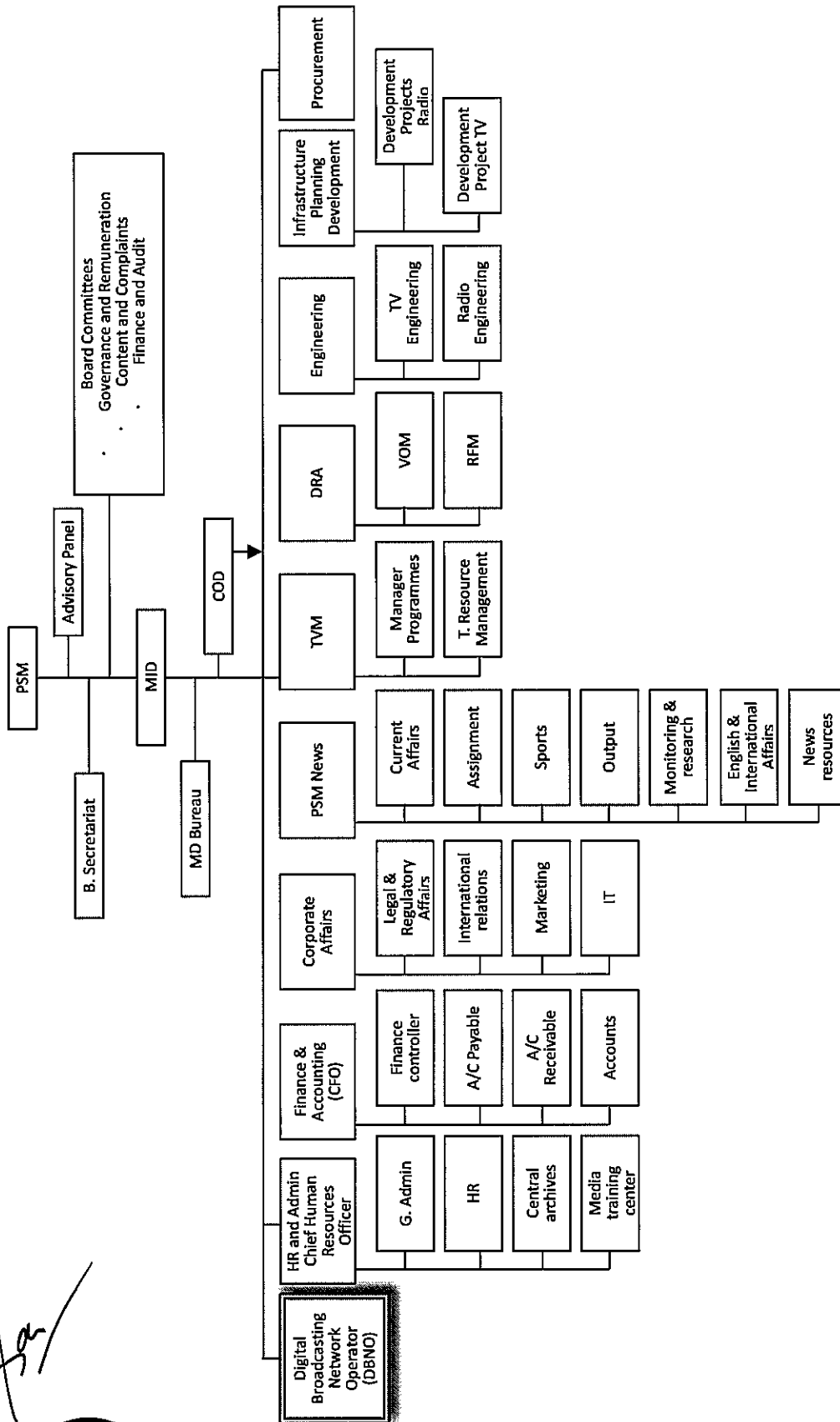
(1) Ministry of Home Affairs



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(2) Public Service Media (PSM)



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## Project Cost Estimation

## 1. Cost Estimation Borne by the Government of Japan

This section is closed due to confidentiality.

## 2. Cost Estimation Borne by the Government of the Republic of Maldives

Item	Cost Estimation (MVR)	Note
Approval for IEE/EIA	550,000	13 sites
Removal of existing antenna, feeder, foundation, trees and leveling the sites	2,180,000	
Relocation and operational cost for existing transmitting equipment to temporary sites	1,400,000	Ungoofaaruu , Eydhafushi, Felidhoo, Nilandhoo
Securing backup power to NOC equipment	1,097,400	20kVA
Securing commercial power supply to all transmitting and relay stations	798,000	Cable: MVR 1,200/m Installation of cable: MVR 100/m Meter:MVR 12,000/site
Renovation and preparation of NOC area	2,800,000	
Internal Tax	6,377,383	Goods and Services Tax 6%

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Item	Cost Estimation (MVR)	Note
Bank commissions (Advising commission of Authorization to Pay (A/P) and payment commission)	370,313	Approximately 0.1% of the total Project cost
Training of DBNO personnel	800,000	
Total	16,373,096	

Notes:

1) Conditions of cost estimation

- Estimated timing: November 2015
- Exchange rates: USD 1.00 = JPY 122.20  
MVR 1.00 = JPY 7.95

2) Others

The project is implemented in accordance with the scheme of Japan's Grant Aid. The above cost estimation does not assure the ceiling cost on the E/N and shall be reviewed by the Government of Japan before the conclusion of the E/N between the both governments.



## JAPANESE GRANT

The Japanese Grant (hereinafter referred to as the “Grant”) 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 is not supplied through the donation of materials as such.

Based on a JICA law which was entered into effect on October 1, 2008 and the decision of the GOJ, JICA has become the executing agency of the Japanese Grant for Projects for construction of facilities, purchase of equipment, etc.

### 1. Grant Procedures

The Grant 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 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 an 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 project. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant 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) 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. Japanese Grant 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, in accordance with the E/N, 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 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 Grant, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. The Grant may be used for the purchase of the products or services of a third country, if necessary, taking into account the quality, competitiveness and economic rationality of products and services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals", in principle.

(4) Necessity of "Verification"

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

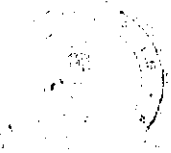
(5) Major undertakings to be taken by the Government of the Recipient Country

In the implementation of the Grant Project, the recipient country is required to undertake such necessary measures as Annex. The Japanese Government requests the Government of the recipient country to exempt all customs duties, internal taxes and other fiscal levies such as VAT, commercial tax, income tax, corporate tax, resident tax, fuel tax, but not limited, which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract, since the Grant fund comes from the Japanese taxpayers.

(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, to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Grant.

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(7) "Export and Re-export"

The products purchased under the Grant 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"), in principle. JICA will execute the Grant 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 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) Environmental and Social Considerations

The Government of the recipient country must carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the recipient country and JICA Guidelines for Environmental and Social Consideration (April, 2010) .

(11) Monitoring

The Government of the recipient country must take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and must regularly report to JICA about its status by using the Project Monitoring Report (PMR).

(12) Safety Measures

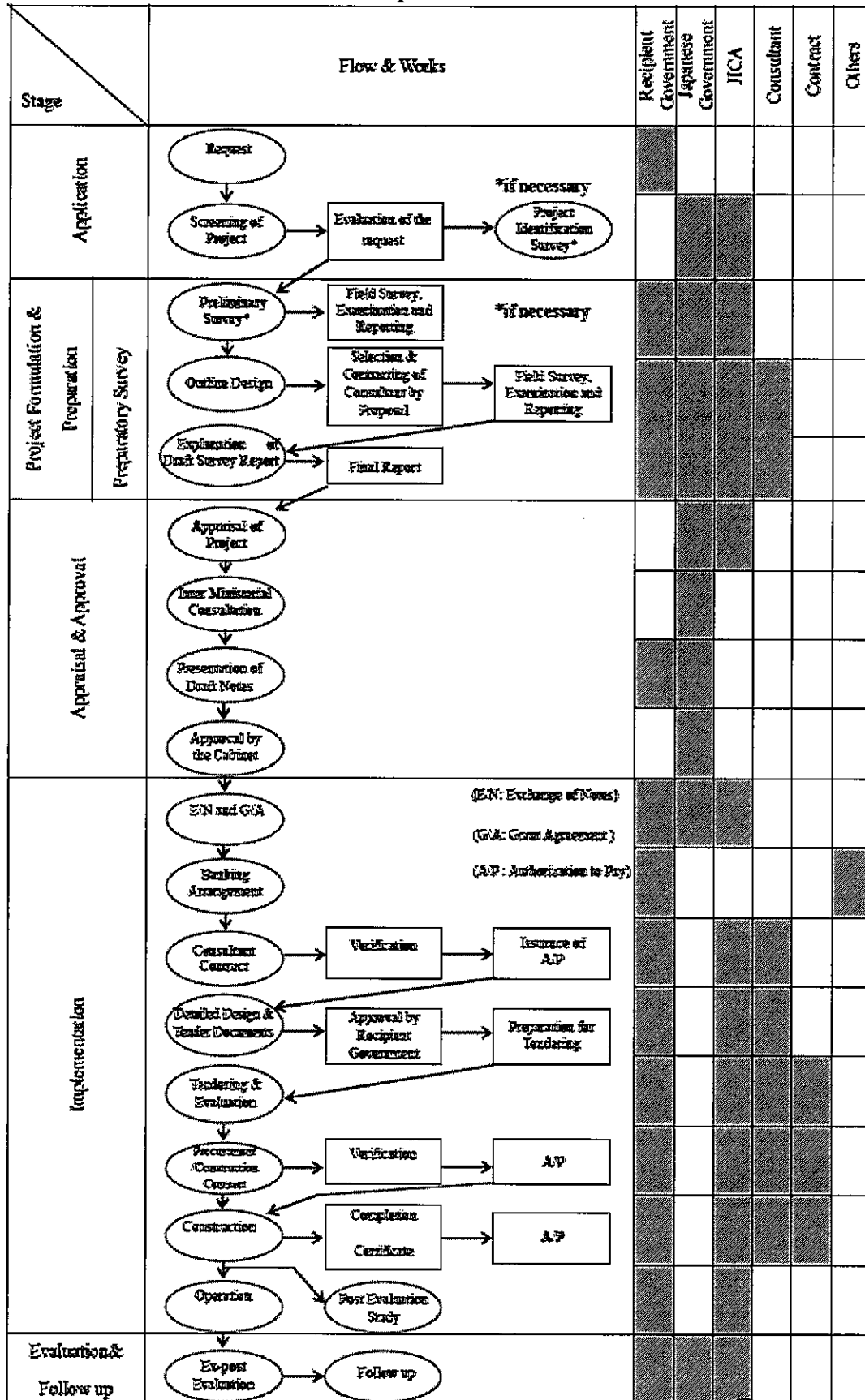
The Government of the recipient country must ensure that the safety is highly observed during the implementation of the Project.

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Flow Chart of Japanese Grant Procedures

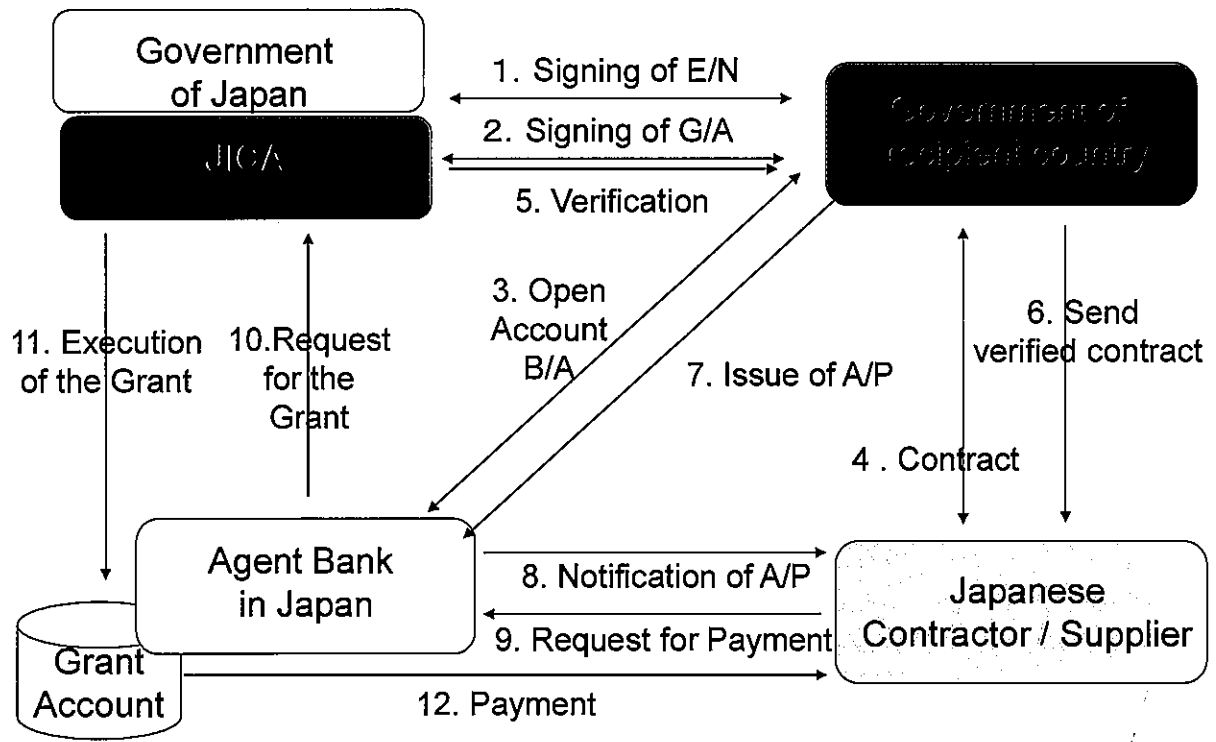


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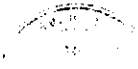


Financial Flow of Japanese Grant









## Major Undertakings to be taken by Each Government

### I. Major Undertakings to be taken by Recipient Government

#### 1. Before the Tender

(Cost: Thousand MVR)

NO	Items	Deadline	In charge	Cost	Ref.
1	To open Bank Account (Banking Arrangement (B/A))	within 1 month after G/A	MoFT	366	
2	To approve IEE/EIA	before conclusion of G/A	EPA	550	
3	To implement EIA	before conclusion of G/A	PSM		
4	To secure the following lands 1) land for transmission station	before conclusion of G/A	MoHA/ PSM		
5	To obtain the planning, zoning, building permit	before notice of the tender document	MoHA/ PSM		
6	To clear, level and reclaim the following sites 1) the sites for transmission stations	before notice of the tender document	MoHA/ PSM	2,180	
7	Preparation of a DTTB Master Plan				
	1) Establishment of a broadcasting network				
	a) Study on coverage expansion to remote islands by preparation of a transmitting station site plan	before end of the preparatory survey	MoHA/ PSM		
	2) Frequency plan	during the preparatory survey	CAM		
	3) the schedules for DSO/ASO and simulcast	before conclusion of G/A	PSM		
	4) Assistance plan and budgetary measures for TV broadcasters	before end of the preparatory survey	MoHA/ PSM		
8	Preparation of DTTB migration plan				
	1) Plans to promote purchase of new TV receivers, assist poor households and dispose of disused analogue TV receivers	before DSO	PSM		
	2) Promotion of the purchase of TV receivers and import of DTTB-compatible equipment	before DSO	PSM		
	3) Study on Platform Equipment Plan				
	a) Equipment outside the scope of the Project	before end of the preparatory survey	MoHA/ PSM		
	4) Study on business model of DTTB platform including private broadcasters' participation to the platform	before conclusion of G/A	PSM		
9	Legal Framework and Guidelines				
	1) Amendment of broadcasting laws and regulations	before conclusion of G/A	MoHA/ Commission		
	2) Amendment of broadcasting-related laws and introduction of multiplexing license	before completion of the Project	MoHA/ Commission		
	a) Decree on establishment of the DBNO	before conclusion of G/A	MoHA		
	b) Establishment of the DBNO	before conclusion of G/A	MoHA/ PSM		



	c) Guidelines for issuance of DTTB licenses to join the DBNO	before conclusion of G/A	Commission		
	3) Licensing standards	before conclusion of G/A	Commission/CAM		
10	Equipment procurement and construction work				
	1) Study on use of existing properties	during the preparatory survey	MoHA/PSM		
11	Organizational and Human Resource Development				
	1) Study on Disaster-Prevention Broadcasting and Development of Organizational Structure and Human Resources for the Operation of EWBS	before DSO	MoHA/PSM		

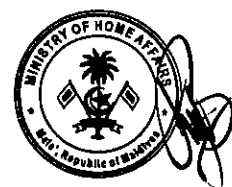
## 2. During the Project Implementation

(Cost: Thousand MVR)

NO	Items	Deadline	In charge	Cost	Ref.
1	To bear the following commissions to a bank of Japan for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract	MoHA/PSM		
	2) Payment commission for A/P	every payment	MoFT	366	1-1
2	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country				
	1) Tax exemption and customs clearance of the products at the port of disembarkation	during the Project	PSM		
3	To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work	during the Project	PSM	-	
4	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the Products and/or the Services be exempted and/or borne by its designated authority without using the Grant; Such customs duties, internal taxes and other fiscal levies mentioned above include VAT, commercial tax, income tax and corporate tax of Japanese nationals, resident tax, fuel tax, but not limited, which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract	during the Project	PSM	6,378	
5	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment	during the Project	PSM	-	
6	Equipment procurement and construction work				
	1) Providing power supply to all the Transmitting and Relay Stations	before equipment at the sites	PSM	798	
	2) Relocation and operational cost for Eydhafushi existing transmitting equipment	before equipment at the sites	PSM	350	
	3) Securing the space for installation of NOC equipment	before equipment at the sites	PSM	2,800	
	4) Providing backup power facility to NOC equipment	Before equipment at the sites	PSM	1,098	

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5)	Providing optical fiber connection to the designated transmitting stations	Before equipment at the sites	PSM		
6)	Securing sites for the installation of the equipment, material storing yard, temporary construction yard and waste disposal	before equipment at the sites	PSM		
7)	Removing designated equipment and obstacles from the Project site	before equipment at the sites	PSM	2,180	I-6
8)	Demolishing the existing antennas, feeders and foundation, and leveling the site	before equipment at the sites	PSM	2,180	2-6-7)
9)	Constructing the following facilities and install the equipment				
a)	Temporary roads within the sites for construction of the Transmitting and relay Stations	before equipment at the sites	PSM		
b)	Roads outside the sites if necessary	before equipment at the sites	PSM		
c)	Parking lots if necessary	before equipment at the sites	PSM		
10)	Installation of optical fiber cables for the programme transmission between Carrier's NOC and transmitting stations if necessary.	during the Project	PSM		
7	Organizational and Human Resource Development				
1)	Training of DBNO personnel	during the Project	PSM	800	
8	To implement EMP and EMOp	during the construction	PSM		
1)	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	PSM		
2)	To implement RAP (livelihood restoration program, if needed)	for a period based on livelihood restoration program	PSM		
3)	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report  - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement among MoHA, PSM and JICA.	- until the end of livelihood restoration program (In case that livelihood restoration program is provided) - for two years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)	PSM		

### 3. After the Project

NO	Items	Deadline	In charge	Cost	Ref.
1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	PSM	11,040	4
2	To implement EMP and EMOp	for a period based on EMP and EMOp	PSM		



	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between PSM and JICA.	for three years after the Project	PSM		
3	To secure the budget of programme transmission links manage by carriers	Before actual operation of the platform commencement	PSM	2,620	4

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

#### 4. Estimated annual maintenance and operation costs for DBNO

Item		Total (MVR)
Employment cost	Based on the salary scale of PSM with 39 personnel.	5,810,000
Electric power cost	Based on the expenditure of PSM in 2014. The power costs for transmitting and relay stations are included in maintenance costs for equipment.	120,000
Maintenance costs for equipment	Maintenance costs for antenna towers and transmitting stations is based on the expenditure in 2014. For NOC equipment, based on the actual price of the equipment.	11,040,000
Optical fiber fees	Based on the hearings from CAM	2,620,000
Frequency license fees	Based on the existing license fees by CAM	3,250,000
Miscellaneous costs	For communication with transmitting stations and purchase of consumable goods, accounting for 10% of all expenditure except this item	3,500,000



**II. Major Undertakings to be Covered by the Japanese Grant**

This section is closed due to confidentiality.

7







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COMMUNICATIONS AUTHORITY OF MALDIVES

Ref: 165/JICA/2016/01 : ސަފުޞަލު ނަންބަރު

Date: 16 June 2016

Jotaro Tateyama  
Leader  
Project Survey Team for  
The Project for the Digital Terrestrial Television  
Broadcasting Network Development  
Japan International Cooperation Agency

Dear Sir,

**Terrestrial Broadcasting Frequencies for DTTB Network**

In relation to the project on the development of the Digital Terrestrial Television Broadcasting (DTTB), this is to confirm that the terrestrial broadcasting frequencies as identified during the Project Survey, which are listed below, will be made available to the Digital Broadcasting Network Operator (DBNO) that will be established to operate the DTTB network.

**Broadcasting Frequencies for the Phase 1 of the DTTB Project:**

Channel No.	Frequency (MHz)
1	30
2	31
3	32
4	33
5	34

Channel No.	Frequency (MHz)
6	35
7	36
8	37
9	38
10	39

Yours sincerely

  
Ilyas Ahmed  
Chief Executive





**Project Monitoring Report**  
**on**  
**Project Name**  
**Grant Agreement No. XXXXXXXX**  
20XX, Month

**Organization Information**

<b>Authority (Signer of the G/A)</b>	_____ Person in Charge _____ (Division) _____ Contacts      Address: _____ Phone/FAX: _____ Email: _____
<b>Executing Agency</b>	_____ Person in Charge _____ (Division) _____ Contacts      Address: _____ Phone/FAX: _____ Email: _____
<b>Line Agency</b>	_____ Person in Charge _____ (Division) _____ Contacts      Address: _____ Phone/FAX: _____ Email: _____

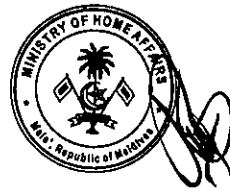
**Outline of Grant Agreement:**

<b>Source of Finance</b>	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____
<b>Project Title</b>	
<b>E/N</b>	Signed date: Duration:
<b>G/A</b>	Signed date: Duration:

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## 1: Project Description

### 1-1 Project Objective

--

### 1-2 Necessity and Priority of the Project

- Consistency with development policy, sector plan, national/regional development plans and demand of target group and the recipient country.

--

### 1-3 Effectiveness and the indicators

- Effectiveness by the project

Quantitative Effect (Operation and Effect indicators)		
Indicators	Original (Yr )	Target (Yr )
Qualitative Effect		

## 2: Project Implementation

### 2-1 Project Scope

Table 2-1-1a: Comparison of Original and Actual Location

Location	Original: (M/D) Attachment(s):Map	Actual: (PMR) Attachment(s):Map

Table 2-1-1b: Comparison of Original and Actual Scope

Items	Original	Actual
(M/D)	(M/D)	(PMR)  Please state not only the most updated schedule but also other past revisions chronologically.



'Soft component' shall be included in 'Items'.	All change of design shall be recorded regardless of its degree.
--	--

(Sample)Table 2-1-1b: Comparison of Original and Actual Scope

Items	Original	Actual
1. Upgrading of the Kukum Highway	length 20km, single lane (3.47m*2), path(1.25m*2) Concrete Pavement 200mm (motor lane only)	length 20km, single lane (3.47m*2), path(1.00m*2) Concrete Pavement 200mm (motor lane only)
2. Replacement of Old Mataniko Bridge	Bridge length 40m, Width 9.5m, path(1.00m*2), compound steel box-girder bridge, Inverted T type-abutment spread foundation	Ditto

(Sample)Table 2-1-1b: Comparison of Original and Actual Scope

Items	Original	Actual
1. Outpatient Department	RC, Double Storey Ground floor: Consultation room 6 Reception Satellite Lab. Pharmacy, etc 1st floor: Consultation room 5 Dental Clinic 2	RC, Double Storey Ground floor: Consultation room 5  ditto
2. Operation Theatre, Casualty Unit, Maternity Ward	RC, Double Storey Ground Floor: Operation room 2 Casualty Unit 1st Floor: Maternity Ward 50 beds	ditto  Maternity Ward 60 beds

(Sample)Table 2-1-1b: Comparison of Original and Actual Scope

Items	Original	Actual
1. Primary and Secondary Surveillance Radars at Chittagong Int'l Airport	i) OSR/SSR 1 set ii) RDP 1 set iii) VHF Transmitters 2 sets	Ditto
2. Access Control System for Dhaka Int'l Airport	1 set	Ditto
3. Doppler VOR/DME at Saidpur Airport	1 set	Ditto
4. Aerodrome Simulator for Civil Aviation Training Center	1 set	Ditto



5. Baggage Inspection System for Dhaka Int'l Airport	i) Hold Baggage Xray Inspectin system 7sets ii) Hold Baggage Explosive Trace Detecting System 7sets iii) Cabin Baggage Xray Inspection System 2sets	Ditto
6. Airport Fire Fighting Vehicles for Dhaka Int'l Airport	2 sets	3 sets

2-1-2 Reason(s) for the modification if there have been any.

(PMR)

2-2 Implementation Schedule  
2-2-1 Implementation Schedule

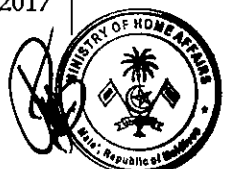
Table 2-2-1: Comparison of Original and Actual Schedule

Items	Original		Actual
	DOD	G/A	
[M/D]	(M/D)		(PMR) As of (Date of Revision)
'Soft component' shall be stated in the column of 'Items'.			Please state not only the most updated schedule but also other past revisions chronologically.
Project Completion Date*			

\*Project Completion was defined as \_\_\_\_\_ at the time of G/A.

(Sample)Table 2-2-1: Comparison of Original and Actual Schedule

Items	Original		Actual
	DOD	G/A	
Cabinet Approval	11/2015	-	-
E/N	12/2015	1/2016	24/1/2016
G/A	12/2015	1/2016	24/1/2016
Detailed Design	12/2015-4/2016	1/2016-5/2016	Amended 13/3/2017 1/2016-5/2016
Tender Notice	5/2016	5/2016	1/6/2016
Tender	6/2016	6/2016	15/7/2016
(Lot1) Construction Period	7/2016-11/2018	7/2016-11/2018	8/8/2016-30/11/2018
(Lot2) Installarion of Equipement	7/2016-6/2018	7/2016-6/2018	6/8/2016-30/60/2017



Project Completion Date	11/2018	11/2018	30/11/2018
Defect Liability Period	11/2019	11/2019	30/11/2019

\*Project Completion was defined as Check-out of Construction work at the time of G/A.

2-2-2 Reasons for any changes of the schedule, and their effects on the project.

2-3 Undertakings by each Government

2-3-1 Major Undertakings  
See Attachment 2.

2-3-2 Activities  
See Attachment 3.

2-3-3 Report on RD  
See Attachment 4.

2-4 Project Cost

2-4-1 Project Cost

Table 2-4-1a Comparison of Original and Actual Cost by the Government of Japan  
(Confidential until the Tender)

Items	Cost (Million Yen)			
	Original	Actual	Original	Actual
Construction Facilities (or Equipment)	'Soft component' shall be included in 'Items'.			Please state not only the most updated schedule but also other past revisions chronologically.
Consulting Services	- Detailed design - Procurement Management - Construction Supervision			
Total				

Note: 1) Date of estimation:  
2) Exchange rate: 1 US Dollar = Yen

Table 2-4-1b Comparison of Original and Actual Cost by the Government of XX

Items	Cost (Million USD)			
	Original	Actual	Original	Actual
				Please state not only the most



				updated schedule but also other past revisions chronologically.
Total				

Note: 1) Date of estimation:  
2) Exchange rate: 1 US Dollar = (local currency)

(Sample)Table 2-4-1a Comparison of Original and Actual Cost by the Government of Japan  
(Confidential until the Tender)

Items		Cost (Million Yen)		
	Original	Actual	Original <sup>(1)2)</sup>	Actual
Construction Facilities	1. Outpatient Department 2. Operation Theatre, Casualty Unit, Maternity Ward	Ditto Ditto	1,169.5	1,035.0
Equipment	1) Primary and Secondary Surveillance Radars at Chittagong Int'l Airport 2) Access Control System for Dhaka Int'l Airport 3) Doppler VOR/DME at Saidpur Airport 4) Aerodrome Simulator for Civil Aviation Training Center 5) Baggage Inspection System for Dhaka Int'l Airport 6) Airport Fire Fighting Vehicles for Dhaka Int'l Airport	Ditto	2,374.6	2,110.0
Consulting Services	- Detailed design - Procurement Management - Construction Supervision - Soft Component	Ditto	0.87	0.87
Total			3544.97	3145.87

Note: 1) Date of estimation: October, 2014  
2) Exchange rate: 1 US Dollar = 99.93 Yen

(Sample)Table 2-4-1b Comparison of Original and Actual Cost by the Government of Bangladesh

Items		Cost (1,000 Taka)		
	Original	Actual	Original <sup>(1)2)</sup>	Actual
Dhaka International Airport	Modification of software of existing Rader Data Processing System	Ditto	8,000	9,240
	Provision of a partition, lighting, air conditioning and electric power supply at transfer hold baggage check point	Ditto	5,000	2,453





	Replacement of five doors in the international passenger terminal building	Ditto	4,000	5,340
Chittagong Int'l Airport	Preparation of the radar site including felling of trees, clearing and grabbing	Ditto	5,000	3,400
Total			22,000	20,433

Note: 1) Date of estimation: October, 2014  
2) Exchange rate: 1 US Dollar = 0.887 Bangladesh Taka (local currency)

2-4-2 Reason(s) for the wide gap between the original and actual, if there have been any, the remedies you have taken, and their results.

(PMR)

2-5 Organizations for Implementation

2-5-1 Executing Agency:

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original: (M/D)

---

Actual, if changed: (PMR)

2-6 Environmental and Social Impacts

- The results of environmental monitoring as attached in [REDACTED] in accordance with Schedule 4 of the Grant Agreement.
- The results of social monitoring as attached [REDACTED] in accordance with Schedule 4 of the Grant Agreement.
- Information on the disclosed results of environmental and social monitoring to local stakeholders, whenever applicable.

**3: Operation and Maintenance (O&M)**

3-1 O&M and Management

- Organization chart of O&M
- Operational and maintenance system (structure and the number, qualification and skill of staff or other conditions necessary to maintain the outputs and benefits of the project soundly, such as manuals, facilities and equipment for maintenance, and spare part stocks etc)



*[Handwritten Signature]*



<b>Original:</b> (M/D)
<b>Actual:</b> (PMR)

**3-2 O&M Cost and Budget**

- The actual annual O&M cost for the duration of the project up to today, as well as the annual O&M budget.

<b>Original:</b> (M/D)
------------------------

**4: Precautions (Risk Management)**

- Risks and issues, if any, which may affect the project implementation, outcome, sustainability and planned countermeasures to be adapted are below.

<b>Original Issues and Countermeasure(s):</b> (M/D)	
Potential Project Risks	Assessment
1.	Probability: H/M/L
(Description of Risk)	Impact: H/M/L
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action during the Implementation:
Contingency Plan (if applicable):	
2.	Probability: H/M/L
(Description of Risk)	Impact: H/M/L
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action during the Implementation:
Contingency Plan (if applicable):	



3. (Description of Risk)	Probability: H/M/L
	Impact: H/M/L
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action during the Implementation:
	Contingency Plan (if applicable):
<b>Actual issues and Countermeasure(s)</b>	
(PMR)	

**5: Evaluation at Project Completion and Monitoring Plan**

**5-1 Overall evaluation**

Please describe your overall evaluation on the project.

**5-2 Lessons Learnt and Recommendations**

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

**5-3 Monitoring Plan for the Indicators for Post-Evaluation**

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

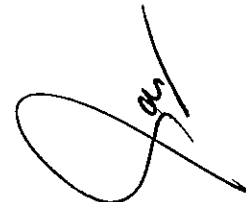
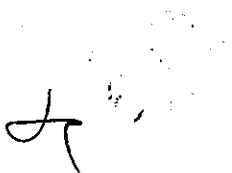


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Attachment

1. Project Location Map
2. Undertakings to be taken by each Government
3. Monthly Report
4. Report on RD
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)  
(Final Report Only)



Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Item No.	Item Name	Unit	Quantity	Unit Price	Total Price	Remarks
1	Item 1	●●t	●	●	●●	●
2	Item 2	●●t	●	●	●●	●
3	Item 3					
4	Item 4					
5	Item 5					

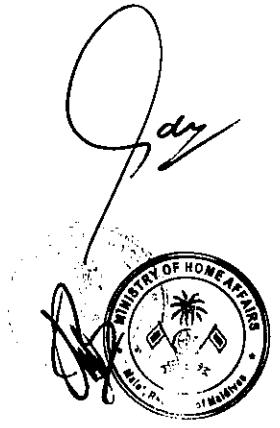
2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Item No.	Item Name	Unit	Quantity	Unit Price	Total Price	Remarks
1	Item 1					
2	Item 2					
3	Item 3					
4	Item 4					
5	Item 5					

(3) Summary of Discussion with Contractor (if necessary)



Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)  
 (Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	



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## Environmental Check List

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons of Yes/No, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(a) N (b) N (c) N (d) N	PSM has applied for screening from the Environmental Protection Agency (EPA), as a result of which there is an instruction to carry out an EIA at nine sites, and for the other 12 sites a survey is not necessary and the project can proceed. PSM has concluded a contract with an environmental consultant to implement the EIA.
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the local stakeholders? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a) Y (b) Y	(a) The explanations and the opinion hearings with the stakeholders and residents are being carried out by PSM and the local registered consultant in accordance with the process of the EIA approval procedures. (b) The comments of stakeholders meeting such as safety during construction, request for communication program, etc. have been reflected to the project design.
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a) Y	(a) The examination of alternative plans has been conducted.
2 Mitigation Measures	(1) Air Quality	(a) Do air pollutants, (such as sulphur oxides (SOx), nitrogen oxides (NOx), and soot and dust) emitted from the proposed infrastructure facilities and ancillary facilities comply with the country's emission standards and ambient air quality standards? Are any mitigating measures taken? (b) Are electric and heat source at accommodation used fuel which emission factor is low?	(a) Y (b) N/A	(a) There will be no emissions from the completed facilities. Emissions during construction will be controlled by monitoring. (b) Normally the public electricity supply will be used. A low fuel cost generator will be used as the standby electrical power generator. However, in some cases it may be difficult to select the fuel locally.



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Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons of Yes/No, Mitigation Measures)
(2) Water Quality	(a) Do effluents or leachates from various facilities, such as infrastructure facilities and the ancillary facilities comply with the country's effluent standards and ambient water quality standards?	(a) Y	(a) Y	(a) During service it will not be necessary to discharge wastewater, and it will not be carried out. Rainwater will flow downstream naturally. During excavation of the foundations during construction, drainage will be carried out. Drainage will be carried out by pumping up groundwater and discharging it, so there is a possibility that the turbidity of the nearby groundwater will increase due to excavated soil from the construction site being mixed into it, so the turbidity will be controlled before discharge.
(3) Waste	(a) Are wastes from the infrastructure facilities and ancillary facilities properly treated and disposed of in accordance with the country's regulations?	(a) Y	(a) Y	(a) Waste will not arise during service. During construction there is a possibility that tree roots or waste deposited in reclaimed land will be excavated. The waste will be separated from the excavated soil, and transported to a waste facility for disposal by a specific disposal method. Also, the excavated soil will be transported to a specified soil disposal site.
(4) Soil Contamination	(a) Are adequate measures taken to prevent contamination of soil and groundwater by the effluents or leachates from the infrastructure facilities and the ancillary facilities?	(a) Y	(a) Y	(a) Soil contamination will not arise during service. There is a possibility of occurrence of small scale soil contamination as a result of oil leakage from construction machinery and vehicles during construction. Inspection for oil leaks and repair will be carried out on vehicles and machines. If an oil leakage occurs, the polluted soil will be collected, transported to a specified waste disposal site, and disposed of.
(5) Noise and Vibration	(a) Do noise and vibrations comply with the country's standards?	(a) Y	(a) Y	(a) During service, noise and vibration will not occur. Noise and vibration will occur during construction, mainly associated with foundation excavation. The Maldives does not have a set criterion, but the noise and vibration levels will be maintained below the criteria of the adjacent countries when carrying out construction.
(6) Subsidence	(a) In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	(a) N	(a) N	(a) The ground is reef limestone with thin topsoil, and this is not a region of wide area ground subsidence. Also, according to the site investigation, direct foundations or piled foundations will be installed in locations having sufficient bearing capacity, so ground subsidence will not occur.
(7) Odour	(a) Are there any odour sources? Are adequate odour control measures taken?	(a) N	(a) N	(a) The foundation excavation will be in limestone ground or land reclaimed with beach sand, and the site investigation did not find material that could be the source of odours, so odours will not arise during construction or during service.

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*[Handwritten mark]*



Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons of Yes/No, Mitigation Measures)
	(1) Protected Area	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	(a) N	(a) The sites are not located in protection areas. Some sites are close to or adjacent to Environmental Sensitive Areas, Environmental Protection Zones, or coastal protection forests, so during construction measures will be taken to reduce the effect (reduction of the effect of exhaust gases, reduction of the effect on groundwater quality associated with drainage). Also, alternative tree planting will be carried out for felled trees in accordance with the regulations, and during service these planted trees will be cultivated and managed, so that the effect on protection areas will be reduced.
3 Natural Environment	(2) Ecosystem	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Is there a possibility that the amount of water (e.g., surface water, groundwater) used by the project will adversely affect aquatic environments, such as rivers? Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?	(a) Y (b) N (c) Y (d) N	(a) At nine (out of 21) target sites, felling of natural tropical forests or secondary forests will be carried out. During construction measures to reduce the effect on the surroundings will be taken (reduction of the effect of exhaust gas, reduction of the effect of drainage on groundwater level lowering and water quality, alternative tree planting and cultivation associated with deforestation). (b) At Felidhoo (Vaavu Atoll), there is a protected old tree 70m from the site, so measures will be taken during construction to reduce the effect (reduction of the effect of exhaust gas, reduction of the effect of drainage on the groundwater level lowering and water quality). (c) No protected flora and fauna have been found on the target, but as a result of felling of forests the habitats and activity areas of the flora and fauna will be reduced. Measures will be taken to reduce the effect on the surrounding forest in accordance with (a) above (reduction of the effect of exhaust gas, reduction of the effect of drainage on groundwater level lowering and water quality, alternative tree planting and cultivation associated with deforestation). (d) Water will be used during the drainage operations associated with construction of the foundations, but there will be no effect on river environment and on aquatic organisms.
	(3) Hydrology	(a) Is there a possibility that hydrologic changes due to the project will adversely affect surface water and groundwater flows?	(a) N	(a) Drainage operations will be carried out associated with the construction of foundations, as a result of which there will be a temporary drawdown of the groundwater levels in the area surrounding the site, but it will not affect the flow of surface water or groundwater.



Category	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons of Yes/No, Mitigation Measures)
(4) Topography and Geology	(a) Is there a possibility the project will cause large-scale alteration of the topographic features and geologic structures in the project site and surrounding areas?	(a) N	(a) The target sites are flat ground several meters above sea level, and there will be no change to the topography or geological structure.
	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimise the impacts caused by the resettlement? (b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement? (c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? (d) Is the compensations going to be paid prior to the resettlement? (e) Is the compensation policies prepared in document? (f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous people? (g) Are agreements with the affected people obtained prior to resettlement? (h) Is the organisational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan? (i) Are any plans developed to monitor the impacts of resettlement? (j) Is the grievance redress mechanism established?	(a) N/A (b) N/A (c) N/A (d) N/A (e) N/A (f) N/A (g) N/A (h) N/A (i) N/A (j) N/A	(a) (b) (c) (d) (e) (f) (g) (h) (i) (j) There will be no resettlement of residents. Necessary lands are ensured by the PSM.
	(1) Resettlement	(a) Y	(a) On the islands with target sites some of the roads are narrow, so the movement of the residents may be hindered due to transport of materials and equipment, temporary storage of materials and equipment, and the construction site. The construction plan will be explained to the Island Committees and residents, safety measures, etc., will be discussed, and the residents will be informed.
(2) Living and Livelihood	(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?	(a) Y	(a) Historical assets have been identified at two locations on the islands with target sites, but they are distant from the sites, and will not be affected.
	(3) Heritage	(a) Is there a possibility that the project will damage the local archaeological, historical, cultural, and religious heritage? Are adequate measures considered to protect these sites in accordance with the country's laws?	(a) Y

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Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons of Yes/No, Mitigation Measures)
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken? (b) Is there a possibility that landscape is spoiled by construction of high-rise buildings such as huge hotels?	(a) N (b) N	Several towers of telecom carriers have already being constructed on each of the target islands, so the addition of one tower will not damage the landscape.
	(5) Ethnic Minorities and Indigenous People	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous people? (b) Are all of the rights of ethnic minorities and indigenous people in relation to land and resources respected?	(a) N/A (b) N/A	There are no distinct ethnic minorities or indigenous peoples on the islands with target sites.
	(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project? (b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials? (c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health programme, and safety training (including traffic safety and public health) for workers etc.? (d) Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?	(a) Y (b) Y (c) Y (d) Y	(a) The compliance will be carried out. (b) Measures to prevent work-related accidents will be implemented. (c) A labour health and safety plan will be formulated, notified to the workers, and implemented. (d) A guard will be deployed to provide guidance.
5 Other	(1) Impacts during Construction	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and waste)? (b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts? (c) If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?	(a) Y (b) Y (c) Y	(a) Concentration of construction machinery will be avoided, the hours of high noise and vibration operations will be set, labour safety measures and mitigation measures will be implemented. (b) For the foundation excavation which will have the greatest effect on the natural environment during construction, in particular for the drainage operations, a drainage plan will be submitted to the EPA in accordance with the Dewatering Regulations, and a permit obtained. Measures based on the instructions from the EPA and mitigation measures to reduce the impact will be implemented. (c) Mitigation measures will be implemented such as formulation of a plan to mitigate traffic obstruction for the residents due to the construction,

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons of Yes/No, Mitigation Measures)
	(2) Monitoring	<p>(a) Does the proponent develop and implement monitoring programme for the environmental items that are considered to have potential impacts?</p> <p>(b) What are the items, methods and frequencies of the monitoring programme?</p> <p>(c) Does the proponent establish an adequate monitoring framework (organisation, personnel, equipment, and adequate budget to sustain the monitoring framework)?</p> <p>(d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?</p>	<p>(a) Y</p> <p>(b) Y</p> <p>(c) Y</p> <p>(d) N</p>	<p>(a) The project promoter PSM will prepare an EIA Management Department by employing staff</p> <p>(b) The environmental impact will mainly arise during the construction period. Items to reduce the environmental impact of the construction will be set. Construction will be carried out at 21 locations, and the items will be adjusted in accordance with the construction period at each location.</p> <p>(c) This will be implemented by the PSM management.</p> <p>(d) Although not currently prescribed, this will be prescribed in the environmental decision documents of the EPA.</p>
6 Note	<p>Reference to Checklist of Other Sectors</p>	<p>(a) Where necessary, pertinent items described in the Roads, Railways and Bridges Checklists should also be checked (e.g., projects including access roads to the infrastructure facilities).</p> <p>(b) For projects, such as installation of telecommunication cables, power line towers, and submarine cables, where necessary, pertinent items described in the Power Transmission and Distribution Lines Checklist should also be checked.</p>	<p>(a) N</p> <p>(b) Y</p>	<p>(a) Roads, railways, and bridges are not relevant.</p> <p>(b) A checklist for electrical power transmission, transforming, and distribution has been confirmed.</p>
	<p>Note on Using Environmental Checklist</p>	<p>(a) If necessary, the impacts to transboundary or global issues should be confirmed (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).</p>	<p>(a) Y</p>	<p>(a) There is a possibility of an effect from the rise in sea water levels associated with global warming, but the facility design has taken a tsunami into a consideration.</p>

Note 1) Regarding the term 'Country's Standards' mentioned in the above table, in the event that environmental standards in the country where the project is located diverge significantly from international standards, appropriate environmental considerations are required to be made. In cases where local environmental regulations are yet to be established in some areas, considerations should be made based on comparisons with appropriate standards of other countries (including Japan's experience).

Note 2) Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking into account the characteristics of the project and the particular circumstances of the country and locality in which the project is located.

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**Environmental Management Plan / Environmental Monitoring Plan**

Environmental Item	Item	Point	Frequency	Responsible Agency
Air Quality	SPM, CO, NO <sub>2</sub> , SO <sub>2</sub>	Adjacent to each site	5 times per site	Construction contractor PSM
Water Pollution	BOD, COD, SS pH, EC, turbidity	Drainage during construction Shallow wells near each site	5 times per site	Construction contractor PSM
Waste	Status of management of waste temporary placement area  Status of transfer to waste disposal site  Status of levelling of excavated soil disposal site	Waste material temporary placement area Waste disposal site  Soil disposal site	5 times per site	Construction contractor PSM
Soil Contamination	Status of inspection and repair of oil leaks Status of processing of oil leak areas	Construction sites, construction machinery and vehicle storage sites	5 times per site	Construction contractor PSM
Noise and Vibration	Noise and vibration	Adjacent to each site	5 times per site	Construction contractor PSM
Protected Area	Status of implementation of construction management, alternative tree planting and cultivation by monitoring drainage and exhaust operations, water quality, groundwater levels, etc., in accordance with the specific mitigation measures. Status of ESAs, EPZs, and coastal greenbelt close to the sites	ESAs, EPZs, and coastal greenbelt close to the sites	5 times per site Alternative tree planting and cultivation in the case of tree felling once in 3 years	Construction contractor PSM
Ecosystem	Status of implementation of mitigation measures (same as for protected areas) Status of protected trees and surrounding woods close to the sites	Each site, and protected trees, woods, and forest areas close to the sites	5 times per site Alternative tree planting and cultivation in the case of tree felling once in 3 years	Construction contractor PSM
Living and Livelihood	Status of management of traffic obstruction of residents due to the construction	Near each site	5 times per site	Construction contractor PSM
Working Conditions	Status of health and safety guidance Status of use of worker safety equipment	Each site	5 times per site	Construction contractor PSM
Accident	Status of implementation of safety measures Status of implementation of safety measures for the nearby residents	Each site	5 times per site	Construction contractor PSM

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### Environmental and Social Monitoring Form

#### 1. Explanation for Permit, Residents

Monitoring Item	Monitoring Results during Report Period
e.g.) Responses/Actions to Comments and Guidance from Government Authorities	

#### 2. Mitigation Measures

– Air Quality (Emission Gas / Ambient Air Quality)

##### Measurement during construction period and during service (confirmation of recovery)

Item (Unit)	Measured Value (Mean)	Measured Value (Max.)	Country's Standards (Sri Lanka) $\mu\text{g}/\text{m}^3$	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
CO			30,000 (1 hr)	30,000 (1 hr)	5 times per site
NO <sub>2</sub>			250 (1 hr)	200 (1 hr)	5 times per site
SO <sub>2</sub>			200 (1 hr)	20 (24 hrs)	5 times per site
SPM (suspended particulate matter)			500 (1 hr)	50 (24 hrs)	5 times per site

– Water Quality (Effluent/Wastewater/Ambient Water Quality) **Measurement during construction period and during service (confirmation of recovery)**

Item (Unit)	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
BOD			Check the water quality of the nearby shallow wells, and adjust mainly the turbidity of the wastewater to that level or lower.		5 times per site
COD					5 times per site
SS (suspended solids)					5 times per site

Check the water quality (pH, EC, turbidity, BOD, COD, SS) of the nearby shallow wells, and adjust mainly the turbidity of the wastewater to that level or lower.

– Waste **Monitoring during the construction period**

Monitoring Item	Monitoring Results during Report Period
Status of disposal of landfill waste excavated during the foundation excavation	
Status of disposal of surplus excavation spoil	

– Noise / Vibration **Measurement during construction period and during service (confirmation of recovery)**



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Item (Unit)	Measured Value (Mean)	Measured Value (Max.)	Country's Standards (Sri Lanka)	Referred International Standards (Japan)	Remarks (Measurement Point, Frequency, Method, etc.)
Noise level			Daytime: 75dB Night time: 45 dB	Daytime: 60dB Night time: 40 dB Construction: 85 dB	5 times per site
Vibration level			2.0 mm/sec	Daytime: 60dB Night time: 55 dB Construction: 75dB	5 times per site

### 3. Natural Environment

#### – Protected Area **Monitoring during construction period and during service**

Monitoring Item	Monitoring Results during Report Period
Status of implementation of mitigation measures at the site	
Status of the protection area close to the site	
Status of implementation and cultivation of alternative tree planting	

#### – Ecosystem **Monitoring during construction period and during service**

Monitoring Item	Monitoring Results during Report Period
Status of implementation of mitigation measures at the site	
Status of protected trees and forests near the site	
Status of implementation and cultivation of alternative tree planting	

### 4. Social Environment

#### – Living and Livelihood **Monitoring during construction period**

Monitoring Item	Monitoring Results during Report Period
Status of management of traffic construction for the residents due to the construction	

#### – Working Conditions **Monitoring during the construction period**

Monitoring Item	Monitoring Results during Report Period
Status of safety and health guidance on the construction site	
Status of use of labour safety equipment	

#### – Accident **Monitoring during the construction period**

Monitoring Item	Monitoring Results during Report Period
Status of implementation of safety measures on the construction site	
Status of implementation of safety measures for the nearby residents	

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**Appendices 6 Documents related to Environmental and Social Considerations**

## Appendix 6 Documents related to Environmental and Social Considerations

### (1) List of animals and plants to be protected

#### (a) List of birds to be protected (70 kinds)

No.	General name (English name)	Scientific name	Name of local place	Classification by IUCN
1	Asian Koel	<i>Eudynamys scolopacea scolopacea</i>	Dhivehi Kovehi	
2	Audubon's Shearwater	<i>Puffinus lherminieri</i>	Dhivehi Hoagulhaa	
3	Black Bittern	<i>Dupetor flavicollis</i>	Kalhu Raabondhi	
4	Black Headed Heron	<i>Ardea melanocephala</i>	Noo Maakanaa	
5	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Raabondhi	
6	Black-Headed Gull	<i>Larus ridibundus</i>	Boakalhu Gohorukey	
7	Black-Naped Tern	<i>Sterna sumatrana</i>	Kirudhooni	
8	Black-Tailed Godwit	<i>Limosa limosa</i>	Eshunga Ilolhi	Near Threatened
9	Black-Winged Stilt	<i>Himantopus himantopus</i>	Theyravaa Ilolhi	
10	Bodu Gaadhooi	<i>Sterna bergii</i>	Great Crested Tern	
11	Bridled Tern	<i>Sterna anaethetus</i>	Vaali	
12	Brown Booby	<i>Sula leucogaster</i>	Kalhu Maadhooi	
13	Brown Noddy	<i>Anous stolidus</i>	Maaranga	
14	Caspian Tern	<i>Sterna caspia</i>	Miyaremu Dhooni	
15	Cattle Egret	<i>Bubulcus ibis</i>	Iruvaihudhu	
16	Central Maldivian Heron	<i>Butorides striatus didii phillipsi</i>	Medhuraajjethere Raabondhi	
17	Common Coot	<i>Fulica atra</i>	Salvaa Dhooni	
18	Common Greenshank	<i>Tringa nebularia</i>	Chon Chon Ilolhi	
19	Common Moorhen	<i>Gallinula chloropus</i>	Olhuvalu Kanbili/Kulhee Kanbili	
20	Common Ringed Plover	<i>Charadrius hiaticula</i>	Angoti Bondana	
21	Common Tern	<i>Sterna hirundo</i>	Valla	
22	Crab Plover	<i>Dromas ardeola</i>	Theyravaa/Moalha Lunbo	
23	Curlew Sandpiper	<i>Calidris ferruginea</i>	Bondana Ilolhi	Near Threatened
24	Eurasian Spoonbill	<i>Platalea leucorodia</i>	Dheyfaiy Dhooni	
25	Ferruginous Pochard	<i>Aythya nyroca</i>	Rathu Reyru	Near Threatened
26	Flesh-Footed Shearwater	<i>Puffinus carneipes</i>	Maa Hoagulhaa	
27	Garganey	<i>Anas querquedula</i>	Kunburu Reyru	
28	Glossy Ibis	<i>Plegadis falcinellis</i>	Kalhu Bulhithunbi	
29	Great Egret	<i>Casmerodius albus</i>	Lagnaa	
30	Great Frigatebird	<i>Fregata minor</i>	Maahoara	
31	Greater Flamingo	<i>Phoenicopterus ruber</i>	Gudugudaa Dhooni	
32	Greater Sand Plover	<i>Charadrius leschenaultii</i>	Valu Bondana	
33	Grey Plover	<i>Pluvialis squatarola</i>	Alaka	
34	Gull-Billed Tern	<i>Gelochelidon nilotica</i>	Kanifulhu Dhooni	
35	House Sparrow	<i>Passer domesticus</i>	Kurulla Dhooni	

No.	General name (English name)	Scientific name	Name of local place	Classification by IUCN
36	Jack Snipe	<i>Lymnocryptes minimus</i>	Onna Iolhi	
37	Kentish Plover	<i>Charadrius alexandrinus</i>	Kiru Bondana	
38	Lesser Crested Tern	<i>Sterna bengalensis</i>	Ainmathee Gaadhooni	
39	Lesser Frigatebird	<i>Fregata ariel</i>	Hoara	
40	Lesser Golden Plover	<i>Pluvialis dominica</i>	Funamaa Dhushin	
41	Lesser Noddy	<i>Anous tenuirostris</i>	Kurangi	
42	Lesser Sand Plover	<i>Charadrius mongolus</i>	Kuda Bondana	
43	Maldivian Little Heron	<i>Butorides striatus albidulusi</i>	Dhivehi Raabondhi	
44	Maldivian Pond Heron	<i>Ardeola grayii phillipsi</i>	Huvadho Raabondhi	
45	Maldivian Water Hen	<i>Amaurornis phoenicurus maldivus</i>	Dhivehi Kanbili	
46	Marsh Sandpiper	<i>Tringa stagnatilis</i>	Furedhdhe Iolhi	
47	Masked Booby	<i>Sula dactylatra</i>	Hudhumaa Dhooni	
48	Northern House Martin	<i>Delichon urbica</i>	Rahmathee forike	
49	Northern Shoveler	<i>Anas clypeata</i>	Reyru	
50	Pacific Golden Plover	<i>Pluvialis fulva</i>	Bileymaa Dhushin	
51	Pallas's Gull	<i>Larus ichthyaetus</i>	Gohorukey	
52	Purple Heron	<i>Ardea pupurea</i>	Dhanbu Maakanaa	
53	Red-footed Booby	<i>Sula sula</i>	Maa Dhooni	
54	Red-Throated Pipit	<i>Anthus cervinus</i>	Mushi Fenfoah Dhooni	
55	Roseate Tern	<i>Sterna dougallii</i>	Valla	
56	Ruddy Turnstone	<i>Arenaria interpres</i>	Rathafai	
57	Saunders's Tern	<i>Sterna saundersi</i>	Bondhu Dhooni	
58	Sooty Tern	<i>Sterna fuscata</i>	Beyndu	
59	Spot-billed Pelican	<i>Pelecanus philippensis</i>	Girubaa Dhooni	Near Threatened
60	Tree Pipit	<i>Anthus trivialis</i>	Dhon Fenfoah dhooni	
61	Watercock	<i>Gallix rex cinerea</i>	Kulhee Kukulhu	
62	Wedge-Tailed Shearwater	<i>Puffinus pacificus</i>	Bodu Hoagulhaa	
63	Western Reef Egret	<i>Egretta gularis</i>	Bodu Raabondhi	
64	Whimbrel	<i>Numenius phaeopus</i>	Bulhithunbi	
65	Whiskered Tern	<i>Chlidonias hybridus</i>	Valhoa Dhooni	
66	White Tern	<i>Gygis alba</i>	Dondheeni	
67	White-Tailed Tropicbird	<i>Phaethon lepturus</i>	Dhandifulhu Dhooni	
68	Wilson's Storm-petrel	<i>Oceanites oceanicus</i>	Kandu Kanbaa	
69	Yellow Bittern	<i>Ixobrychus sinensis</i>	Dhon Raabondhi	
70	Yellow Wagtail	<i>Motacilla flava</i>	Fenfoah Dhooni	

Prohibition of buying and selling, capturing and keeping protected birds, based on the Environmental Protection and Preservation Act (Law 4/93)

Source: Protected Bird of Maldives 2010, EPA

## (b) Additional list of birds to be protected (33 kinds)

No.	General name (English name)	Scientific name	Classification by IUCN
1	White-eyed Gull	LaridaeLarusleucophthalmus	Near Threatened
2	Eurasian Curlew	ScolopacidaeNumenius arquata	Near Threatened
3	Sociable Lapwing	CharadriidaeVanellus gregarius	Critically Endangered
4	Pallid Harrier	AccipitridaeCircus macrourus	Near Threatened
5	Brown-Headed Gull	LaridaeLarus brunnicephalus	
6	Heuglin's Gull	LaridaeLarus heuglini	
7	Yellow-legged Gull/Caspian Gull	LaridaeLarus cachinnans	
8	Streaked Shearwater	ProcellariidaeCalonectris leucomelas	Near Threatened
9	Grey Heron	ArdeidaeArdea cinerea	
10	Little Egret	ArdeidaeEgretta garzetta	
11	Great Bittern	ArdeidaeBotaurus stellaris	
12	Cinnamon Bittern	ArdeidaeIxobrychus cinnamomeus	
13	Fulvous Whistling Duck	AnatidaeDendrocygna bicolor	
14	Tufted Duck	AnatidaeAythya fuligula	
15	Common Teal	AnatidaeAnas crecca	
16	Northern Pintail	AnatidaeAnas acuta	
17	Barn Swallow	HirundinidaeHirundo rustica	
18	Sand Martin	HirundinidaeRiparia riparia	
19	Pallid Swift	ApodidaeApus pallidus	
20	Common Swift	ApodidaeApus apus	
21	House Swift	ApodidaeApus affinis	
22	Grey Wagtail	MotacillidaeMotacilla cinerea	
23	Common Buzzard	AccipitridaeButeo buteo	
24	Oriental Honey- Buzzard	AccipitridaePernis ptilorhyncus	
25	Black-winged Kite	AccipitridaeElanus caeruleus	
26	Amur Falcon	FalconidaeFalco amurensis	
27	Lesser Kestrel	FalconidaeFalco naumanni	
28	Eurasian Hobby	FalconidaeFalco subbuteo	
29	Common Kestrel	FalconidaeFalco tinnunculus	
30	Osprey	PandionidaePandion haliaetus	
31	Marsh Harrier	AccipitridaeCircus aeruginosus	
32	Montagu's Harrier	AccipitridaeCircus pygargus	Near Threatened
33	Bee-eater	MeropidaeMerops apiaster	Near Threatened

Source: Protected Bird List 2013, EPA

## (c) List of marine organisms (Prohibition of catching, selling and buying and keeping; 10 kinds)

No.	General name (English name)
1	Black Corals
2	Stony Corals
3	Triton and Trochus Shells
4	Pearl Oysters
5	Lobsters

No.	General name (English name)
6	Napoleon Wrasses
7	Sea Turtles
8	Whale Sharks
9	Dolphins and Whales
10	Sharks

Source: Protected Marine Spaces in the Maldives, EPA

(d) List of marine organisms (Prohibition of selling and buying; 11 kinds)

No.	General name (English name)
1	Black Corals
2	Stony Corals
3	Triton and Trochus Shells
4	Pearl Oysters
5	Lobsters
6	Moray Eels
7	Puffer Fish
8	Parrot Fish
9	Skates and Rays
10	Sea Turtles
11	Dolphins and Whales

Source: Protected Marine Spaces in the Maldives, EPA

(e) List of marine organisms and products (22 kinds)

No.	General name (English name)
1	Bait fishes (used for pole line fishing )
2	Big eye scad (less than 6 inches)
3	Black coral
4	Black coral necklaces
5	Turtle shells
6	Boulder coral
7	Branching coral
8	Conch (triton) shell
9	Coral
10	Whales
11	Dolphin
12	Eels
13	Lobster
14	Lobster meat
15	Mother of pearl shells
16	Parrot fish
17	Puffer fish
18	Ray skin
19	Rays
20	Trochus
21	Turtle
22	Turtle shell products

Source: State of the Environment Maldives 2011, EPA

(f) Classification by IUCN

Nothing is mentioned about the classification by IUCN in the documents of EPA. The following contents are described in the IUCN's classification regarding mammals in the Maldives. ([https://en.wikipedia.org/wiki/List\\_of\\_mammals\\_of\\_the\\_Maldives](https://en.wikipedia.org/wiki/List_of_mammals_of_the_Maldives))

<b>1) Order: Sirenia (manatees and dugongs)</b>
<ul style="list-style-type: none"><li>• Family: Dugongidae<ul style="list-style-type: none"><li>◦ Genus: Dugong<ul style="list-style-type: none"><li>▪ Dugong <i>Dugong dugon</i> VU</li></ul></li></ul></li></ul>
<b>2) Order: Chiroptera (bats)</b>
<ul style="list-style-type: none"><li>• Family: Pteropodidae (flying foxes, Old World fruit bats)<ul style="list-style-type: none"><li>◦ Subfamily: Pteropodinae<ul style="list-style-type: none"><li>▪ Genus: Pteropus<ul style="list-style-type: none"><li>▪ Indian Flying-fox <i>Pteropus giganteus</i> LR/lc</li><li>▪ Small Flying-fox <i>Pteropus hypomelanus</i> LR/lc</li></ul></li></ul></li></ul></li></ul>
<b>3) Order: Cetacea (whales)</b>
<ul style="list-style-type: none"><li>• Suborder: Mysticeti<ul style="list-style-type: none"><li>◦ Family: Balaenopteridae<ul style="list-style-type: none"><li>▪ Subfamily: Balaenopterinae<ul style="list-style-type: none"><li>▪ Genus: <i>Balaenoptera</i><ul style="list-style-type: none"><li>▪ Minke Whale <i>Balaenoptera acutorostrata</i> LR/nt</li><li>▪ Bryde's Whale <i>Balaenoptera edeni</i> DD</li><li>▪ Sei whale <i>Balaenoptera borealis</i> EN</li><li>▪ Fin Whale <i>Balaenoptera physalus</i> EN</li><li>▪ Blue Whale <i>Balaenoptera musculus</i> EN</li></ul></li></ul></li><li>▪ Subfamily: Megapterinae<ul style="list-style-type: none"><li>▪ Genus: <i>Megaptera</i><ul style="list-style-type: none"><li>▪ Humpback Whale <i>Megaptera novaeangliae</i> CR</li></ul></li></ul></li></ul></li></ul></li><li>• Suborder: Odontoceti<ul style="list-style-type: none"><li>◦<ul style="list-style-type: none"><li>▪ Family: Physeteridae<ul style="list-style-type: none"><li>▪ Genus: <i>Physeter</i><ul style="list-style-type: none"><li>▪ Sperm Whale <i>Physeter macrocephalus</i> VU</li></ul></li></ul></li><li>◦ Superfamily: Platanistoidea<ul style="list-style-type: none"><li>▪ Family: Kogiidae<ul style="list-style-type: none"><li>▪ Genus: Kogia<ul style="list-style-type: none"><li>▪ Pygmy Sperm Whale <i>Kogia breviceps</i> LR/lc</li></ul></li></ul></li><li>▪ Family: Ziphiidae<ul style="list-style-type: none"><li>▪ Subfamily: Hyperoodontinae<ul style="list-style-type: none"><li>▪ Genus: <i>Indopacetus</i><ul style="list-style-type: none"><li>▪ Longman's Beaked Whale <i>Indopacetus pacificus</i> DD</li></ul></li></ul></li><li>▪ Family: Delphinidae (marine dolphins)<ul style="list-style-type: none"><li>▪ Genus: <i>Stenella</i><ul style="list-style-type: none"><li>▪ Pantropical Spotted Dolphin <i>Stenella attenuata</i> LR/cd</li><li>▪ Striped Dolphin <i>Stenella coeruleoalba</i> LR/cd</li><li>▪ Spinner Dolphin <i>Stenella longirostris</i> LR/cd</li></ul></li><li>▪ Genus: <i>Lagenodelphis</i><ul style="list-style-type: none"><li>▪ Fraser's Dolphin <i>Lagenodelphis hosei</i> DD</li></ul></li><li>▪ Genus: <i>Grampus</i><ul style="list-style-type: none"><li>▪ Risso's Dolphin <i>Grampus griseus</i> DD</li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul>

- Genus: *Peponocephala*
      - Melon-headed Whale *Peponocephala electra* LR/lc
  - Superfamily Ziphiioidea
    - Family: Ziphiidae
      - Genus: *Mesoplodon*
        - Deraniyagala's beaked whale *Mesoplodon hotaula* DD
- Suborder: Mysticeti
  - Family: Balaenopteridae
    - Subfamily: Balaenopterinae
      - Genus: *Balaenoptera*
        - Minke Whale *Balaenoptera acutorostrata* LR/nt
        - Bryde's Whale *Balaenoptera edeni* DD
        - Sei whale *Balaenoptera borealis* EN
        - Fin Whale *Balaenoptera physalus* EN
        - Blue Whale *Balaenoptera musculus* EN
    - Subfamily: Megapterinae
      - Genus: *Megaptera*
        - Humpback Whale *Megaptera novaeangliae* CR (Arabian Sea Population)
- Suborder: Odontoceti
  - Family: Physeteridae
    - Genus: *Physeter*
      - Sperm Whale *Physeter macrocephalus* VU
  - Superfamily: Platanistoidea
    - Family: Kogiidae
      - Genus: *Kogia*
        - Pygmy Sperm Whale *Kogia breviceps* LR/lc
    - Family: Ziphiidae
      - Subfamily: Hyperoodontinae
        - Genus: *Indopacetus*
          - Longman's Beaked Whale *Indopacetus pacificus* DD
    - Family: Delphinidae (marine dolphins)
      - Genus: *Stenella*
        - Pantropical Spotted Dolphin *Stenella attenuata* LR/cd
        - Striped Dolphin *Stenella coeruleoalba* LR/cd
        - Spinner Dolphin *Stenella longirostris* LR/cd
      - Genus: *Lagenodelphis*
        - Fraser's Dolphin *Lagenodelphis hosei* DD
      - Genus: *Grampus*
        - Risso's Dolphin *Grampus griseus* DD
      - Genus: *Peponocephala*
        - Melon-headed Whale *Peponocephala electra* LR/lc
  - Superfamily Ziphiioidea
    - Family: Ziphiidae
      - Genus: *Mesoplodon*
        - Deraniyagala's beaked whale *Mesoplodon hotaula* DD

The category of classification by IUCN is shown below.

EX	<b>Extinct</b>	No reasonable doubt that the last individual has died.
EW	<b>Extinct in the wild</b>	Known only to survive in captivity or as a naturalized populations well outside its previous range.
CR	<b>Critically Endangered</b>	The species is in imminent risk of extinction in the wild.
EN	<b>Endangered</b>	The species is facing an extremely high risk of extinction in the wild.
VU	<b>Vulnerable</b>	The species is facing a high risk of extinction in the wild.
NT	<b>Near Threatened</b>	The species does not meet any of the criteria that would categorise it as risking extinction but it is likely to do so in the future.
LC	<b>Least Concern</b>	There are no current identifiable risks to the species.
DD	<b>Data Deficient</b>	There is inadequate information to make an assessment of the risks to this species.

The following list is equivalent with NT ~ LC, based on the original standards.

LR/cd	<b>Lower Risk/conservation dependent</b>	Species which were the focus of conservation programmes and may have moved into a higher risk category if that programme was discontinued.
LR/nt	<b>Lower Risk/near threatened</b>	Species which are close to being classified as Vulnerable but are not the subject of conservation programmes.
LR/lc	<b>Lower Risk/least concern</b>	Species for which there are no identifiable risks.



## (2) List of trees of old age to be protected

Trees of target islands were extracted from EPA's List of protected trees of old age and the table below shows the result translated from Maldivian to English.

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
<b>Haa Alif Atoll</b>								
107	<b>29HA01</b>	HA.Atoll	Dhidhdhoo	Nika Gas	More than 50 years	12.15	9.04	West of HA. Atholhuge
108	<b>29HA02</b>	HA.Atoll	Dhidhdhoo	Nika gas	More than 50 years	6.1	6.02	West of pre-school
109	<b>29HA03</b>	HA.Atoll	Dhidhdhoo	Nika Gas	More than 50 years	4.05	6.02	In front of Kudage
110	<b>29HA04</b>	HA.Atoll	Dhidhdhoo	Nika Gas	More than 50 years	3.16	4.7	West of storage room of Island Office
111	<b>29HA05</b>	HA.Atoll	Dhidhdhoo	Nika Gas	More than 50 years	7.3	3.04	West of Windmaage
112	<b>29HA06</b>	HA.Atoll	Dhidhdhoo	Nika Gas	More than 50 years	7	3.05	North of Iramaage
<b>Haa Dhaal Atoll</b>								
2081	<b>01HD01</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 65 years	4.5	7.62	Kudhi Akireege Aage
2082	<b>01HD02</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 70 years	4.5	21.3	Champaa Ge
2083	<b>01HD03</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 70 years	4.5	18.3	MalMal Ge
2084	<b>01HD04</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 75 years	4.8	21.3	Midhili Maa Ge
2085	<b>01HD05</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 85 years	4.95	21.3	Soasun Ge
2086	<b>01HD06</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 60 years	4.3	20	Yellow Light Ge
2087	<b>01HD07</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas	More than	4.3	15.2	On the grounds of

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
				(Breadfruit Tree)	70 years			Vahberuge
2088	<b>01HD08</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 60 years	4.3	22.9	Falsaage
2089	<b>01HD09</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 65 years	4.3	20	Total Ge
2090	<b>01HD10</b>	Hdh. Atoll	Kulhudhufushi	Banbukeyo Gas (Breadfruit Tree)	More than 80 years	4.85	15.2	Kistheege
2091	<b>31HD01</b>	Hdh. Atoll	Kulhudhufushi	RaaRuhi	More than 55 years	0.9	4.6	
<b>Noonu Atoll</b>								
1775	<b>29N01</b>	Noonu Atoll	Manadhoo	Nika Gas	More than 80 year	8.5	18.29	On the hospital grounds
1776	<b>29N02</b>	Noonu Atoll	Manadhoo	Nika Gas	More than 100 years	13.72	70	On the grounds where Wataniyya antenna stands
1777	<b>29N03</b>	Noonu Atoll	Manadhoo	Nika Gas	More than 100 years	13.1	56	South of Boduusgandu Magu
1778	<b>29N04</b>	Noonu Atoll	Manadhoo	Nika Gas	More than 100 years	45	56	East of Atholhuge, from the area allocated for Atoll Office near the harbour
1779	<b>29N05</b>	Noonu Atoll	Manadhoo	Nika Gas	More than 100 years	56	80	Near the bank, east of Aamagu
1780	<b>29N06</b>	Noonu Atoll	Manadhoo	Nika Gas	More than 100 years	4.6	60	Near Dhandukolhu, east of Aamagu
1781	<b>29N69</b>	Noonu Atoll	Manadhoo	Nika Gas	More than 100 years	13.72	70	On the grounds where Wataniyya antenna stands
<b>Raa Atoll</b>								
84	<b>17R01</b>	Raa Atoll	Ungoofaaruu	Kaani Gas	More than 55 years	0.9	16.15	In the park near the beach
85	<b>29R01</b>	Raa Atoll	Ungoofaaruu	Nika Gas	More than	0.7	30.48	On the play grounds

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
					65 years			
<b>Baa Atoll</b>								
88	<b>17B01</b>	Baa Atoll	Eydhafushi	Kaani Gas	More than 53 years	2.43	9.14	West of the grounds where the oil tank is located
89	<b>17B02</b>	Baa Atoll	Eydhafushi	Kaani Gas	More than 54 years	3.9	7.62	Near the north goal post of the football ground
90	<b>17B03</b>	Baa Atoll	Eydhafushi	Kaani Gas	More than 51 years	3.7	6.09	East of power house
91	<b>17B04</b>	Baa Atoll	Eydhafushi	Kaani Gas	More than 55 years	5.8	7.62	North of power house
<b>Male'</b>								
1	<b>07Me01</b>	Male	Villingili	Dhigga Gas	More than 50years	3.23	13.53	17the block of the recreation area
2	<b>09Me01</b>	Male	Villingili	Funa Gas	More than 50years	2.25	25.29	17the block of the recreation area
3	<b>09Me02</b>	Male	Villingili	Funa Gas	More than 50years	3.29	25.29	17the block of the recreation area
4	<b>09Me03</b>	Male	Villingili	Funa Gas	More than 50years	2.89	25.29	17the block of the recreation area
5	<b>09Me04</b>	Male	Villingili	Funa Gas	More than 50years	2.49	25.59	17the block of the recreation area
6	<b>09Me05</b>	Male	Villingili	Funa Gas	More than 50years	2.19	25.59	17the block of the recreation area
7	<b>09Me06</b>	Male	Villingili	Funa Gas	More than 50years	2.8	25.59	17the block of the recreation area
8	<b>09Me07</b>	Male	Villingili	Funa Gas	More than 50years	2	19.16	17the block of the recreation area
9	<b>09Me08</b>	Male	Villingili	Funa Gas	More than 50years	1.9	19.16	17the block of the recreation area
10	<b>09Me09</b>	Male	Villingili	Funa Gas	More than 50years	3	25.2	17the block of the recreation area

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
11	<b>09Mle10</b>	Male	Villingili	Funa Gas	More than 50years	2.85	23.23	Behind Bank of Maldives, 31 <sup>st</sup> Block
12	<b>09Mle11</b>	Male	Villingili	Funa Gas	More than 50years	2.3	28.65	Flat area, 30 <sup>th</sup> Block
13	<b>09Mle12</b>	Male	Villingili	Funa Gas	More than 50years	2.57	28.65	Flat area, 30 <sup>th</sup> Block
14	<b>09Mle15</b>	Male	Villingili	Funa Gas	More than 50years	3.1	28.6	Flat area, 30 <sup>th</sup> Block
15	<b>09Mle16</b>	Male	Villingili	Funa Gas	More than 50years	2.15	28.6	Flat area, 30 <sup>th</sup> Block
16	<b>09Mle17</b>	Male	Villingili	Funa Gas	More than 50years	2.1	28.6	Flat area, 30 <sup>th</sup> Block
17	<b>09Mle18</b>	Male	Villingili	Funa Gas	More than 50years	1.84	28.6	Flat area, 30 <sup>th</sup> Block
18	<b>09Mle19</b>	Male	Villingili	Funa Gas	More than 50years	2.42	28.6	Flat area, 30 <sup>th</sup> Block
19	<b>09Mle20</b>	Male	Villingili	Funa Gas	More than 50years	2.3	28.6	Flat area, 30 <sup>th</sup> Block
20	<b>09Mle21</b>	Male	Villingili	Funa Gas	More than 50years	2.27	28.6	Flat area, 30 <sup>th</sup> Block
21	<b>09Mle22</b>	Male	Villingili	Funa Gas	More than 50years	2.05	28.6	Flat area, 30 <sup>th</sup> Block
22	<b>09Mle23</b>	Male	Villingili	Funa Gas	More than 50years	2.3	28.6	Flat area, 30 <sup>th</sup> Block
23	<b>09Mle24</b>	Male	Villingili	Funa Gas	More than 50years	2.57	28.6	Flat area, 30 <sup>th</sup> Block
24	<b>09Mle25</b>	Male	Villingili	Funa Gas	More than 50years	3.1	29.25	9 <sup>th</sup> Block
25	<b>09Mle26</b>	Male	Villingili	Funa Gas	More than 50years	3.15	28.65	9 <sup>th</sup> Block
26	<b>09Mle27</b>	Male	Villingili	Funa Gas	More than 50years	3.3	20.9	VIP area, 1 <sup>st</sup> block
27	<b>09Mle28</b>	Male	Villingili	Funa Gas	More than	3.62	28.6	Flat area, 30 <sup>th</sup> Block

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
					50years			
28	<b>09Mle29</b>	Male	Villingili	Funa Gas	More than 50years	3.65	28.6	Flat area, 30 <sup>th</sup> Block
29	<b>17Mle01</b>	Male	Villingili	Kaani Gas	More than 55 years	3.15	22.4	Veshi Magu
30	<b>17Mle02</b>	Male	Villingili	Kaani Gas	More than 50 years	4.27	22.4	Veshi Magu
31	<b>19Mle01</b>	Male	Villingili	Kinbi Gas	More than 60 years	3.68	26.4	VIP area, 1 <sup>st</sup> Block
32	<b>29Mle01</b>	Male	Villingili	Nika Gas	More 150 years	12.49	28.95	Infront of Ward Office, 17 <sup>th</sup> Block
33	<b>29Mle02</b>	Male	Villingili	Nika Gas	More than 50 years	4.89	15.2	Recreational area, 17 <sup>th</sup> block
34	<b>29Mle03</b>	Male	Villingili	Nika Gas	More than 50 years	13.3	23.35	Infront of MNDF Coast Guard, 50 <sup>th</sup> block
35	<b>29Mle04</b>	Male	Villingili	Nika Gas	More than 50 years	6.92	24.9	In front of MNDF Coast Guard, 50 <sup>th</sup> block
36	<b>29Mle05</b>	Male	Villingili	Nika Gas	More than 50 years	12.32	28.85	On the grounds of Water Supply, 50 <sup>th</sup> black
37	<b>29Mle08</b>	Male	Villingili	Nika Gas	More than 50 years			Number 31
38	<b>29Mle09</b>	Male	Villingili	Nika Gas	More than 50 years			Number 31
39	<b>29Mle12</b>	Male	Villigili	Nika Gas	More than 50 years			36 <sup>th</sup> Block of Environmental Office
<b>Vaavu Atoll</b>								
6	<b>29V01</b>	Vaavu	Felidhoo	Nika Gas	More than 320 years old	13.4	39.62	On the beach, south of the island
7	<b>36V01</b>	Vaavu	Felidhoo	Hirudhu Gas	More than	2.74	9.14	On the beach, north

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
					100 years			of the island
<b>Faafu Atoll</b>								
1	<b>29F01</b>	Faafu	Nilandhoo	Nika Gas	More than 150 years	10	45.72	Hukuru Miskiy Magu, east of Aasaary sarahaddhu
2	<b>29F02</b>	Faafu	Nilandhoo	Nika Gas	More than 130 years	11	30.48	South east corner of Aasaary Sarahaddhu
3	<b>29F03</b>	Faafu	Nilandhoo	Nika Gas	More than 70 years	5.5	24.38	Outside south east of Aasaary Sarahaddhu
4	<b>29F04</b>	Faafu	Nilandhoo	Nika Gas	More than 120 years	6.7	30.48	South east of Aasaary Sarahaddhu
5	<b>29F05</b>	Faafu	Nilandhoo	Nika Gas	More than 70 years	4.8	21.34	South east of Aasaary Sarahaddhu
6	<b>29F06</b>	Faafu	Nilandhoo	Nika Gas	More than 60 years	3.8	21.34	East side of Salam Mosque
7	<b>29F07</b>	Faafu	Nilandhoo	Nika Gas	More than 60 years	4	18.29	North side of Salam Mosque
13	<b>25F01</b>	Faafu	Feeali	Madhoshi Gas	52 years	1.93	21.34	Grounds of Feeali Cemetery
14	<b>25F02</b>	Faafu	Feeali	Madhoshi Gas	52 years	1.55	21.34	Grounds of Feeali Cemetery
<b>Thaa Atoll</b>								
38	<b>29T09</b>	Thaa	Guraidhoo	Nika Gas	More than 100 years	5.8	45.72	Kandaru Ward
<b>Gaaf Alif</b>								
4	<b>01GA01</b>	GA	Villingili	Banbukeyo Gas (Breadfruit Tree)	More than 60 years	1.83	21.34	On private property ground
5	<b>11GA01</b>	GA	Villingili	Gulchampa Gas	More than 65 years	0.6	6.09	On the grounds of the Court building
<b>Gaaf Dhaal</b>								
19	<b>00GD01</b>	Gdh	Thinadhoo	Anbu Gas (Mango Tree)	50 years	2.13	13.72	Dhanburudhoshuge

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
20	<b>01GD01</b>	Gdh	Thinadhoo	Banbukeyo Gas (Breadfruit tree)	More than 70 years	3.05	11.58	Maanel
21	<b>01GD02</b>	Gdh	Thinadhoo	Banbukeyo Gas (Breadfruit tree)	More than 75 years	3.4	12.19	Maanel
22	<b>01GD03</b>	Gdh	Thinadhoo	Banbukeyo Gas (Breadfruit tree)	More than 55 years	2.43	13.72	Bokarumaage
23	<b>01GD04</b>	Gdh	Thinadhoo	Banbukeyo Gas (Breadfruit tree)	More than 60 years	2.13	13.72	Westlight
24	<b>01GD05</b>	Gdh	Thinadhoo	Banbukeyo Gas (Breadfruit tree)	More than 50 years	2.43	12.19	Westlight
25	<b>04GD01</b>	Gdh	Thinadhoo	Boalhakinkiri Maa Gas	More than 65 years	1.5	7.62	Grounds of Hukuru Miskiy
<b>Gnaviyani Atoll</b>								
1	<b>00GN01</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 60 years	3.5	21.34	Daisy Maa
2	<b>00GN02</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 70 years	2.1	16.76	Fehi Villa Ge
3	<b>00GN03</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 55 years	2	19.51	Kalhu Vashi Ge
4	<b>00GN04</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 55 years	2	12.19	Husnoo Ge
5	<b>00GN05</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 80 years	2.3	15.24	Maizaandhoshu Ge
6	<b>00GN06</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 60 years	2.2	18.29	Emlee Ge
7	<b>00GN07</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 56 years	2.1	21.34	Selat
8	<b>00GN08</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 60 years	2.1	16.76	Fengadi Magu
9	<b>00GN09</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 75 years	4.1	21.95	Anbugasdhoshuge
10	<b>00GN10</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 59 years	2.2	17.07	Kariyyage

#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
11	<b>00GN11</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 64 years	1.9	14.02	Asurumaage
12	<b>00GN12</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 55 years	2	9.45	Galge
13	<b>00GN13</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 58 years	2.1	12.19	Mainaage
14	<b>00GN14</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 60 years	2.5	21.34	Kadhurumaage
15	<b>00GN15</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 50 years	1.5	15.24	Maajehige
16	<b>00GN16</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 70 years	2	22.86	Kalhufehige
17	<b>00GN17</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 50 years	2.2	22.56	Keyofeeni Ge
18	<b>00GN18</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 60 years	2.1	30.00	Roashan Villa
19	<b>00GN19</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 100 years	2.5	36.00	Yaasameenuge
20	<b>00GN20</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 59 years	2.5	27.00	Kulheemage
21	<b>00GN21</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 84 years	2.3	22.00	Kudafaruge
22	<b>00GN22</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 57 years	2.1	16.76	Bluereege
23	<b>00GN23</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 50 years	2.3	15.24	Araarootge
24	<b>00GN24</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 60 years	2.1	18.29	Neeravali
25	<b>00GN25</b>	Gn	Foammulah	Anbu Gas (Mango Tree)	More than 55 years	2.5	12.19	Ruhkosheege
26	<b>00GN26</b>	Gn	Foammulah	Funa Gas	More than 50 years	2.5	12.19	Near the mangroves of Bahaaruge
27	<b>00GN27</b>	Gn	Foammulah	Nika Gas	More than	10.5	6.00	Harbour near Thaara



#	Tree Code	Atoll	Island	Name of Tree	Age (estimated)	Circumference of the tree (meters)	Height of the tree (meters)	Location of the tree
					70 years			Magu
28	<b>00GN28</b>	Gn	Foammulah	Nika Gas	More than 60 years	11	9.00	Thaara Magu
29	<b>00GN29</b>	Gn	Foammulah	Nika Gas	More than 54 years	9	21.00	Behind Manhajul Hudha
30	<b>00GN30</b>	Gn	Foammulah	Nika Gas	More than 90 years	13	39.00	Ground of Haafiz Ahmed School
<b>Seenu Atoll</b>								
1	<b>19S01</b>	Seenu	Hithadhoo	Kinbi Gas	More than 55 years	6.4	30.48	Dhehera Fannu
2	<b>19S02</b>	Seenu	Hithadhoo	Kinbi Gas	More than 50 years	1.83	45.72	Dhehera Fannu
3	<b>29S01</b>	Seenu	Hithadhoo	Nika Gas	More than 60 years	5.5	22.86	East of Maamendhoo
4	<b>36S01</b>	Seenu	Hithadhoo	Hirudhu Gas	More than 55 years	6.37	36.6	Grounds of Media Centre

### (3) Minutes and attendance lists of stakeholder meetings

#### 1) Dhidhdhoo

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project.	<ul style="list-style-type: none"> <li>Council is aware of the project but the general public is not aware of the project at all.</li> </ul>
What is the opinion of the community regarding the project in your Island?	
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>Yes, People will support the project</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>Maintenance issue might be there</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>Need to include sports channel</li> <li>Broadband internet service through the network</li> <li>Proper maintenance information needed to the council</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	<p>No negative impact.</p> <p>There might be lightning due to the tower from past experience</p> <p>Health issue due to radiation</p> <p>Some impact to the cable TV operator</p>
In your opinion, are there any positive impacts or benefits associated with the project?	General public will be benefitted
Is there an alternative location for the site selection?	There is not any alternative location that can be allocated. Huge land area is there for PSM.
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>Security is important to look after the site</li> <li>Proper maintenance and monitoring plan</li> <li>Local community will give their cooperation</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>There are construction companies who can do this job</li> </ul>
Loss of residential/commercial structures, if any due to the project	<p>No</p> <p>If there is vibration during construction, then there may be some damage to the homes.</p>
Loss of community life like any market places or community activities to be affected?	Children's park, Harbor and Police station nearby. Therefore maybe impacted.
Is the site prone to disasters?	No
Is this consultation useful? Comments?	Yes

Name	Organization or Address	Designation
Hassan Kareem	Real T SPC	President Headmaster
Munadi Ali	Real T SPC	Member Inter. Director
Ahmed Amjed	Barrala sports club	President
Ahmed Taha K.	Barrala sports club	Secretary
Dhifteen Fashedd	BX sports club	club regist.
Ibrahim Rashad	Dakhla Teenage Boys SC	Vice-president
Ibrahim Rashad	s	Member
Muhammad	Dakhla Council	member
Ibrahim Shuaib	Dakhla Council	President
Ibrahim Ahmad	Dakhla Council	member
Ibrahim Ahmad	Dakhla Council	member

Close to the public due to confidentiality

## 2) Kulhudhuffushi

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>Council aware of the project. But island community is so far not aware</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>We support and island community will support.</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>If it is private party, there will be always change of increasing tariff.</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>Cable TV service is needed.</li> <li>Site is close to the shore. So maintenance will be high. Especially during south west monsoon season, sea spray is very high.</li> <li>Area is close to shore, therefore shore protection is important.</li> <li>Want to see localized channels specially for this island</li> <li>It should be able to provide local announcements and advertisements</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	Some loss to cabal TV operator. But general public will support
In your opinion, are there any positive impacts or benefits associated with the project?	Yes. But if it is only local channels people won't support that much
Is there an alternative location for the site selection?	No but north of the island can be considered.
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>HD quality cable TV service should be available</li> <li>Internet service (WiFi) through this network.</li> <li>Island community and council will fully support this and if necessary other stakeholders will involve.</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>There are lots of construction companies which can handle this project. If needed council will cooperate with NGOs for their support.</li> </ul>
Loss of residential/commercial structures, if any due to the project	Residential plots are close by but don't think there will be any impact on them. There is a plan to have 50ft width road next to the site.
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	Erosion may occur. No other issue
Is this consultation useful? Comments?	yes

Name	Organization or Address	Designation
Ali Mohamed	K. Council / pm	President
Mohamed Amin	Hulhodhuffushi Council	Vice President
Aminath Majeedha	//	Council Member
Ibrahim Rasheed	//	Council Member
Ali Ibrahim	MWSC	security
Yasin Mohamed	Varudhee	Taxi driver
Hussain Maceen	Foo 242	shop owner
Khadheega Mohamed Metcherayya		-
Shiqura Ali	Mosque	Shop keeper
Faheen Zakariya	PSM	Technician
Adnan Nasser	Thaadhage	Finance
Mohammed Ali	LUA	Driver
Abdul Sadek	Koof ASU	-
M.A. Gafar	Koof ASU	-
Abdul Rasheed	H.Dh PRE / Kadhaf School	Teacher
Abdulla Maw	Hirudhu	-

Close to the public due to confidentiality

### 3) Funadhoo

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?</p>	<ul style="list-style-type: none"> <li>• Very good objectives</li> <li>• Its not good to construct antenna in living area</li> <li>• Increasing no of antenna will consume lands and other area- better to think to use common antenna</li> <li>• Council need to know who look after the land even during the service-council welcome to take if paid</li> </ul> <p>No info It's a good project Heard on TV news but limited info Yes, through council-from some other party related to same work and through PSM/TVM</p>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• Yes, support will be there</li> <li>• Stakeholder support...also council</li> <li>• Very good project if fulfilled</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<ul style="list-style-type: none"> <li>• Any work without a pay will be an issue</li> <li>• Need prior info about when to send signals from antenna to houses</li> <li>• Lightning to antenna is sometimes a fear for the locals</li> <li>• No issues from locals</li> <li>• Radiation run on the long run</li> <li>• Good if better service</li> <li>• If foreign channels-should be cautious on unrelated contents</li> <li>• Some youths might stay there and do bad things</li> <li>• Should construct tower away from local polulation</li> <li>• Lightning may cause power failure in near by houses-it should be avoided</li> <li>• Safety concern-hope work will be carried out after good study</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<ul style="list-style-type: none"> <li>• Channels should be available</li> <li>• It is important to communicate through atoll council to island council</li> <li>• If council can get facility to announce/channels to the locals</li> <li>• Nearest pond can be reclaimed</li> <li>• Location should be separated and fenced</li> <li>• The area is in waste/garbage area-local houses are there</li> <li>• CCTV should be there</li> <li>• Even in future the land area should not be close to population</li> <li>• Culture and religious channels should be incorporated</li> <li>• Once implemented and depend on the service, price should not be increased.</li> </ul>
<p>In your opinion, are there any negative impacts or losses</p>	<ul style="list-style-type: none"> <li>• Increasing signals from similar antennas may cause interference to other services</li> </ul>

associated with the project?	
In your opinion, are there any positive impacts or benefits associated with the project?	Quality signal Dissemination of warning messages Free channels is a good thing Job opportunities Better rich information
Is there an alternative location for the site selection?	Some suggested to use east side may be better Near harbor area is better because to go and get service will be easier
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	Sustainability with upgrades Dhiraagu antenna caused hospital equipment damage in one thundering event Dewatering can cause contamination
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>• Council can provide accommodation and other service on paid basis</li> <li>• Local can fully engage in the project</li> </ul>
Loss of residential/commercial structures, if any due to the project	If better service is available continuously we believe there is no loss of land
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	Waves common (Udha) Should be reclaimed to make the area high Erosion Tsunami 2004
Is this consultation useful? Comments?	Useful Very important Better to get view from public yes

Name	Organization	Designation
AHMED IBRAHIM Fulker	FUNADHOO Council	PRESIDENT
AHMED NAZEER	"	Member
JAYAS KRAAVITH	"	V. PRESIDENT
ABDULRAHMAN	"	Member
IBRAHIM RASHED IIRRES	SH. ATOLL COUNCIL	V. PRESIDENT
Mohamed Husham	Sh. Funadhoo atoll Hospital	In charge
Shihama Mohamed	Sh. Family and children service center UNADHOO	A social service worker

Date: 30/06/2

Name	Address
Mohamed Adam	Kethirose
Mohamed Hussain	Rani
Abdul Shakoor	Itaidhee
Zareena	Radiunge
Abdulrahman Ahmed	Finikiyaage
Rifa	Moonlight
Suzana	Alfan
Zaina	naadhee
Ibrahim Shiham	Trumatheege

Close to the public due to confidentiality



#### 4) Manadhoo

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?</p>	<ul style="list-style-type: none"> <li>• Beneficial project-well informed</li> <li>• Good project with minor concerns</li> <li>• No information</li> <li>• Little awareness</li> </ul>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• Positively support, will support, beneficial</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<ul style="list-style-type: none"> <li>• High rise mast in a residential area</li> <li>• Mast in a residential area</li> <li>• Lightning risk</li> <li>• radiation</li> <li>• A mast catering for all the users is needed</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<ul style="list-style-type: none"> <li>• Boundary wall should be there</li> <li>• Lightning protection should be there</li> <li>• Security should be there</li> <li>• Maintenance should be there</li> <li>• Safety standard should be followed</li> <li>• All the antenna should be in one mast</li> <li>• Tower should be painted</li> </ul>
<p>In your opinion, are there any negative impacts or losses associated with the project?</p>	<p>No impact Radiation Damage due to disaster Falling objects from the tower</p>
<p>In your opinion, are there any positive impacts or benefits associated with the project?</p>	<p>Job opportunities Income generating source Social services Competition in the market Disaster warning Income from the land Availability of public TV Cheaper price Good signal strength</p>
<p>Is there an alternative location for the site selection?</p>	<p>Eastern side near other mast Near Dhiraagu mast, near football field West side of proposed site</p>
<p>Any other issues you may feel like to share: (Whether they</p>	<ul style="list-style-type: none"> <li>• Information related to the project will be very useful</li> <li>• Future planning</li> </ul>

welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• Sharing of same mast for all service providers</li> <li>• Local parties are willing to carryout maintenance work</li> <li>• High rise mast in residential area</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>• Construction parties will involve</li> </ul>
Loss of residential/commercial structures, if any due to the project	Unused green filed, no
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	no
Is this consultation useful? Comments?	Some information useful, good, informative, useful

Name	Organization	Designation
MOZEEZ		Chairman
ALI SHARIF		
ALI NAJIB	N. ATOLL COUNCIL	MEMBER
Mohamed Imas	N. ATOLL COUNCIL	member
Abimeed Fahem	N. ATOLL school	Principal
Jib Naseer	Femba cop-1st	Asst-manager

Name	Address
Ismail	Roashanage
Adam fahem	Twelve Paa
Adam Abdul Karim	Daisy range
Fayaz	Landhooage
Rameez	Hulhanguge
Umar Ismail	Baharage
Adam Naseer	Arbuz-sollu
Abdulla Hassa	Awarooz
Jaufer Abubakar	Maltheerage
Mithun (Dove)	Mkuzungu
Mohamed	Fumadhu
Zarna Abdul Hakeem	Hippa-suth
Aminath Haroon	Hulhanguge
Aminath Ahmad	Manjorunge
Aminath Mideemah	Kuritheerage
Jameela Moosa	Dheraha
Habeiba Ibrahim	fahamtyage
Maryam Wabedha	Hiri
Shahidha Abdul Qadir	Awaraz
Ainla Abdul Hakeem	fasmaceer

Close to the public due to confidentiality

## 5) Ungoofaaruu

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>• It's a good project</li> <li>• No idea (not heard)</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>• Will support and others also will fully support</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• No concern</li> <li>• Current service provider may lose business</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• Internet through this network</li> <li>• Localized advertisement</li> <li>• Local people should be involved</li> <li>• Should be well maintained</li> <li>• No service disruption</li> <li>•</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	Local service provider will be effected
In your opinion, are there any positive impacts or benefits associated with the project?	<ul style="list-style-type: none"> <li>• Quality service</li> <li>• Job opportunity</li> <li>• More channels</li> <li>• Warning information dissemination</li> </ul>
Is there an alternative location for the site selection?	Best location
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	Security and construction work should be given to local people
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>• Yes, local labor will involve</li> </ul>
Loss of residential/commercial structures, if any due to the project	no
Loss of community life like any	no

market places or community activities to be affected?	
Is the site prone to disasters?	no
Is this consultation useful? Comments?	Yes, lot of information gained It is advisable to involve local community in this project

Name	Organization or Address	Designation
Mohamed Nizar Ali	New Face	
Mohamed Aboobakuru	Salmaage	
Hussain Zakariyya	Dhoadhi	
Hussain Ali	Maayaa	
Yousuf Shareef	Asareege	
Abdulla Hameed	Roazy villaage	
Ali Naeem	Minwan Asseyri	
Yaugoob Yousuf	Fangi	
Adnan Adam	Noohiri	
Mohamed Fahmy	Malaz	
Ibrahim Manik	Sosun villa	
Ibrahim Rasheed	Asurumaage	
Mumthaz Mohamed	Thila	
Ali Moosa	Chanbeyleege	
Moosa Haleem	Morning vaadhee	
Abdul Ghanee Mohamed	Shabnamge	
Ahmed Afsal		
Ahmed Niyaz		

Close to the public due to confidentiality

## 6) Eydhafushi

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>• Good project. We and people will support the project</li> <li>• Not aware of the project</li> </ul>
Support of the local people for the proposed project.	<ul style="list-style-type: none"> <li>• Will support the project</li> <li>• Channels are available in Male but not available in these islands.</li> <li>• There will be people who will need free channels.</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• No concern</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• Internet service through this network.</li> <li>• A way to transmit local information to local public (this island people)</li> <li>• There should be no radiation effect</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	No negative impact. Maybe Cable TV operator might be impacted
In your opinion, are there any positive impacts or benefits associated with the project?	Quality of service expected to be good Free service people will accept
Is there an alternative location for the site selection?	Alternative area could be near stage area
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• Sometimes feel that there might be threats during storms.</li> <li>• Due to competition there may be some threat, therefore need to have security.</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• There are construction companies</li> <li>• Hard to get labour</li> </ul>
Loss of residential/commercial structures, if any due to the project	No
Loss of community life like any market places or community activities to be affected?	No
Is the site prone to disasters?	No
Is this consultation useful? Comments?	Yes

Name	Organization or Address	Designation
Hussain Siraj	Utaraungu	Taxi driver
Ibrahim Ahmed	Amanz	Fisherman
Abdul Fasih Mohamed	Gan'dhakodhiwage Hospital	Health officer
Seroza At mjid	Magoo-Lange	Nurse
Aishath Riffa	Narugis villa	Receptionist
Fazloin Mohamed	B. Atoll Education centre	Admin. officer
Hana Hamidee	B. Atoll Education centre	student
Haleema Ahmed	B. Atoll Hospital	Health officer
Ranya Rashadh	B. Atoll Education centre	student
Suha Ahmed	B. Atoll Education centre	student
Fathimath Riffa	B. Atoll Education centre	student
Mohamed Akmal Ibrahim	B. Atoll Education centre	student
Mohamed Uthman	B. Imanu'Allah wafa	shopkeeper
Mohamed Ahmed	Council	member
Mohamed 'Abd	Com. Pecton-Joban	Presi
Mohamed 'Abd	Council	Member
Muhammad Ahmed	Council (Ejdhufushi)	A. Director
Muhammad 'Abd	Ejdhufushi council	Member

Close to the public due to confidentiality

## 7) Naifaru

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>• Heard about the project. Sustainable project</li> <li>• No information</li> <li>• Little information</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>• Will support. Not support, will not support, support</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• Radiation, High rise structure, security of infrastructure, no concerns, residential site</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• Security, Safety, fencing, prompt fault attending, sharing of same infrastructure, cheaper price, religious and educational programs should be included</li> <li>• Painting should be done</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	Health risk, mosquito breeding, maintenance, wild life attraction, loss of land
In your opinion, are there any positive impacts or benefits associated with the project?	More structures will not benefit Awareness, more educational channels, cheaper rates for cable TV, No benefit
Is there an alternative location for the site selection?	Felivaru, Olhuvelifushi, offshore lagoon, no land space, near waste disposal yard, lagoon
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• Business opportunities might be lost for the local people</li> <li>• Sharing of infrastructure for different companies</li> <li>• Cable TV is a must</li> <li>•</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>• Will involve</li> </ul>
Loss of residential/commercial structures, if any due to the project	Proposed site for the project is extension of children park
Loss of community life like any market places or community activities to be affected?	Youth camp, bashi court (woman playground), Sea sport site, close by commercial sites
Is the site prone to disasters?	Erosion-beach protection is not there, flooding
Is this consultation useful? Comments?	Informative, useful



Date:		
Name	Organization	Designation
MUHAMMAD HASSAN	MADHAR SATTUL IFTAKHARI	DP
MUHAMMAD HASSAN	NAIFARI COUNCIL	ASST DIRECTOR
MUHAMMAD SUBID	NAIFARI COUNCIL	BOUNGH
Nasirullah M. M. M.	Buddies-Net	MT.D
Alimul Yaqin	Naifari Council	Director
Rifa' Nasser	Naifari police	Station incharge
Husain Zaman	Buddies-Net	Manager
Ahmed Abdul	Jhoni boase	attrex
Muhammad Hassan	Sattlink Pvt Ltd	Technician
ASADU KHAN	ADIL HOSPITAL	S.P OFFICER
Hamid Abdullah	M. Formu Council / Bahara	S. MANAGER / Service deliv
Imam M. M. M.	Council	Member
Muhammad Karim	Council	Council member
ARAFATH MUHAMMAD	FERRARA NAIFARI	STATICAL MANAGER
ASADU KHAN	NAIFARI COUNCIL INCHARGE	DIRECTOR

Close to the public due to confidentiality

Date:	
Name	Address
Yousuf Zakir	Amman Vehi
Abdul Qani	Udha
Ahmed Sharraf	Rasari Villa
Ali Nigaz	Vaima theege
Husain Zakir	Viluveti
Hamid Abdullah	Hakaveli
Abdul Razaq	Gulishange
Muhammad Jaleel	Fennaage
Muhammad Ali	Kopege
Muhammad Sidiq	Maveyo
Muhammad Ibrahim	Amman

## 8) Male'

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>• Some stakeholders are not aware of the project.</li> <li>• Dhiraagu requested for coordinates of proposed locations. We have no issues with the project (if there is a problem we can provide a solution).</li> <li>• Some community members are aware of the project and said they will support the project.</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>• Good project. Challenging project. But can be done. Yes, community people will support. One of the community member said he will not support the project (but no specific issue).</li> <li>• Good project and we will support.</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• No concern</li> <li>• Dhiraagu plan to build a new tower</li> <li>• People should not be allowed to access the site</li> <li>• The tower might fall onto the houses are nearby</li> <li>• Might be impacted due to high sea waves</li> <li>• The project should be carried out away from residential area</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• The area should be fenced and cordoned while construction</li> <li>• We maintain the island as a green island. So we request planting trees around the area</li> <li>• Educational channels should be there</li> <li>• Islamic channels</li> <li>• Safety should be taken seriously</li> <li>• Price should be lower and should be able to pay in local currently (now paying in dollars)</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	Might fall
In your opinion, are there any positive impacts or benefits associated with the project?	<p>For awareness, the network can be used.</p> <ul style="list-style-type: none"> <li>• Service quality will improve</li> <li>• Disaster information will reach people</li> </ul>
Is there an alternative location for the site selection?	Some said this is the best location while others said all the towers should be around the same area. The proposed location is very close to STELCO transformer.
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• Why extra towers will be constructed? While there are Dhiraagu and Ooredhoo towers</li> <li>• Now we face problem with the service and we expect this will improve the service</li> <li>• No there is monopoly</li> <li>• We would like to know which vehicles will be used, no of people-Can allocate land from Gulhifalhu for labour</li> </ul>

	<ul style="list-style-type: none"> <li>Condition of the site might improve with the project (e.g. flooding condition will improve)</li> <li>Service quality will improve</li> <li>Disaster information</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>Some construction companies might be involved.</li> <li>To some extent community will be involved</li> <li>It will be good if the island people carry out the construction work.</li> </ul>
Loss of residential/commercial structures, if any due to the project	no
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	Flooding, high waves even up to the road, tsunami, strong winds.
Is this consultation useful? Comments?	Yes. Good that the team came to meet STELCO. Good info

Name	Organisation	Designation
Abdulla Shams	WILLI	EX. Consultant
Zulfhan	STHANNON	& Engineer
moosaf		Manager
ajith	20111	S. Manager
Yousuf Nishad	WILLI	S. Engineer
Nazim Ali Nizam	Makulima Steel	Quality Inspector
ABRAHIM IKHAYE	STELCO	ADMIN SUPERVISOR
ALI RISHWAN	STELCO	SUPERVISOR
ABDULLA SHAFIQ	STELCO	"
MUHAMMAD ABDULLA	Stelco	"
Adam Lathief	PSM	MANAGER

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Name	Address
Ali Nishad	NAZAM
Muhammed Nishad	V. VERONICA
Muhammed Nishad	V. BAHAMON
Hassan Ali	V. HATHAVI
Shahid	C. HATHAVI
Shahid Abdul Samad	HATHAVI
Hassan Yousuf	V. HATHAVI
Arshad Mohamed	V. MANAM
Ibrahim Mohamed	V. MANAM
Adam Nizam	V. SATELLITE

Close to the public due to confidentiality

## 9) Maafushi

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the	<ul style="list-style-type: none"> <li>• Survey carried out...no detailed information</li> <li>• Miscommunication</li> <li>• Limited information</li> <li>• Beneficial project</li> </ul>

community regarding the project in your Island?	
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>• Will support</li> <li>• Will support</li> <li>• Their recommended conditions</li> <li>• Land reclamation is a requirement</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• Falling debris , population scattered</li> <li>• Past experience was not favorable</li> <li>• No concern</li> <li>• Loss of land space</li> <li>•</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• Security-prison is very close by</li> <li>• Surrounded by residential units</li> <li>• Boundary wall</li> <li>• Public safety</li> <li>• Should meets standard (by relevant regulator)</li> <li>• Frightened due to the sound by strong wind due to the size of the mast</li> <li>• Safety</li> <li>• Space limitation</li> <li>• Boundary wall</li> <li>• Lighting</li> <li>•</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	<ul style="list-style-type: none"> <li>• Radiation</li> <li>• climbing by general public</li> <li>• Potential hazard to local people</li> <li>• Land limitation</li> <li>• Island landscaping view</li> </ul>
In your opinion, are there any positive impacts or benefits associated with the project?	<ul style="list-style-type: none"> <li>• No significant positive impact</li> <li>• Job opportunities</li> <li>• Cheaper TV</li> <li>• Educational channels</li> <li>• Stronger TV signal</li> </ul>
Is there an alternative location for the site selection?	Reclamation site, MNDF site, Lagoon, Sand bank near Islaahiyya Allocated land plots for gov.
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• Land is scares...currently island is full (no land)</li> <li>• Sharing of infrastructure would save limited available land plots for other more important things</li> <li>• Everything is costly to the people</li> </ul>
Will there be likely involvement of local people in the	<ul style="list-style-type: none"> <li>• Will involve...island party is preferred</li> </ul>

implementation of the project?	
Loss of residential/commercial structures, if any due to the project	Driving test conducting location
Loss of community life like any market places or community activities to be affected?	One palm tree, a lamp post
Is the site prone to disasters?	Udha, Twister prone location, Waste disposal plot nearby
Is this consultation useful? Comments?	Helpful, useful

Name	Organization	Designation
Ahmed Ab. Saffar	Maafushi Power House	Office Asst.
Mariyam Ajla	Maafushi School	Admin. officer
Ahmed Zinath	Maafushi Prison (MCS)	F.C.P.D
Ali waasheed	Maafushi Council	A. Director
Ali Shammood	Councilor	Councilor
MAJDAH IBRAHIM	MAAFUSHI COUNCIL	V. PRESIDENT
AISHATH IUSHA	MAAFUSHI COUNCIL	COUNCILOR

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Name	Address
Ali Mansoor	Felivina munge
Ali Shareef	Nanovilla
Ahmed Mifzal	Miladhooge
Hanifa	Rabamunge
Bathriyya Hassan	Neseemunge
Ibrahim Mustafa	finifemunge
Rishwan Ahmad	Happy future
Mariyam Muzna	Selvio
Abdulla Saeed	Selvio
Mehand Saeed	Heselma
Asma. Abdul. Palen	Saaka
Jamshodha	han munge

Close to the public due to confidentiality

## 10) Felidhoo

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?</p>	<p>Good project.            Heard about the project            Not heard about the project            Good project</p> <p>PSM had provided limited information            We have sent a letter to PSM</p>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• Council: People may not support the project since there are existing issues with the land allocated PSM-Not maintained at all, no boundary wall, mosquitoes breeding at the site. No lights- We have sent a letter to PSM highlighting these issues</li> <li>• Support the project</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<ul style="list-style-type: none"> <li>• Not maintained at all, no boundary wall, mosquitoes breeding at the site. No lights- The proposed location within the boundary is so close to houses-Council has sent a letter to PSM highlighting these issues</li> <li>• Support the project</li> <li>• From the existing towers objects falling-So from the project also same might happen</li> <li>• Radiation</li> <li>• Disruption of the service</li> <li>• Currently also the area is not maintained</li> <li>• Mosquitoes are breeding at the area</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<ul style="list-style-type: none"> <li>• Fence should be there</li> <li>• Lighting should be there</li> <li>• Area should be well looked after (cleaning and maintenance)</li> <li>• Price should be lower than now</li> <li>• Service should be quality</li> <li>• Free channels should be there</li> <li>• Educational, religious channels should be there</li> <li>• Beach protection measure should be there</li> <li>• Land rent should be paid</li> <li>• First priority should be given to safety</li> <li>• During dewatering, water should not be released to the sea</li> <li>• The tower should be built away from houses (middle of the land allocated)</li> <li>• Island vegetation should not be impacted</li> </ul>
<p>In your opinion, are there any negative impacts or losses associated with the project?</p>	<ul style="list-style-type: none"> <li>• Might fall objects and damage properties and might harm people</li> <li>• Radiation impact</li> </ul>

	<ul style="list-style-type: none"> <li>• Might impact ground water quality-During previous tower construction water is released to sea</li> </ul>
In your opinion, are there any positive impacts or benefits associated with the project?	<ul style="list-style-type: none"> <li>• Might provide job opportunities</li> <li>• Quality service</li> <li>• Delivery of information during emergency</li> <li>• Price might be low</li> <li>• New channels might be available</li> <li>• Food and accommodation for workers</li> </ul>
Is there an alternative location for the site selection?	<ul style="list-style-type: none"> <li>• Close to houses-might impact</li> <li>• Best location-No other good location</li> <li>•</li> </ul>
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• Close to beach-beach is eroding</li> <li>• Would like to see the project starting as early as possible</li> <li>• Full support if the service is provided sustainable</li> <li>• If PSM carries out any work in the atoll, first priority should be given to this island since the tower is in the island-for example if shooting is done for an advertisement, it should be done in this island</li> <li>• Now the cable TV service is provided to other islands within the atoll by this island-Lot of pressure to council since PSM focal point is not attending any issues</li> <li>•</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	Yes. Work should be given to island people Loading and unloading of goods can be done by the locals
Loss of residential/commercial structures, if any due to the project	No
Loss of community life like any market places or community activities to be affected?	No
Is the site prone to disasters?	Flooding area is eroding – needs to be protected (about 20 feet between beach and the land)
Is this consultation useful? Comments?	<ul style="list-style-type: none"> <li>• Good, good</li> </ul>

Name	Organization	Designation
Abdul Majid Abdul Ghouse	V Atoll Council	D. Director
Saeed Ibrahim	V Felidoo police	P Sergeant
Imam Rasheed	V Felidoo Council	Admin. officer
Ali Mubashir	V Felidoo School	Officer in-charge
Muhammad Hakeem	F - SD	19 -
Ali Faris	Univ Atoll Hospital	Community Health Officer
Hassan Ali	V Felidoo Council	Council President
Amrullah Rahim	V FESC	Admin. officer
Ismael Saeed	V Felidoo Council	A. Director

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Name	Address
Muhammad Ismail	Sosun Villa
Ibrahim Ismail	Sosun Villa
Ibrahim Nazam	Garnation villa
Ali Nazam	Haadhu vareege
Muhammad Ali	DilKash Villa
Muhammad Ali Ghouse	Green's
Mariyam Ibrahim	Quercus
Abdulla Ali	Pluk Flower
Abdul Rafoor	Kenere villa
Hafsa Rasim	Kenere villa
Naluffa	Sosun Villa
Shitana	Star light
Victoria	Wetly star

Close to the public due to confidentiality



## 11) Dhangethi

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?</p>	<p>Heard about the project. Good project.            Aware of the project.            Not heard.            Good project.</p>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• Full support</li> <li>• We support and community also will support</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<ul style="list-style-type: none"> <li>• Why existing towers are not used? Current location is tourism development area.</li> <li>• Fee for the service might be higher than now</li> <li>• There might be inappropriate channels for children</li> <li>•</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<ul style="list-style-type: none"> <li>• Fence should be there</li> <li>• Sign board</li> <li>• All the basic channels should be free</li> <li>• Sports channels should be there</li> <li>• There should a rent for the land area</li> <li>• The area should be looked after (through a party or a staff)</li> <li>• Price should be same</li> <li>• Educational, Religious, health.</li> <li>• Free channels should be there</li> </ul>
<p>In your opinion, are there any negative impacts or losses associated with the project?</p>	<ul style="list-style-type: none"> <li>• Radiation impact</li> <li>• Will limit availability of land for other purpose</li> <li>• If outsiders are given employment</li> </ul>
<p>In your opinion, are there any positive impacts or benefits associated with the project?</p>	<ul style="list-style-type: none"> <li>• Might reduce price (fee)</li> <li>• May provide job opportunities</li> <li>• Emergency information delivery</li> <li>• Service will improve (now very poor service)</li> <li>•</li> </ul>
<p>Is there an alternative location for the site selection?</p>	<p>Council: The current survived land area will not be given since it is tourism development area. New land area has been identified and allocated by the council. This land area is allocated through consultation with the public. A letter had been sent to Home Ministry to inform this decision. Also informed to Housing Ministry.</p> <p>Current allocated land area is best location.            One suggested reclaimed area. With the tower, aesthetic value</p>

	will improve
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>If the project goes well, then it is a good development project.</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	There are parties who can work on these kind of projects. There is likely involvement.
Loss of residential/commercial structures, if any due to the project	No If it falls, it will be a big problem.
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	no
Is this consultation useful? Comments?	<ul style="list-style-type: none"> <li>Very good-got information</li> </ul>

Name	Organization	Designation
ABDUL HANMAN	Chungathu Council	Chairman
Nasir Ahmad		Member
Hussain Ahmad		Member
Isam Ahmad	Chungathu Council	Member
Abdul Wahid		Member
Aminath Rahman		Member
Muhammad Rashed		Member
Fathimath Ahmad	Chungathu Council	Member
Imam Ahmad	Chungathu Council	Member
Muhammad Rashed		Member
Abdul Wahid	SANJAYATHUL KUTUBA PATTI	Member
Abdul Wahid	plus private Director	Member
Abdul Wahid	D.H.C.	Member
Abdul Wahid	POLICE	Member

Name	Address
Muhammad	Member
Ibrahim	Five Village
Umaru Hassan	Springville
Aminath Rahman	Member
Muhammad Ahmad	Member
Fathimath Ahmad	Member
Abdul Wahid	Member
Umaru Hassan	Member
Aminath Rahman	Member
Aminath Rahman	Member

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Close to the public due to confidentiality

## 12) Feeali

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>• There projects will be a good project to cure citizen. Because through this project island people can get many information.</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>• There will be high support from the local people</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• no</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• no</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	<ul style="list-style-type: none"> <li>• no</li> </ul>
In your opinion, are there any positive impacts or benefits associated with the project?	Yes, islands can get job during construction period
Is there an alternative location for the site selection?	Yes-but no specific location was provided
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• people from the island always will welcome to these kind of projects.</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	Yes, construction workers from the island will be helpful to the project.
Loss of residential/commercial structures, if any due to the project	No
Loss of community life like any market places or community activities to be affected?	Yes, Those who are doing same kind of business will be affected.
Anything would you like to add?	<ul style="list-style-type: none"> <li>•</li> </ul>
Is this consultation useful? Comments?	<ul style="list-style-type: none"> <li>• yes</li> </ul>

Name	Organization or Address	Designation
Abdulla Zaman	Heavy Moon	ACMO
Nadhum Hassan	Chaman	Translator
Aminath Sathia	Heypleen	A-Admin
Ashath Zahara	Chaman	Praker
Ahmed Shareef	Bageecharge	Teacher
Mohamed Samoz	Santhandiy villa	Technician
Ahmed Afroz	Beach Herer	supervisor
Mohamed adam	elishan	fishermen
Ali shafeeq	Baharage	S-admin
Ali Aswain	Aariyanna	officer
Saeidha Hasan	Rupavilla	Admin
Mohamed Rameez	Rantolca villa	supervisor
Ahmed Shaibu	Bannal-sange	fisherman
Najla Mohamed	Norriany villa	hus wife
Mariyam Hassan	Rupavilla	Comm v presh
Gassan Mohamed	Happy Gardens	Project officer

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### 13) Nilandhoo

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	The community is already aware to this type of projects. Because in the past these types of some projects held in this island. So in one word can say the whole community is eagerly waiting for the projects which will be held in the island.
Support of the local people for the proposed project	The locals are awaiting for the projects. They will help the project as they can.
Any critical issues or concerns, problems by the local people regarding the project?	No
Are there any criteria you would like to see considered during the project design, construction and operation stage?	The time duration and work schedule of the project. And the finishing date.
In your opinion, are there any negative impacts or losses associated with the project?	Somehow there may be a negative opinion. Because of the political issues spreading all over the country. But as compare to other communities the issues are a very low in this island.
In your opinion, are there any positive impacts or benefits associated with the project?	Because of this project there are some direct and indirect benefits. Directly the connection of PSM and our communities will arise. Indirectly local businesses will benefit.
Is there an alternative location for the site selection?	No
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	When the project is going on, the authority persons from the community will give advice and helping the projects direct and indirectly.
Will there be likely involvement of local people in the implementation of the project?	Yes.
Loss of residential/commercial structures, if any due to the project	No
Loss of community life like any market places or community activities to be affected?	No
Is the site prone to disasters?	Rarely
Is this consultation useful? Comments?	Yes

Name	Organization or Address	Designation
Ali Rasheed	F. Nilandhoocouncil	counciller
Isma'il Abdulla	F. Nilandhoocouncil	Director
Ali Ahmed	Karunkaage	local
Manoora	Chaudharaage	women local
Ahmed Sharaf	Kingraa	planning offi
umma kulsun	Uninaage	local
Amma Ismail	Funamaage	local
Shadhiga	Reashan	local
Zakayda Ali	Dheylynaage	parent
Samara Sobha	Palmside	parent
Fareesha	Fareesha council	parent
Natullahige	Dainamaage	parent
Ashraf hameed	Alisla	neighbour
Ali Hussain	urenas	local
Abdul Majeed	Diamond villa	association
<del>Abdullah Majeed</del> Mawjood	Balbilage Shahredha	youth

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## 14) Gan

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>No aware of the project</li> <li>Need more info</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>Yes, full support. Community also will support</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>No critical issues</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>Should get local channels</li> <li>Cable operators might oppose the project</li> <li>There should be a way to provide information by the council to the community in case of emergency</li> <li>There should be fence around the area</li> <li>Prior notice should be given to FENAKA</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	<p>No negative impact Might be expensive</p>
In your opinion, are there any positive impacts or benefits associated with the project?	<p>Fees might be lower for the channels Digital service to all Emergency information/announcement</p>
Is there an alternative location for the site selection?	Some indicated that the previous location is best, while others indicated the location is good
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>Sometimes the contractors might interfere with the public</li> <li>Do not work without knowing the location</li> <li>NO firms</li> <li>Better to contact council before dewatering</li> <li>Boundary should be separate-responsible person should be known.</li> <li>Local involvement</li> <li></li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>yes</li> </ul>
Loss of residential/commercial structures, if any due to the project	no
Loss of community life like any	no

market places or community activities to be affected?	
Is the site prone to disasters?	no
Is this consultation useful? Comments?	good

Name	Organization	Designation
Mohamed Syed	Gen Council	President
Abdulla waliz	Gen Council	v President
Aslam Mohamed	S	member
Farooq Hussein	S	S
Ibrahim Niyaz	Dhiraanga	A Engineer
Abdulla Suleiman	FENKSA co Ltd	R Manager
Aminath Saib	public	-
Mariyam Umar	1.	-
Aishath Shaima	1.	
Khudheera Humay	1.	

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## 15) Guraidhoo

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?</p>	<p>No previous information But few are aware of the tower Community will support</p> <p>Known Good project Good project is better signal and cheap price</p>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• Full support</li> <li>• Usually it gets delayed...good if the project not delayed</li> <li>• Good-public service project</li> <li>• If it's through government, it is ok</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<ul style="list-style-type: none"> <li>• Some stakeholders raised concern regarding the location</li> <li>• Current Cable service providers may not be able to give service</li> <li>• No issue: Happy to see development</li> <li>• We may loose our fishing area</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<p>If skilled workers are available at island, preference should be given to them. It should be fenced Educational channels should be there No specific criteria Signal should be as planned-no delays acceptable More religious channels should be incorporated Drama is not good</p>
<p>In your opinion, are there any negative impacts or losses associated with the project?</p>	<ul style="list-style-type: none"> <li>• No</li> <li>• Might fall and create a disaster</li> <li>• There might be lightning (happened about 40 years ago on to 14 coconut trees)</li> </ul>
<p>In your opinion, are there any positive impacts or benefits associated with the project?</p>	<ul style="list-style-type: none"> <li>• Emergency announcement feature is a positive impact</li> <li>• Could provide job opportunity</li> <li>• If educational or religious channel is provided, will help to build good generation</li> <li>• May create an economic activity</li> <li>• Better signal is all added advantage</li> </ul>
<p>Is there an alternative location for the site selection?</p>	<ul style="list-style-type: none"> <li>• Some suggested new reclaimed area</li> <li>• Prefer existing location</li> <li>• Best land (no better location)</li> </ul>
<p>Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local</p>	<ul style="list-style-type: none"> <li>• Yes, local can work</li> <li>• Small harbor should be used for safety and easy transport</li> <li>• Should be fenced</li> </ul>

community during the implementation, security measures, etc)	
Will there be likely involvement of local people in the implementation of the project?	No, yes, yes
Loss of residential/commercial structures, if any due to the project	Less likely
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	Windy area/ not prone to any specific disaster
Is this consultation useful? Comments?	<ul style="list-style-type: none"> <li>Yes, very good</li> </ul>

Name	Organization	Designation
Hussain Ahmad	Guraiddoo Council	President
Mohamed Sarah	Guraiddoo Council	Vice President
Kyas Abdulla	Guraiddoo Council	Director
Muhammad Faruk	HEALTH CENTRE	S ADMINISTRATOR
Ahmed Rashid	Guraiddoo Environment movement (GEM)	President
MUHAMMAD AFEEF	STATION MANAGER FENAKA	
MUHAMMAD RAJIB	GURAIDDOO COUNCIL	Council Member
Hussain John	(Guraiddoo Council)	Council Member
Ahmed Ibrahim	The atoll council	v. president

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Name	Address
Zuleyha	Thuddege.
Muhammad Hafiz Ilyas	Kaafin
HILWEE	
RASHEED	
AHMED	
HUSSAIN MAHIB	maahab -
Zuleyha Abdulla	Athalamavilla
Zuleyha Komar	Athalamavilla
Santa Mahib	Udhamees
MOOSA MAHIB	Faandhagooje
Aminath Ibrahim	Faandhagooje

Close to the public due to confidentiality

## 16) Villingili

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your island?</p>	<ul style="list-style-type: none"> <li>• Some people indicated that previously they have not heard about the project (Not shared with public by the council).</li> <li>• But others heard from the local TV about the project and aware of the project site in the island.</li> <li>• Very much looking forward to the project</li> </ul>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• All the people who attended and the people we met said they support the project and local other local people also will support the project.</li> <li>• They think the project is a good project. And suggested that they are looking forward to the project since current signal is not good (we cannot live without TV).</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<ul style="list-style-type: none"> <li>• One council member indicated that the proposed site has not been allocated. Council has not received any request officially to allocate the site for the project.</li> <li>• No concerns or issues were raised by the locals and locals said the project site is away from the local residents and is in the green zone (so no problem)</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<ul style="list-style-type: none"> <li>• PSM office also should be located at the proposed site</li> <li>• Current PSM land should be handed over to the council for other use. Existing PSM building is too old and new office buildings should be constructed</li> <li>• Price of the services should remain same</li> <li>• Advertising opportunities should be given to local and regional businesses (even for a charge (island)).</li> <li>• Construction should be done by closing the area to avoid accidents</li> </ul>
<p>In your opinion, are there any negative impacts or losses associated with the project?</p>	<ul style="list-style-type: none"> <li>• Might impact current service providers business. Because of the project, current service provider business should not be impacted.</li> <li>• ..</li> </ul>
<p>In your opinion, are there any positive impacts or benefits associated with the project?</p>	<ul style="list-style-type: none"> <li>• Will not affect flight (new location). Existing PSM tower is in flight approaching area.</li> <li>• Quality service will be available due to the new technology (we are confident that the project will provide better service)</li> </ul>
<p>Is there an alternative location for the site selection?</p>	<ul style="list-style-type: none"> <li>• No other location suggested and noted that the proposed site is the best location (away from residential area)</li> <li>• No other site is available for such a tall tower</li> <li>• Suggested that the soil is a good in the proposed area</li> </ul>
<p>Any other issues you may feel like to share: (Whether they</p>	<ul style="list-style-type: none"> <li>• Happy that the work is in progress</li> <li>• 100% COOPERATION BY THE PUBLIC</li> </ul>

welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>Local companies should be involved in the construction work</li> </ul>
Loss of residential/commercial structures, if any due to the project	No
Loss of community life like any market places or community activities to be affected?	No
Anything would you like to add?	<ul style="list-style-type: none"> <li>Currently the service is very weak--How the service will be in the future? We indicated that the service will be better.</li> </ul>
Is this consultation useful? Comments?	<ul style="list-style-type: none"> <li>Very happy to have the meeting</li> <li>We got extra information</li> </ul>

Name	Organization or Address	Designation
Ahmed Abdulla	PSM / ga. Medicenter	
Dr. Hafeez Khan	Council	
Shamheer Khan	Council - <del>representative</del>	
Mohammed Farooq	Council	
Fahim M	Council 1 -	
Sobhan	Council	
Ustaz Mohamed	Project Officer	
Abdul Majeed	GA Village 1 Council	D. Director
Shazma Mohamed	" "	Director
Muhammad Mohamed	Council member	
Muhammad	URSC	PRESIDENT
Sauwathulla	Atoll Council	Counciler
Mohamed Aziz	s. admin	
Mohamed (son)	DTC / LIVING AREA / in-charge	
Ahmed Ahmed	MRDC	A. Manager
Rahim Alashim	Council Staff	Asst. Director
Fahima Alshams	Maananga	
Musana Mohamed	GA Atoll hospital	Receptionist

Close to the public due to confidentiality

## 17) Gadhoo

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?</p>	<ul style="list-style-type: none"> <li>• We have shown areas where tower can be located.</li> <li>• Land has not been approved by the council yet (no request yet)</li> <li>• Information regarding the project is not given to the public.</li> <li>• Not heard about the project.</li> </ul>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• Over all the community will support the project. If it is development project.</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<p>Concerns:</p> <ul style="list-style-type: none"> <li>• What will be the benefit for the community?</li> <li>• Whether any free channels will be given?</li> <li>• Without any benefit why land is allocated?</li> <li>• Limited land is available from the island. Lot of land areas taken for other projects. But the public is not getting any benefit.</li> <li>• Lightning occurs to the tower and damages electronic items in the past. This may happen due to the proposed tower also. This is a concern for the community.</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<ul style="list-style-type: none"> <li>• Project site (land) should leased for rent (and council should get the fee)</li> <li>• Safety and security should be considered.</li> </ul>
<p>In your opinion, are there any negative impacts or losses associated with the project?</p>	<ul style="list-style-type: none"> <li>• No major impact due to the project.</li> <li>• Limits the availability of land for other purpose (no land for waste management, powerhouse, housing etc)</li> </ul>
<p>In your opinion, are there any positive impacts or benefits associated with the project?</p>	<ul style="list-style-type: none"> <li>• Local job opportunities might be created.</li> </ul>
<p>Is there an alternative location for the site selection?</p>	<ul style="list-style-type: none"> <li>• Proposed location is the ideal location</li> </ul>
<p>Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)</p>	<ul style="list-style-type: none"> <li>• New technology is needed.</li> <li>• All the services should be made available through the network (TV, telephone, net etc)</li> </ul>
<p>Will there be likely involvement of local people in the implementation of the project?</p>	<p>Local contractors should be involved</p>

Loss of residential/commercial structures, if any due to the project	No
Loss of community life like any market places or community activities to be affected?	With this project government can control all media
Is the site prone to disasters?	
Is this consultation useful? Comments?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Only PSM and JAICA could provide more and appropriate information (such as fees and service providers and whether there will be free channels and so on).</li> </ul>

Name	Organization or Address	Designation
<i>[Signature]</i>	<i>[Signature]</i>	
Samiya A. Haghiner	Beach Women Samiya Atoll Mangrove	
Aishath Shaheen	Misty 101 Aishath Shaheen	
Abdulla Rasool	Agumathige	
Mohamed Samson	Island Council Wetland	Council member
Ahmed Yameen	Council member	Council member
Abdulla Sadiq	Island Council President Bemhangge Road	Council member
Peterillus Inud	Island Council Dactylodactyl	President of
Silman Salih	Dhiraagu	S. Officer
Ahmed Saaved	Health Centre Foolhumaage	S. Admin. of
Ali Shamsing	Beach Women	-
Fathimath Ismailath	Fath. Atoll school	Principal

Close to the public due to confidentiality

## 18) Fiyoari

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>• There is an antenna but no service...so people question about it.</li> <li>• Support is there (we support this project).</li> <li>• Yes, we heard about the project (previously also a survey was done).</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>• Fully support. Because some channels are not available</li> <li>• We are waiting for the service...we will provide our full support.</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• People questioned about when the service will be available from the project</li> <li>• Right now only limited channels are available</li> <li>• Right now religious channel is also not available</li> <li>• Right now only 3 channels available</li> <li>• If it rains no signal</li> <li>• What will happen to the current services providers?</li> <li>• Years back antenna was installed and equipments were brought but project was not implemented.</li> <li>• People questioned whether the project will happen? This is our concern (will it be implemented?)</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• Children educational channels should be there</li> <li>• More channels should be available</li> <li>• Services should be sustainable</li> <li>• Services should be cheap</li> <li>• Some contents should not be allowed</li> <li>• Sports channels should be there for youth.</li> <li>• Signal should not be interrupted</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	<p>If the project delays then it is a problem</p> <p>Waste should be handled properly</p>
In your opinion, are there any positive impacts or benefits associated with the project?	Channels are needed for the island
Is there an alternative location for the site selection?	<p>Since existing antenna is already available and enough space is already available...this is the best location</p> <p>Best location</p> <p>Location is one of the highest area...water table will be high</p>
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the	<ul style="list-style-type: none"> <li>• Locals should be informed about the charges and why the amount is charged?</li> <li>• Publics should be informed about channels that they will be getting</li> <li>• If the project delays it will be a problem (concern)</li> </ul>

Implementation, security measures, etc)	<ul style="list-style-type: none"> <li>We would like to see this project implemented as early as possible.</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>Island community will be involved (exemplary &amp; land)</li> <li>For monitoring locals should be involved.</li> </ul>
Loss of residential/commercial structures, if any due to the project	No
Loss of community life like any market places or community activities to be affected?	No
Is the site prone to disasters?	
Is this consultation useful? Comments?	Without this kind of meeting we will not be able to implement the project and shows that the project is going ahead. We are happy about the meeting and got information was provided.

Name	Organization or Address	Designation
Abdul Samad	FLYWAY COUNCIL	V. PRESIDENT
SECRETARY	"	C. MEMBER
ABDUL SAMAD	"	"
MUHAMMAD HASSAN	"	"
HASSAN ADAM	to Admin. Dept. Council Member	
AL-FITRIY	FLYWAY COUNCIL	FLYWAY COUNCIL
Abdul Karim F. H. G. - 100		FLYWAY COUNCIL
WASSIM ADAM	FAYZA	F. MEMBER
Muhammad Saif	Police	FLYWAY
Abdul Wahab	Police Head Office	FLYWAY
Abdul Wahab	FLYWAY	
Abdul Rauf	GENERA	Abdul Rauf
Muhammad Bushra	Council	Project Officer
Muhammad Bushra	Council	FLYWAY
Muhammad Bushra		FLYWAY
Muhammad Bushra		FLYWAY
ABDULL NASEEM		FLYWAY
Abdul Wahab	FAYZA	"
Ahmed Ali	FAYZA	Driver
Muhammad Adnan	FAYZA	Admin. Officer
Muhammad Saif	Council	A. Director
Muhammad Saif	FAYZA	Support

Close to the public due to confidentiality



## 19) Thinadhoo

Issues	Participants' opinion, comments and suggestions
<p>General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?</p>	<ul style="list-style-type: none"> <li>• Good and important project for the area-Right now also PSM building is there but no proper service.</li> <li>• Will be good if the project is implemented</li> <li>• Community will support the project</li> <li>• Some are not aware of the project</li> <li>• Proposed site is not allocated and approved by the council</li> <li>• Proposed site location is given to road construction contractor for one year</li> <li>• There should be proper communication with the council (we have not received any written communication)</li> <li>• Council would like to know PSM thinking regarding the current land area (and the PSM buildings)</li> <li>• Mosquito's in PSM office area</li> </ul>
<p>Support of the local people for the proposed project</p>	<ul style="list-style-type: none"> <li>• We welcome the project</li> </ul>
<p>Any critical issues or concerns, problems by the local people regarding the project?</p>	<ul style="list-style-type: none"> <li>• Not sure whether the project will be implemented</li> <li>• Proposed location is flight approaching area</li> <li>• Closed to sea area-might not be appropriate (maintenance will be high). Should consider aviation and safety.</li> <li>• What will happen to current service providers? (might create monopoly)</li> <li>• Will there be any radiation issue for the people?</li> </ul>
<p>Are there any criteria you would like to see considered during the project design, construction and operation stage?</p>	<ul style="list-style-type: none"> <li>• Should provide quality service</li> <li>• Should be same or lower price</li> <li>• Competition should be there in providing the service</li> <li>• Free channels should be there</li> <li>• Should have choice to choose packages or channels</li> <li>• Educational channels should be there</li> <li>• Jobs should be given to island people</li> </ul>
<p>In your opinion, are there any negative impacts or losses associated with the project?</p>	<ul style="list-style-type: none"> <li>• No negative impacts.</li> <li>• Might create aviation hazard</li> <li>• Government might control the media (might block the channels)</li> </ul>
<p>In your opinion, are there any positive impacts or benefits associated with the project?</p>	<ul style="list-style-type: none"> <li>• Good coverage</li> <li>• Quality will be maintained</li> <li>• Business will increase</li> <li>• Customer problems also will be attended quickly or minimized</li> <li>• Jobs will be created</li> </ul>
<p>Is there an alternative location for the site selection?</p>	<p>PSM land area Maintenance might be high due to proximity to sea</p>

Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>If the project is implemented within the time frame will be good</li> <li>How long it will take to implement the project?</li> <li>Why the current PSM site is not used?</li> <li>Contents should be controlled for children</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>Jobs should be given and local companies should be involved.</li> <li>Most of the previous projects are implemented through council, so there will be local involvement.</li> </ul>
Loss of residential/commercial structures, if any due to the project	no
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	Waves
Is this consultation useful? Comments?	Yes, good information

Name	Organization or Address	Designation
Mr. P. R. Reddy	Hyderabad	FOODS
Yunus Khan	Guwahati	-
Hassan Khan	Saleem	-
ABDUL AZEED KHAN	MALINDI, KENTUCKY	MANAGER
AHMED MUSA	DHAKA	SENIOR TECH
AHMED USMAN	ORISSA STATE	OWNER
ABDUL RAHMAN	FRESH DASHI	OWNER
MOHAMMED ZAHID	VILUPA	-
HASSAN AHMED DIDI	STARLINE	-
Muhammad Ali	Thimath Council	-
Azam Abdul Wahid	Dhaka	-
ABDUL RAHMAN	White Creek	-
Ahmed Hassan	Mangalore	-
Sahib Khan	Dhaka	-
Fazal Khan	M. P. D.	OWNER
Muhammad Shaker	M. P. D.	OWNER
Muhammad Wasim	M. P. D.	COUNCIL
Sana Khan	Thimath Council	COUNCIL
NASIR AHMED	Thimath Council	Assistant Director
Qasim Khan	Thimath Council	COUNCIL

Close to the public due to confidentiality

## 20) Foammulah

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your Island?	<ul style="list-style-type: none"> <li>Local people have sufficient knowledge</li> <li>They believe that after implementation they can easily access to the information like education and general awareness.</li> </ul>
Support of the local people for the proposed project	We support and others also will fully support
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>No issue</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>Price should be low</li> <li>Educational channels</li> <li>Should be well maintained</li> <li></li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	It is for the benefit of whole population, so there will be no negative impact.
In your opinion, are there any positive impacts or benefits associated with the project?	More information Better quality of service Warning dissemination
Is there an alternative location for the site selection?	No, best location
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	Local public will welcome this project. No security threat People are in need of it
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>Yes, local labor force is available for construction work</li> </ul>
Loss of residential/commercial structures, if any due to the project	no
Loss of community life like any market places or community activities to be affected?	no
Is the site prone to disasters?	no
Is this consultation useful? Comments?	Yes, everyone will give full support and corporation.

<b>Name</b>	<b>Organization or Address</b>	<b>Designation</b>
Abdulla Falaah Shareef	Fuvahmulaku Atoll Council	President
Ahmed Mohamed	Fuvahmulaku Atoll Council	Director
Ali Maseeh	Fuvahmulaku Atoll Council	Assistant Director
Ibrahim Mauroof Saeed	Naarasy	-
Ibrahim Hisan	Redcresent	Branch Secretary
Ahmed Siyam Moosa	Gn. Atoll Education Centre	Administrator
Hussain Shaafee	Fuvahmulaku Atoll Council	Vice President
Moahmed Areef	Fuvahmulaku Atoll Council	Deputy Director
Thasneem Ali Zaheer	Gn. Atoll Education Centre	
Fathimath Ali	Secretariat of the Hoadhadu Council	
Shazna Abdulla	Forum, Gn. Fuvahmulah	
Fathimath Shuma	Hafiz Ahmed School	
Fathimath Ali	Dhoalhanbuge, Gn. Fuvahmulah	
Fathimath Dheem		

Close to the public due to confidentiality

## 21) Hithadhoo

Issues	Participants' opinion, comments and suggestions
General perception about the project and the awareness about the proposed project. What is the opinion of the community regarding the project in your island?	<ul style="list-style-type: none"> <li>• Project is good and important for the island</li> <li>• Not heard about the project</li> </ul>
Support of the local people for the proposed project	<ul style="list-style-type: none"> <li>• Community will support the project</li> </ul>
Any critical issues or concerns, problems by the local people regarding the project?	<ul style="list-style-type: none"> <li>• Project might not be implemented (since some projects are not implemented)</li> <li>• Right now goods service not available</li> <li>• Other islands in the city are paying less right now</li> <li>• During construction workers safety should be considered</li> </ul>
Are there any criteria you would like to see considered during the project design, construction and operation stage?	<ul style="list-style-type: none"> <li>• Dhivehi channels should be free</li> <li>• Price should be lower than now</li> <li>• HD quality sports (football) channels should be there</li> <li>• For payment there should be more options</li> <li>• News channels should be made available</li> <li>• PSMs should be the service provider</li> </ul>
In your opinion, are there any negative impacts or losses associated with the project?	<ul style="list-style-type: none"> <li>• There might be some inappropriate channels</li> <li>• Price might be higher (not good)</li> </ul>
In your opinion, are there any positive impacts or benefits associated with the project?	<ul style="list-style-type: none"> <li>• Picture quality will be good</li> <li>• Good service will be available</li> <li>• More service providers might be there (more competition)</li> <li>• More job opportunities</li> <li>• Religious and Quran channels might be available</li> </ul>
Is there an alternative location for the site selection?	Best location since it's the middle of the island.
Any other issues you may feel like to share: (Whether they welcome the project, will there be cooperation from the local community during the implementation, security measures, etc)	<ul style="list-style-type: none"> <li>• Will there be more channels?</li> <li>• Will there be charges?</li> <li>• Customers should be notified before disconnecting the service</li> <li>• There should be possibility of selecting channels</li> </ul>
Will there be likely involvement of local people in the implementation of the project?	<ul style="list-style-type: none"> <li>• There are many companies who can do the construction work. So they might be involved.</li> </ul>
Loss of residential/commercial	no

structures, if any due to the project	
Loss of community life like any market places or community activities to be affected?	
Is this consultation useful? Comments?	Yes. Important information

Name	Date:	
	Organization or Address	Designation
Md. Masud Ferdous	H. Hospital	Master
Sham Nazem	Island TV	Executive
Mossam Nazem	Sami Hill	-
Shahin Mahmud	Shi. Kanyon (old)	Teacher
Sulhan Hassan	Kangaroo kids	Teacher
Ali. Hossain Hossain	Kirtibhanga	-
Masuda Hossain	Asanulla	-
Masud Jalal	Dyabhanja	-
Alhossain Borah	Lunfowla	-
Ali. Shumail	Fyong-c	-
Masud Ibrahim	Dhankhanga	-
Fahim Rahman	Bodhanhara	-
Touhid	Vandhanara	-
Almasud	ONDRODHANARA	-
Hassan	MANDHOBBE	-
Abdulla Saad	White Rose	-
Masud Hossain	Adina / S+7	Nurse

Close to the public due to confidentiality

# **Appendices**

## **Appendices 7 Report of Soil Investigation**





**ELS & AMIN**  
International private limited

Tel/ Fax: +960 334 6000, Mobile Hotline: 790 6000  
52, Boduthakurufaanu Magu, Maafannu, Male' 20-01, Maldives.  
Email: info@elsamin.com.mv, Web: www.elsamin.com.mv

<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
		<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	1 of 2
Location	HA.Dhidhdhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	0.90 m
Date of Started	22.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	-
Date of Finished	22.01.2016	Casing Diameter	100mm	Elevation (m)	-		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft				
								15cm	15cm	15cm	N	5	10	15	20	25	30	35	40	45
0.00					0.00		Ground level													
	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments													
			WS																	
1.00					1.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	12	4	4	8									
	D2		SS																	
			WS																	
2.00					2.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	24	15	9	24									
	D3		SS																	
			WS																	
3.00					3.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	7	9	8	17									
	D4		SS																	
			WS																	
4.00					4.50		Dense yellowish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	28	23	25	48									
	D5		SS																	
			WS																	
5.00					6.00		Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments (6.45-7.50)m: Water loss was observed between that depth	6	6	6	12									
	D6		SS																	
			WS																	
6.00					7.50		Wash Sample:	8	6	7	13									
	D7		SS				Off white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments (7.50-9.00)m: Water loss was observed between that depth													
			WS																	
7.00					9.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	6	7	5	12									
	D8		SS																	
			WS																	
8.00																				
9.00																				
10.00																				

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka		
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		



<b>Project</b>					Borehole No	BH-01
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.90 m	
Location	HA.Dhidhdhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	22.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	22.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N			5	10	15	20	25
10.00							Continue from Page 1											
11.00			D9	SS			Same as previous	8	5	10	15							
12.00				WS														
13.00			D10	SS	12.00		Medium dense yellowish brown fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	6	10	16	26							
14.00				WS														
15.00			D11	SS	13.50		Dense yellowish brown fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	9	18	15	33							
16.00				WS														
17.00			D12	SS														
18.00																		
19.00																		
20.00					15.45		END OF THE BORE HOLE AT 15.45m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		
	Clay		Sand		
	Gravel		Organic Matter		
	Laterite Nodules		Silty Sand		
	Completely Weathered Rock		Highly Weathered Rock		
	Fresh Rock				



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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
		<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	1 of 2
Location	HA.Dhidhdhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	0.90 m
Date of Started	23.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	-
Date of Finished	23.01.2016	Casing Diameter	100mm	Elevation (m)	-		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00					0.00		Ground level										
1.00	D1		DS		1.00		Pale yellowish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shell fragments										
			WS														
2.00	D2		SS		1.00		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock and sea shell fragments	4	7	13	20						
			WS														
3.00	D3		SS		3.00		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	10	8	10	18						
			WS														
4.00	D4		SS		4.50		Medium dense yellowish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments; (6.45-7.50)m: Water loss was observed between that depth	18	17	20	37						
			WS														
5.00	D5		SS		7.50		Wash Sample:	14	17	13	30						
			WS														
6.00	D6		SS		9.00		Off white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments (7.50-9.00)m: Water loss was observed between that depth	16	8	13	21						
			WS														
7.00	D7		SS				Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	5	4	7	11						
			WS														
8.00	D8		SS														
			WS														
9.00																	
10.00																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



<b>Project</b>					Borehole No	BH-02
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.90 m	
Location	HA.Dhidhdhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	23.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	23.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N			5	10	15	20	25
10.00							Continue from Page 1											
11.00			D9	SS	10.50		Loose off white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	12	4	3	7							
12.00				WS														
13.00			D10	SS	12.00		Dense yellowish brown fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	8	17	26	43							
14.00				WS														
15.00			D11	SS				10	15	20	35							
15.45				WS														
15.45			D12	SS			END OF THE BORE HOLE AT 15.45m DEPTH	7	14	18	32							
16.00																		
17.00																		
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		Completely Weathered Rock
	Clay		Sand		Highly Weathered Rock
	Gravel		Organic Matter		Laterite Nodules
	Silty Sand		Fresh Rock		



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<b>Project</b>				<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No		BH-01		
				<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet		1 of 2		
Location		HDH.Kuludhufushi		Rig	Track Whd	Core Diameter	54mm		Ground Water level		0.60 m	
Date of Started		22.01.2016		Drilling Method	Rotary		Casing depth	15.00m		Coordinates		-
Date of Finished		22.01.2016		Casing Diameter	100mm		Elevation (m)					

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00					0.00		Ground level										
	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments										
			WS														
1.00					1.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	2	2	6	8						
	D2		SS														
			WS	G.W.L. at 0.60 m													
2.00					2.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	12	15	8	23						
	D3		SS														
			WS														
3.00																	
	D4		SS														
			WS														
4.00																	
	D5		SS		4.50		Dense yellowish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	4	6	5	11						
			WS														
5.00																	
	D6		SS		6.00		Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments (6.45-7.50)m: Water loss was observed between that depth	3	2	5	7						
			WS														
6.00																	
	D7		SS		7.50		Wash Sample: Off white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments (7.50-9.00)m: Water loss was observed between that depth	6	6	5	11						
			WS														
7.00																	
	D8		SS		9.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	6	7	12	19						
			WS														
8.00																	
9.00																	
10.00																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level		<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka	
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		





<b>Project</b>				<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
				<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	1 of 2
Location		HDH.Kuludhufushi	Rig	Track Wheel	Core Diameter	54mm	Ground Water level 0.60 m		
Date of Started		22.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates		
Date of Finished		22.01.2016	Casing Diameter	100mm	Elevation (m)				

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
												5	10	15	20	25	30	35
0.00					0.00		Ground level											
1.00	D1		DS				Off white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments											
			WS															
1.00	D2		SS		1.00		Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	7	6	8	14							
			WS															
2.00	D3		SS				(2.00-3.00)m: Grain size ranged from fine to coarse and sea shell fragments were present	6	8	22	30							
			WS															
3.00	D4		SS		3.00		Dense off white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	9	18	15	33							
			WS															
4.00	D5		SS				(4.50-6.00)m: Grain size ranged from fine to medium and sea shell fragments were present	4	14	12	26							
			WS															
5.00	D6		SS		6.00		Medium dense off white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	7	5	6	11							
			WS															
6.00	D7		SS															
			WS															
7.00	D8		SS															
			WS															
8.00																		
9.00																		
10.00																		

SPT Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)		D - Disturbed Sample		N - Natural Moisture Content		C - Consolidation		Existing ground level considered as the zero level	Logged By:
GWL : Ground Water Level observed inside the Borehole, after the saturation		SS -SPT Sample		L - Atterberg Limit Test		UCT-Unconfined Compression			Lahiru
NE Not Encountered		W - Water Sample		G - Grain Size Analysis		CU - Consolidated Undrained		Supervised By:	
HB -Hammer Bounce		WS-Wgrey Sample		SG -Specific Gravity Test		UU-Unconsolidated Undrained		Lahiru	
FD - Free Down		UD- Undisturbed Sample		B - Bulk Density		pH - Chemical		Drilled By:	
		CS- Core Sample		V - Vane Shear Test		O - Organic content		Danushka	
		Cr - Core Recovery (%)		RQD-Rock Quality Designation (%)		SO <sub>4</sub> <sup>2-</sup> - Sulphate Content			
						Cl - Chloride Content			
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock
									Fresh Rock



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<b>Project</b>					Borehole No	BH-02
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.60 m	
Location	HDH.Kuludhufushi	Rig	Track Wheel	Core Diameter	54mm	
Date of Started	22.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	22.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	Z	5	10	15	20	25	30	35
10.00							Continue from Page 1											
							Same as previous	38/ HB										>50
11.00			CS		10.50		Off white porous highly weathered highly fractured CORAL ROCK; Coral rock was recovered as coarse irregular shaped gravels	Cr=13%										
12.00			CS		12.00		Offwhite porous highly weathered highly fractured CORAL ROCK; Latter part of the coral rock was recovered as coarse irregular shaped gravels and pebbles	Cr=40%										
13.00			CS		13.50		Off white porous highly weathered highly fractured CORAL ROCK; Coral rock was recovered as coarse irregular shaped gravels and pebbles	Cr=16%										
14.00			CS		15.00		END OF THE BORE HOLE AT 15.00m DEPTH											
15.00																		
16.00																		
17.00																		
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :	
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru	
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Supervised By:	Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Drilled By:	Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)			
FD	- Free Down					
	Made Ground		Silt		Laterite Nodules	
	Clay		Sand		Silty Sand	
	Gravel		Organic Matter		Completely Weathered Rock	
	Highly Weathered Rock		Fresh Rock			





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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	N.Manadhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.10 m
Date of Started	19.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	19.02.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
												5	10	15	20	25	30	35
0.00					0.00		Ground level											
1.00	D1		DS				Gray fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments											
			WS															
1.00					1.00		Medium dense gray fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells	4	6	6	12							
	D2		SS															
			WS															
2.00																		
	D3		SS						3	4	8	12						
			WS															
3.00							Dense gray medium to coarse sub angular to sub rounded CORAL SAND with abundant amount of coral rock fragments and sea shells	6	6	7	13							
	D4		SS															
			WS															
4.00																		
5.00					4.50		Medium dense gray fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells; Abundant amount of coral rock fragments could be observed between (7.50-9.00)m depth	10	21	19	40							
	D5		SS															
			WS															
6.00					6.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with hard coral rock fragments	5	8	16	24							
	D6		SS															
			WS															
7.00																		
8.00								10	8	5	13							
	D7		SS															
			WS															
9.00								11	4	2	6							
	D8		SS		9.00													
			WS															
10.00																		

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
Location	N.Manadhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.10 m
Date of Started	19.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	19.02.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
10.00					10.00		Continue from Page 1										
11.00			D9 SS		10.50		Same as previous	14	13	10	23						
12.00			WS		12.00		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with hard coral rock fragments										
13.00			D10 SS		12.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with hard coral rock fragments	8	6	3	9						
14.00			WS		13.50		Dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with hard coral rock fragments										
15.00			D11 SS		13.50		Dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with hard coral rock fragments	18	20	17	37						
16.00			WS		15.45		END OF THE BORE HOLE AT 15.45m DEPTH										
17.00			D12 SS														
18.00																	
19.00																	
20.00																	

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		
	Clay		Sand		
	Gravel		Organic Matter		
	Laterite Nodules		Silty Sand		
	Completely Weathered Rock		Highly Weathered Rock		
	Fresh Rock				



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<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
<b>Location</b>	N.Manadhoo	Rig	Track Wh	Core Diameter	54mm	
<b>Date of Started</b>	25.02.2016	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	25.02.2016	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft			
								15cm	15cm	15cm	N	5	10	15	20	25	30	35	40
0.00					0.00		Ground level												
1.00	D1		DS		1.00		Gray fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments												
			WS																
2.00	D2		SS		2.00		Medium dense gray fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells	4	5	18	23								
			WS																
3.00	D3		SS		3.00		Loose gray fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells	5	3	4	7								
			WS																
4.00	D4		SS		4.00		Medium dense gray fine to medium sub angular to sub rounded CORAL SAND with abundant amount of coral rock fragments and sea shells; (6.00-7.50)m depth hard coral rock core of (4-5)cm could be observed	7	4	7	11								
			WS																
5.00	D5		SS		5.00				9	9	6	15							
			WS																
6.00	D6		SS		6.00			4	11	3	14								
			WS																
7.00	D7		SS		7.00			11	10	6	16								
			WS																
8.00	D8		SS		8.00			12	11	9	20								
			WS																
9.00					9.50		Off white highly weathered highly fractured medium grained CORAL ROCK ;Small cavities could be observed in the core sample with stained yellow patched on the fracture surface												
10.00								Cr=27%			RQD=0%								

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka	



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<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>					Borehole No	BH-02
<b>Client</b>	<b>M/s. Yachiyo Engineering Co.Ltd</b>					Sheet	2 of 2
Location	N.Manadhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.10 m
Date of Started	21.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	-
Date of Finished	21.02.2016	Casing Diameter	100mm	Elevation (m)	-		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N			5	10	15	20	25
10.00					10.00		Continue from Page 1											
			CS				Same as previous	Cr=27%	RQD=0%									
11.00					11.00		Off white highly weathered highly fractured medium grained CORAL ROCK ;small cavities could be observed in the core samples	Cr=30%	RQD=22%									
12.00			CS															
13.00					12.50		Off white highly weathered highly fractured medium grained CORAL ROCK ;small cavities could be observed in the core sample ,latter part of the core was obtained as corase gravel size samples	Cr=53%	RQD=10%									
14.00																		
15.00			CS		14.00		Off white highly weathered highly fractured medium grained CORAL ROCK ;small cavities could be observed in the core samples	Cr=20%	RQD=18%									
16.00					15.00		END OF THE BORE HOLE AT 15.45m DEPTH											
17.00																		
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Lahiru
NE	Not Encountered				Supervised By:
HB	-Hammer Bounce				Lahiru
FD	- Free Down				Drilled By:
					Danushka
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
					Laterite Nodules
					Silty Sand
					Completely Weathered Rock
					Highly Weathered Rock
					Fresh Rock



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<b>Project</b>					Borehole No	BH-01
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	1 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level	0.40 m
Location	Funadhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	27.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	29.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %								
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>								
												10	20	30	40	50	60	70	80	90
0.00					0.00		Ground level													
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments													
			WS	G.W.L. at 0.40 m																
2.00	D2		SS		1.00		Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with sea shell fragments	16	6	13	19									
3.00	D3		SS					6	8	10	18									
4.00	D4		SS					9	15	15	30									
5.00	D5		SS					11	11	8	19									
6.00	D6		SS					9	4	11	15									
7.00			WS																	
8.00	D7		SS		7.50		Dense fine to coarse sub angular to sub rounded CORAL SAND with sea shell fragments	9	16	17	33									
9.00	D8		SS		9.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	18	10	11	21									
10.00			WS																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



<b>Project</b>					Borehole No	BH-01
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.40 m	
Location	Funadhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	27.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	29.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	Z	5	10	15	20	25	30	35
10.00					10.00		Continue from Page 1											
11.00			D9	SS	10.60		Same as previous	35	HB									
12.00				CS	12.10		Offwhite prous highly weatherd highly fractured CORAL ROCK	Cr=76%		RQD=40%								
13.00				CS	13.60		Offwhite porous highly weatherd highly fractured CORAL ROCK	Cr=53%		RQD=23%								
14.00				CS	15.10		Offwhite porous highly weatherd highly fractured CORAL ROCK	Cr=60%		RQD=11%								
15.00					15.10		END OF THE BORE HOLE AT 15.10m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Lahiru
NE	Not Encountered				Lahiru
HB	-Hammer Bounce				Danushka
FD	- Free Down				
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		



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<b>Project</b>					Borehole No	BH-02
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	1 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.65 m	
Location	Funadhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	28.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	29.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00					0.00		Ground level										
	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
			WS														
1.00					1.00		Very dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with sea shell fragments	5	5	38/H	>50						
	D2		SS	G.W.L. at 0.65 m													
			WS														
2.00					2.00		Dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with sea shell fragments	17	18	15	33						
	D3		SS														
			WS														
3.00					3.00		Very dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	10	30/	15	>50						
	D4		SS														
			WS														
4.00					4.50		Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	10	11	17	28						
	D5		SS														
			WS														
5.00					6.00		Loose medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	8	10	6	16						
	D6		SS														
			WS														
6.00					7.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	10	4	4	8						
	D7		SS														
			WS														
7.00					9.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	18	13	7	20						
	D8		SS														
			WS														
8.00																	
9.00																	
10.00																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



<b>Project</b>					Borehole No	BH-02
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.65 m	
Location	Funadhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	28.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	29.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft				
								15cm	15cm	15cm	N	10	20	30	40	50	60	70	80	90
								15cm	15cm	15cm	N	5	10	15	20	25	30	35	40	45
10.00					10.00		Continue from Page 1													
							Same as previous													
11.00			D9		10.60		Very dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	22	38	HB	>50									
			SS																	
			WS																	
			CS				Offwhite prous highly weatherd highly fractured CORAL ROCK	Cr=60%			RQD=31%									
12.00																				
			CS																	
					12.10		Offwhite porous highly weatherd highly fractured CORAL ROCK	Cr=45%			RQD=12%									
13.00																				
			CS																	
					13.60		Offwhite porous highly weatherd highly fractured CORAL ROCK	Cr=42%			RQD=10%									
14.00																				
			CS																	
					15.10		END OF THE BORE HOLE AT 15.10m DEPTH													
15.00																				
16.00																				
17.00																				
18.00																				
19.00																				
20.00																				

Sample Key / Test Key				Remarks	Logged By :	
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru	
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Supervised By:	Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Drilled By:	Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)			
FD	- Free Down					
	Made Ground		Silt		Laterite Nodules	
	Clay		Sand		Silty Sand	
	Gravel		Organic Matter		Completely Weathered Rock	
	Fresh Rock		Highly Weathered Rock		Fresh Rock	





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<b>Project</b>					Borehole No	BH-01
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	1 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.90 m	
Location	R.Ungoofaaruu	Rig	Track Whd	Core Diameter	54mm	
Date of Started	30.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	30.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
												5	10	15	20	25	30	35
0.00					0.00		Ground level											
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments											
			WS															
1.00	D2		SS		1.00		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral and sea shell fragments	5	8	8	16							
			WS															
2.00	D3		SS						12	9	9	18						
			WS															
3.00	D4		SS						7	9	8	17						
			WS															
4.00	D5		SS						6	6	8	14						
			WS															
5.00	D6		SS					6	7	10	17							
			WS															
6.00	D7		SS					11	8	14	22							
			WS															
7.00	D8		SS															
			WS															
8.00																		
9.00																		
10.00					9.00		Very dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	20	38/ HB		>50							

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahiru <b>Supervised By:</b> Lahiru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				





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<b>Project</b>					Borehole No	BH-02
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	1 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.65 m	
Location	R.Ungoofaaru	Rig	Track Whd	Core Diameter	54mm	
Date of Started	31.01.2016	Drilling Method	Rotary	Casing depth	15.00m	
Date of Finished	01.02.2016	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	10	20	30	40	50	60	70
0.00					0.00		Ground level											
	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments											
			WS															
1.00	D2		SS	G.W.L. at 0.65 m	1.00		Stained pale yellowish white medium grained highly weathered CORAL ROCK; pore spaces were visible			Cr=35%	RQD=0%							
			WS															
2.00	D3		SS		2.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments: water loss was observed between	4	6	12	18							
			WS															
3.00	D4		SS						6	10	10	20						
			WS															
4.00			WS															
5.00	D5		SS					5	6	6	12							
			WS															
6.00	D6		SS					10	8	10	18							
			WS															
7.00			WS															
8.00	D7		SS		7.50		Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments	1	1	1	2							
			WS															
9.00	D8		SS		9.00		Very dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	30	38/HB		>50							
			WS															

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground	Silt	Gravel	Laterite Nodules	Completely Weathered Rock	Fresh Rock				
Clay	Sand	Organic Matter	Silty Sand	Highly Weathered Rock					



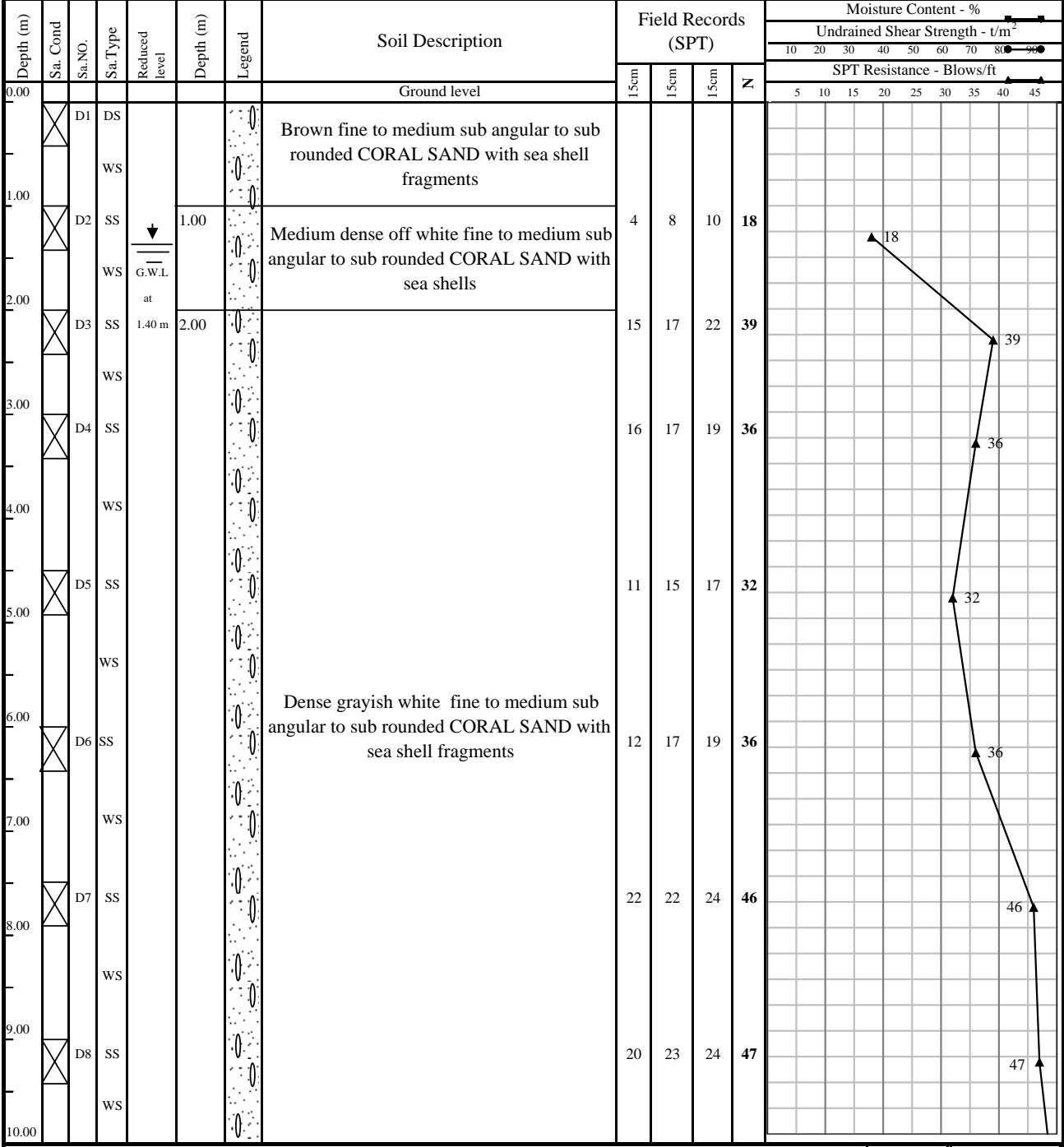
<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
<b>Location</b>	B.Eydhafushi	Rig	Track Whd	Core Diameter	Ground Water level 1.40 m	
<b>Date of Started</b>	15.01.2016	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	16.01.2016	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft			
								15cm	15cm	15cm	N								
												5	10	15	20	25	30	35	40
0.00							Ground level												
1.00	D1		DS				Brown fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments												
			WS																
1.00	D2		SS		1.00		Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with sea shells	10	12	17	29								
			WS																
2.00	D3		SS		2.00		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	16	20	22	42								
			WS																
3.00	D4		SS						14	16	19	35							
			WS																
4.00																			
5.00	D5		SS		4.50		Medium Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	9	13	15	28								
			WS																
6.00	D6		SS					8	11	14	25								
			WS																
7.00																			
8.00	D7		SS					11	9	9	18								
			WS																
9.00																			
9.00	D8		SS		9.00		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	22	21	18	39								
			WS																
10.00																			

<p>SPT Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE Not Encountered</p> <p>HB -Hammer Bounce</p> <p>FD - Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>Lahiru</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
<p> Made Ground</p> <p> Clay</p>	<p> Silt</p> <p> Sand</p>	<p> Gravel</p> <p> Organic Matter</p>	<p> Laterite Nodules</p> <p> Silty Sand</p>	<p> Completely Weathered Rock</p> <p> Highly Weathered Rock</p>	<p> Fresh Rock</p>



<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
<b>Location</b>	B.Eydhafushi	Rig	Track Whd	Core Diameter	Ground Water level 1.40 m	
<b>Date of Started</b>	16.01.2016	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	17.01.2016	Casing Diameter	100mm	Elevation (m)	-	



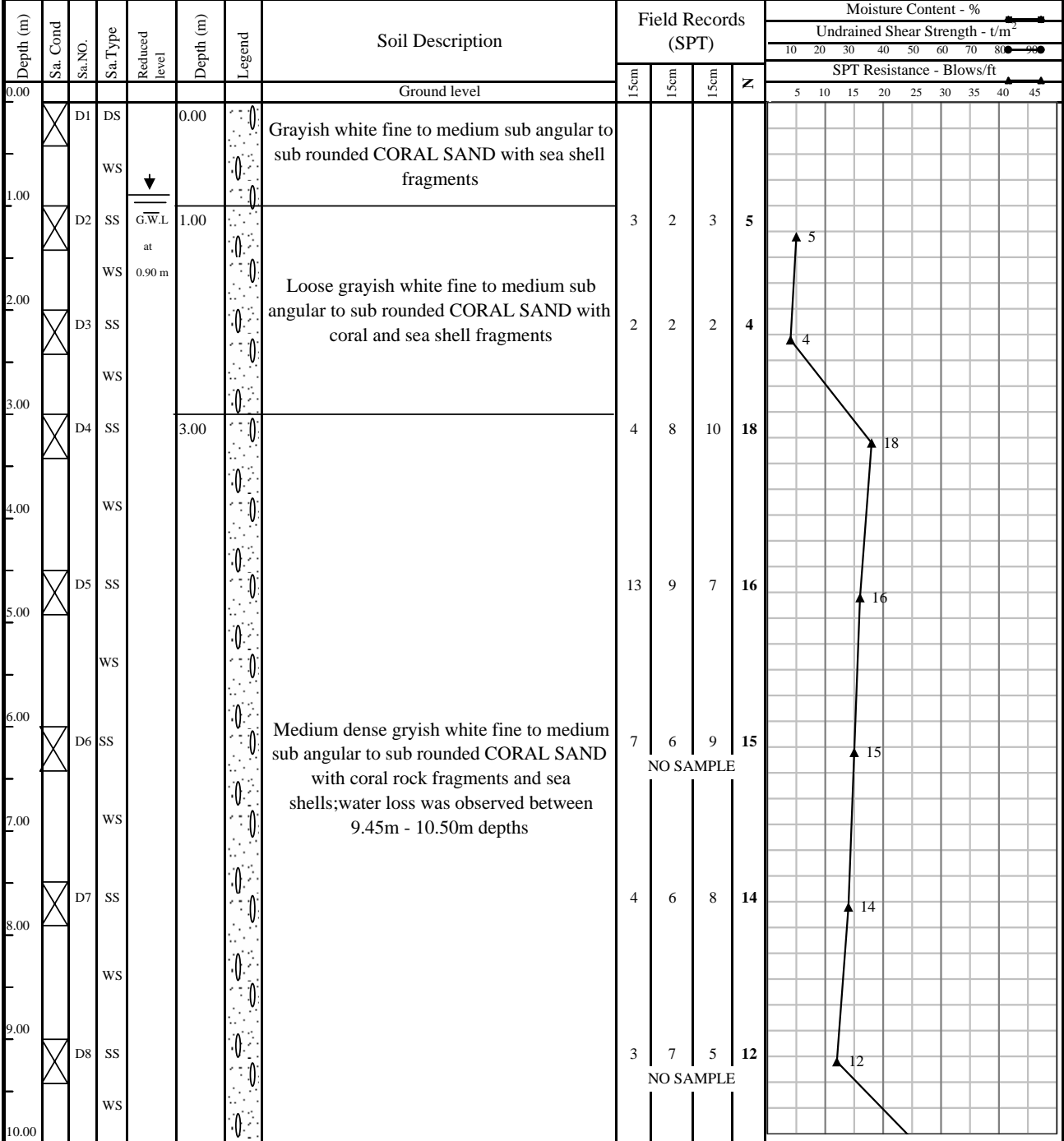
<p>SPT Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE Not Encountered</p> <p>HB -Hammer Bounce</p> <p>FD - Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>Lahiru</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
Made Ground	Silt	Gravel	Laterite Nodules	Completely Weathered Rock	Fresh Rock
Clay	Sand	Organic Matter	Silty Sand	Highly Weathered Rock	







<b>Project</b>					<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>		Borehole No	BH-01
					<b>M/s. Yachiyo Engineering Co.Ltd</b>		Sheet	1 of 2
Location	LH.Naifaru	Rig	Track Whd	Core Diameter	54mm	Ground Water level		0.90 m
Date of Started	02.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates		-
Date of Finished	03.02.2016	Casing Diameter	100mm	Elevation (m)	-			



<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



<b>Project</b>					Borehole No	BH-01
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.90 m	
Location	LH.Naifaru	Rig	Track Whd	Core Diameter	54mm	
Date of Started	02.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	03.02.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft			
								15cm	15cm	15cm	N			5	10	15	20	25	30
10.00							Continue from Page 1												
							Same as previous												
11.00			D9	SS	10.50		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shells; water loss was observed between 10.95m - 12.00m depths	18	26	12	38								
				WS															
12.00			D10	SS	12.00		Very dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shells; water loss was observed between 13.95m - 15.00m depths	30	38/ HB		>50								
				WS															
13.00																			
14.00			D11	SS				38/ HB			>50								
				WS															
15.00			D12	SS				25	35/ HB		>50								
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH												

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		Completely Weathered Rock
	Clay		Sand		Highly Weathered Rock
			Gravel		Fresh Rock
			Organic Matter		
			Laterite Nodules		
			Silty Sand		



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<b>Project</b>					Borehole No	BH-02
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	1 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level	0.90 m
Location	LH.Naifaru	Rig	Track Whd	Core Diameter	54mm	
Date of Started	04.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	05.02.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	5	10	15	20	25	30	35
0.00					0.00		Ground level											
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments											
			WS															
1.00	D2		SS		1.00		Wash Sample: Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	2	1	1	2							
			WS															
2.00	D3		SS		2.00		Loose whitish gray fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	2	3	3	6							
			WS															
3.00	D4		SS		3.00		Medium Dense whitish gray fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	7	12	12	24							
			WS															
5.00	D5		SS		5.00				5	9	7	16						
			WS															
6.00	D6		SS		6.00			14	17	11	28							
			WS															
8.00	D7		SS		8.00			8	15	12	27							
			WS															
9.00	D8		SS		9.00		Dense whitish gray fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	15	16	16	32							
			WS															

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka		
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		



<b>Project</b>					Borehole No	BH-02
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.90 m	
Location	LH.Naifaru	Rig	Track Whd	Core Diameter	54mm	
Date of Started	04.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	05.02.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft			
								15cm	15cm	15cm	N								
												5	10	15	20	25	30	35	40
10.00							Continue from Page 1												
11.00	X		D9 SS		10.50		Same as previous	22	30	21/ HB	>50							>50	
12.00	X		D10 SS				Very dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	16	38/ HB		>50							>50	
13.00			WS																
14.00	X		D11 SS						22	35/ HB		>50							>50
15.00	X		D12 SS						28	30	20/ HB	>50							>50
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH												

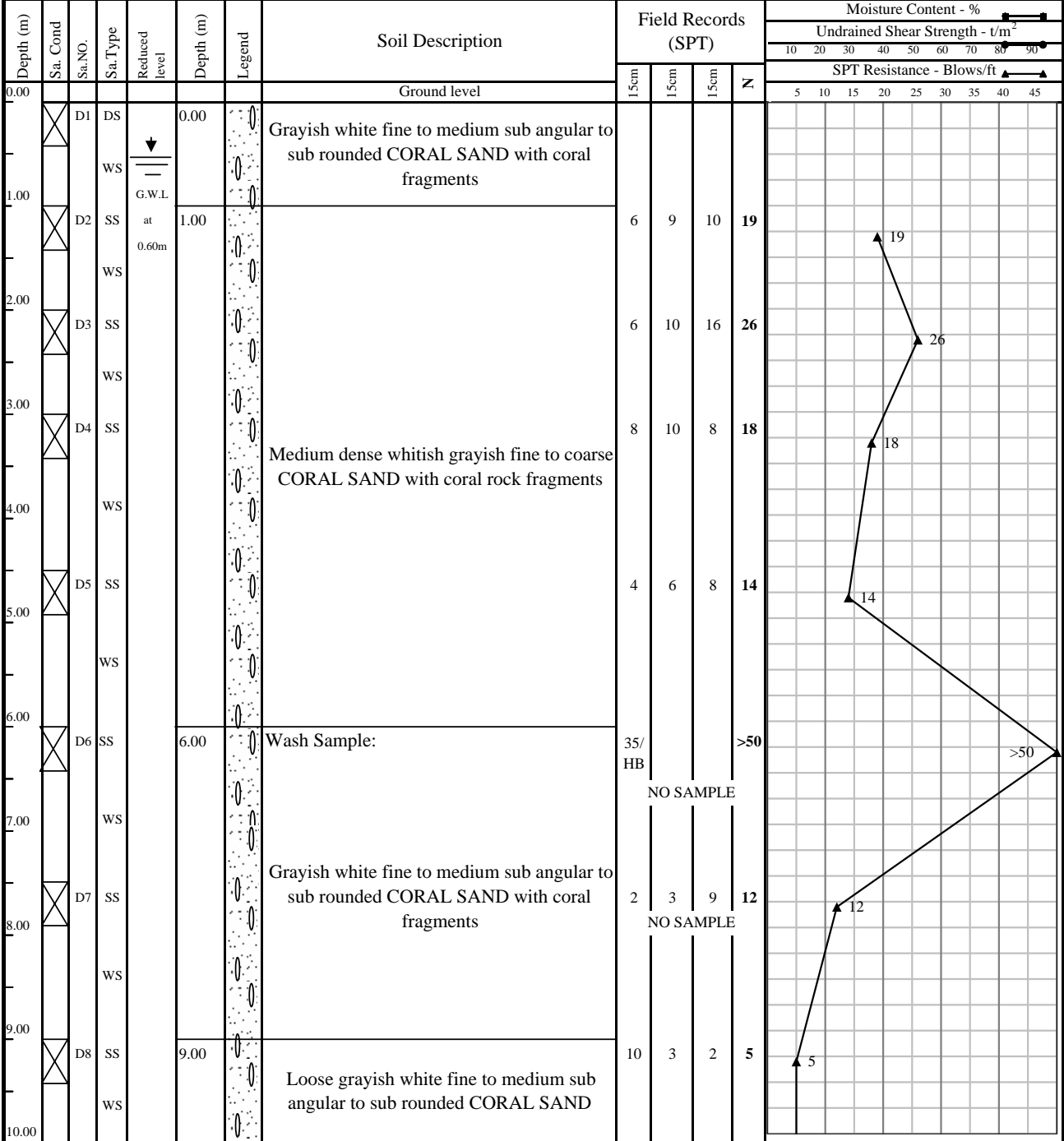
Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS - SPT Sample W - Water Sample WS - Wgrey Sample UD - Undisturbed Sample CS - Core Sample Cr - Core Recovery (%) RQD - Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG - Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT - Unconfined Compression CU - Consolidated Undrained UU - Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Lahiru
NE	Not Encountered				Supervised By:
HB	- Hammer Bounce				Lahiru
FD	- Free Down				Drilled By:
	Made Ground	Silt	Gravel	Laterite Nodules	Danushka
	Clay	Sand	Organic Matter	Silty Sand	
				Completely Weathered Rock	
				Highly Weathered Rock	Fresh Rock



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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>			Borehole No	BH-01	
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd			Sheet	1 of 2	
Location	K. Villingili	Rig		Core Diameter	54mm	Ground Water level	0.60 m
Date of Started	23.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	23.02.2016	Casing Diameter	100mm	Elevation (m)			



<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By:</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Dhanushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



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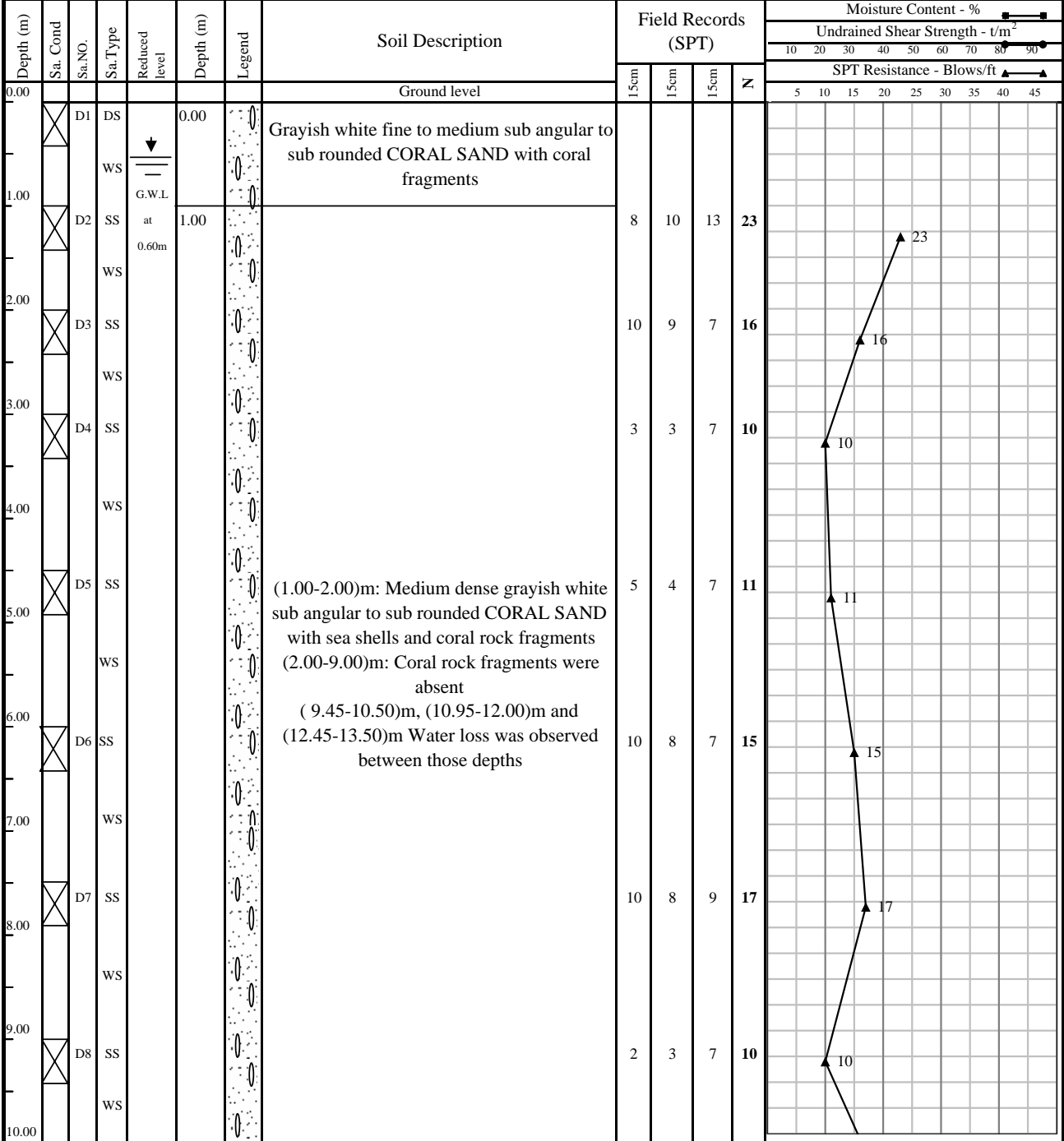
<b>Project</b>		Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of			Borehole No	BH-01	
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd			Sheet	2 of 2	
Location	K. Villingili	Rig		Core Diameter	54mm	Ground Water level	0.60 m
Date of Started	23.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	23.02.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
												5	10	15	20	25	30	35
10.00					10.00		Continue from Page 1											
11.00	D9		SS				Same as previous	2	2	3	5							
12.00			WS															
13.00	D10		SS						4	3	5	8						
14.00			WS															
15.00	D11		SS		13.50		Medium dense grayish white fine to coarse CORAL SAND	4	6	8	14							
15.45			WS															
16.00	D12		SS				END OF THE BORE HOLE AT 15.00m	3	6	9	15							
17.00																		
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS - SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS - Wgrey Sample		Lahiru
NE	Not Encountered	UD - Undisturbed Sample	CS - Core Sample		Dhanushka
HB	- Hammer Bounce	Cr - Core Recovery (%)	RQD - Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		
	Clay		Sand		
	Gravel		Organic Matter		
	Laterite Nodules		Silty Sand		
	Completely Weathered Rock		Highly Weathered Rock		
	Fresh Rock				



<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	K. Villingili	Rig		Core Diameter	54mm	Ground Water level	0.60 m
Date of Started	23.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	23.02.2016	Casing Diameter	100mm	Elevation (m)			



<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> G.D.P. De Zoysa <b>Supervised By:</b> Susantha <b>Drilled By:</b> Nishantha		
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		



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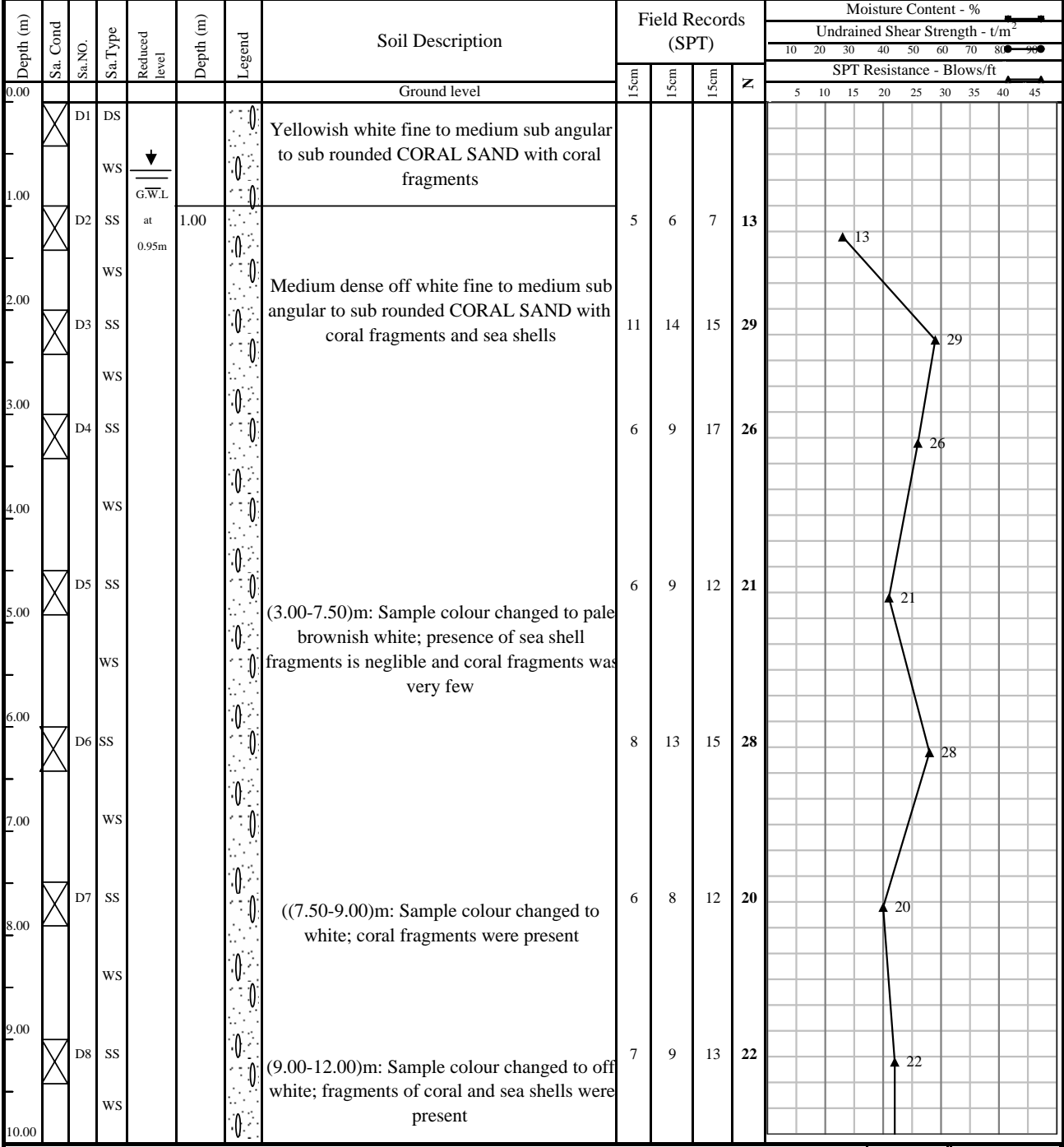
<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2	
<b>Location</b>	K. Villingili	Rig		Core Diameter	54mm	Ground Water level	0.60 m
<b>Date of Started</b>	23.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	-
<b>Date of Finished</b>	23.02.2016	Casing Diameter	100mm	Elevation (m)	-		

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft			
								15cm	15cm	15cm	N								
												5	10	15	20	25	30	35	40
10.00					10.00		Continue from Page 1												
11.00			D9	SS			Same as previous	16	14	8	22								
12.00				WS				7	9	11	20								
13.00			D10	SS															
14.00				WS															
15.00			D11	SS					6	8	10	18							
15.45			D12	SS				10	8	13	21								
15.45					15.45		END OF THE BORE HOLE AT 15.00m												

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS - SPT Sample W - Water Sample WS - Wgrey Sample UD - Undisturbed Sample CS - Core Sample Cr - Core Recovery (%) RQD - Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG - Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT - Unconfined Compression CU - Consolidated Undrained UU - Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	G.D.P. De Zoysa Supervised By: Susantha Drilled By: Nishantha
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Existing ground level considered as the zero level
NE	Not Encountered				
HB	- Hammer Bounce				
FD	- Free Down				
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
					Laterite Nodules
					Silty Sand
					Completely Weathered Rock
					Highly Weathered Rock
					Fresh Rock

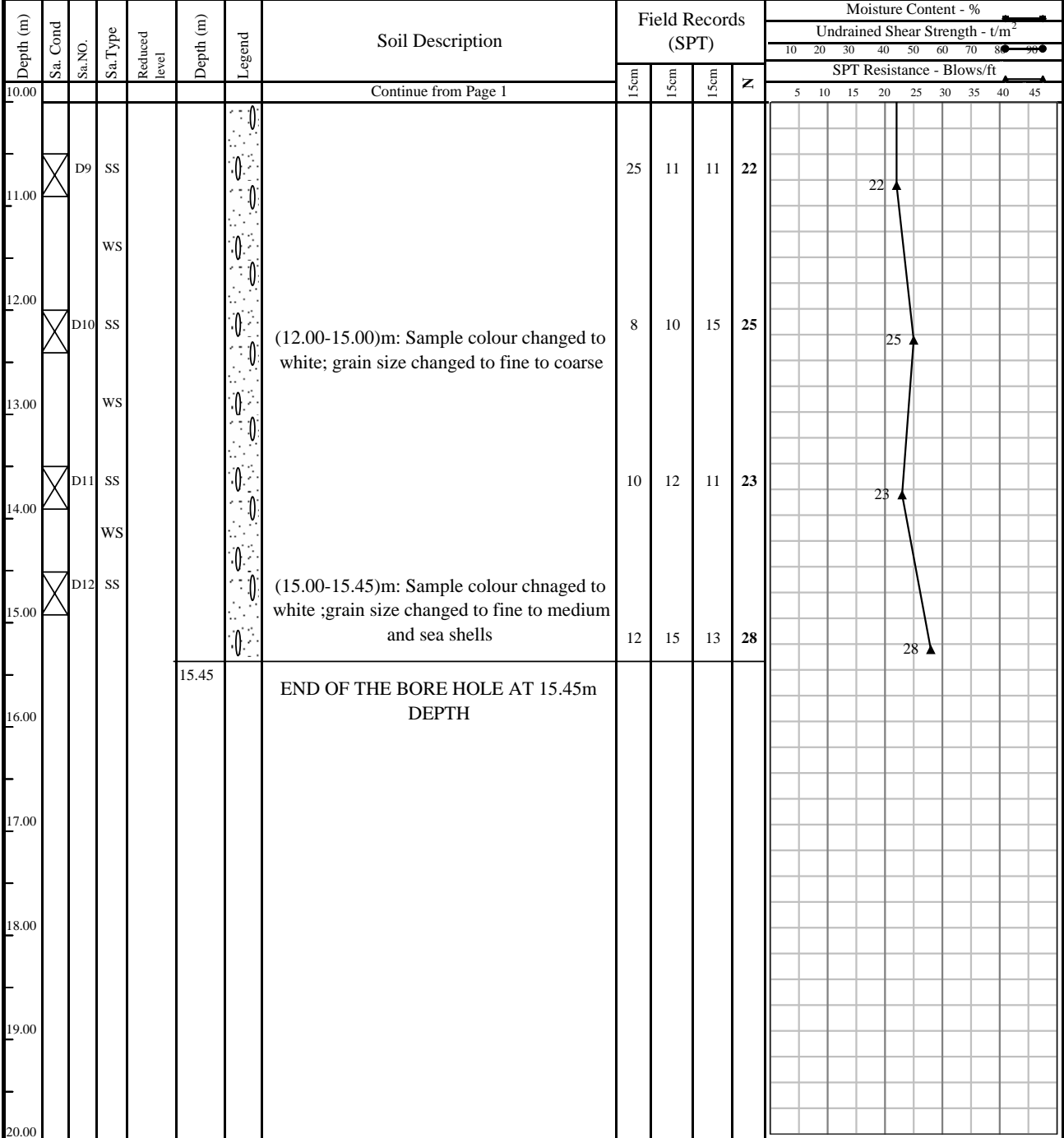


<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
<b>Location</b>	K. Maafushi	Rig	Track Whd	Core Diameter	Ground Water level 0.95 m	
<b>Date of Started</b>	09.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	09.12.2015	Casing Diameter	100mm	Elevation (m)	-	



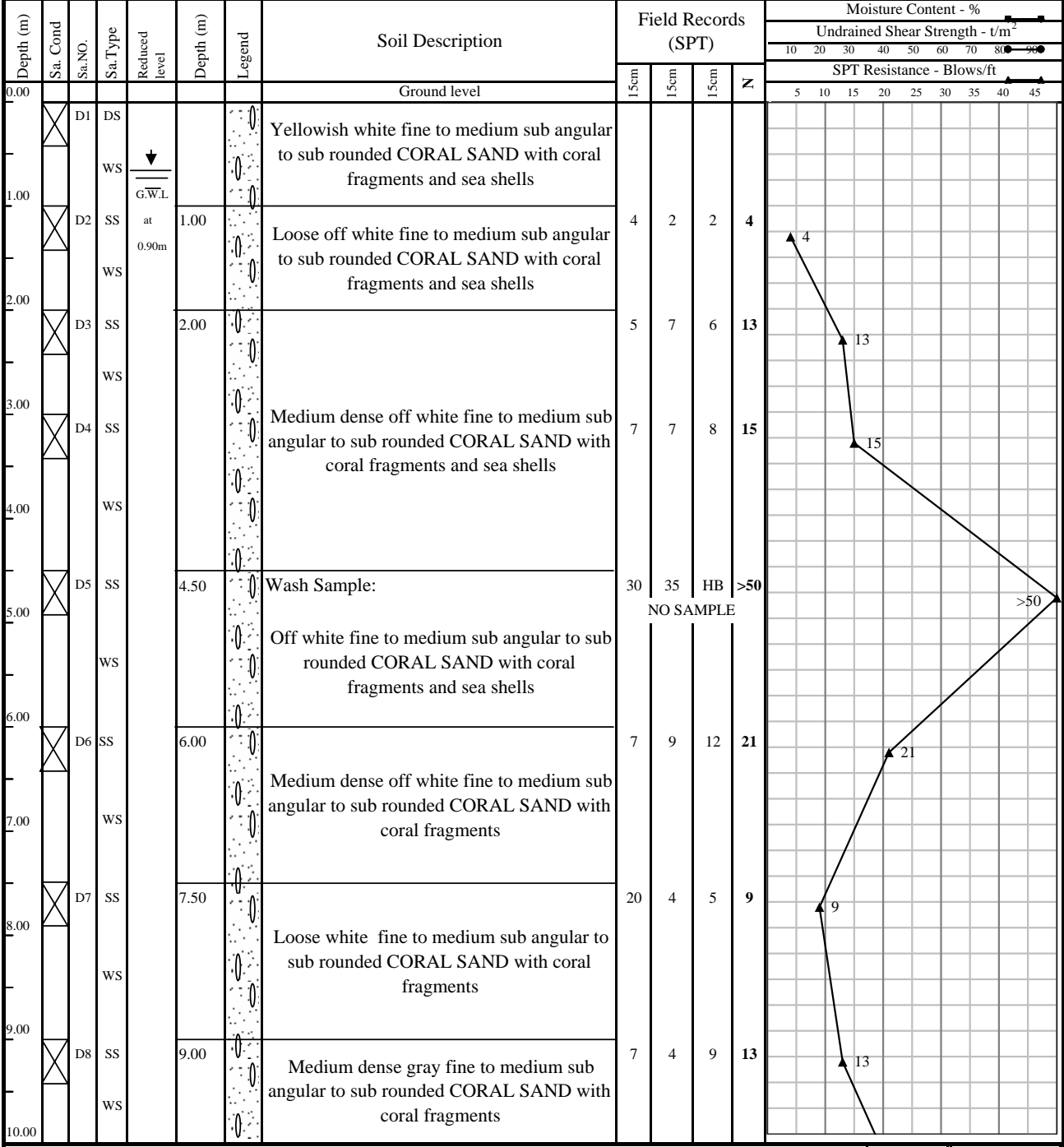
<p>SPT Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE Not Encountered</p> <p>HB -Hammer Bounce</p> <p>FD - Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>J.R.M.Sashikala</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
Made Ground	Silt	Gravel	Laterite Nodules	Completely Weathered Rock	Fresh Rock
Clay	Sand	Organic Matter	Silty Sand	Highly Weathered Rock	

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>	K. Maafushi	Rig	Track Whd	Core Diameter	54mm	
<b>Date of Started</b>	09.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	09.12.2015	Casing Diameter	100mm	Elevation (m)	-	
					Ground Water level	0.95 m
					Coordinates	-



Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	J.R.M.Sashikala Supervised By: Lahiru Drilled By: Danushka
GWL	: Ground Water Level observed inside the Borehole, after the saturation			Existing ground level considered as the zero level	
NE	Not Encountered				
HB	-Hammer Bounce				
FD	- Free Down				
	Made Ground		Silt		Laterite Nodules
	Clay		Sand		Silty Sand
	Gravel		Organic Matter		Completely Weathered Rock
	Fresh Rock		Highly Weathered Rock		Fresh Rock

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2	
<b>Location</b>	K. Maafushi	<b>Rig</b>	Track Wheel	<b>Core Diameter</b>	54mm	<b>Ground Water level</b>	0.90 m
<b>Date of Started</b>	10.12.2015	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	
<b>Date of Finished</b>	10.12.2015	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>			



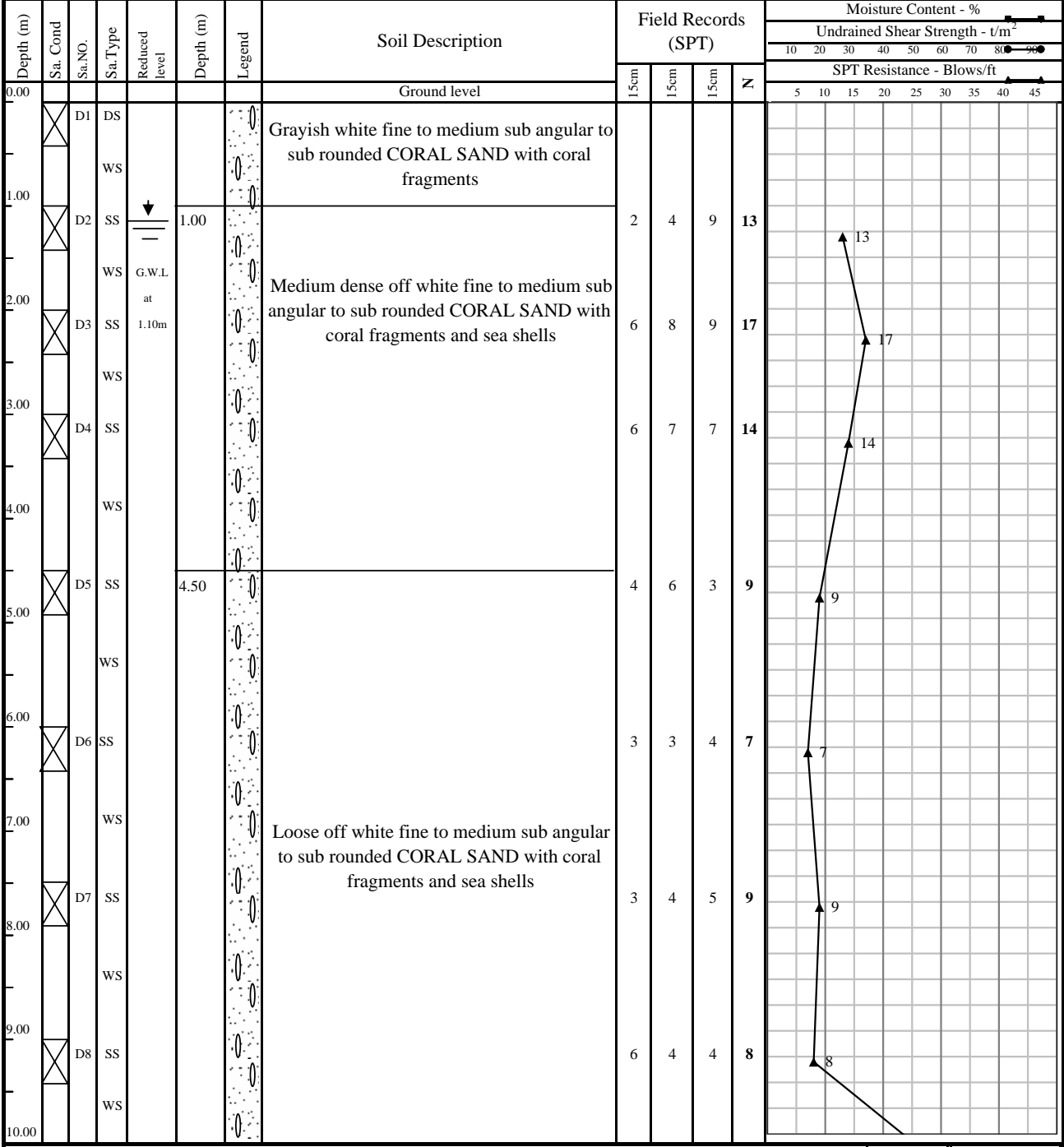
<p><b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p><b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation</p> <p><b>NE</b> Not Encountered</p> <p><b>HB</b> -Hammer Bounce</p> <p><b>FD</b> - Free Down</p>	<p><b>D</b> - Disturbed Sample</p> <p><b>SS</b> -SPT Sample</p> <p><b>W</b> - Water Sample</p> <p><b>WS</b>-Wgrey Sample</p> <p><b>UD</b>- Undisturbed Sample</p> <p><b>CS</b>- Core Sample</p> <p><b>Cr</b> - Core Recovery (%)</p> <p><b>RQD</b>-Rock Quality Designation (%)</p>	<p><b>N</b> - Natural Moisture Content</p> <p><b>L</b> - Atterberg Limit Test</p> <p><b>G</b> - Grain Size Analysis</p> <p><b>SG</b> -Specific Gravity Test</p> <p><b>B</b> - Bulk Density</p> <p><b>V</b> - Vane Shear Test</p>	<p><b>C</b> - Consolidation</p> <p><b>UCT</b>-Unconfined Compression</p> <p><b>CU</b> - Consolidated Undrained</p> <p><b>UU</b>-Unconsolidated Undrained</p> <p><b>pH</b> - Chemical</p> <p><b>O</b> - Organic content</p> <p><b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content</p> <p><b>Cl</b> - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>J.R.M.Sashikala</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
<p> Made Ground</p> <p> Clay</p>	<p> Silt</p> <p> Sand</p>	<p> Gravel</p> <p> Organic Matter</p>	<p> Laterite Nodules</p> <p> Silty Sand</p>	<p> Completely Weathered Rock</p> <p> Highly Weathered Rock</p>	<p> Fresh Rock</p>

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2	
<b>Location</b>	K. Maafushi	<b>Rig</b>	Track Wheel	<b>Core Diameter</b>	54mm	<b>Ground Water level</b>	0.90 m
<b>Date of Started</b>	10.12.2015	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	
<b>Date of Finished</b>	10.12.2015	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft				
								15cm	15cm	15cm	N	10	20	30	40	50	60	70	80	90
												5	10	15	20	25	30	35	40	45
10.00							Continue from Page 1													
11.00			D9 SS				(10.50-12.00)m: colour changed to off white; Particle size changed to coarse	21	10	15	25									
12.00			WS																	
13.00			D10 SS		12.00		Dense gray fine to medium sub angular to sub rounded CORAL SAND with coral fragments	15	13	18	31									
14.00			WS																	
15.00			D11 SS		13.50		Wash Sample: Very dense white gray fine to medium sub angular to sub rounded CORAL SAND	18	35	HB	>50									
15.00			WS																	
15.00			D12 SS		15.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells	17	12	16	28									
15.45					15.45		END OF THE BORE HOLE AT 15.45m													

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				J.R.M.Sashikala
NE	Not Encountered				Supervised By:
HB	-Hammer Bounce				Lahiru
FD	- Free Down				Drilled By:
					Danushka
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	K. Feidhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	11.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
Date of Finished	11.12.2015	Casing Diameter	100mm	Elevation (m)	-	
					Ground Water level	1.10 m
					Coordinates	-



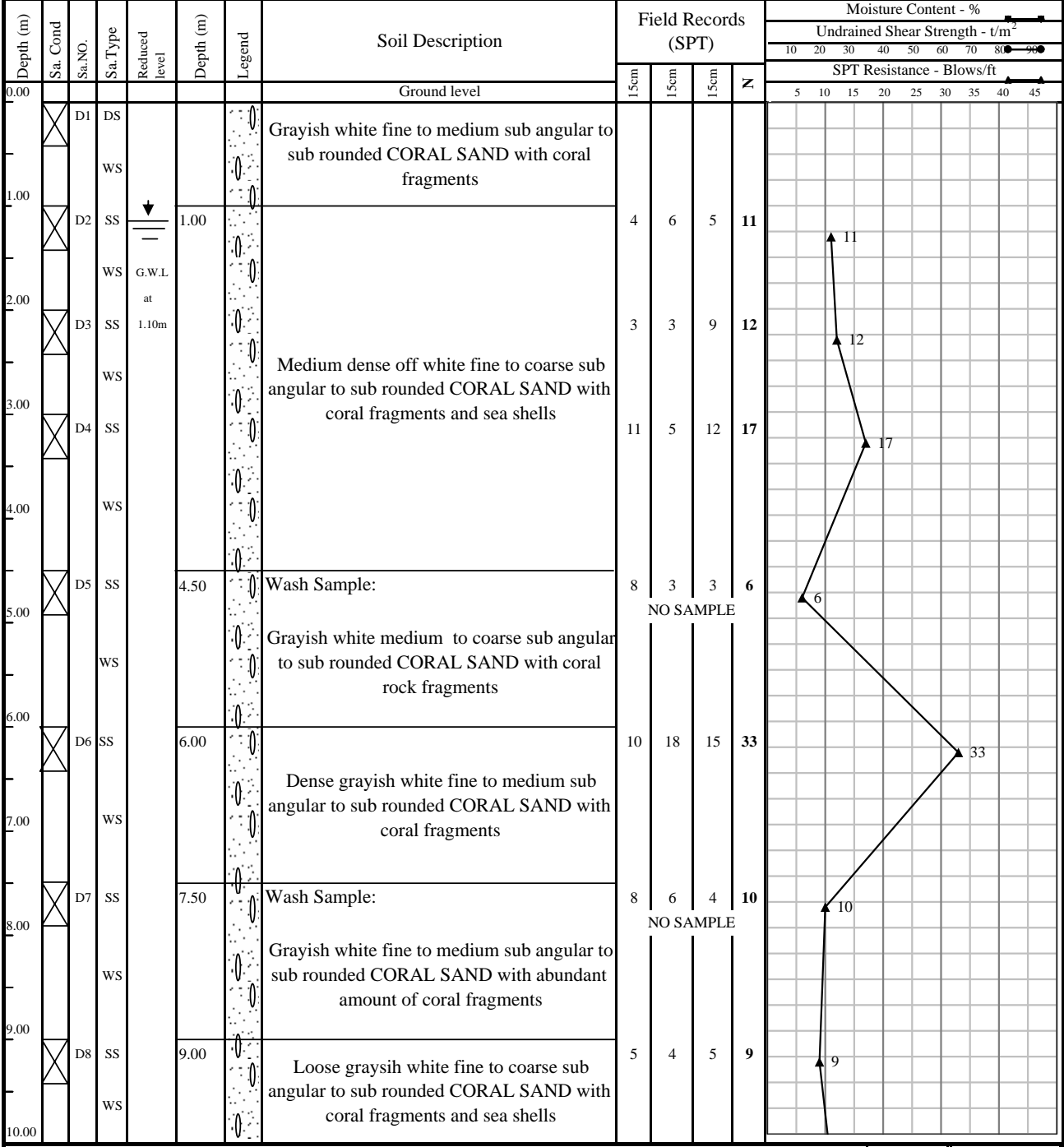
<p>SPT : Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE : Not Encountered</p> <p>HB : Hammer Bounce</p> <p>FD : Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>J.R.M.Sashikala</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
Made Ground          Clay          Silt          Sand          Gravel          Organic Matter          Laterite Nodules          Silty Sand          Completely Weathered Rock          Highly Weathered Rock          Fresh Rock					

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
Location	K. Feidhoo	Rig	Track Whd	Core Diameter	Ground Water level 1.10 m	
Date of Started	11.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
Date of Finished	11.12.2015	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	5	10	15	20	25	30	35
10.00							Continue from Page 1											
11.00			D9	SS	10.50		Same as previous	12	18	23	41							41
12.00				WS			Dense off white fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells	11	15	20	35							35
13.00			D10	SS														
14.00				WS			Very dense off white fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells	30	HB		>50							>50
15.00			D11	SS	13.50													
15.00				WS			Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shells	22	18	15	33							33
15.00			D12	SS	15.00													
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	J.R.M.Sashikala
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		
	Clay		Sand		
	Gravel		Organic Matter		
	Laterite Nodules		Silty Sand		
	Completely Weathered Rock		Highly Weathered Rock		
	Fresh Rock				

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2	
Location	K. Feidhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.50 m
Date of Started	12.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	12.12.2015	Casing Diameter	100mm	Elevation (m)			



<p>SPT Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE Not Encountered</p> <p>HB -Hammer Bounce</p> <p>FD - Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>J.R.M.Sashikala</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
Made Ground	Silt	Gravel	Laterite Nodules	Completely Weathered Rock	Fresh Rock
Clay	Sand	Organic Matter	Silty Sand	Highly Weathered Rock	

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
Location	K. Feidhoo	Rig	Track Whd	Core Diameter	Ground Water level 1.50 m	
Date of Started	12.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
Date of Finished	12.12.2015	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
10.00							Continue from Page 1										
							Same as previous										
11.00			D9	SS	10.50		Medium dense fine to coarse sub angular to sub rounded CORAL SAND with abundant amount of coral fragments	8	5	7	12						12
				WS													
12.00			D10	SS	12.00		Very dense grayish off white fine to coarse sub angular to sub rounded CORAL SAND with abundant amount of coral rock fragments and sea shells	28	26	HB	>50						>50
				WS													
14.00			D11	SS			(15.00-15.45)m depth: The amount of coral reock fragments increased	25	20	HB	>50						>50
				WS													
15.00			D12	SS				30	HB		>50						>50
					15.45		END OF THE BORE HOLE AT 15.45m DEPTH										

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	J.R.M.Sashikala
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		Completely Weathered Rock
	Clay		Sand		Highly Weathered Rock
	Gravel		Organic Matter		Laterite Nodules
	Silty Sand		Fresh Rock		





**ENGINEERING & LABORATORY SERVICES (PVT) LTD.**  
**SITE INVESTIGATIONS DIVISION**

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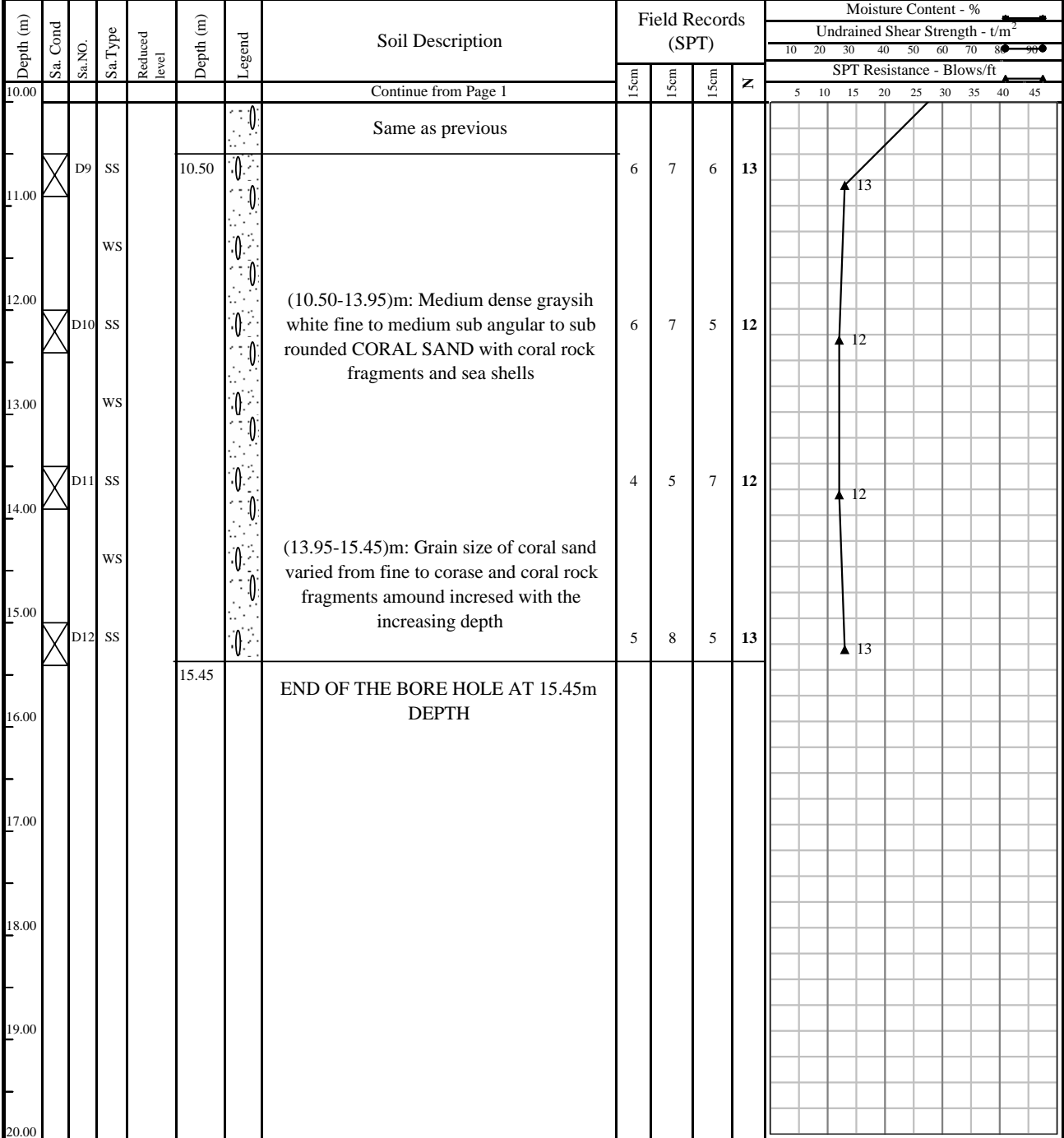
Format No:  
 ELS-SI-02

<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	Adh.Dhangethi	Rig	Track Whd	Core Diameter	54mm	Ground Water level	0.95 m
Date of Started	13.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	13.12.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00							Ground level										
1.00	D1		DS				Yellowish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
			WS														
1.00	D2		SS		1.00		Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with sea shells	5	4	8	12						
			WS														
2.00	D3		SS		2.00		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral fragments	6	15	17	32						
			WS														
3.00	D4		SS		3.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral fragments (3.45-4.50)m: Water loss was observed between this particular depth.	5	10	11	21						
			WS														
4.50	D5		SS		4.50		Wash Sample:	9	7	5	12						
			WS				Yellowish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
6.00	D6		SS		6.00		Medium dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with sea shells	4	6	8	14						
			WS														
7.50	D7		SS		7.50		Wash Sample:	9	38	HB	>50						
			WS				White fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
9.00	D8		SS		9.00		Dense yellowish white fine to medium sub angular to sub rounded CORAL SAND	9	19	21	40						
			WS														

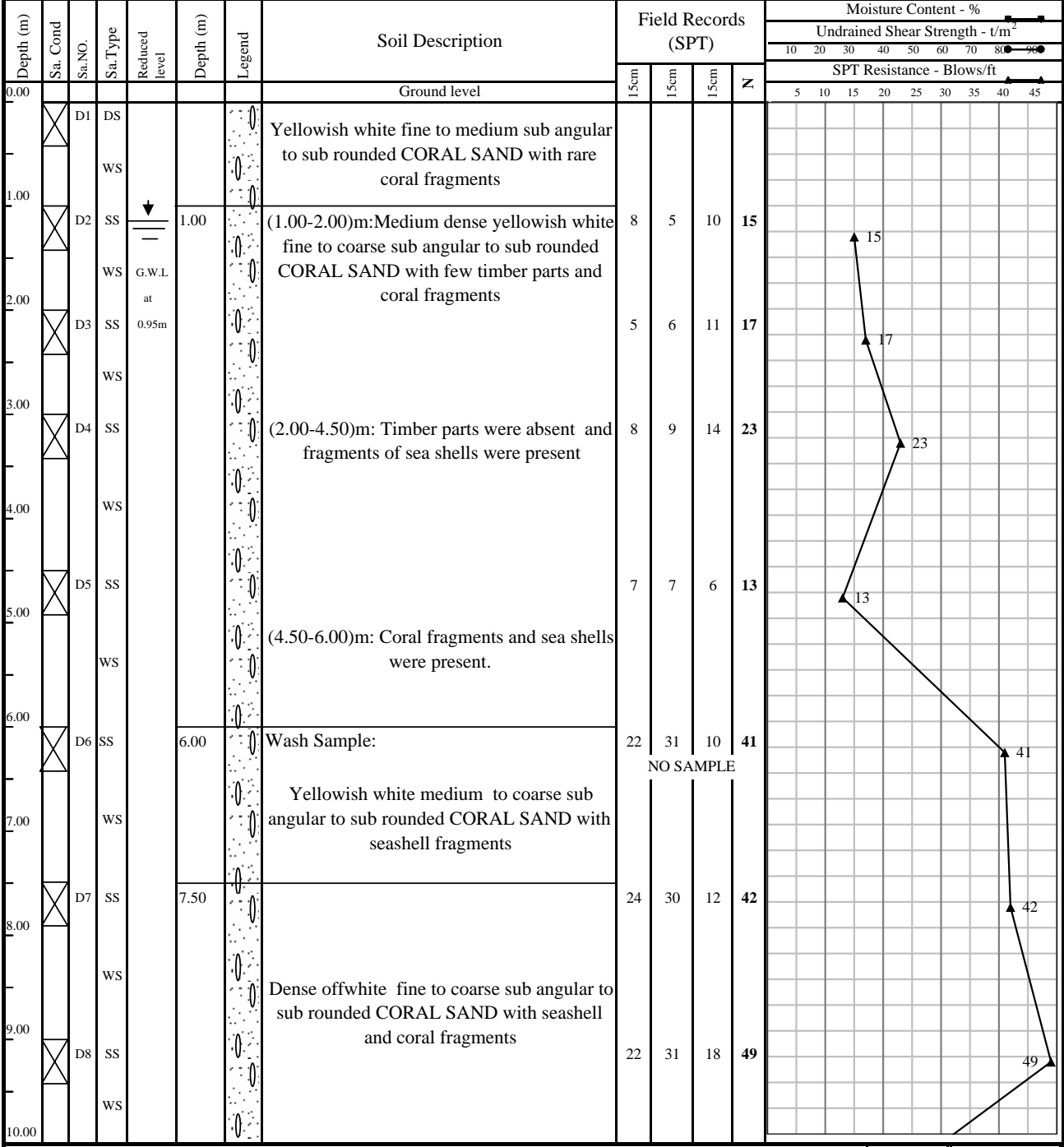
<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>SG</b> -Specific Gravity Test <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> J.R.M.Sashikala <b>Supervised By:</b> Lahiru <b>Drilled By:</b> Danushka		
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>	Adh.Dhangethi	Rig	Track Whd	Core Diameter	Ground Water level 0.95 m	
<b>Date of Started</b>	13.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	13.12.2015	Casing Diameter	100mm	Elevation (m)	-	



Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	J.R.M.Sashikala Supervised By: Lahiru Drilled By: Danushka
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Existing ground level considered as the zero level
NE	Not Encountered				
HB	-Hammer Bounce				
FD	- Free Down				
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	Adh.Dhangethi	Rig	Track Whd	Core Diameter	Ground Water level 0.95 m	
Date of Started	14.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
Date of Finished	14.12.2015	Casing Diameter	100mm	Elevation (m)	-	



<p>SPT : Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE : Not Encountered</p> <p>HB : Hammer Bounce</p> <p>FD : Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p>Logged By :</p> <p>J.R.M.Sashikala</p> <p>Supervised By:</p> <p>Lahiru</p> <p>Drilled By:</p> <p>Danushka</p>
Made Ground          Clay          Silt          Sand          Gravel          Organic Matter          Laterite Nodules          Silty Sand          Completely Weathered Rock          Highly Weathered Rock          Fresh Rock					

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>	Adh.Dhangethi	Rig	Track Whd	Core Diameter	Ground Water level 0.95 m	
<b>Date of Started</b>	14.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	14.12.2015	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	5	10	15	20	25	30	35
10.00							Continue from Page 1											
							Same as previous											
11.00			D9	SS	10.50		(10.50-12.00)m: Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral fragments	15	6	7	13							
				WS														
12.00			D10	SS				4	6	8	14							
				WS														
13.00							(12.00-15.45)m: Sea shell fragments were present between this particular depth											
14.00			D11	SS				7	9	6	15							
				WS														
15.00			D12	SS				9	7	13	20							
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	J.R.M.Sashikala
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		
	Clay		Sand		
	Gravel		Organic Matter		
	Laterite Nodules		Silty Sand		
	Completely Weathered Rock		Highly Weathered Rock		
	Fresh Rock				



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<b>Project</b>		Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	F. Feeali	Rig	Track Whd	Core Diameter	54mm	Ground Water level	0.80 m
Date of Started	15.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	15.12.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
0.00							Ground level										
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments <b>(RECLAIMED AREA)</b>										
			WS														
1.00	D2		SS		1.00		Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with abundant amount of fine to coarse sub angular to sub rounded coral rock fragments; Amount of coral rock fragments increased with the depth.	6	5	7	12						
			WS														
2.00	D3		SS					9	12	17	29						
			WS														
3.00	D4		SS		3.00		Very dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral fragments; (3.45-4.50)m: Water loss was observed between this particular depth.	21	HB		>50						
			WS														
4.00	D5		SS		4.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	7	6	4	10						
			WS														
5.00	D6		SS		6.00		Loose grayish white sub angular to sub rounded medium to coarse CORAL SAND with fine to medium sub angular to angular coral rock fragments	5	2	4	6						
			WS														
6.00	D7		SS		7.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with fine to medium sub angular to angular coral rock fragments	10	7	3	10						
			WS														
7.00	D8		SS					2	5	5	10						
			WS														
8.00																	
9.00																	
10.00																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>SG</b> - Specific Gravity Test <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> J.R.M.Sashikala <b>Supervised By:</b> Lahiru <b>Drilled By:</b> Danushka		
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>	F. Feali	<b>Rig</b>	Track Whd	<b>Core Diameter</b>	54mm	
<b>Date of Started</b>	15.12.2015	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	
<b>Date of Finished</b>	15.12.2015	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-	
					<b>Ground Water level</b>	0.80 m
					<b>Coordinates</b>	-

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %					
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>					
												10	20	30	40	50	60
10.00							Continue from Page 1										
							Same as previous										
11.00			D9 SS		10.50		(10.50-13.95)m: Medium dense graysih white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shells	5	4	3	7						
			WS														
12.00			D10 SS		12.00		Wash Sample: Graysih white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shells	11	8	6	14						
			WS														
13.00			D11 SS		13.50		Medium dense graysih white fine to medium sub angular to sub rounded CORAL SAND with sea shells	13	8	6	14						
			WS														
14.00			D12 SS		15.45		END OF THE BORE HOLE AT 15.45m DEPTH	10	7	5	12						

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	J.R.M.Sashikala Supervised By: Lahiru Drilled By: Danushka
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Existing ground level considered as the zero level
NE	Not Encountered				
HB	-Hammer Bounce				
FD	- Free Down				
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	F.Feali	Rig	Track Whd	Core Diameter	Ground Water level 0.90 m	
Date of Started	16.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
Date of Finished	16.12.2015	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00							Ground level										
1.00	D1		DS				Yellowish white fine to medium sub angular to sub rounded CORAL SAND with rare coral fragments <b>(RECLAIMED AREA)</b>										
			WS	↓ G.W.L. at 0.90m													
2.00	D2		SS		1.00		Medium dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with rare coral fragments	6	5	5	10						
3.00	D3		SS					10	13	10	23						
4.00	D4		SS		3.00		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with rare coral fragments	8	14	19	33						
5.00	D5		SS		4.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	4	6	8	14						
6.00	D6		SS					16	7	5	12						
7.00			WS														
8.00	D7		SS		7.50		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	7	16	15	31						
9.00			WS														
9.00	D8		SS		9.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	6	12	8	20						
10.00			WS														

<p>SPT Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE Not Encountered</p> <p>HB -Hammer Bounce</p> <p>FD - Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>J.R.M.Sashikala</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
Made Ground	Silt	Gravel	Laterite Nodules	Completely Weathered Rock	Fresh Rock
Clay	Sand	Organic Matter	Silty Sand	Highly Weathered Rock	

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>	F.Feeali	Rig	Track Whd	Core Diameter	Ground Water level 0.90 m	
<b>Date of Started</b>	14.12.2015	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	14.12.2015	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %						
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>						
												10	20	30	40	50	60	70
10.00							Continue from Page 1											
11.00			D9	SS	10.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coarse sub rounded coral rock fragments	6	7	10	17							
12.00				WS														
13.00			D10	SS					5	6	16	22						
14.00				WS														
15.00			D11	SS				10	11	18	29							
15.45				WS														
15.45			D12	SS	15.45		END OF THE BORE HOLE AT 15.45m DEPTH	11	13	9	22							
16.00																		
17.00																		
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS - SPT Sample W - Water Sample WS - Wgrey Sample UD - Undisturbed Sample CS - Core Sample Cr - Core Recovery (%) RQD - Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG - Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT - Unconfined Compression CU - Consolidated Undrained UU - Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	J.R.M.Sashikala Supervised By: Lahiru Drilled By: Danushka
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Existing ground level considered as the zero level
NE	Not Encountered				
HB	- Hammer Bounce				
FD	- Free Down				
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		





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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	F.Nilandhoo	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.20 m
Date of Started	17.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	17.12.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N			10	20	30	40	50
0.00							Ground level											
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments											
			WS															
1.00	D2		SS		1.00		(1.00-2.00)m: Medium dense blackish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	3	5	7	12							
			WS															
2.00	D3		SS				(2.00-4.50)m: Sample colour changed to grayish white and sea shell fragments were present	7	9	14	23							
			WS															
3.00	D4		SS					2	13	14	27							
			WS															
4.00																		
5.00	D5		SS		4.50		Dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with abundant amount of medium to coarse sub angular to sub rounded gravels of coral rock fragments	16	18	17	35							
			WS															
6.00	D6		SS		6.00		Wash Sample:	17	8	4	12							
			WS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments											
7.00																		
8.00	D7		SS		7.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	4	8	6	14							
			WS															
9.00																		
9.00	D8		SS		9.00		Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	3	2	4	6							
			WS															
10.00																		

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> -Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By:</b> Lahiru <b>Supervised By:</b> Lahiru <b>Drilled By:</b> Chaminda		
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		





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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	F.Nilandhoo	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.00 m
Date of Started	18.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	18.12.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00							Ground level										
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments										
			WS														
1.00	D2		SS		1.00		(1.00-2.00)m: Medium dense blackish white fine to medium sub angular to sub rounded CORAL SAND	4	8	6	14						
			WS														
2.00	D3		SS				(2.00-4.50)m: Sample colour changed to grayish white and sea shell fragments were present	4	9	18	27						
			WS														
3.00	D4		SS					3	13	10	23						
			WS														
4.00																	
5.00	D5		SS		4.50		Loose grayish white fine to coarse sub angular to sub rounded CORAL SAND	6	4	3	7						
			WS														
6.00	D6		SS		6.00		Loose brownish white fine to medium sub angular to sub rounded CORAL SAND	7	4	5	9						
			WS														
7.00																	
8.00	D7		SS		7.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND	12	7	10	17						
			WS														
9.00	D8		SS		9.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND	15	12	8	20						
			WS														
10.00																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahiru <b>Supervised By:</b> Lahiru <b>Drilled By:</b> Chaminda
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of Maldives</b>				Borehole No	BH-02	
<b>Client</b>	<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	2 of 2	
Location	F.Nilandhoo	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.00 m
Date of Started	18.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	-
Date of Finished	18.12.2015	Casing Diameter	100mm	Elevation (m)	-		-

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
10.00							Ground level											
11.00		D9	SS		10.50		Same as previous	21	18	15	33							
12.00			WS				Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments											
13.00		D10	SS		12.00		Very dense grayish white fine to medium sub angular to sub rounded CORAL SAND with fine to medium sub angular to sub rounded gravels of coral rock fragments	23	15	HB	>50							
14.00			WS				<b>ROCK LEVEL</b>											
15.00			CS		13.90		CORE LOSS											
16.00			CS		14.90		CORE LOSS											
17.00					15.90		END OF THE BORE HOLE AT 15.90m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS - SPT Sample	N - Natural Moisture Content	C - Consolidation
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS - Wgrey Sample	L - Atterberg Limit Test	UCT - Unconfined Compression
NE	Not Encountered	UD - Undisturbed Sample	CS - Core Sample	G - Grain Size Analysis	CU - Consolidated Undrained
HB	- Hammer Bounce	Cr - Core Recovery (%)	RQD - Rock Quality Designation (%)	SG - Specific Gravity Test	UU - Unconsolidated Undrained
FD	- Free Down			B - Bulk Density	pH - Chemical
				V - Vane Shear Test	O - Organic content
					SO <sub>4</sub> <sup>2-</sup> - Sulphate Content
					Cl - Chloride Content
	Made Ground		Silt		Gravel
	Clay		Sand		Laterite Nodules
			Organic Matter		Silty Sand
					Completely Weathered Rock
					Highly Weathered Rock
					Fresh Rock



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<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of Maldives</b>				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
<b>Location</b>	L.Gan	Rig	Track Wh	Core Diameter	54mm	
<b>Date of Started</b>	01.03.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	
<b>Date of Finished</b>	01.03.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-	
				<b>Coordinates</b>	-	

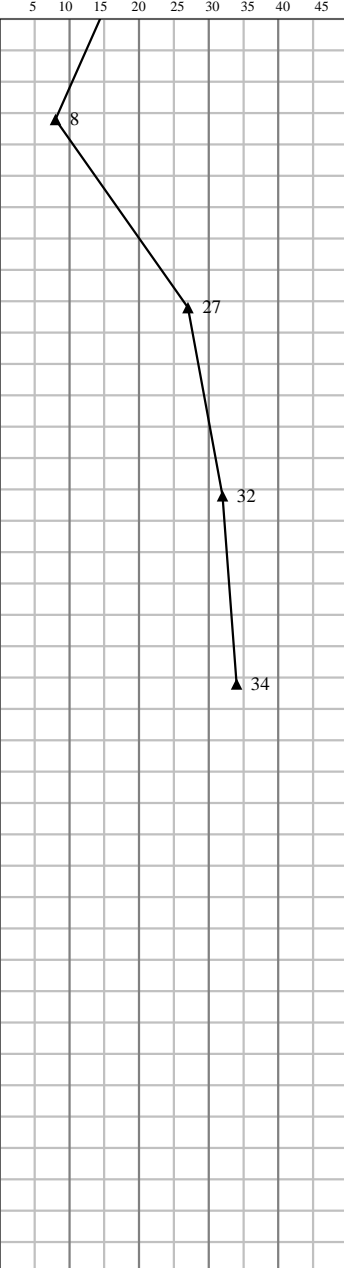
Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N	5	10	15	20	25	30
0.00							Ground level										
1.00	D1		DS		0.00		Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments										
1.00	D2		SS		1.00		Wash Sample: Off white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	3	5	3	8						
2.00			WS														
2.00	D3		SS		2.00												
3.00			WS														
3.00	D4		SS					9	13	14	27						
4.00			WS														
5.00	D5		SS					9	9	8	17						
6.00			WS														
6.00	D6		SS				Medium Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral fragments	12	10	10	20						
7.00			WS														
8.00	D7		SS					11	12	13	25						
9.00			WS														
9.00	D8		SS					10	11	9	20						
10.00			WS														

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>SG</b> -Specific Gravity Test <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka		
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		



<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of Maldives</b>				Borehole No	BH-01
<b>Client</b>	<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	2 of 2
<b>Location</b>	L.Gan	Rig	Track Wh	Core Diameter	54mm	
<b>Date of Started</b>	01.03.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	
<b>Date of Finished</b>	01.03.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-	
				<b>Coordinates</b>	-	

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %	
								15cm	15cm	15cm	N	10	20
10.00							Continue from Page 1						
11.00	X	D9	SS		10.50		Wash Sample: Grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	3	2	6	8		
12.00			WS										
13.00	X	D10	SS		12.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	10	14	13	27		
14.00			WS										
15.00	X	D11	SS		13.50		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	12	15	17	32		
16.00			WS										
17.00													
18.00													
19.00													
20.00					15.45		END OF THE BORE HOLE AT 15.45m DEPTH	14	16	18	34		



Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS - SPT Sample W - Water Sample WS - Wgrey Sample UD - Undisturbed Sample CS - Core Sample Cr - Core Recovery (%) RQD - Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG - Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT - Unconfined Compression CU - Consolidated Undrained UU - Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Lahiru Supervised By: Lahiru Drilled By: Danushka
GWL	Ground Water Level observed inside the Borehole, after the saturation			Existing ground level considered as the zero level	
NE	Not Encountered				
HB	-Hammer Bounce				
FD	-Free Down				
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		



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<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of Maldives				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
<b>Location</b>	L.Gan	Rig	Track Whd	Core Diameter	54mm	
<b>Date of Started</b>	29.02.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	
<b>Date of Finished</b>	29.03.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-	
					<b>Ground Water level</b>	0.80 m
					<b>Coordinates</b>	-

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %	
												Undrained Shear Strength - t/m <sup>2</sup>	
								15cm	15cm	15cm	Z	SPT Resistance - Blows/ft	
0.00							Ground level						
1.00	D1		DS		0.00		Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments						
			WS										
1.00	D2		SS	G.W.L at 0.80 m	1.00		Loose off white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	3	5	3	8		
2.00	D3		SS		2.00			6	8	7	15		
3.00	D4		SS					9	13	14	27		
4.00			WS										
5.00	D5		SS					9	9	8	17		
6.00	D6		SS				Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments	12	10	10	20		
7.00			WS										
8.00	D7		SS					11	12	13	25		
9.00			WS										
9.00	D8		SS					10	11	9	20		
10.00			WS										

<p>SPT : Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE : Not Encountered</p> <p>HB : Hammer Bounce</p> <p>FD : Free Down</p>				<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>				<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>				<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>				<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>		<p><b>Logged By:</b></p> <p>Lahiru</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>	
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock								
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock										



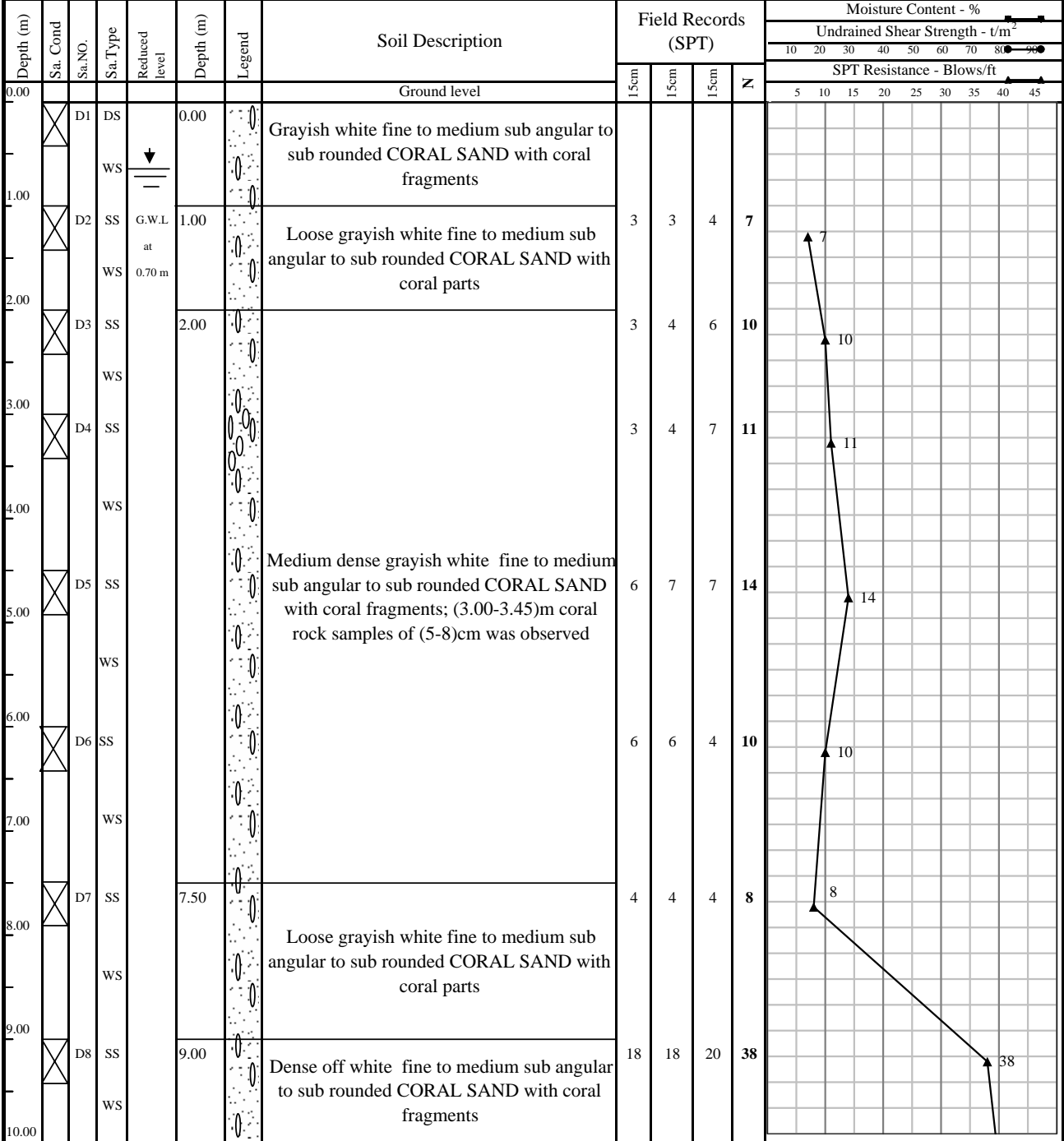
<b>Project</b>				<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
<b>Client</b>				M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>		L.Gan	Rig	Track Whd	Core Diameter	54mm	Ground Water level 0.80 m		
<b>Date of Started</b>		29.02.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>		
<b>Date of Finished</b>		29.03.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
10.00					10.00		Continue from Page 1											
11.00			D9	SS	10.50		Wash Sample: Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells	3	2	6	8							8
12.00				WS	12.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells	10	14	13	27							27
13.00			D10	SS	12.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells											
14.00				WS	13.50		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells	12	15	17	32							32
15.00			D11	SS	13.50		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells											
16.00				WS	15.45		END OF THE BORE HOLE AT 15.45m DEPTH	14	16	18	34							34
17.00			D12	SS														
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS - SPT Sample W - Water Sample WS - Wgrey Sample UD - Undisturbed Sample CS - Core Sample Cr - Core Recovery (%) RQD - Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG - Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT - Unconfined Compression CU - Consolidated Undrained UU - Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Lahiru
NE	Not Encountered				Lahiru
HB	- Hammer Bounce				Danushka
FD	- Free Down				
	Made Ground		Silt		Laterite Nodules
	Clay		Sand		Silty Sand
			Gravel		Completely Weathered Rock
			Organic Matter		Highly Weathered Rock
					Fresh Rock



<b>Project</b>		Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	Th.Guraidhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	0.70 m
Date of Started	25.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	25.02.2016	Casing Diameter	100mm	Elevation (m)			



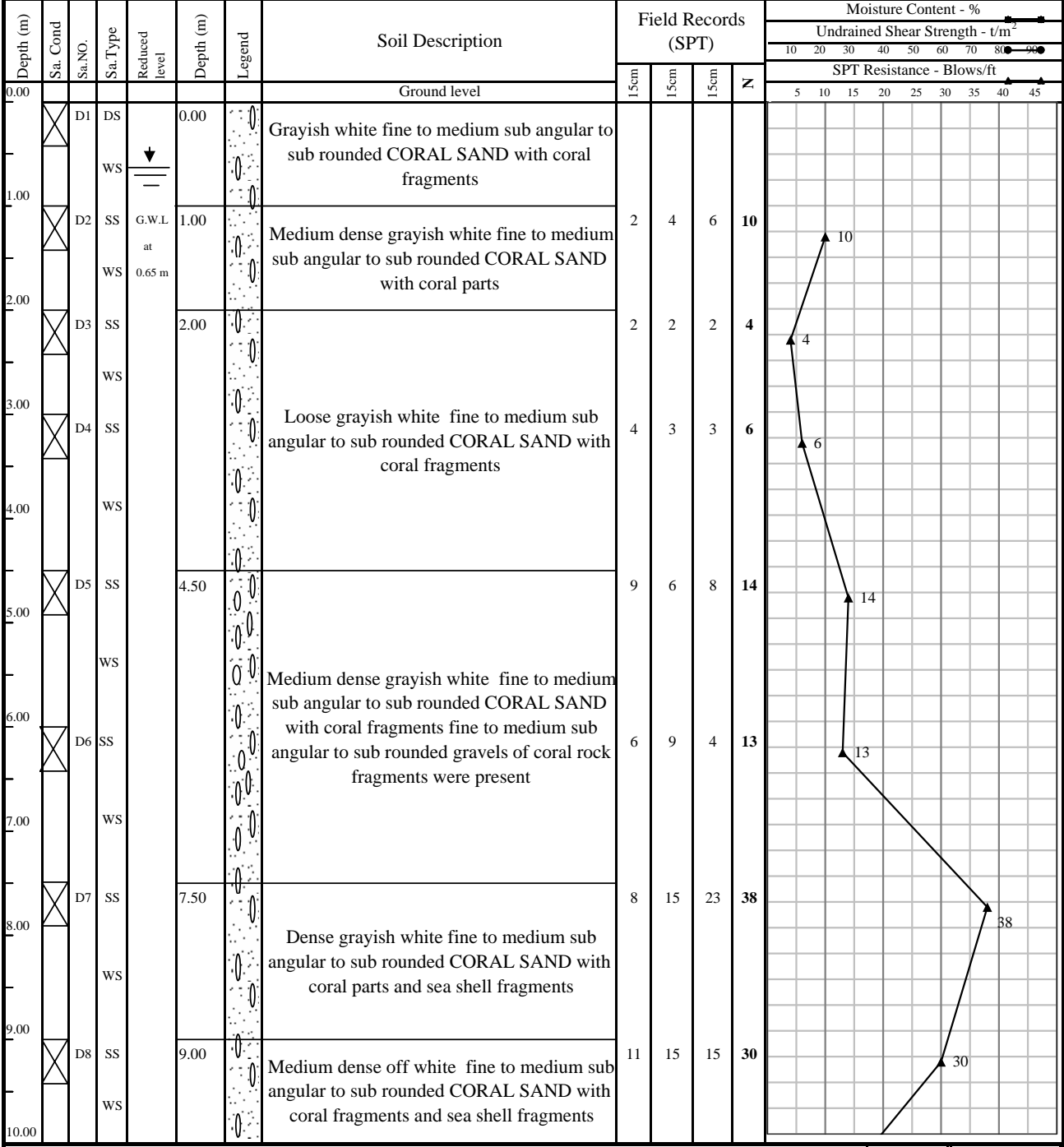
<p>SPT : Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE : Not Encountered</p> <p>HB : Hammer Bounce</p> <p>FD : Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>Lahiru</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
<p> Made Ground</p> <p> Clay</p>	<p> Silt</p> <p> Sand</p>	<p> Gravel</p> <p> Organic Matter</p>	<p> Laterite Nodules</p> <p> Silty Sand</p>	<p> Completely Weathered Rock</p> <p> Highly Weathered Rock</p>	<p> Fresh Rock</p>

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>	Th.Guraidhoo	Rig	Track Whd	Core Diameter	Ground Water level 0.70 m	
<b>Date of Started</b>	25.02.2016	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	25.02.2016	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %						
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>						
												10	20	30	40	50	60	70
10.00					10.00		Continue from Page 1											
11.00			D9	SS			Same as previous	18	19	22	41							
12.00				WS														
13.00			D10	SS	12.00		Medium dense fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments ; (12.00-12.45)m depth coral rock fragments of (5-6)cm	12	8	10	18							
14.00				WS														
15.00			D11	SS					14	10	13	23						
16.00				WS														
17.00			D12	SS				12	8	6	14							
18.00					15.45		END OF THE BORE HOLE AT 15.45m DEPTH											
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS -Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Lahiru
NE	Not Encountered				Lahiru
HB	-Hammer Bounce				Danushka
FD	- Free Down				
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		

<b>Project</b>		Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	Th.Guraidhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	0.65 m
Date of Started	26.02.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	26.02.2016	Casing Diameter	100mm	Elevation (m)			



<p>SPT : Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)</p> <p>GWL : Ground Water Level observed inside the Borehole, after the saturation</p> <p>NE : Not Encountered</p> <p>HB : Hammer Bounce</p> <p>FD : Free Down</p>	<p>D - Disturbed Sample</p> <p>SS -SPT Sample</p> <p>W - Water Sample</p> <p>WS-Wgrey Sample</p> <p>UD- Undisturbed Sample</p> <p>CS- Core Sample</p> <p>Cr - Core Recovery (%)</p> <p>RQD-Rock Quality Designation (%)</p>	<p>N - Natural Moisture Content</p> <p>L - Atterberg Limit Test</p> <p>G - Grain Size Analysis</p> <p>SG -Specific Gravity Test</p> <p>B - Bulk Density</p> <p>V - Vane Shear Test</p>	<p>C - Consolidation</p> <p>UCT-Unconfined Compression</p> <p>CU - Consolidated Undrained</p> <p>UU-Unconsolidated Undrained</p> <p>pH - Chemical</p> <p>O - Organic content</p> <p>SO<sub>4</sub><sup>2-</sup> - Sulphate Content</p> <p>Cl - Chloride Content</p>	<p><b>Remarks</b></p> <p>Existing ground level considered as the zero level</p>	<p><b>Logged By :</b></p> <p>Lahiru</p> <p><b>Supervised By:</b></p> <p>Lahiru</p> <p><b>Drilled By:</b></p> <p>Danushka</p>
<p> Made Ground</p> <p> Clay</p>	<p> Silt</p> <p> Sand</p>	<p> Gravel</p> <p> Organic Matter</p>	<p> Laterite Nodules</p> <p> Silty Sand</p>	<p> Completely Weathered Rock</p> <p> Highly Weathered Rock</p>	<p> Fresh Rock</p>

<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
<b>Location</b>	Th.Guraidhoo	Rig	Track Whd	Core Diameter	Ground Water level 0.65 m	
<b>Date of Started</b>	26.02.2016	Drilling Method	Rotary	Casing depth	15.00m	
<b>Date of Finished</b>	26.02.2016	Casing Diameter	100mm	Elevation (m)	-	

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %						
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>						
												10	20	30	40	50	60	70
10.00							Continue from Page 1											
11.00			D9	SS	10.50		Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	5	2	6	8							
12.00				WS														
13.00			D10	SS	12.00		Medium dense fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments ;fine to medium sub angular to sub rounded gravels of coral rock fragments were present	6	5	7	12							
14.00				WS														
15.00			D11	SS					8	6	9	15						
16.00				WS														
17.00			D12	SS				9	8	8	16							
18.00																		
19.00																		
20.00					15.45		END OF THE BORE HOLE AT 15.45m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS -Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Lahiru
NE	Not Encountered				Supervised By:
HB	-Hammer Bounce				Lahiru
FD	- Free Down				Drilled By:
					Danushka
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		



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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
<b>Location</b>	Th.Gadhdhoo	<b>Rig</b>	Track Wheel	<b>Core Diameter</b>	54mm	<b>Ground Water level</b>	1.10 m
<b>Date of Started</b>	31.12.2015	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	
<b>Date of Finished</b>	31.12.2015	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %					
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>					
												10	20	30	40	50	60
0.00							Ground level										
	D1		DS				Yellowish white fine to medium sub angular to sub rounded CORAL SAND with fragments of coral and sea shells										
			WS														
1.00			CS		1.00		Yellowish off white highly weathered highly fractured CORAL ROCK	Cr=90%		RQD=0%							
			WS		1.50		Yellowish white fine to medium sub angular to sub rounded CORAL SAND with fragments of coral and sea shells										
2.00			SS		2.00		Medium dense off white fine to coarse CORAL SAND with coral fragments	3	5	6	11						
	D2		WS														
3.00			SS		3.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	7	4	4	8						
	D3		WS														
4.00			SS		4.50		Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with sea shell fragments and coral fragments	10	8	8	16						
	D4		WS														
5.00			SS		6.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	7	4	4	8						
	D5		WS														
6.00			SS		6.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	3	4	5	9						
	D6		WS														
7.00			SS		9.00		Wash Sample: Grayish off white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	10	12	9	21						
	D7		WS					NO SAMPLE									
8.00																	
9.00																	
10.00																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>SG</b> -Specific Gravity Test <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahiru <b>Supervised By:</b> Lahiru <b>Drilled By:</b> Chaminda	



<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of Maldives				Borehole No	BH-01	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2	
<b>Location</b>	Th.Gadhdhoo	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.10 m
<b>Date of Started</b>	31.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	-
<b>Date of Finished</b>	31.12.2015	Casing Diameter	100mm	Elevation (m)	-		-

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
10.00							Ground level											
11.00	X		D8 SS		10.50		Same as previous	7	7	11	18							
12.00			WS															
13.00	X		D9 SS				Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	14	16	14	30							
14.00			WS															
15.00	X		D10 SS						14	8	7	15						
16.00			WS															
17.00																		
18.00																		
19.00																		
20.00																		
					15.45		END OF THE BORE HOLE AT 15.50m											

Sample Key / Test Key				Remarks	Logged By:
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS - SPT Sample W - Water Sample WS - Wgrey Sample UD - Undisturbed Sample CS - Core Sample Cr - Core Recovery (%) RQD - Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG - Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT - Unconfined Compression CU - Consolidated Undrained UU - Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Lahiru
GWL	Ground Water Level observed inside the Borehole, after the saturation				Supervised By:
NE	Not Encountered				Lahiru
HB	- Hammer Bounce				Drilled By:
FD	- Free Down				Chaminda
	Made Ground		Silt		Gravel
	Clay		Sand		Organic Matter
			Laterite Nodules		Silty Sand
			Completely Weathered Rock		Highly Weathered Rock
			Fresh Rock		



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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	Th.Gadhdhoo	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.10 m
Date of Started	01.01.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	-
Date of Finished	01.01.2015	Casing Diameter	100mm	Elevation (m)	-		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	10	20	30	40	50	60	70
0.00							Ground level											
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND											
			WS															
1.00	D2		SS		1.00		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	6	5	3	8							
			WS															
2.00	D3		SS		2.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments; (4.50-6.00)m sea shell fragments were present between that depth	10	8	12	20							
			WS															
3.00	D4		SS						6	8	14	22						
			WS															
4.00			WS															
5.00	D5		SS					11	7	6	13							
			WS															
6.00	D6		SS		6.00		Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments	5	3	5	8							
			WS															
7.00			WS															
8.00	D7		SS		7.50		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral and sea shell fragments	4	4	6	10							
			WS															
9.00			WS															
10.00	D8		SS					7	6	4	10							
			WS															

SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	N - Natural Moisture Content	C - Consolidation	Remarks	Logged By :					
GWL	: Ground Water Level observed inside the Borehole, after the saturation	SS -SPT Sample	L - Atterberg Limit Test	UCT-Unconfined Compression							
NE	Not Encountered	W - Water Sample	G - Grain Size Analysis	CU - Consolidated Undrained	Existing ground level considered as the zero level	Lahiru					
HB	- Hammer Bounce	WS-Wgrey Sample	SG -Specific Gravity Test	UU-Unconsolidated Undrained							
FD	- Free Down	UD- Undisturbed Sample	B - Bulk Density	pH - Chemical	Supervised By:	Lahiru					
		CS- Core Sample	V - Vane Shear Test	O - Organic content							
		Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)	SO <sub>4</sub> <sup>2-</sup> - Sulphate Content	Drilled By:	Chaminda					
				Cl - Chloride Content							
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand		Highly Weathered Rock		

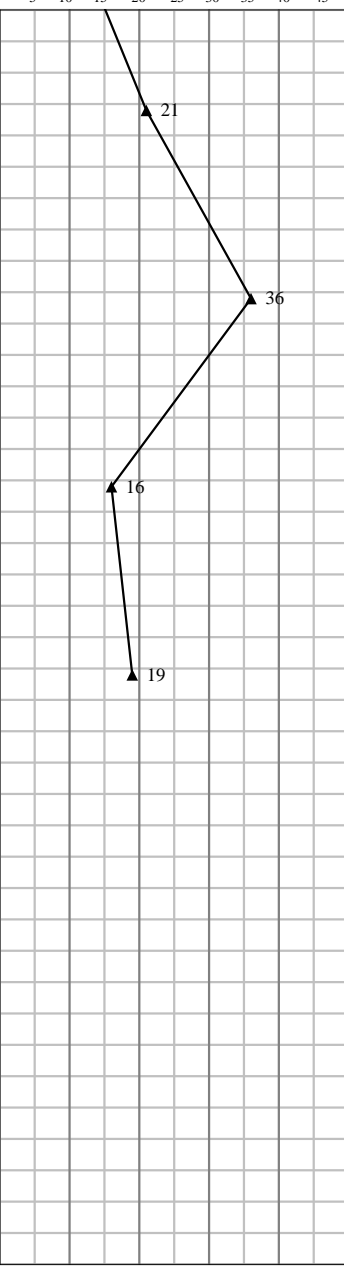


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<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of Maldives</b>				Borehole No	BH-02
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
Location	Th.Gadhdhoo	Rig	Track Wheel	Core Diameter	54mm	
Date of Started	01.01.2015	Drilling Method	Rotary	Casing depth	15.00m	
Date of Finished	01.01.2015	Casing Diameter	100mm	Elevation (m)	-	
				Coordinates	-	

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %	
								15cm	15cm	15cm	Z	Undrained Shear Strength - t/m <sup>2</sup>	
10.00							Ground level						
11.00			D9 SS		10.50		Same as previous	4	7	14	21		
12.00			D10 SS		12.00		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral and sea shell fragments	12	17	19	36		
13.00			WS				Dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	13	11	5	16		
14.00			D11 SS		13.50		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments and sea shell fragments	10	8	11	19		
15.00			D12 SS		15.45		END OF THE BORE HOLE AT 15.50m						



Sample Key / Test Key				Remarks	Logged By:	
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	N - Natural Moisture Content	Existing ground level considered as the zero level	Lahiru	
GWL	Ground Water Level observed inside the Borehole, after the saturation	SS - SPT Sample	L - Atterberg Limit Test		Supervised By:	Lahiru
NE	Not Encountered	W - Water Sample	G - Grain Size Analysis		Drilled By:	Chaminda
HB	-Hammer Bounce	WS - Wgrey Sample	SG - Specific Gravity Test			
FD	- Free Down	UD - Undisturbed Sample	B - Bulk Density			
		CS - Core Sample	V - Vane Shear Test			
		Cr - Core Recovery (%)	RQD - Rock Quality Designation (%)			
	Made Ground		Silt		Completely Weathered Rock	
	Clay		Sand		Highly Weathered Rock	
	Gravel		Organic Matter		Laterite Nodules	
	Silty Sand				Fresh Rock	





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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	Gdh.Fiyoari	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.20 m
Date of Started	29.12.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	29.12.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft			
								15cm	15cm	15cm	N	5	10	15	20	25	30	35	40
0.00					0.00		Ground level												
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments												
1.00			WS																
1.00	D2		SS		1.00		Medium dense blackish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	3	3	8	11								
2.00			WS																
2.00	D3		SS						6	7	8	15							
3.00			WS																
3.00					3.00		Off white highly weathered highly fractures CORAL ROCK												
4.00			CS																
4.00								Cr=44%											
4.50	D4		SS		4.50		Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	9	14	11	25								
5.00			WS																
6.00	D5		SS		6.00		Very loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral fragments; (6.45-7.50)m: water loss was observed	1	1	2	3								
7.00			WS																
7.50	D6		SS		7.50		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral fragments;(7.96-9.00)m: water loss was observed	3	2	2	4								
8.00			WS																
9.00	D7		SS		9.00		Medium dense off white fine to coarse sub angular to sub rounded CORAL SAND with coral fragments	10	6	6	12								
9.00			WS																
10.00																			

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Chaminda
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



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<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of Maldives				Borehole No	BH-01	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2	
<b>Location</b>	Gdh.Fiyoari	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.20 m
<b>Date of Started</b>	29.12.2015	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	-
<b>Date of Finished</b>	29.12.2015	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-		-

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	0	100	0	10	5	10	15
10.00							Ground level											
11.00	X		D8 SS		10.50		Same as previous	9	11	10	21							
12.00	X		D9 SS	WS	12.00		Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	13	11	9	20							
13.00	X		D10 SS	WS			Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell and coral rock fragments fragments	23	13	15	28							
14.00	X		D11 SS	WS				18	10	16	26							
15.00	X				15.45		END OF THE BORE HOLE AT 15.45m DEPTH											

Sample Key / Test Key				Remarks	Logged By:
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS - SPT Sample W - Water Sample WS - Wgrey Sample UD - Undisturbed Sample CS - Core Sample Cr - Core Recovery (%) RQD - Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG - Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT - Unconfined Compression CU - Consolidated Undrained UU - Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Lahiru
GWL	Ground Water Level observed inside the Borehole, after the saturation				Supervised By:
NE	Not Encountered				Lahiru
HB	- Hammer Bounce				Drilled By:
FD	- Free Down				Chaminda
	Made Ground	Silt	Gravel	Laterite Nodules	Completely Weathered Rock
	Clay	Sand	Organic Matter	Silty Sand	Highly Weathered Rock
					Fresh Rock



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<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02	
<b>Client</b>	<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	1 of 2	
<b>Location</b>	Gdh.Fiyoari	Rig	Track Wheel	Core Diameter	54mm	Ground Water level	1.15 m
<b>Date of Started</b>	30.12.2015	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	-
<b>Date of Finished</b>	29.12.2015	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft				
								15cm	15cm	15cm	N	10	20	30	40	50	60	70	80	90
								5	10	15	20	25	30	35	40	45				
0.00					0.00		Ground level													
1.00	D1		DS		1.00		Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments													
			WS																	
2.00	D2		SS		2.00		Medium dense off white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	2	5	5	10									
			WS																	
3.00	D3		SS		3.00		Very dense off white fine to medium sub angular to sub rounded CORAL SAND with abundant amount of cobble and pebble size coral rock fragments	10	14	20/H	>50									
			WS																	
4.00			CS		4.00		Off white highly weathered highly fractured CORAL ROCK													
										Cr=34%	RQD=11%									
5.00	D4		SS		5.00		Medium dense off white silty medium to coarse sub angular to sub rounded CORAL SAND with sea shell fragments	11	6	5	11									
			WS																	
6.00	D5		SS		6.00		Very loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral fragments; (6.45-7.50)m: water loss was observed	7	9	5	14									
			WS																	
7.00	D6		SS		7.50		Loose grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral fragments;(7.96-9.00)m: water loss was observed	6	7	14	21									
			WS																	
8.00	D7		SS		9.00		Medium dense off white fine to coarse sub angular to sub rounded CORAL SAND with coral fragments	10	8	8	16									
			WS																	

SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahiru <b>Supervised By:</b> Lahiru <b>Drilled By:</b> Chaminda					
⊗	Made Ground	⊗⊗⊗⊗	Silt	⊙⊙⊙⊙	Gravel	⊠⊠⊠⊠	Laterite Nodules	⊠⊠⊠⊠	Completely Weathered Rock	⊠⊠⊠⊠	Fresh Rock
⊠	Clay	⊠⊠⊠⊠	Sand	⊠⊠⊠⊠	Organic Matter	⊠⊠⊠⊠	Silty Sand	⊠⊠⊠⊠	Highly Weathered Rock		

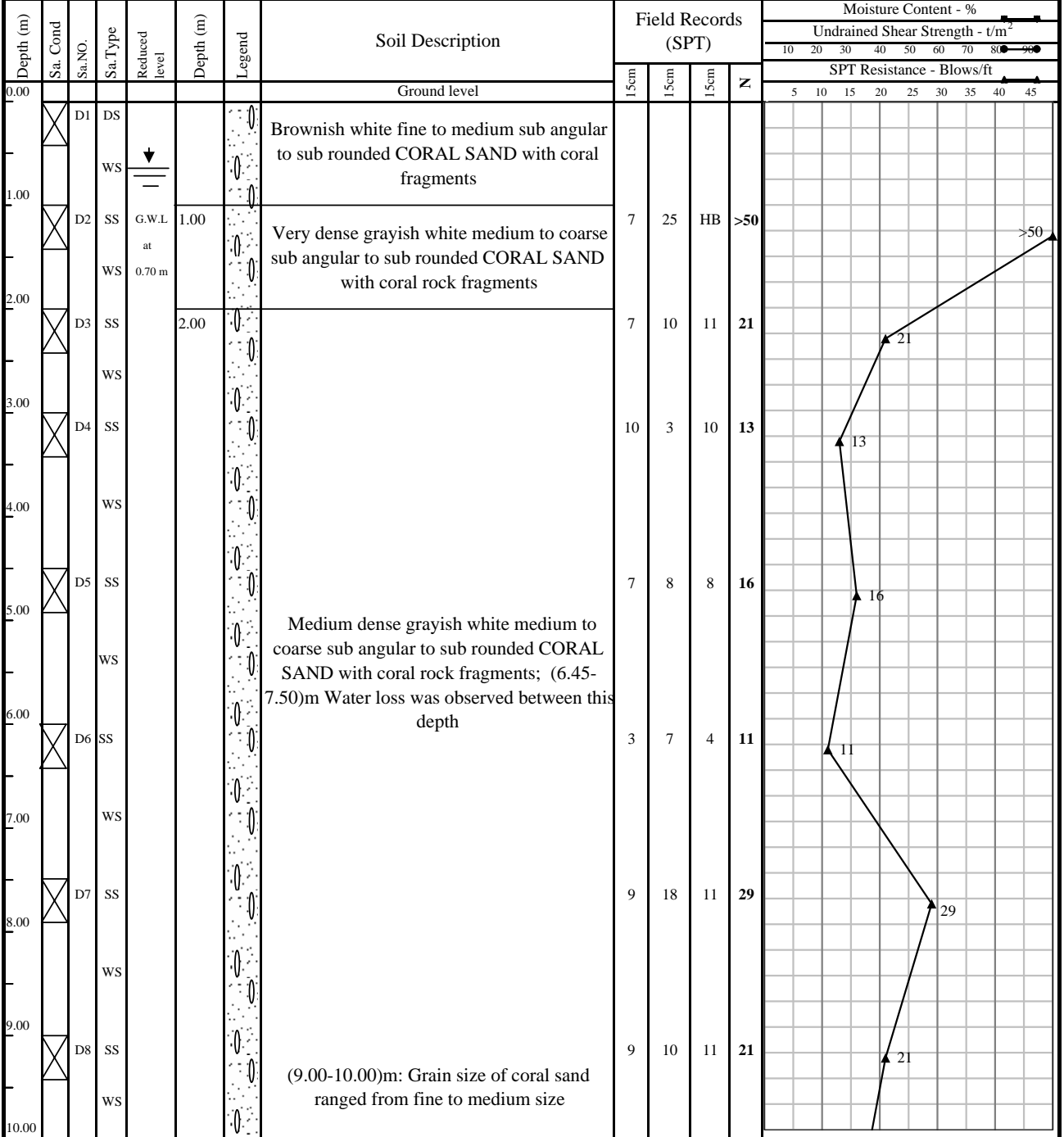




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<b>Project</b>					Borehole No	BH-01
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	1 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.70 m	
Location	Gdh.Thinadhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	13.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	13.01.2016	Casing Diameter	100mm	Elevation (m)		



<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



<b>Project</b>					Borehole No	BH-01
Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of					Sheet	2 of 2
M/s. Yachiyo Engineering Co.Ltd					Ground Water level 0.70 m	
Location	Gdh.Thinadhoo	Rig	Track Whd	Core Diameter	54mm	
Date of Started	13.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates
Date of Finished	13.01.2016	Casing Diameter	100mm	Elevation (m)		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N							
												5	10	15	20	25	30	35
10.00							Continue from Page 1											
11.00	X		D9	SS			Same as previous	8	10	6	16							
12.00	X		D10	SS			(10.50-12.00)m: Grain size ranged from medium to coarse	12	16	9	25							
13.00				WS														
14.00	X		D11	SS			(12.00-15.45)m: Sea shell fragments were present between these depth	7	10	13	23							
15.00	X		D12	SS				12	14	9	23							
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		Completely Weathered Rock
	Clay		Sand		Highly Weathered Rock
	Gravel		Organic Matter		Fresh Rock
	Laterite Nodules		Silty Sand		



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<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02	
<b>Client</b>	<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	1 of 2	
<b>Location</b>	Gdh.Thinadhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level	0.70 m
<b>Date of Started</b>	14.01.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	
<b>Date of Finished</b>	14.01.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft				
								15cm	15cm	15cm	N	10	20	30	40	50	60	70	80	90
												5	10	15	20	25	30	35	40	45
0.00							Ground level													
1.00	D1		DS				Blackish brown fine to medium sub angular to sub rounded CORAL SAND													
			WS																	
1.00	D2		SS	G.W.L. at 0.70 m	1.00		Very dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	25	HB								>50			
2.00	D3		SS		2.00		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	8	10	14	24						24			
3.00	D4		SS				(3.00-4.50)m: Grain size ranged from fine to coarse	8	13	8	21						21			
4.00			WS																	
4.50			CS		4.50		Off white highly weathered highly fractured CORAL ROCK	Cr=30%			RQD=00%									
5.00																				
5.50							Grayish white fine to medium CORAL SAND with coral rock fragments and sea shell fragments													
6.00	D5		SS		6.00		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	17	18	9	27						27			
6.45							Off white highly weathered highly fractured CORAL ROCK	Cr=15%			RQD=00%									
7.00			CS																	
7.95			WS				Grayish white fine to medium CORAL SAND with coral rock fragments and sea shell fragments													
8.00																				
9.00	D6		SS		9.00		Medium dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	15	8	10	18						18			
10.00			WS																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>SG</b> -Specific Gravity Test <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



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<b>Project</b>				<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
<b>Client</b>				M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
Location		Gdh.Thinadhoo	Rig	Track Whd	Core Diameter	54mm	Ground Water level 0.70 m		
Date of Started		14.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates		
Date of Finished		14.01.2016	Casing Diameter	100mm	Elevation (m)				

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft			
								15cm	15cm	15cm	Z			5	10	15	20	25	30
10.00							Continue from Page 1												
11.00	X		D7 SS				Same as previous  (12.00-15.45)M:Grain size ranged from fine to medium , sea shell and coral rock fragments were present	18	12	15	27								
12.00	X		D9 SS					15	10	12	22								
13.00			WS																
14.00	X		D10 SS					13	15	9	24								
15.00	X		D11 SS				13	8	15	23									
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH												
16.00																			
17.00																			
18.00																			
19.00																			
20.00																			

Sample Key / Test Key				Remarks	Logged By :								
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level								
GWL	: Ground Water Level observed inside the Borehole, after the saturation					Lahiru Supervised By:							
NE	Not Encountered				Lahiru Drilled By:								
HB	-Hammer Bounce				Danushka								
FD	- Free Down												
	Made Ground		Silt		Gravel		Laterite Nodules		Completely Weathered Rock		Highly Weathered Rock		Fresh Rock
	Clay		Sand		Organic Matter		Silty Sand						





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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	GA. Villingili	Rig		Core Diameter	54mm	Ground Water level	0.90 m
Date of Started	10.11.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	11.11.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N	5	10	15	20	25	30
0.00							Ground level										
1.00	D1		DS				Grayish white coarse to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
			WS														
1.00	D2		SS		1.00		Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	6	5	2	7						
2.00	D3		SS														
3.00	D4		SS		3.00		Very loose grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments	4	4	3	7						
4.00	D5		SS		4.50		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments and coral rock fragments	3	1	1	2						
5.00	D6		SS		6.00		Very dense yellowish off white fine to medium sub angular to sub rounded CORAL SAND with hard coral rock fragments	7	9	6	15						
6.00	D7		SS		7.50		Very dense grayish white fine to medium sub angular to sub rounded CORAL SAND with abundant amount of Coral rock fragments	40	HB		>50						
7.00	D8		SS		9.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments	16	38	HB	>50						
8.00																	
9.00																	
10.00																	

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



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<b>Project</b>		Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of			Borehole No	BH-01	
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd			Sheet	2 of 2	
Location	GA. Villingili	Rig		Core Diameter	54mm	Ground Water level	0.90 m
Date of Started	10.11.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	11.11.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %	
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>	
												SPT Resistance - Blows/ft	
10.00							Ground level						
11.00			D9	SS	10.50		Same as previous	4	2	10	12		
12.00				WS			Medium dense graysih off white fine to medium sub angular to sub rounded CORAL SAND						
13.00			D10	SS	12.00		Very dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with ample amount of hard Coral rock fragments	7	14	27	41		
14.00				WS									
15.00			D11	SS	13.50		Very dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with ample amount of hard Coral rock fragments	20	38	HB	>50		
15.00				WS									
15.00			D12	SS			Very dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with ample amount of hard Coral rock fragments	25	35	HB	>50		
15.00				WS									
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH						

Sample Key / Test Key				Remarks	Logged By :	
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru	
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Supervised By:	Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Drilled By:	Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)			
FD	- Free Down					
	Made Ground		Silt		Completely Weathered Rock	
	Clay		Sand		Highly Weathered Rock	
			Gravel		Fresh Rock	
			Organic Matter			
			Laterite Nodules			
			Silty Sand			



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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>			Borehole No	BH-02	
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd			Sheet	1 of 2	
Location	GA. Villingili	Rig		Core Diameter	54mm	Ground Water level	0.90 m
Date of Started	10.11.2015	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	11.11.2015	Casing Diameter	100mm	Elevation (m)			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00							Ground level										
1.00	D1		DS				Grayish white coarse to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
			WS														
1.00					1.00				4	4	5	9					
2.00	D2		SS				Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
			WS														
2.00																	
3.00	D3		SS					8	5	8	13						
			WS														
3.00																	
4.00	D4		SS				Very loose grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments										
			WS														
4.00																	
5.00	D5		SS				Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell fragments and coral rock fragments										
			WS														
5.00																	
6.00	D6		SS				Very dense yellowish off white fine to medium sub angular to sub rounded CORAL SAND with hard coral rock fragments										
			WS														
6.00																	
7.00	D7		SS				Very dense grayish white fine to medium sub angular to sub rounded CORAL SAND with abundant amount of Coral rock fragments										
			WS														
7.00																	
8.00	D8		SS				Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral rock fragments										
			WS														
8.00																	
9.00																	
9.00	D8		SS					3	4	4	8						
			WS														
9.00																	
10.00																	

SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	N - Natural Moisture Content	C - Consolidation	Remarks	Logged By :	
GWL	: Ground Water Level observed inside the Borehole, after the saturation	SS -SPT Sample	L - Atterberg Limit Test	UCT-Unconfined Compression			
NE	Not Encountered	W - Water Sample	G - Grain Size Analysis	CU - Consolidated Undrained	Existing ground level considered as the zero level	Lahiru	
HB	- Hammer Bounce	WS-Wgrey Sample	SG -Specific Gravity Test	UU-Unconsolidated Undrained			
FD	- Free Down	UD- Undisturbed Sample	B - Bulk Density	pH - Chemical	Supervised By:	Lahiru	
		CS- Core Sample	V - Vane Shear Test	O - Organic content			
		Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)	SO <sub>4</sub> <sup>2-</sup> - Sulphate Content	Drilled By:	Danushka	
				Cl - Chloride Content			
	Made Ground		Silt		Laterite Nodules		Completely Weathered Rock
	Clay		Sand		Organic Matter		Silty Sand
			Gravel		Highly Weathered Rock		Fresh Rock



<b>Project</b>				<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No		BH-02			
<b>Client</b>				M/s. Yachiyo Engineering Co.Ltd				Sheet		2 of 2			
Location		GA. Villingili		Rig				Core Diameter		54mm			
Date of Started		10.11.2015		Drilling Method		Rotary		Casing depth		15.00m			
Date of Finished		11.11.2015		Casing Diameter		100mm		Elevation (m)					
								Ground Water level				0.90 m	
								Coordinates					

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %									
								15cm	15cm	15cm	N	Undrained Shear Strength - t/m <sup>2</sup>									
Ground level								15cm	15cm	15cm	N	SPT Resistance - Blows/ft									
10.00							Ground level														
							Same as previous														
11.00	X		D9	SS	10.50		Medium dense grayish off white fine to medium sub angular to sub rounded CORAL SAND	4	3	3	6	6									
				WS																	
12.00	X		D10	SS	12.00		Very dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with ample amount of hard Coral rock fragments	7	8	19	27	27									
				WS																	
13.00																					
14.00	X		D11	SS	13.50		Very dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with ample amount of hard Coral rock fragments	10	11	16	27	27									
				WS																	
15.00	X		D12	SS			Very dense yellowish white fine to medium sub angular to sub rounded CORAL SAND with ample amount of hard Coral rock fragments														
				WS																	
15.45					15.45		END OF THE BORE HOLE AT 15.45m DEPTH					25									
16.00																					
17.00																					
18.00																					
19.00																					
20.00																					

Sample Key / Test Key				Remarks	Logged By :	
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS - SPT Sample	Existing ground level considered as the zero level	Lahiru	
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS - Wgrey Sample		Supervised By:	Lahiru
NE	Not Encountered	UD - Undisturbed Sample	CS - Core Sample		Drilled By:	Danushka
HB	- Hammer Bounce	Cr - Core Recovery (%)	RQD - Rock Quality Designation (%)			
FD	- Free Down					
	Made Ground		Silt		Laterite Nodules	
	Clay		Sand		Silty Sand	
	Gravel		Organic Matter		Completely Weathered Rock	
	Fresh Rock		Highly Weathered Rock		Fresh Rock	



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<b>Project</b>	<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-01	
<b>Client</b>	<b>M/s. Yachiyo Engineering Co.Ltd</b>				Sheet	1 of 2	
<b>Location</b>	Gn.Fuahmulah	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.10 m
<b>Date of Started</b>	06.01.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	
<b>Date of Finished</b>	06.01.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft	
								15cm	15cm	15cm	N						
												5	10	15	20	25	30
0.00							Ground level										
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shell fragments										
			WS														
1.00	D2		SS		1.00		Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	5	5	2	7						
			WS														
2.00	D3		SS		2.00		Medium dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments	8	12	14	26						
			WS														
3.00	D4		SS		3.00		Very Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral fragments	17	HB		>50						
			WS														
4.00																	
5.00	D5		SS					17	38		>50						
			WS														
6.00	D6		SS					13	14	HB	>50						
			WS														
6.10					6.10		Off white highly weathered moderately fractured CORAL ROCK	Cr=16%			RQD=0%						
			CS														
7.00																	
7.60					7.60		Off white highly weathered slightly fractured CORAL ROCK	Cr=20%			RQD=15%						
			CS														
8.00																	
9.00																	
9.10					9.10		Off white highly weathered intensely fractured coarse sub angular to sub rounded CORAL ROCK <b>(HIGHLY WEATHRED ROCK)</b>	Cr=0%			RQD=0%						
			CS														
10.00																	

<b>SPT</b>	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)	<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test	<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content	<b>Remarks</b>	<b>Logged By :</b>	
<b>GWL</b>	: Ground Water Level observed inside the Borehole, after the saturation				Existing ground level considered as the zero level	Lahiru	
<b>NE</b>	Not Encountered					Supervised By:	
<b>HB</b>	-Hammer Bounce					Lahiru	
<b>FD</b>	- Free Down					Drilled By:	
						Danushka	
	Made Ground		Silt		Gravel		Laterite Nodules
	Clay		Sand		Organic Matter		Silty Sand
							Completely Weathered Rock
							Highly Weathered Rock
							Fresh Rock



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<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-01	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2	
<b>Location</b>	Gn.Fuahmulah	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.10 m
<b>Date of Started</b>	06.01.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	-
<b>Date of Finished</b>	06.01.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>	-		

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N			10	20	30	40	50
10.00							Continue from Page 1											
			CS				Same as previous											
11.00					10.60		Off white highly weathered slightly fractured CORAL ROCK	Cr=21%		RQD=16%								
12.00					12.10		Off white highly weathered highly fractured CORAL ROCK; The latter part of the core was recovered as, highly fractured cobble size coral rock	Cr=38%		RQD=0%								
13.00					13.60		Off white highly weathered highly fractured CORAL ROCK; The latter part of the core was recovered as, highly fractured cobble size coral rock	Cr=73%		RQD=0%								
14.00			CS		15.10		END OF THE BORE HOLE AT 15.10m DEPTH											
15.00																		
16.00																		
17.00																		
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample SS -SPT Sample W - Water Sample WS-Wgrey Sample UD- Undisturbed Sample CS- Core Sample Cr - Core Recovery (%) RQD-Rock Quality Designation (%)	N - Natural Moisture Content L - Atterberg Limit Test G - Grain Size Analysis SG -Specific Gravity Test B - Bulk Density V - Vane Shear Test	C - Consolidation UCT-Unconfined Compression CU - Consolidated Undrained UU-Unconsolidated Undrained pH - Chemical O - Organic content SO <sub>4</sub> <sup>2-</sup> - Sulphate Content Cl - Chloride Content	Existing ground level considered as the zero level
GWL	: Ground Water Level observed inside the Borehole, after the saturation				Lahiru
NE	Not Encountered				Supervised By:
HB	-Hammer Bounce				Lahiru
FD	- Free Down				Drilled By:
					Danushka
	Made Ground		Silt		Laterite Nodules
	Clay		Sand		Silty Sand
	Gravel		Organic Matter		Completely Weathered Rock
	Fresh Rock				Highly Weathered Rock



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<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	1 of 2
Location	Gn.Fuahmulah	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.10 m
Date of Started	07.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	07.01.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft				
								15cm	15cm	15cm	N	10	20	30	40	50	60	70	80	90
												5	10	15	20	25	30	35	40	45
0.00							Ground level													
1.00	D1		DS				Grayish white fine to medium sub angular to sub rounded CORAL SAND with coral fragments and sea shell fragments													
			WS																	
1.00	D2		SS		1.00		Medium Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments	8	9	9	18									
			WS																	
2.00	D3		SS						18	12	13	25								
			WS																	
3.00	D4		SS		3.00		Very Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral fragments	12	14	HB	>50									
			WS																	
4.00																				
5.00	D5		SS		4.50		Medium Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral fragments	6	6	7	13									
			WS																	
6.00	D6		SS		6.00		Very Dense grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shells and coral rock fragments	HB			>50									
6.20					6.20															
7.00							Off white highly weathered moderately fractured CORAL ROCK	Cr=98%			RQD=10%									
7.70					7.70		Off white highly weathered slightly fractured CORAL ROCK; Latter part of the core run is cobble size coral rock	Cr=44%			RQD=28%									
9.20					9.20		Off white highly weathered intensely fractured coarse sub angular to sub rounded CORAL ROCK	Cr=34%			RQD=30%									
10.00																				

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka	



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<b>Project</b>	Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of				Borehole No	BH-02	
<b>Client</b>	M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2	
<b>Location</b>	Gn.Fuahmulah	Rig	Track Whd	Core Diameter	54mm	Ground Water level	1.10 m
<b>Date of Started</b>	07.01.2016	<b>Drilling Method</b>	Rotary	<b>Casing depth</b>	15.00m	<b>Coordinates</b>	
<b>Date of Finished</b>	07.01.2016	<b>Casing Diameter</b>	100mm	<b>Elevation (m)</b>			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N			5	10	15	20	25
10.00							Continue from Page 1											
							Same as previous											
11.00			CS		10.70		Off white highly weathered highly fractured CORAL ROCK	Cr=21%		RQD=00%								
12.00			CS		12.20		Off white highly weathered highly fractured CORAL ROCK	Cr=23%		RQD=0%								
13.00			CS		13.70		Off white highly weathered highly fractured CORAL ROCK; The latter part of the core was recovered as, highly fractured cobble size coral rock	Cr=30%		RQD=10%								
14.00			CS		15.20		END OF THE BORE HOLE AT 15.20m DEPTH											
15.00																		
16.00																		
17.00																		
18.00																		
19.00																		
20.00																		

Sample Key / Test Key				Remarks	Logged By :	
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru	
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Supervised By:	Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Drilled By:	Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)			
FD	- Free Down					
	Made Ground		Silt		Completely Weathered Rock	
	Clay		Sand		Highly Weathered Rock	
	Gravel		Organic Matter		Laterite Nodules	
	Silty Sand		Fresh Rock			





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<b>Project</b>		Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of			Borehole No	BH-01	
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd			Sheet	1 of 2	
Location	S.Hithadhoo	Rig		Core Diameter	54mm	Ground Water level	0.70 m
Date of Started	09.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	09.01.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	5	10	15	20	25	30	35
0.00							Ground level											
1.00	D1		DS				Off white coarse to medium sub angular to sub rounded CORAL SAND with coral and sea shell fragments											
			WS															
1.00	D2		SS		1.00		Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral and sea shell fragments	9	12	13	25							
			WS															
2.00	D3		SS						11	9	7	16						
			WS															
3.00	D4		SS						4	5	10	15						
			WS															
4.00																		
5.00	D5		SS					9	5	8	13							
			WS															
6.00	D6		SS					10	7	10	17							
6.45					6.45		Off white moderately fractured porous CORAL ROCK					Cr=47%	RQD=0%					
7.00			CS															
7.95					7.95		Grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell and coral fragments											
			WS															
9.00	D7		SS		9.00		Loose grayish white fine to medium sub angular to sub rounded CORAL SAND with sea shell and coral fragments	8	3	4	7							
			WS															
10.00																		

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



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Email: info@elsamin.com.mv, Web: www.elsamin.com.mv

<b>Project</b>		Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of			Borehole No	BH-01	
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd			Sheet	2 of 2	
Location	S.Hithadhoo	Rig		Core Diameter	54mm	Ground Water level	0.70 m
Date of Started	09.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	09.01.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %	
								15cm	15cm	15cm	N	10	20
10.00							Ground level						
11.00	D8		SS				Same as previous	11	5	4	9		
12.00			WS										
13.00	D9		SS		12.00		Medium dense yellowish white fine to coarse sub angular to sub rounded CORAL SAND with seashell and coral fragments	15	18	11	29		
14.00			WS										
15.00	D10		SS						23	21	9	30	
16.00			WS										
17.00	D11		SS		15.45		END OF THE BORE HOLE AT 15.45m DEPTH	13	16	9	25		
18.00													
19.00													
20.00													

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		Laterite Nodules
	Clay		Sand		Highly Weathered Rock
	Gravel		Organic Matter		Silty Sand
	Fresh Rock				Completely Weathered Rock



<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>			Borehole No	BH-02	
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd			Sheet	1 of 2	
Location	S.Hithadhoo	Rig		Core Diameter	54mm	Ground Water level	0.70 m
Date of Started	10.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	10.01.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	Sa. Cond	Sa. NO.	Sa. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	10	20	30	40	50	60	70
0.00							Ground level											
1.00	D1		DS				Brownish white fine to medium sub angular to sub rounded CORAL SAND											
			WS															
1.00					1.00		Medium dense grayish white fine to coarse sub angular to sub rounded CORAL SAND with coral and sea shell fragments	12	11	9	20							
	D2		SS															
			WS															
2.00																		
	D3		SS						9	10	8	18						
			WS															
3.00																		
	D4		SS					5	6	7	13							
			WS															
4.00																		
	D5		SS					5	9	15	24							
			WS															
5.00																		
6.00																		
					6.00		Off white fresh CORAL ROCK; Latter part of the core is highly fractured					Cr=64%	RQD=13%					
7.00																		
	D6		SS		7.00		Very dense grayish white medium to coarse sub angular to sub rounded CORAL SAND with coral rock fragments	16	HB		>50						>50	
			WS															
8.00																		
	D7		SS					15	18	HB	>50						>50	
			WS															
9.00																		
					9.45		Off white fresh CORAL ROCK; Latter part of the core is intensely fractured					Cr=40%	RQD=0%					
10.00																		

<b>SPT</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value) <b>GWL</b> : Ground Water Level observed inside the Borehole, after the saturation <b>NE</b> Not Encountered <b>HB</b> -Hammer Bounce <b>FD</b> - Free Down		<b>D</b> - Disturbed Sample <b>SS</b> -SPT Sample <b>W</b> - Water Sample <b>WS</b> -Wgrey Sample <b>UD</b> - Undisturbed Sample <b>CS</b> - Core Sample <b>Cr</b> - Core Recovery (%) <b>RQD</b> -Rock Quality Designation (%)		<b>N</b> - Natural Moisture Content <b>L</b> - Atterberg Limit Test <b>G</b> - Grain Size Analysis <b>B</b> - Bulk Density <b>V</b> - Vane Shear Test		<b>C</b> - Consolidation <b>UCT</b> -Unconfined Compression <b>CU</b> - Consolidated Undrained <b>UU</b> -Unconsolidated Undrained <b>pH</b> - Chemical <b>O</b> - Organic content <b>SO<sub>4</sub><sup>2-</sup></b> - Sulphate Content <b>Cl</b> - Chloride Content		<b>Remarks</b> Existing ground level considered as the zero level	<b>Logged By :</b> Lahuru <b>Supervised By:</b> Lahuru <b>Drilled By:</b> Danushka
Made Ground Clay	Silt Sand	Gravel Organic Matter	Laterite Nodules Silty Sand	Completely Weathered Rock Highly Weathered Rock	Fresh Rock				



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Email: info@elsamin.com.mv, Web: www.elsamin.com.mv

<b>Project</b>		<b>Topographic survey and soil investigation for the preparatory survey on the digital terrestrial television network project in the Republic of</b>				Borehole No	BH-02
<b>Client</b>		M/s. Yachiyo Engineering Co.Ltd				Sheet	2 of 2
Location	S.Hithadhoo	Rig		Core Diameter	54mm	Ground Water level	0.70 m
Date of Started	10.01.2016	Drilling Method	Rotary	Casing depth	15.00m	Coordinates	
Date of Finished	10.01.2016	Casing Diameter	100mm	Elevation (m)			

Depth (m)	So. Cond	So. NO.	So. Type	Reduced level	Depth (m)	Legend	Soil Description	Field Records (SPT)				Moisture Content - %		Undrained Shear Strength - t/m <sup>2</sup>		SPT Resistance - Blows/ft		
								15cm	15cm	15cm	N	10	20	30	40	50	60	70
10.00							Ground level											
11.00							Same as previous											
12.00					10.95		Off white intensely fractured CORAL ROCK; Core was recovered as cobble size sub angular to sub rounded Coral rock fragments			Cr=10%								
13.00			D8	SS	12.00		Wash Sample: Off white fine to medium CORAL SAND with coral and sea shell fragments	18	20	HB	>50							
14.00			D9	SS	13.50		Medium dense pale grayish off white fine to medium sub angular to sub rounded CORAL SAND	17	12	15	27							
15.00			D10	SS	15.00		Dense pale grayish off white CORAL SAND	15	18	20	38							
16.00					15.45		END OF THE BORE HOLE AT 15.45m DEPTH											

Sample Key / Test Key				Remarks	Logged By :
SPT	Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (not N-value)	D - Disturbed Sample	SS -SPT Sample	Existing ground level considered as the zero level	Lahiru
GWL	: Ground Water Level observed inside the Borehole, after the saturation	W - Water Sample	WS-Wgrey Sample		Lahiru
NE	Not Encountered	UD- Undisturbed Sample	CS- Core Sample		Danushka
HB	-Hammer Bounce	Cr - Core Recovery (%)	RQD-Rock Quality Designation (%)		
FD	- Free Down				
	Made Ground		Silt		
	Clay		Sand		
	Gravel		Organic Matter		
	Laterite Nodules		Silty Sand		
	Completely Weathered Rock		Highly Weathered Rock		
	Fresh Rock				

# **Appendices**

## **Appendices 8 Outline Design Drawing**

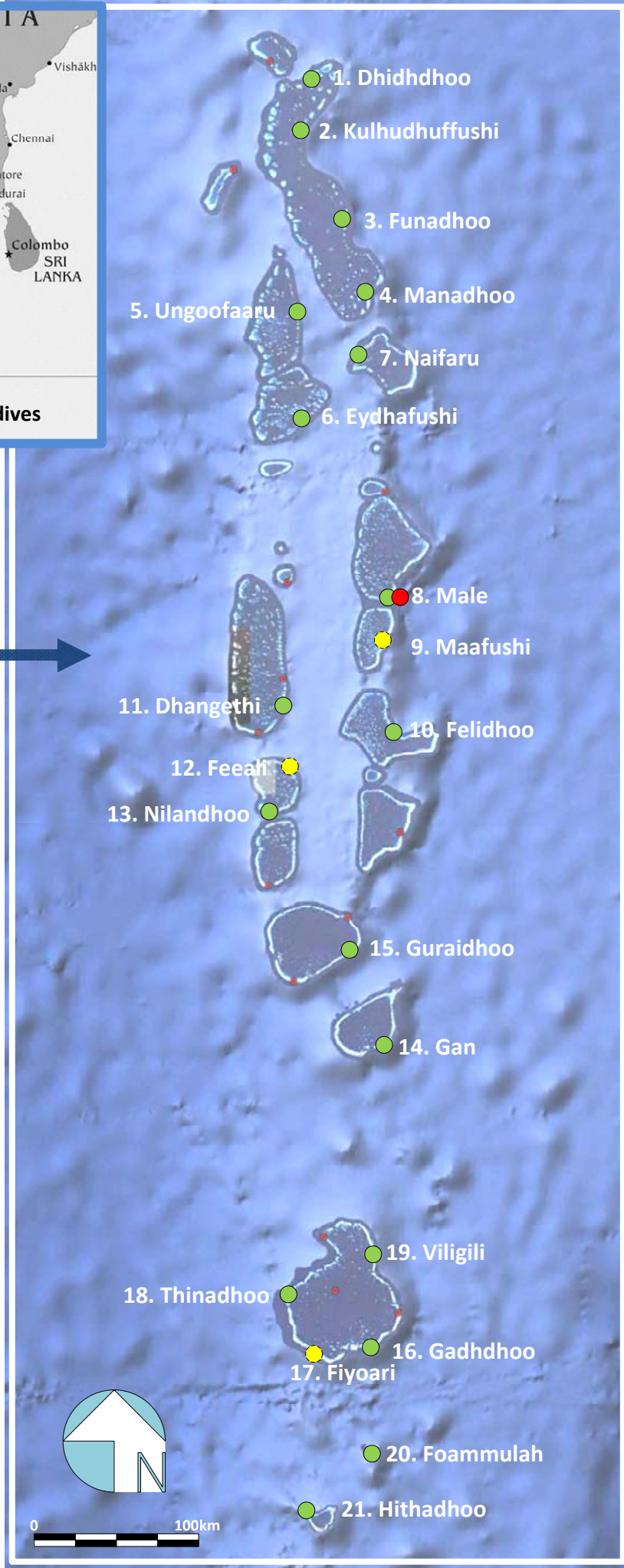
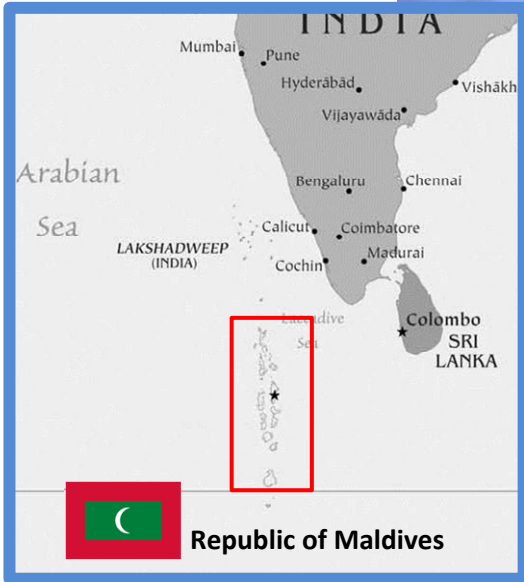
## Appendix 8 Diagram of Outline Design

No	Title
G-1	Project sites
A-1	Block Diagram of Digital Terrestrial Television Network
B-1	Transmitter Schematic Diagram (Dhidhdhoo)
B-2	Transmitter Schematic Diagram (Kulhudhufushi)
B-3	Transmitter Schematic Diagram (Funadhoo)
B-4	Transmitter Schematic Diagram (Manadhoo)
B-5	Transmitter Schematic Diagram (Ungoofaaru)
B-6	Transmitter Schematic Diagram (Eydhafushi)
B-7	Transmitter Schematic Diagram (Naifaru)
B-8	Transmitter Schematic Diagram (Male')
B-9	Transmitter Schematic Diagram (Maafushi)
B-10	Transmitter Schematic Diagram (Felidhoo)
B-11	Transmitter Schematic Diagram (Dhangethi)
B-12	Transmitter Schematic Diagram (Feeali)
B-13	Transmitter Schematic Diagram (Nilandhoo)
B-14	Transmitter Schematic Diagram (Gan)
B-15	Transmitter Schematic Diagram (Guraidhoo)
B-16	Transmitter Schematic Diagram (Gadhdhoo)
B-17	Transmitter Schematic Diagram (Fiyoari)
B-18	Transmitter Schematic Diagram (Thinadhoo)
B-19	Transmitter Schematic Diagram (Viligili)
B-20	Transmitter Schematic Diagram (Foammulah)
B-21	Transmitter Schematic Diagram (Hithadhoo)
C-1	Overall view of NOC
C-2	NOC Block Diagram
C-3	PSM Block Diagram
C-4	MMS&MoHA Block Diagram
C-5	Broadcaster Block Diagram
AA-1	TRANSMITTER BUILDING PLAN
AA-2	TRANSMITTER BUILDING ELEVATION & SECTION
AA-3	TRANSMITTER BUILDING DETAIL
AA-4	TRANSMITTER BUILDING ELEVATION & SECTION
AA-5	TRANSMITTER BUILDING DETAIL OF STAIR
AA-6	TRANSMITTER BUILDING FITTING SCHEDULE
AS-1	TRANSMITTER BUILDING FOUNDATION PLAN AND 1 <sup>st</sup> , 2 <sup>nd</sup> , ROOF FRAMING

	PLAN
AS-2	TRANSMITTER BUILDING FRAMING ELEVATION
AS-3	TRANSMITTER BUILDING ALLOWABLE BEARING CAPACITY 60kN/m <sup>2</sup> FOUNDATION SCHEDULE
AS-4	TRANSMITTER BUILDING ALLOWABLE SOIL BEARING CAPACITY 70kN/m <sup>2</sup> FOUNDATION SCHEDULE
AS-5	TRANSMITTER BUILDING ALLOWABLE SOIL BEARING CAPACITY 100kN/m <sup>2</sup> FOUNDATION SCHEDULE
AS-6	TRANSMITTER BUILDING ALLOWABLE SOIL BEARING CAPACITY 140kN/m <sup>2</sup> FOUNDATION SCHEDULE
AS-7	TRANSMITTER BUILDING GIRDER SCHEDULE COLUMN SCHEDULE
AS-8	TRANSMITTER BUILDING BAR ARRANGEMENT OF STAIR WALL AND SLAB SCHEDULE
AS-9	TRANSMITTER BUILDING BAR ARRANGEMENT OF FRAMING ELEVATION
E-1	TRANSMITTER BUILDING LEGEND FOR SYSTEM & WIRING ELECTRICAL PANEL
E-2	TRANSMITTER BUILDING POWER SUPPLY PLAN
E-3	TRANSMITTER BUILDING LIGHTING FIXTURE & OUTLET SOCKET PLAN
M-1	TRANSMITTER BUILDING VENTILATION AND AIR CONDITIONING SYSTEM EQUIPMENT SCHEDULE
L-1	Layout Plan (Dhidhdhoo)
L-2	Layout Plan (Kulhudhufushi)
L-3	Layout Plan (Funadhoo)
L-4	Layout Plan (Manadhoo)
L-5	Layout Plan (Ungoofaaru)
L-6	Layout Plan (Eydhafushi)
L-7	Layout Plan (Naifaru)
L-8	Layout Plan (Male')
L-9	Layout Plan (Maafushi)
L-10	Layout Plan (Felidhoo)
L-11	Layout Plan (Dhangethi)
L-12	Layout Plan (Feeali)
L-13	Layout Plan (Nilandhoo)
L-14	Layout Plan (Gan)
L-15	Layout Plan (Guraidhoo)
L-16	Layout Plan (Gadhdhoo)
L-17	Layout Plan (Fiyoari)
L-18	Layout Plan (Thinadhoo)
L-19	Layout Plan (Viligili)

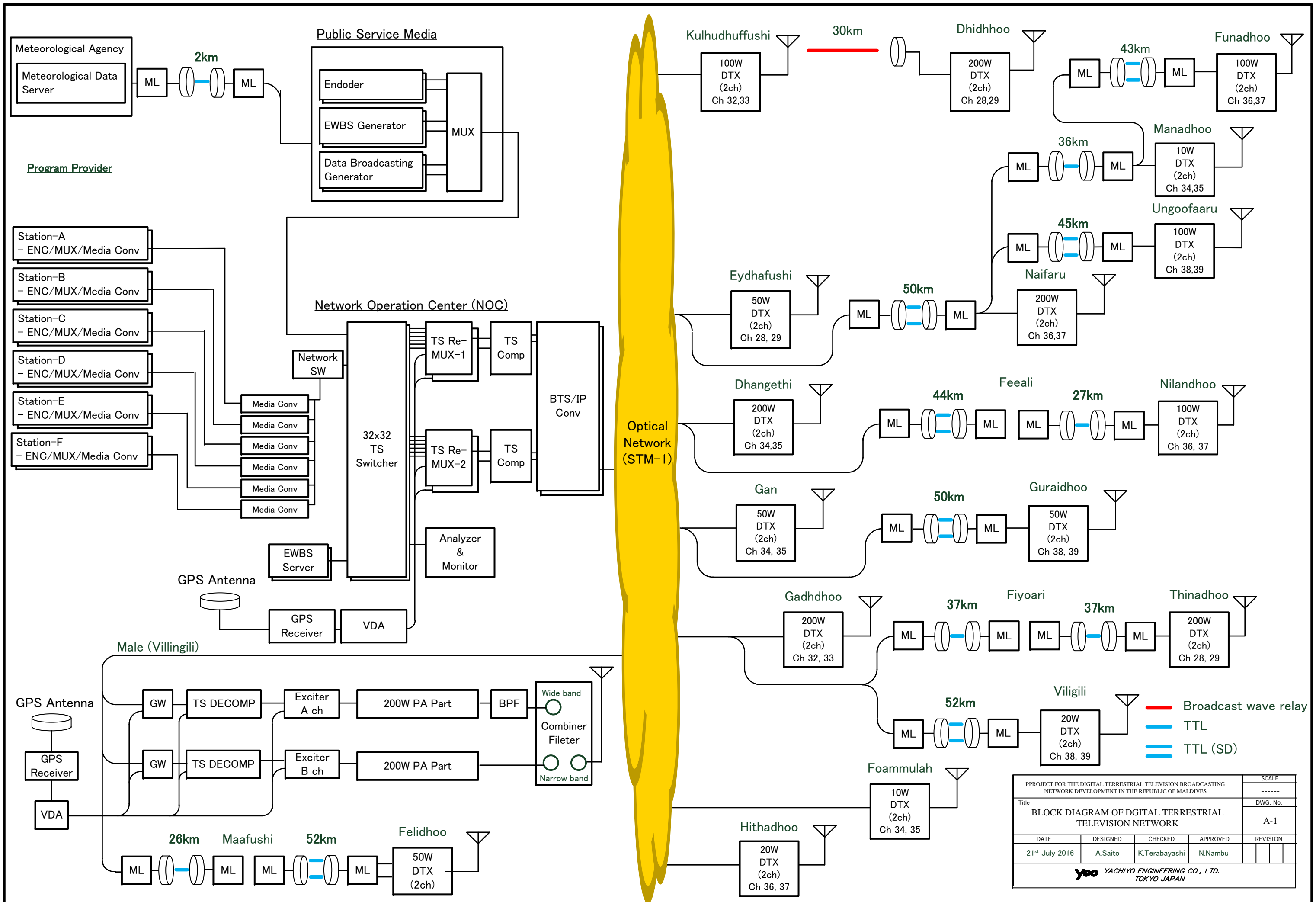


L-20	Layout Plan (Foammulah)
L-21	Layout Plan (Hithadhoo)



	Network Operation Center
	Transmitting Station
	Micro Wave Relay Station

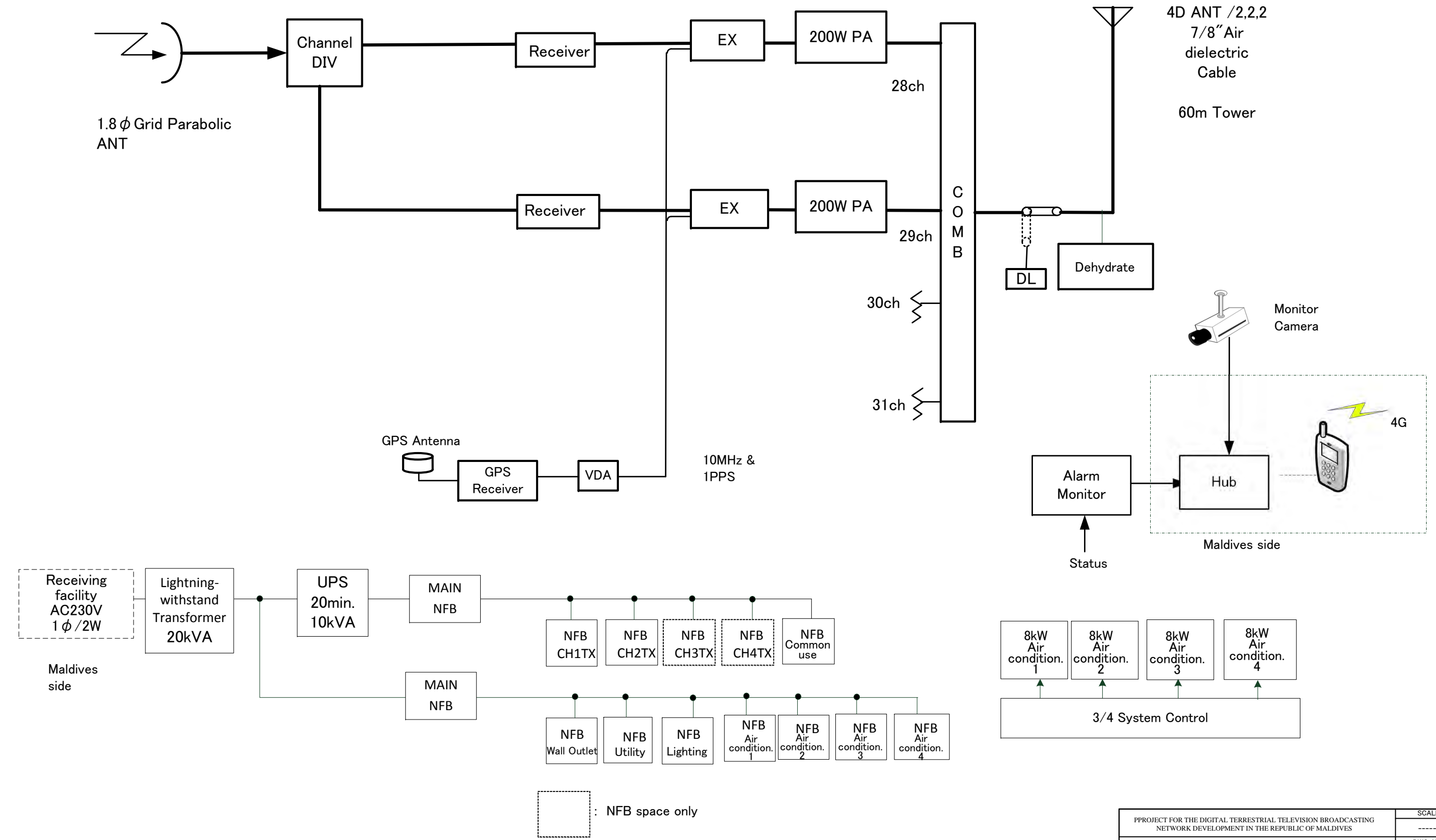
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DWG. No.	G-1			
Title	DESIGNED	CHECKED	APPROVED	REVISION
	21 <sup>st</sup> July, 2016	A. Saito	K. Terabayashi	N. Nambu
<b>YPC</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				



PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE
Title					DWG. No.
BLOCK DIAGRAM OF DIGITAL TERRESTRIAL TELEVISION NETWORK					A-1
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July 2016	A.Saito	K.Terabayashi	N.Nambu		
<b>yec</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN					

From  
Kulhudhufushi  
32ch 33ch

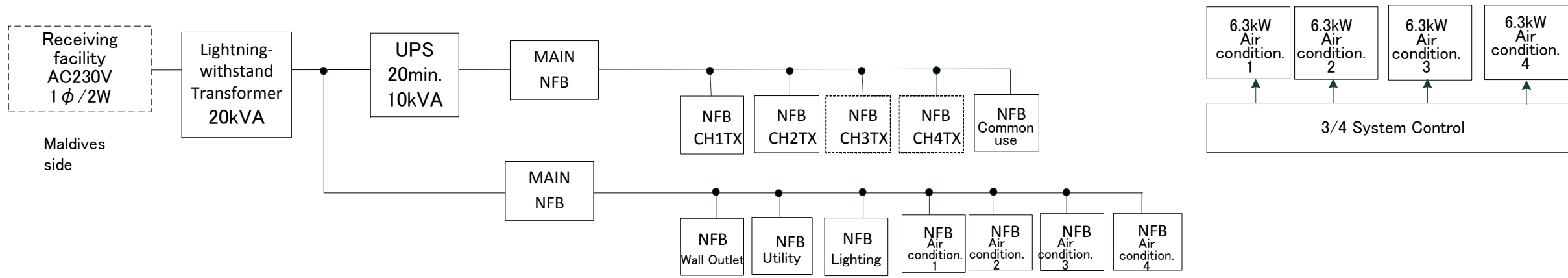
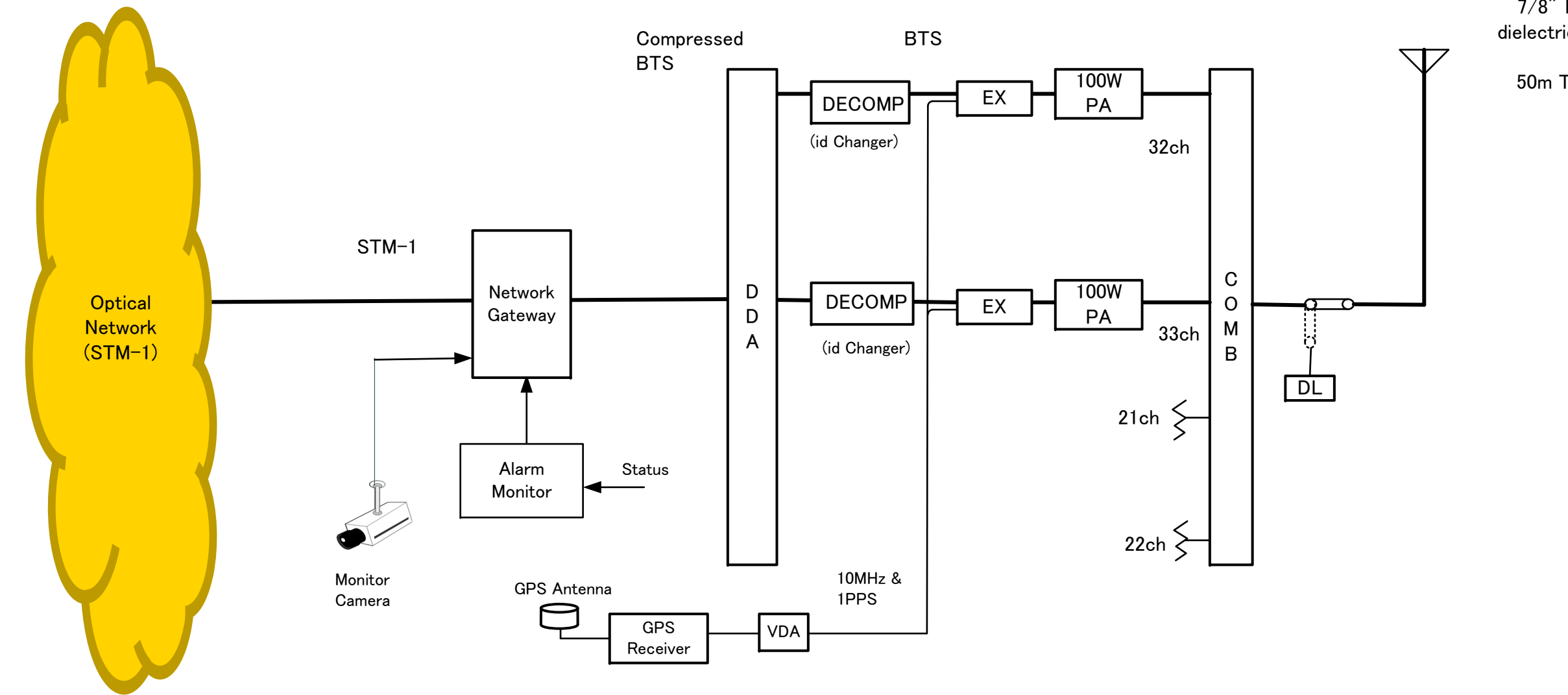
## 200W DTX ( 2sets)



PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Dhidhdhoo Transmitter Schematic Diagram (On Air receiving)				DWG. No.
				B-1
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

# 100W DTX ( 2sets)

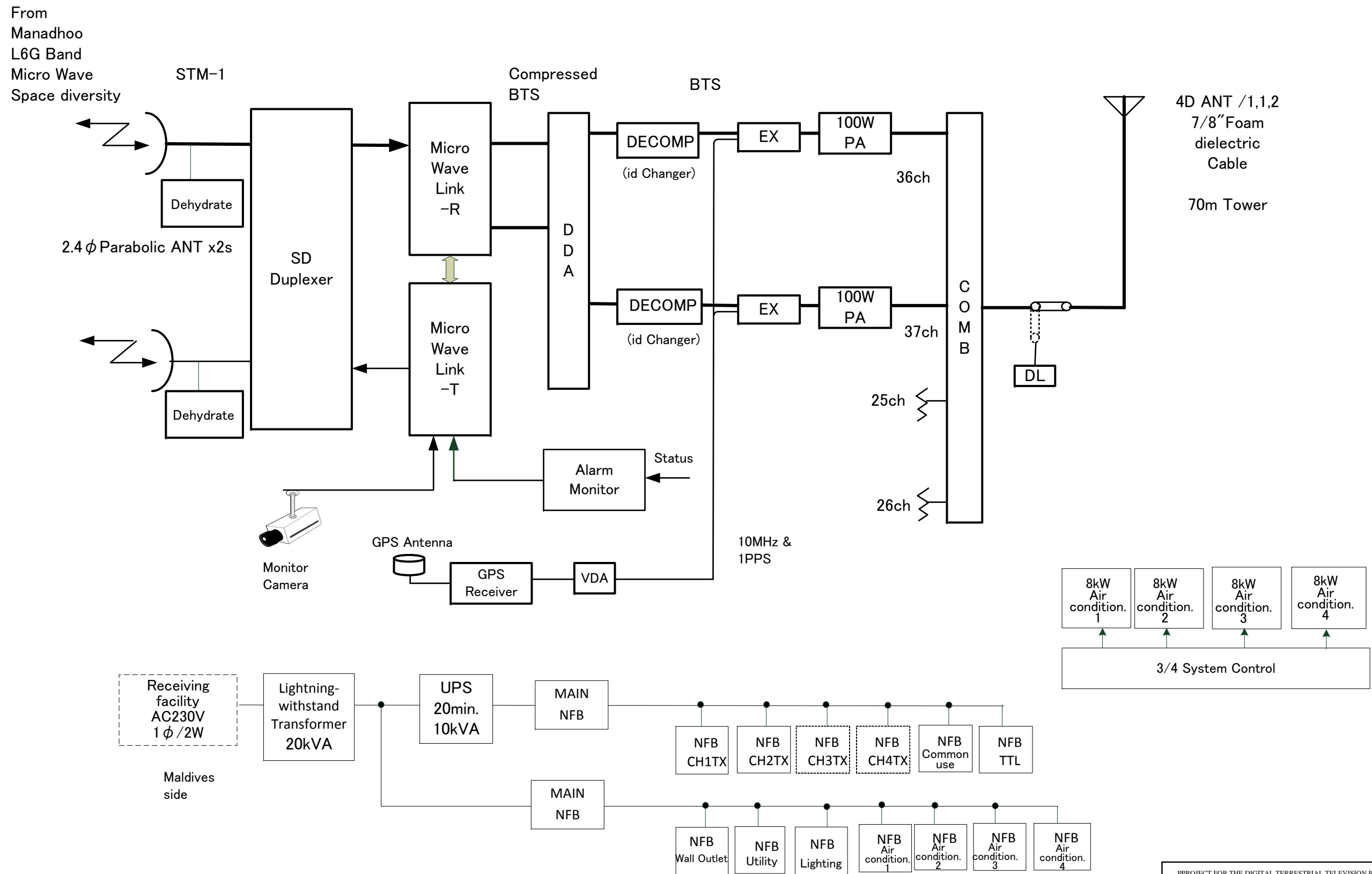
4D ANT /2,2,2,2  
7/8" Foam  
dielectric Cable  
50m Tower



: NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE
Title					-----
Kulhudhufushi Transmitter Schematic Diagram (Optical receiving)					DWG. No.
					B-2
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu		
<b>yao</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN					

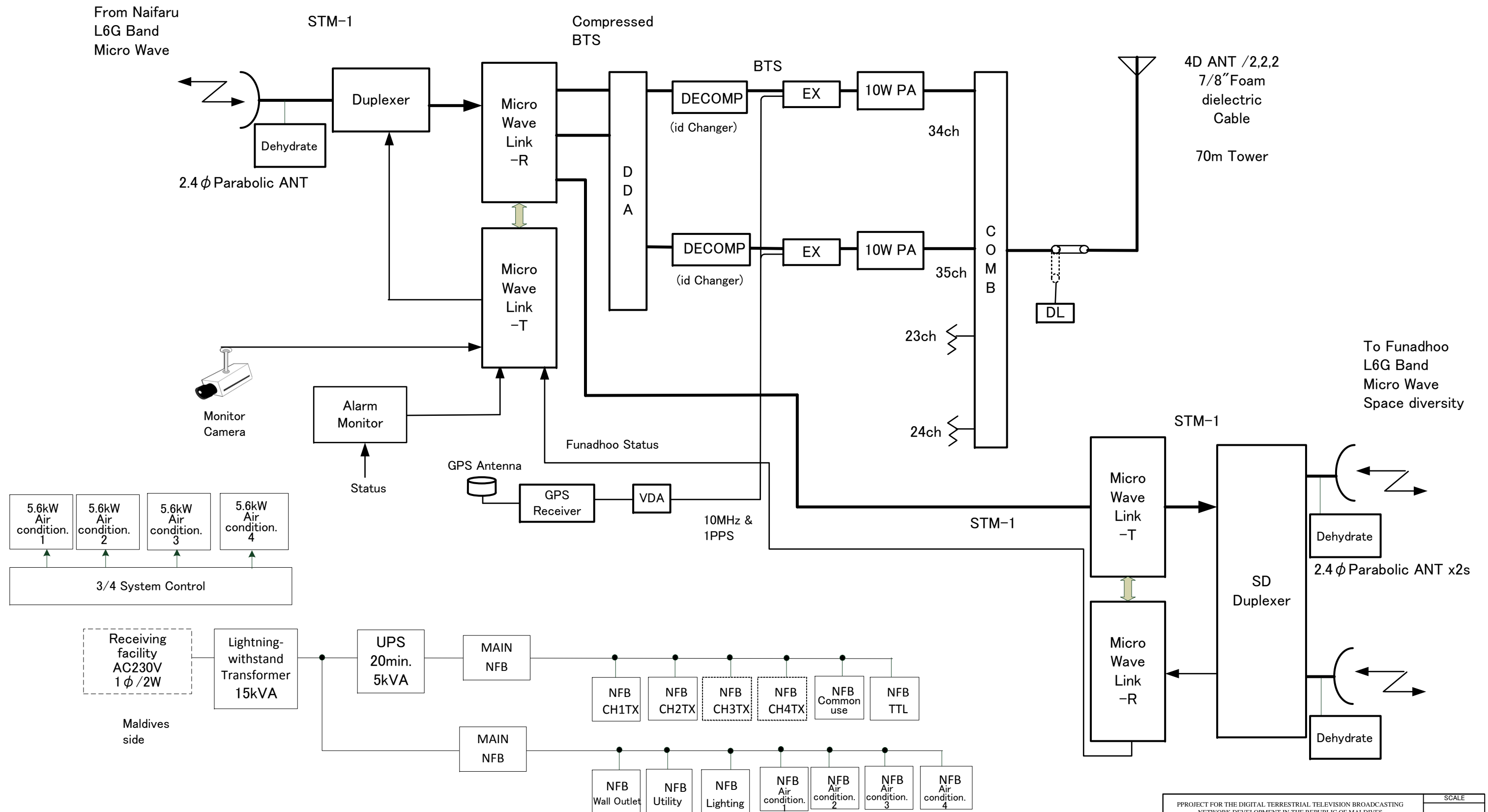
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PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Funadhoo Transmitter Schematic Diagram (SHF receiving)				DWG. No.
				B-3
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21st July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

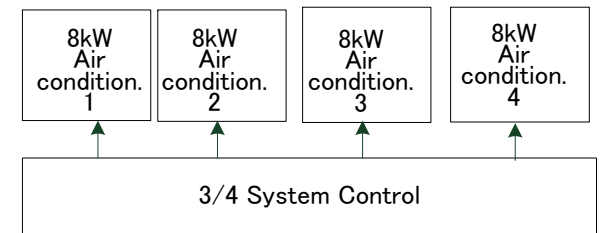
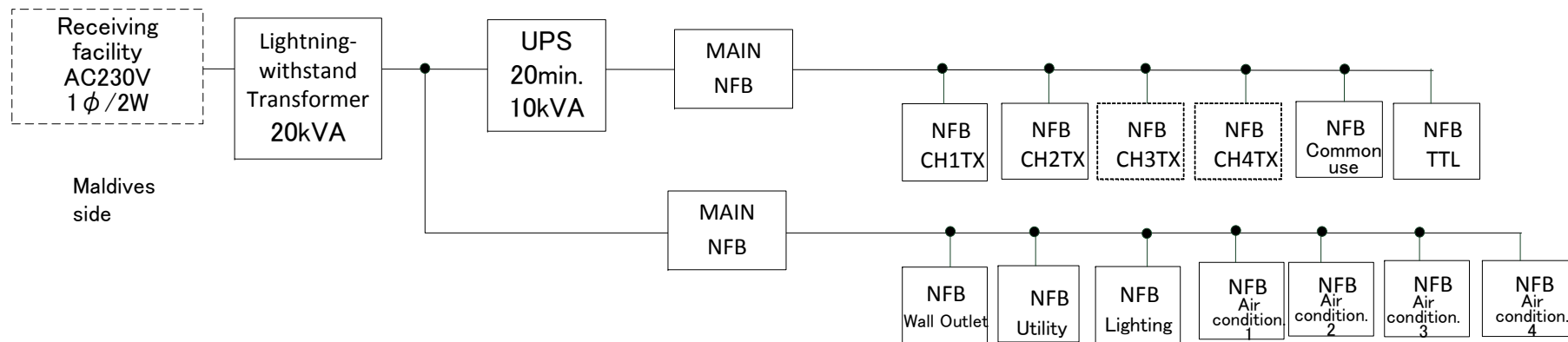
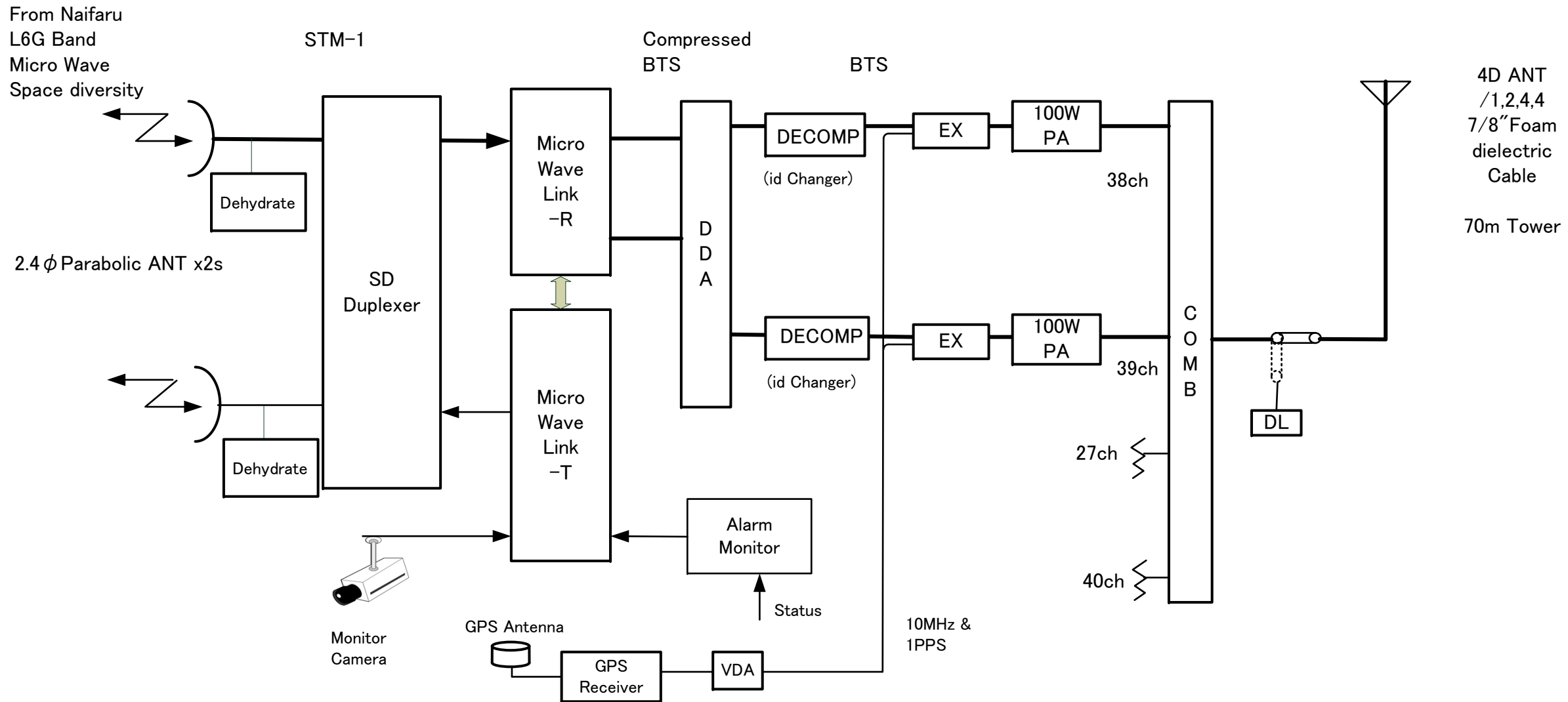
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□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Manadhoo Transmitter Schematic Diagram (SHF receiving)				DWG. No.
				B-4
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

# 100W DTX ( 2sets)

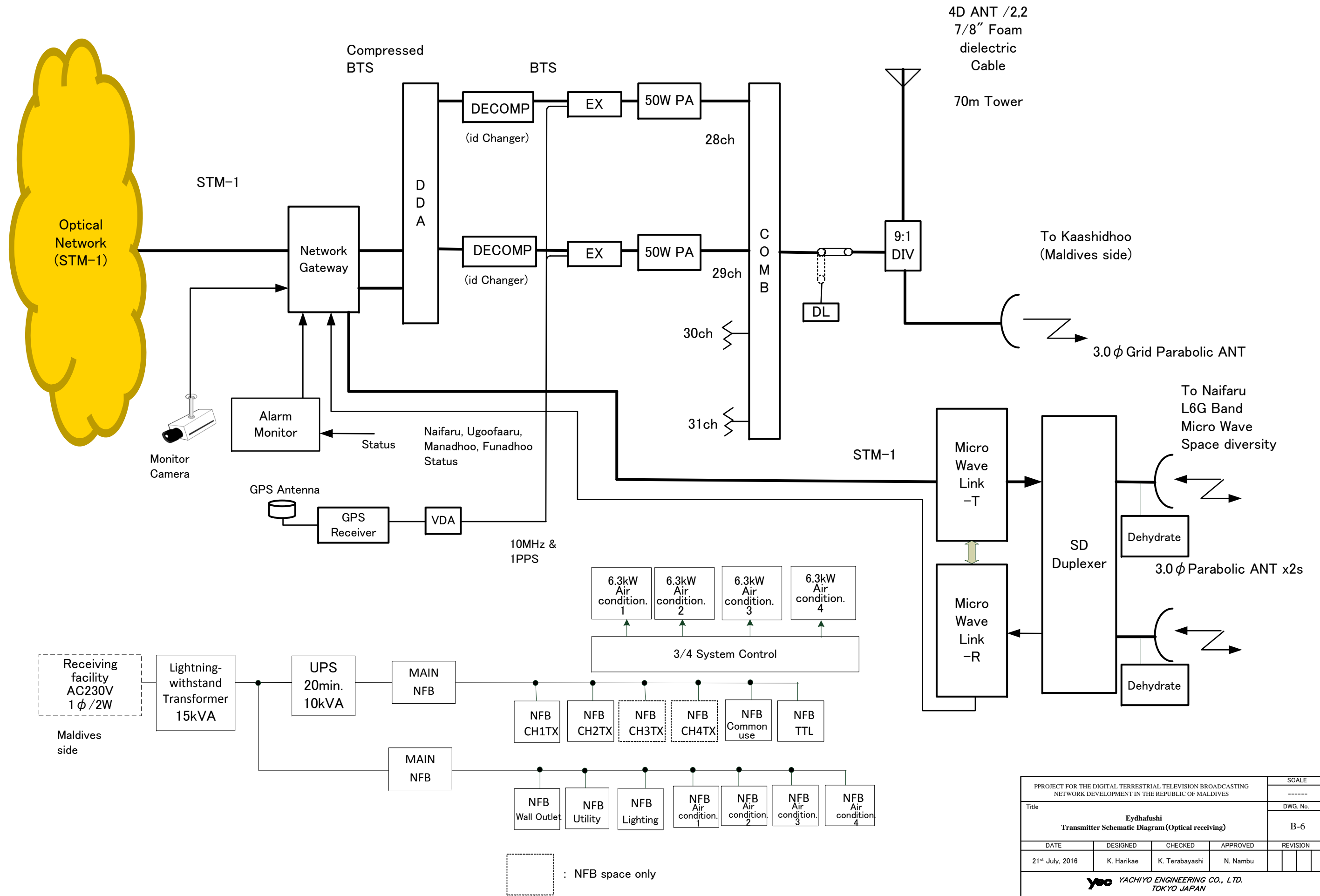


□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Ugoofaaru Transmitter Schematic Diagram (SHF receiving)				DWG. No.
				B-5
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				



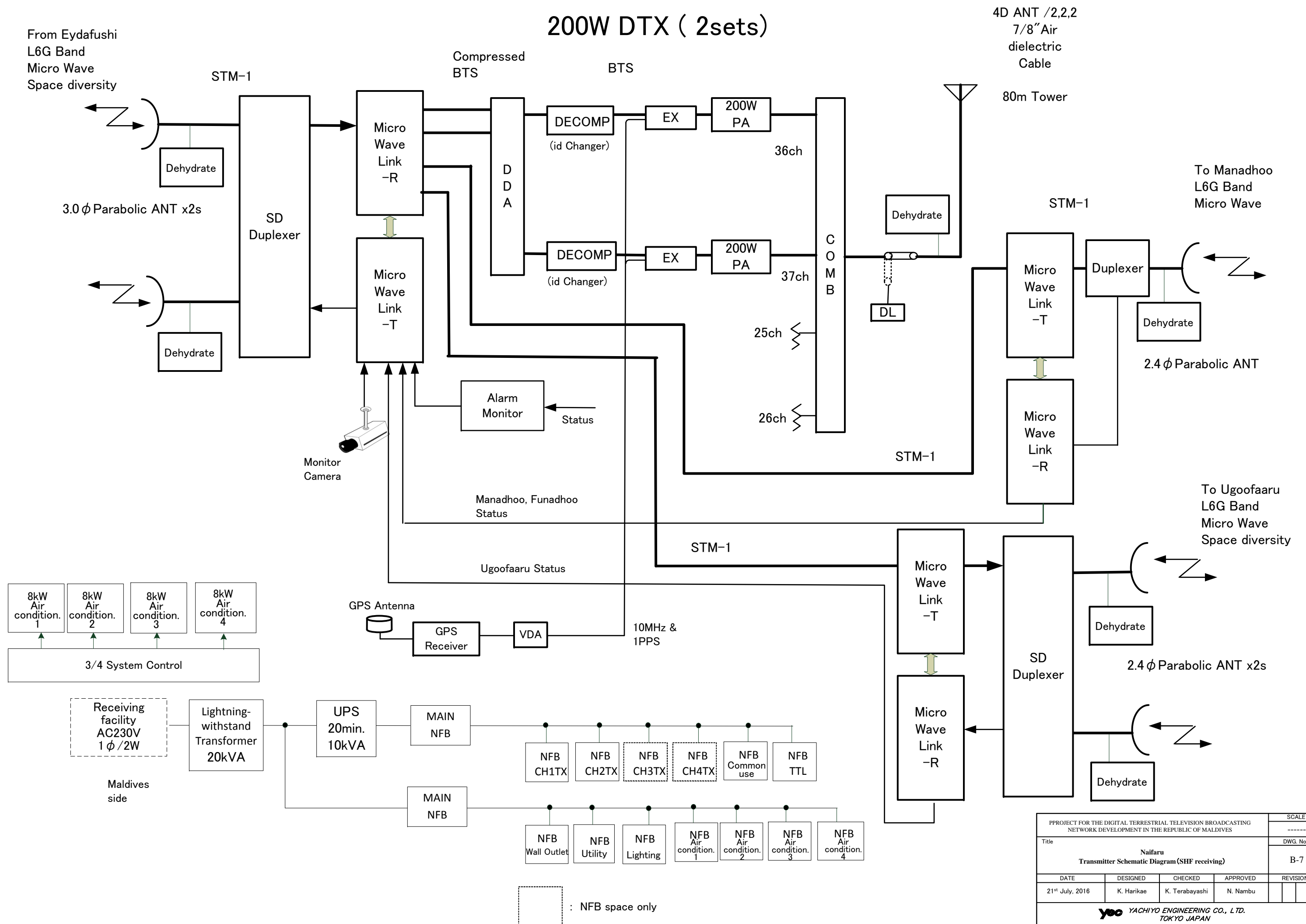
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□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Eydhafushi Transmitter Schematic Diagram (Optical receiving)				DWG. No.
				B-6
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

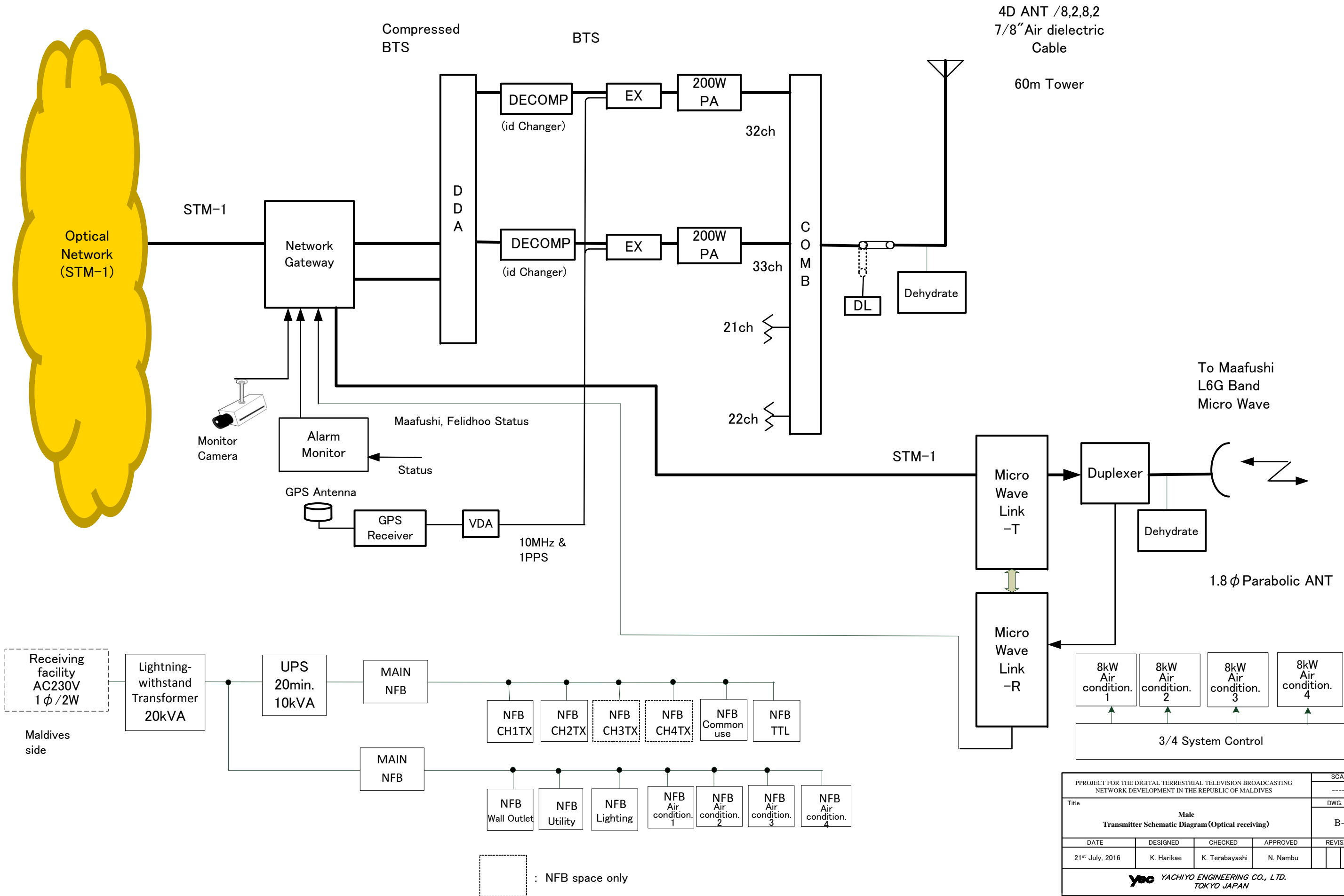
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PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Naifaru Transmitter Schematic Diagram (SHF receiving)				DWG. No.
				B-7
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>yec</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

□ : NFB space only

# 200W DTX ( 2sets)



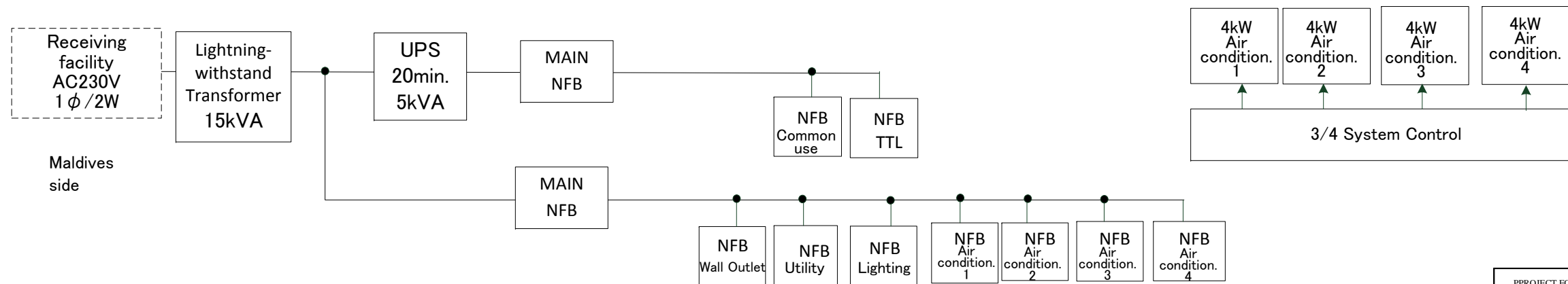
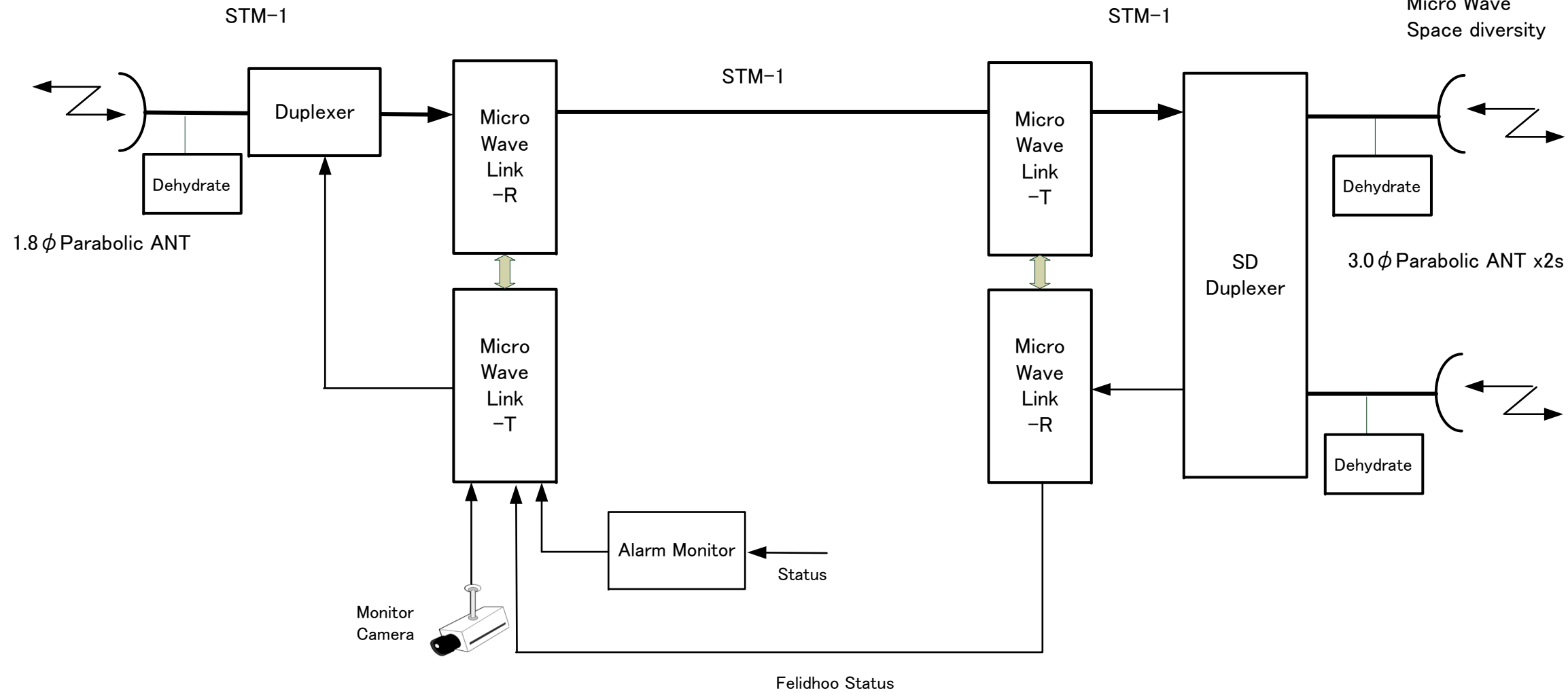
PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Male Transmitter Schematic Diagram (Optical receiving)				DWG. No.
				B-8
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

□ : NFB space only

# Repeater(TTL)

From Male  
L6G Band  
Micro Wave

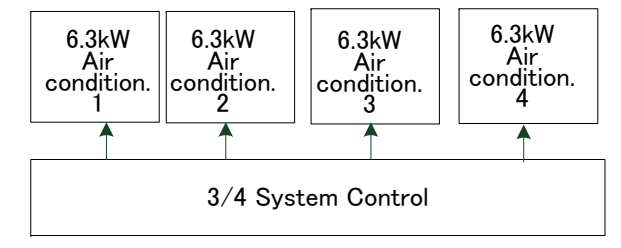
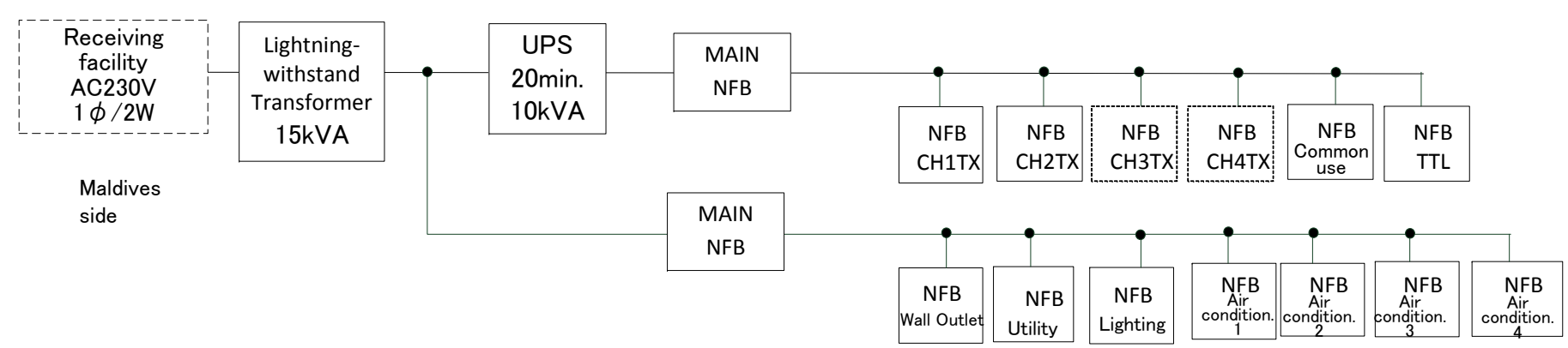
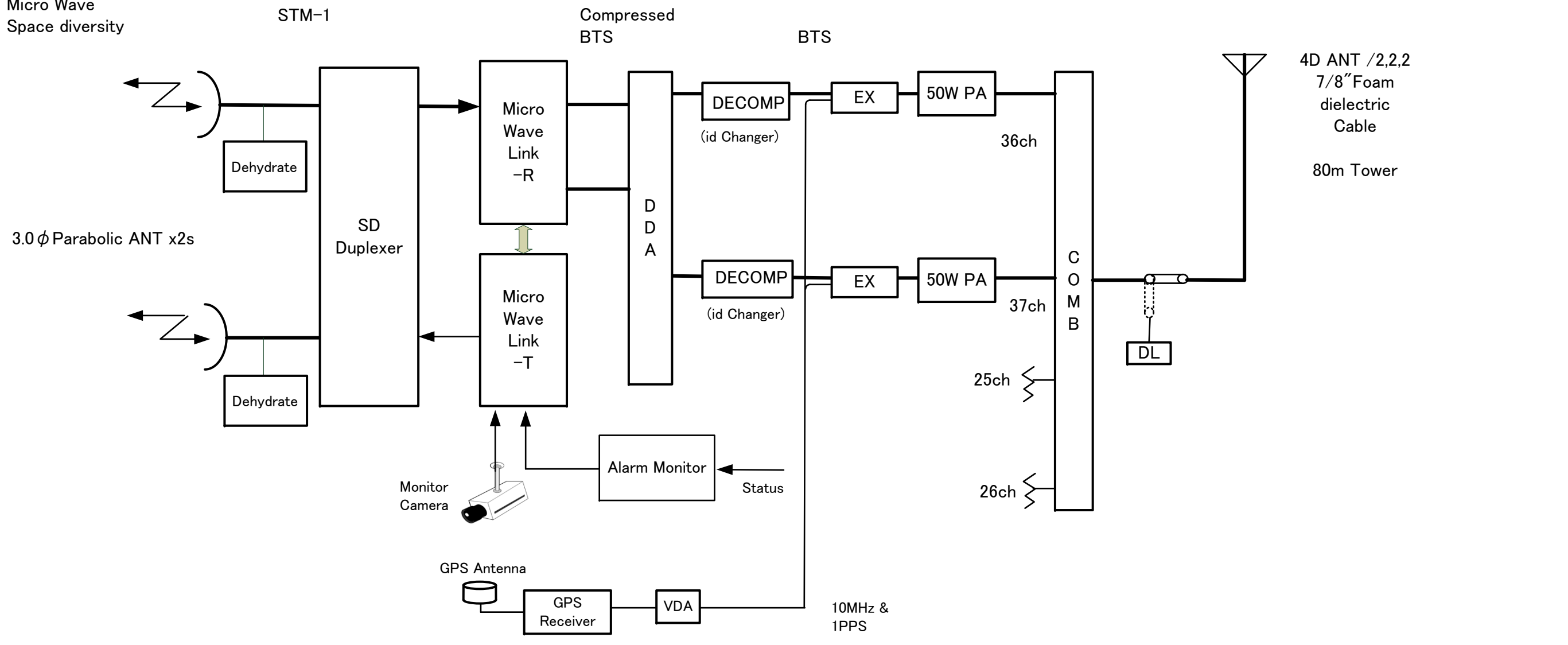
To Felidhoo  
L6G Band  
Micro Wave  
Space diversity



PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Maafushi Repeater Schematic Diagram (TTL)				DWG. No.
				B-9
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>yoo</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

# 50W DTX ( 2sets)

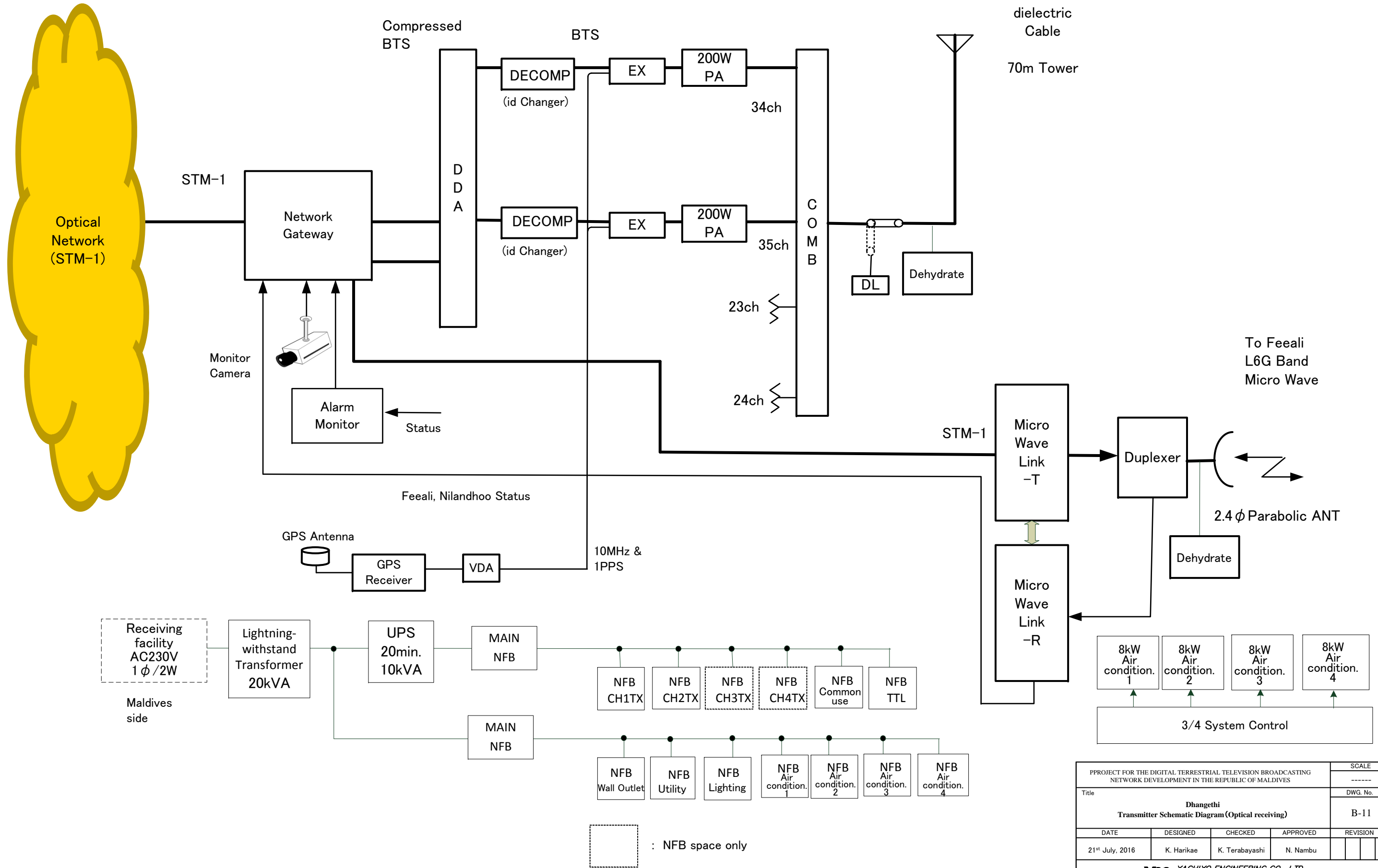
From Maafushi  
L6G Band  
Micro Wave  
Space diversity



□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title <b>Felidhoo Transmitter Schematic Diagram (SHF receiving)</b>				-----
				DWG. No.
				B-10
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>YOC</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

# 200W DTX ( 2sets)



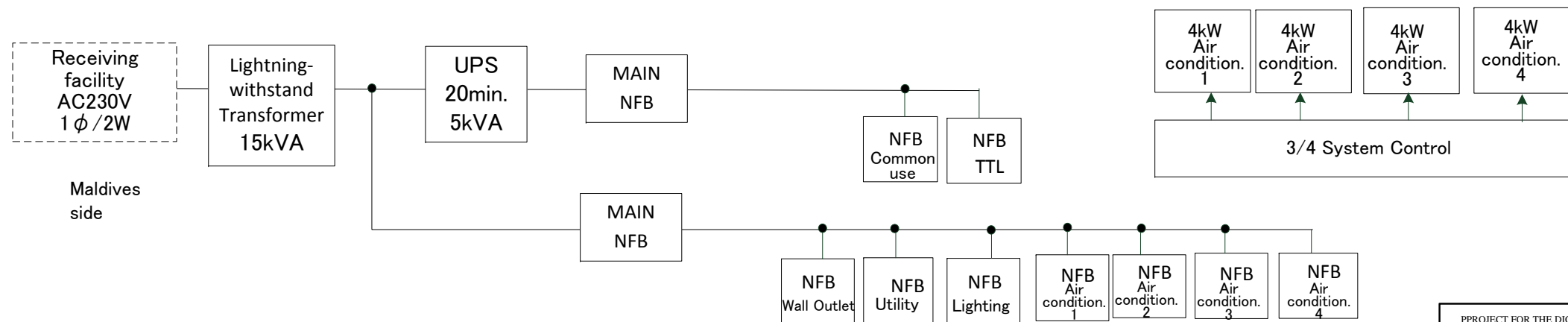
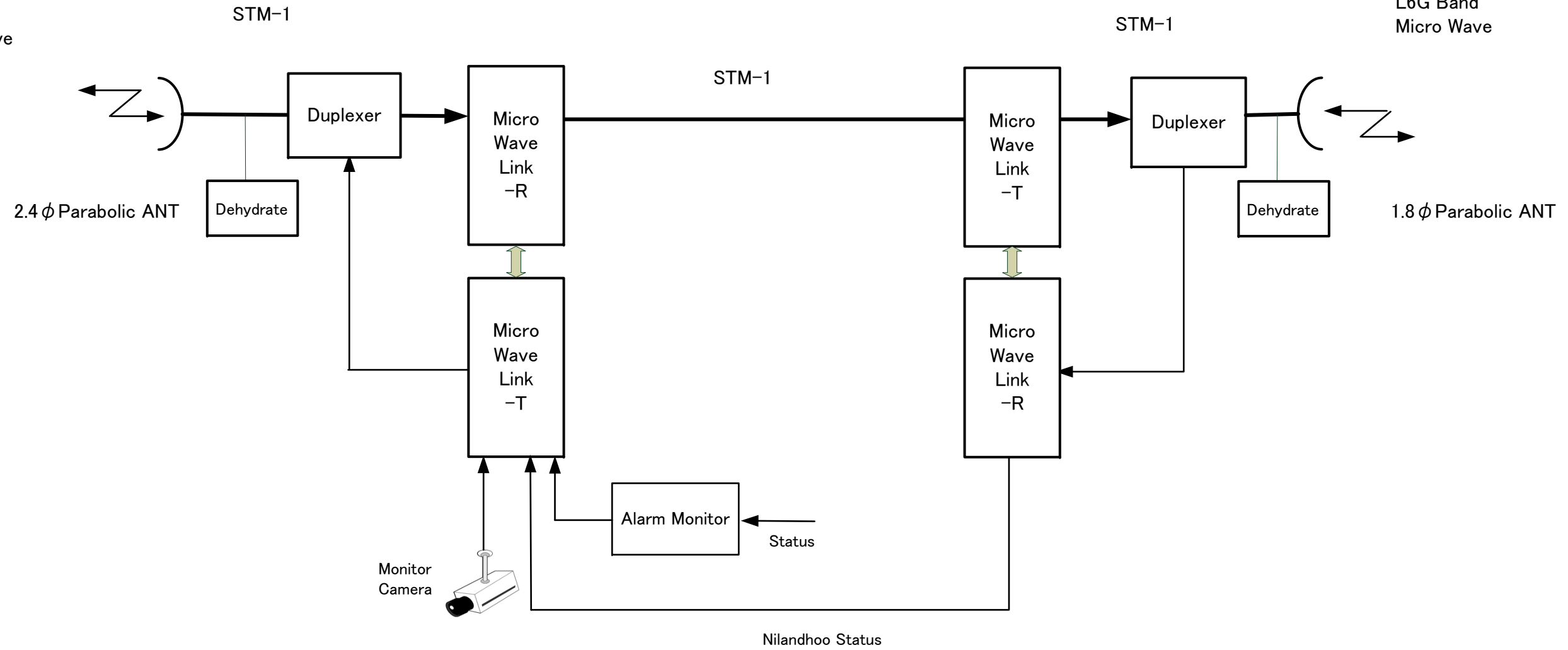
□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				DWG. No.
Dhangethi Transmitter Schematic Diagram (Optical receiving)				B-11
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

# Repeater(TTL)

From Dhangethi  
L6G Band  
Micro Wave

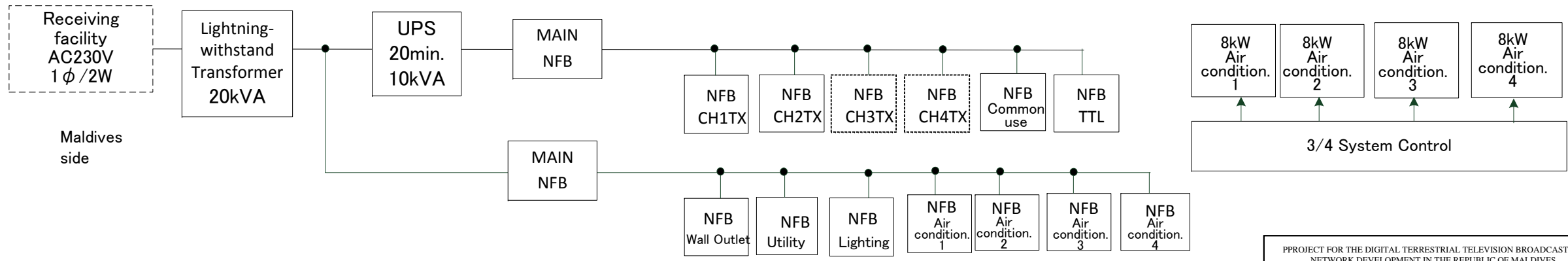
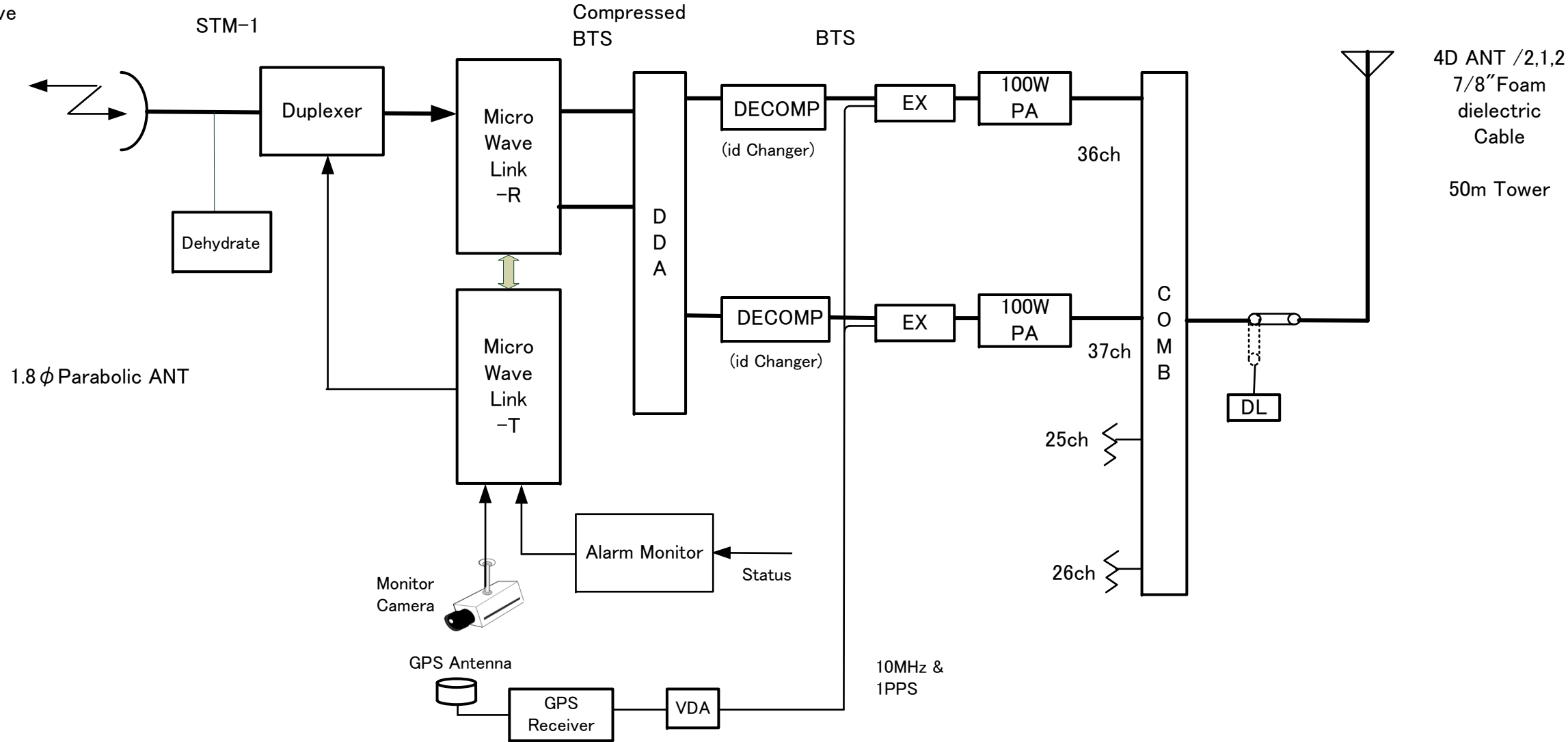
To Nilandhoo  
L6G Band  
Micro Wave



PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title <b>Feeli Repeater Schematic Diagram (TTL)</b>				----- DWG. No. B-12
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>YEC</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

# 100W DTX ( 2sets)

From Feali  
L6G Band  
Micro Wave

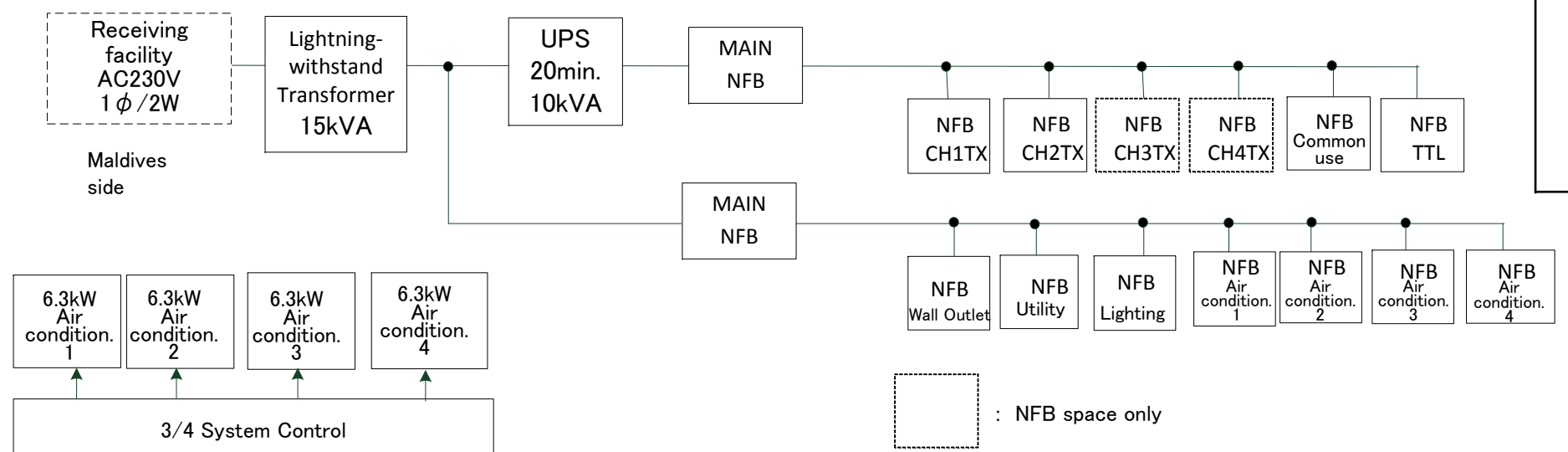
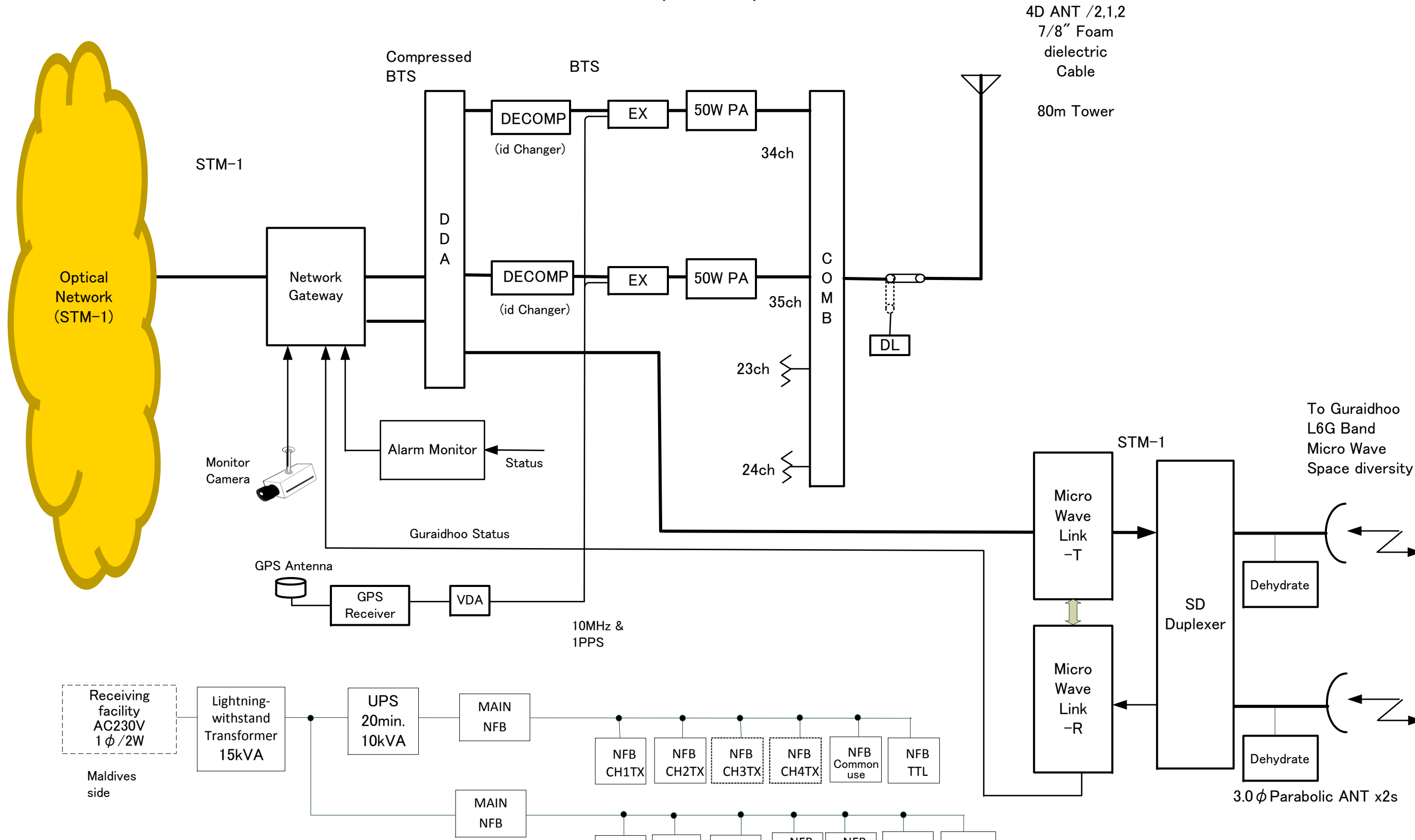


□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title <b>Nilandhoo Transmitter Schematic Diagram (SHF receiving)</b>				----- DWG. No. <b>B-13</b>
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>yoc</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				



# 50W DTX ( 2sets)

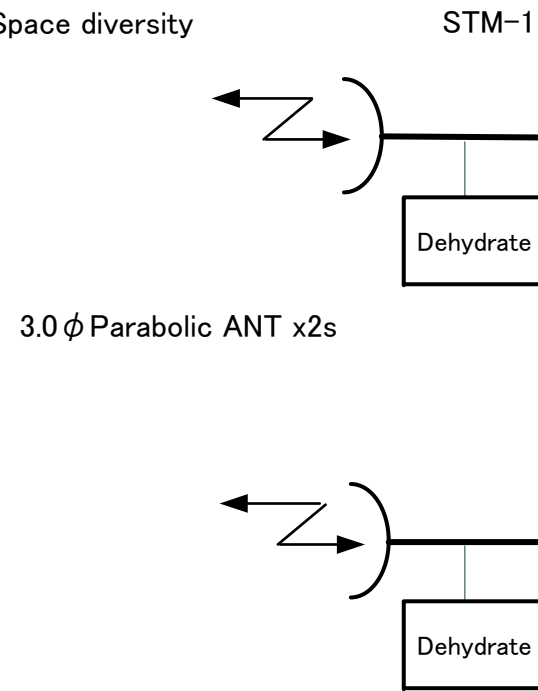


□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title Gan Transmitter Schematic Diagram (Optical receiving)				DWG. No. B-14
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

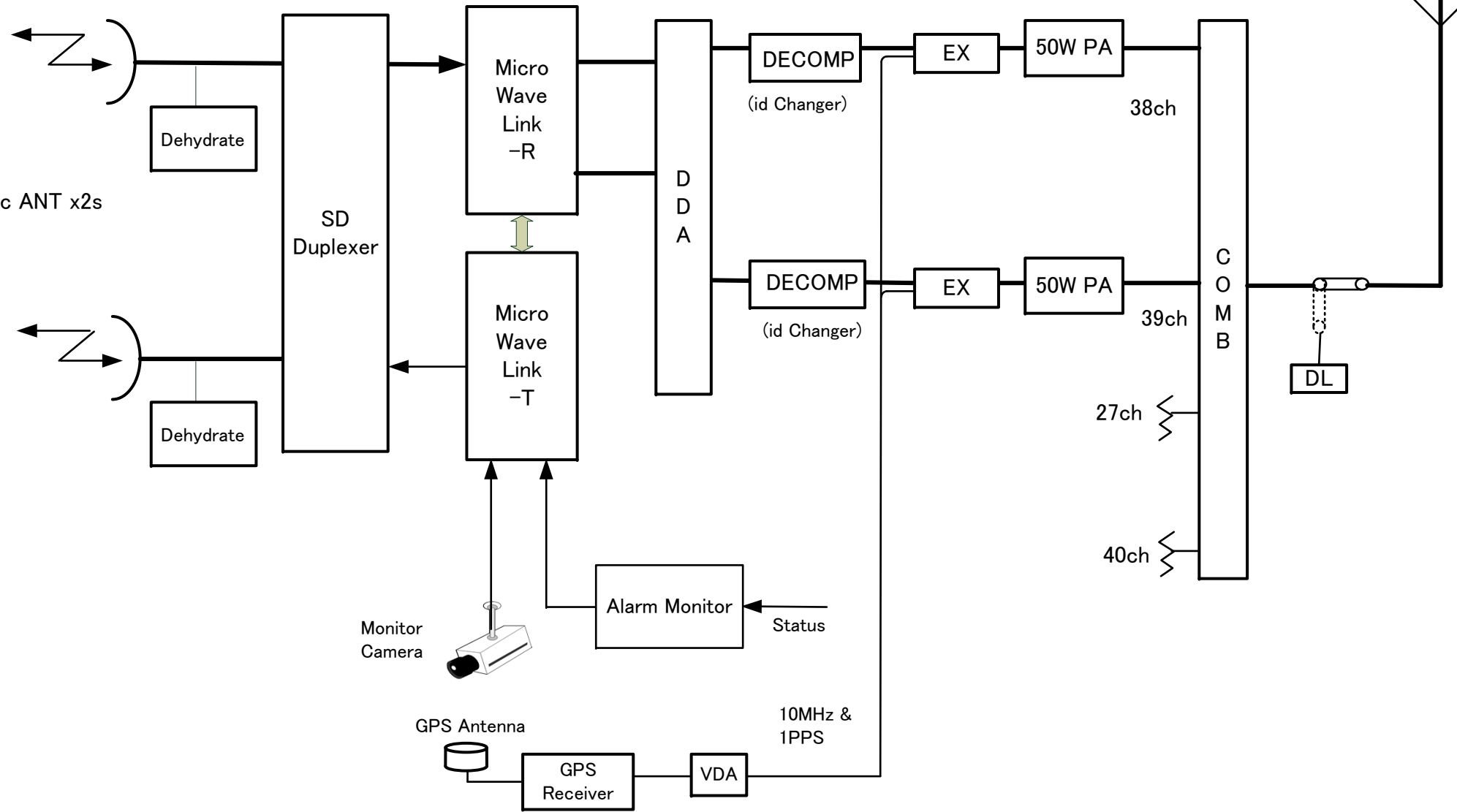
# 50W DTX ( 2sets)

From Gan  
L6G Band  
Micro Wave  
Space diversity

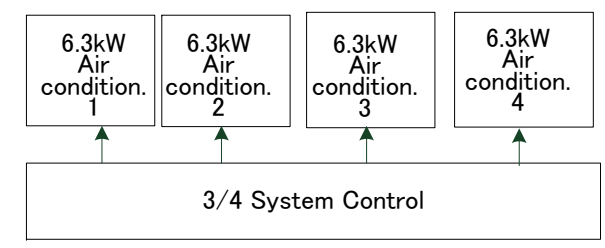
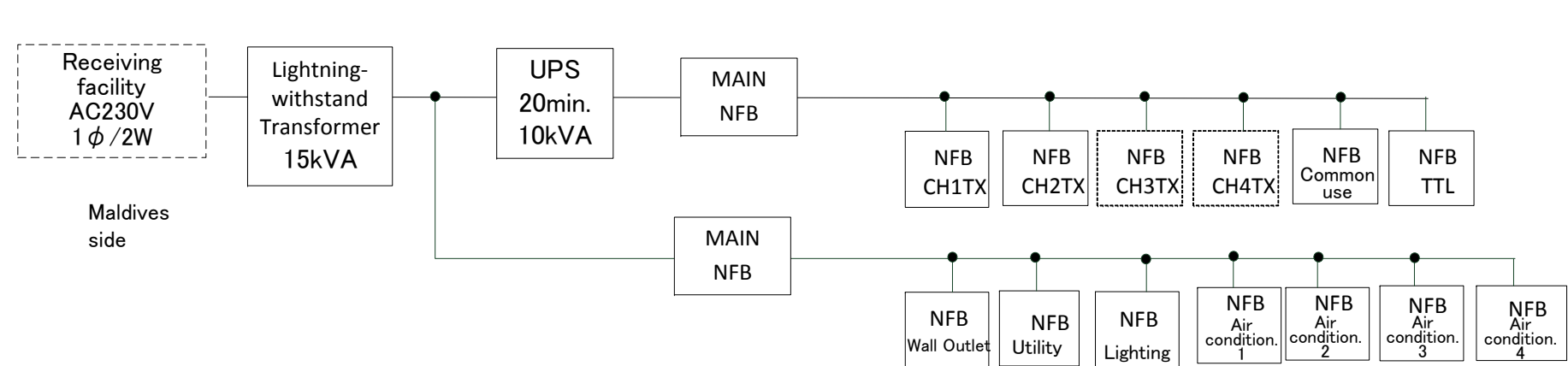


Compressed  
BTS

BTS



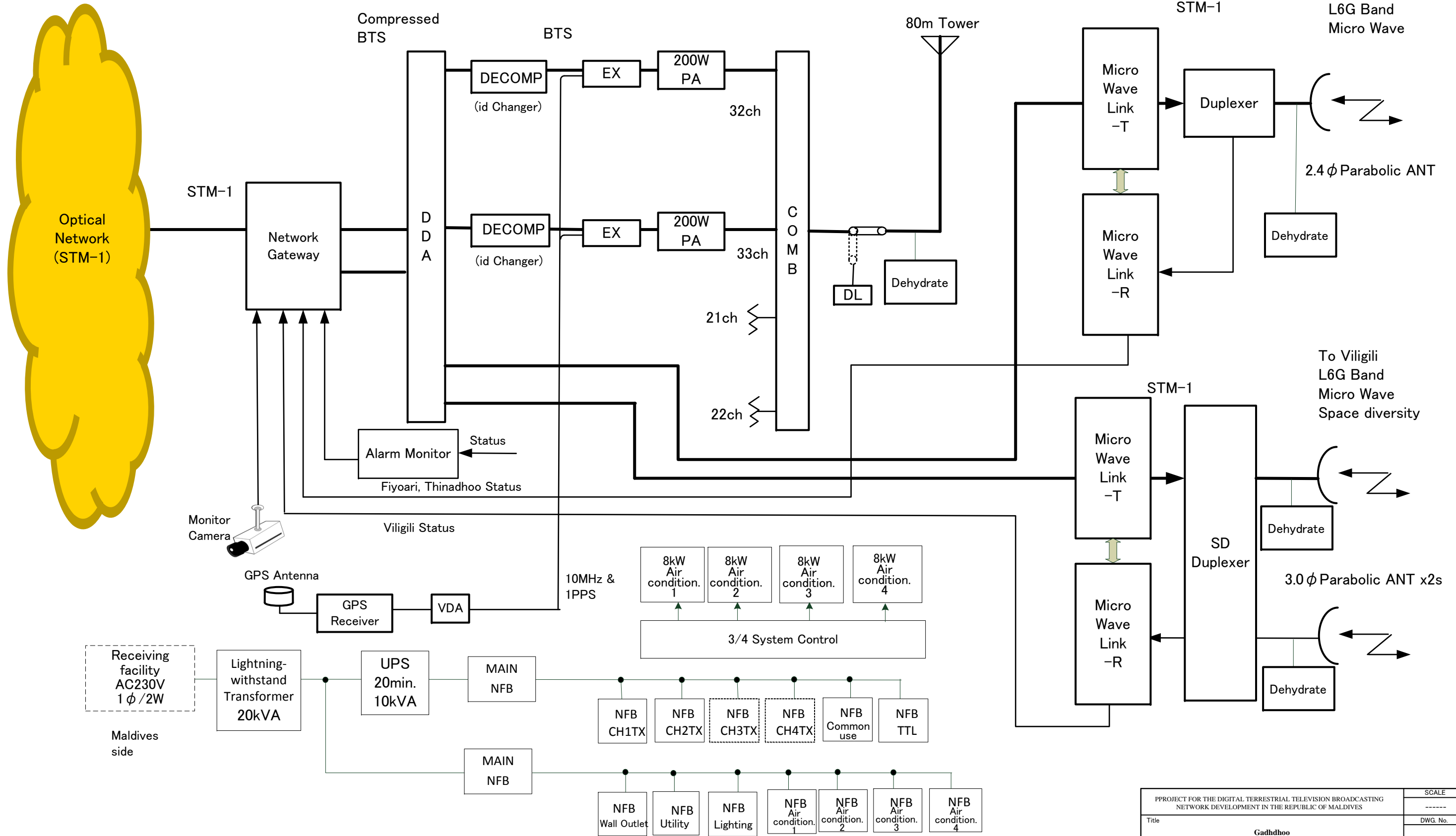
4D ANT /1,2,2  
7/8" Foam  
dielectric  
Cable  
80m Tower



: NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE
Title					-----
Guraidhoo Transmitter Schematic Diagram (SHF receiving)					DWG. No.
					B-15
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu		
<b>yec</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN					

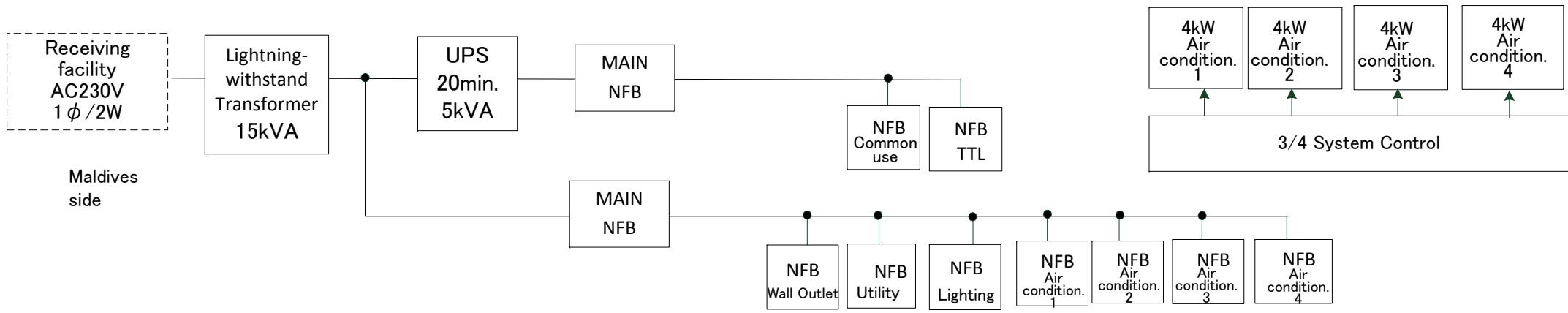
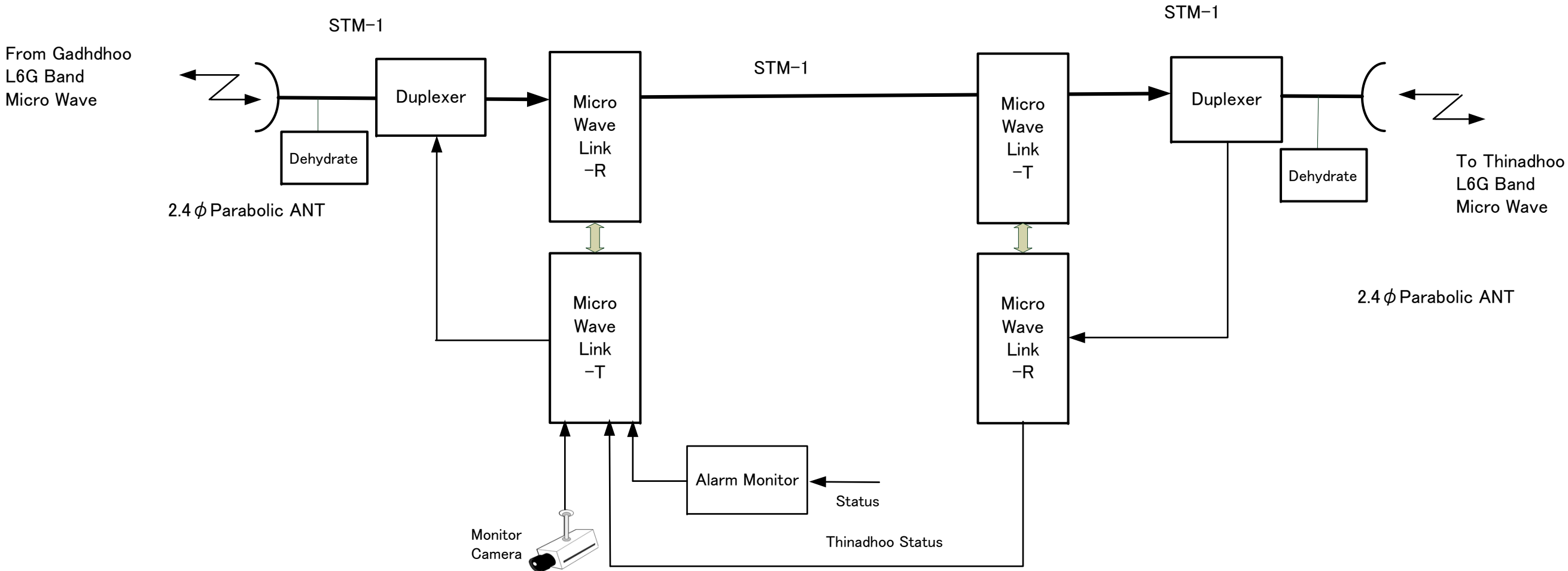
# 200W DTX ( 2sets)



□ : NFB space only

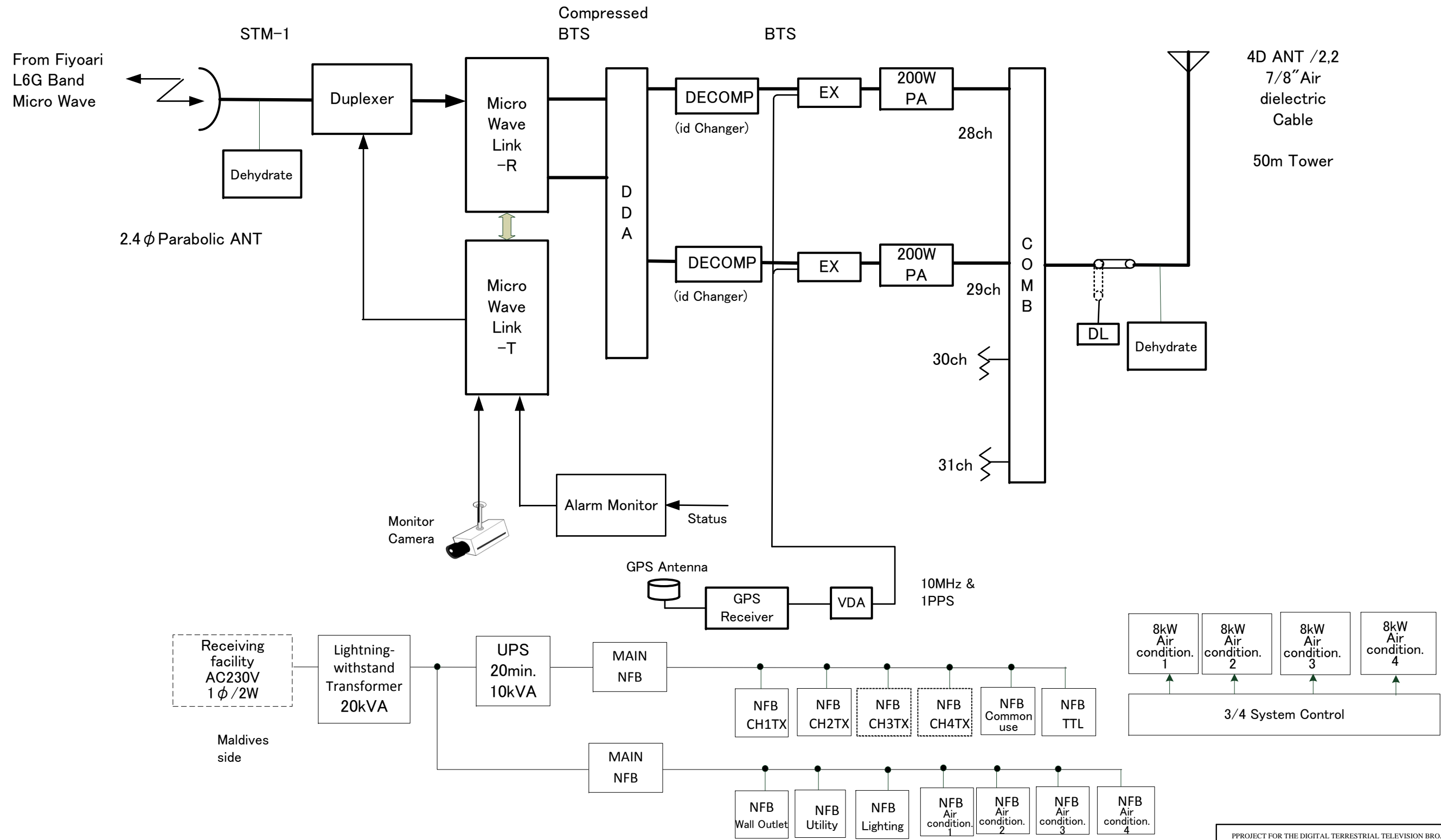
PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE
Title					DWG. No.
Gadhdhoo Transmitter Schematic Diagram (Optical receiving)					B-16
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu		
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN					

# Repeater(TTL)



PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE -----
Title <b>Fiyoari Repeater Schematic Diagram (TTL)</b>					DWG. No. B-17
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu		
<b>YACHIYO ENGINEERING CO., LTD.</b> TOKYO JAPAN					

# 200W DTX ( 2sets)



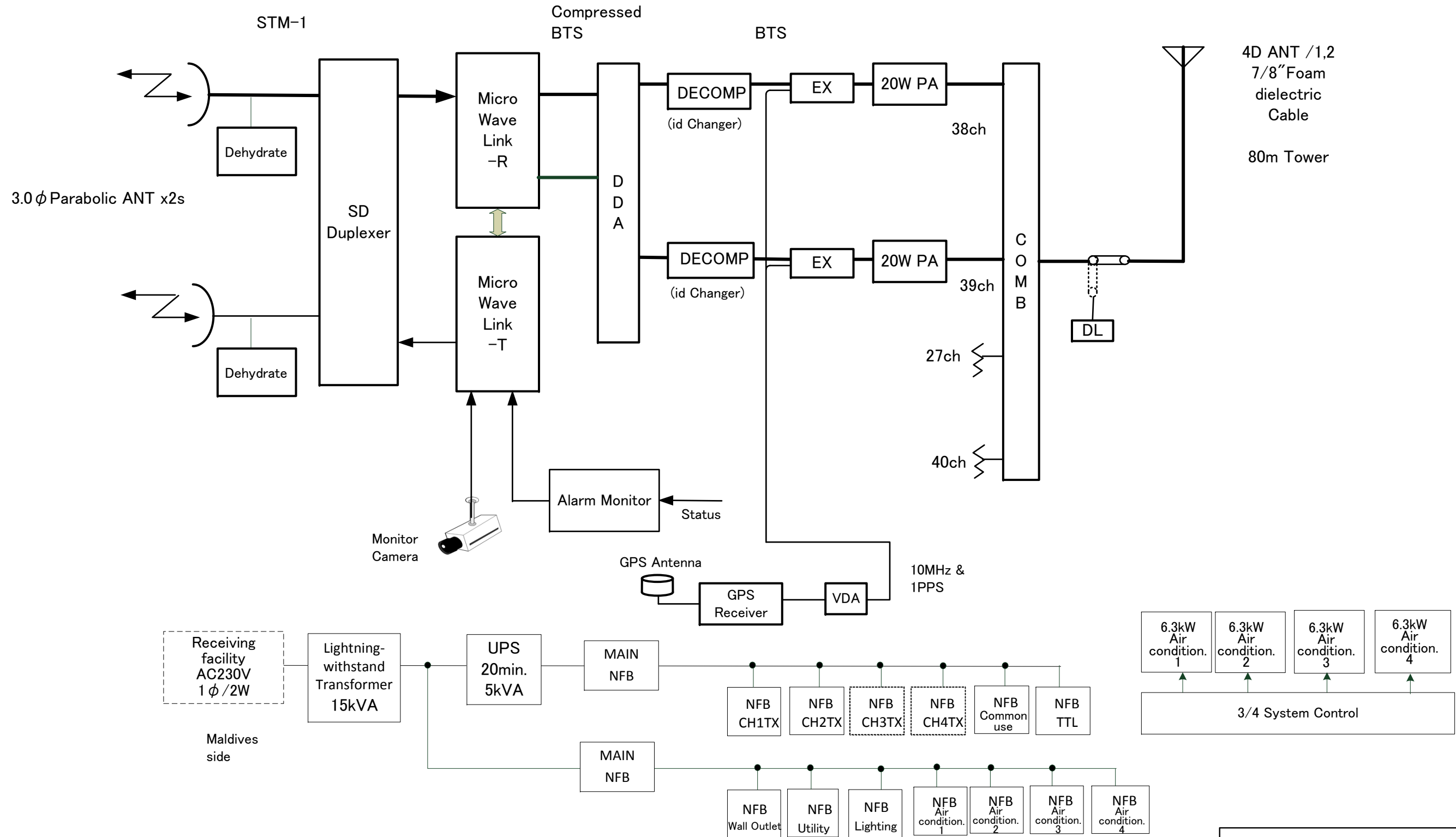
Receiving facility  
AC230V  
1φ/2W  
Maldives side

□ : NFB space only

PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE
Title					-----
Thinadhoo Transmitter Schematic Diagram (SHF receiving)					DWG. No.
					B-18
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu		
YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN					

From Gan  
L6G Band  
Micro Wave  
Space diversity

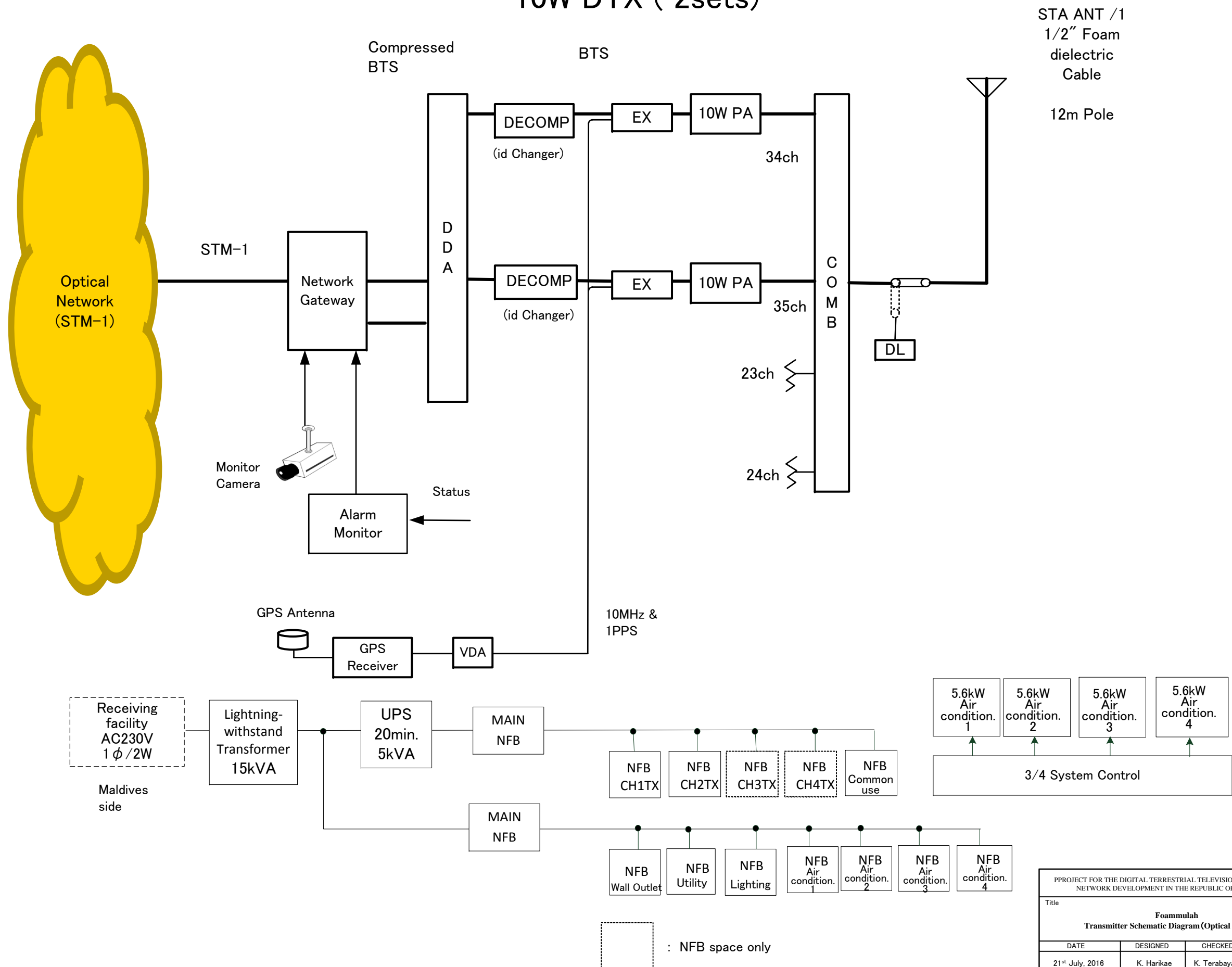
# 20W DTX ( 2sets)



□ : NFB space only

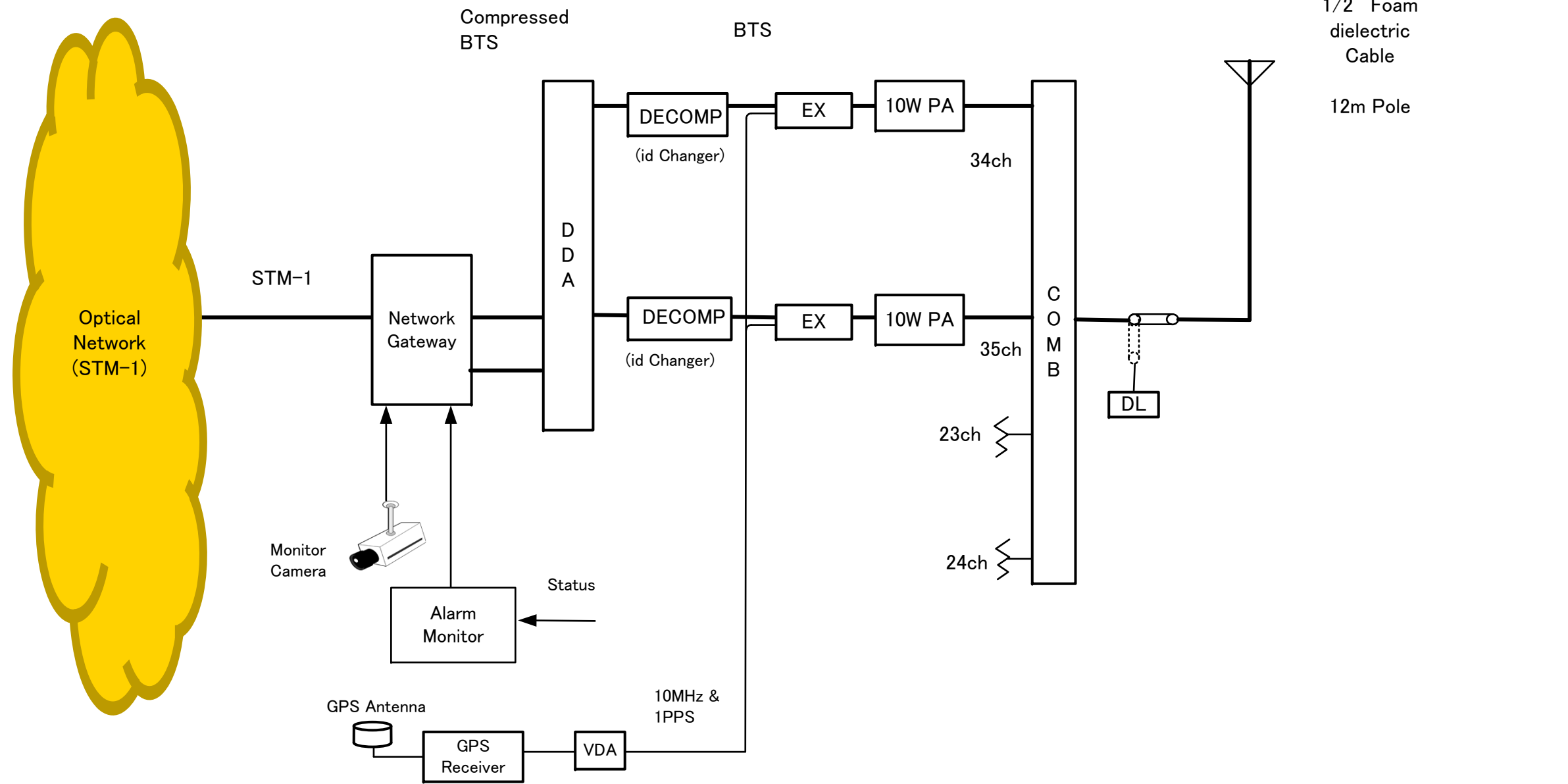
PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				-----
Vilgili Transmitter Schematic Diagram (SHF receiving)				DWG. No.
				B-19
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>yoc</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				

# 10W DTX ( 2sets)

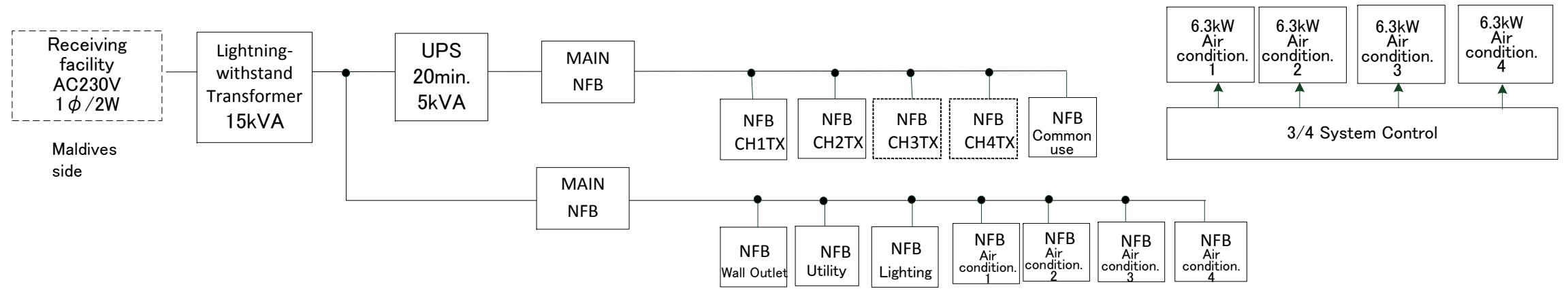


PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				DWG. No.
Foammulah Transmitter Schematic Diagram (Optical receiving)				B-20
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>YACHIO ENGINEERING CO., LTD.</b> TOKYO JAPAN				

# 10W DTX ( 2sets)



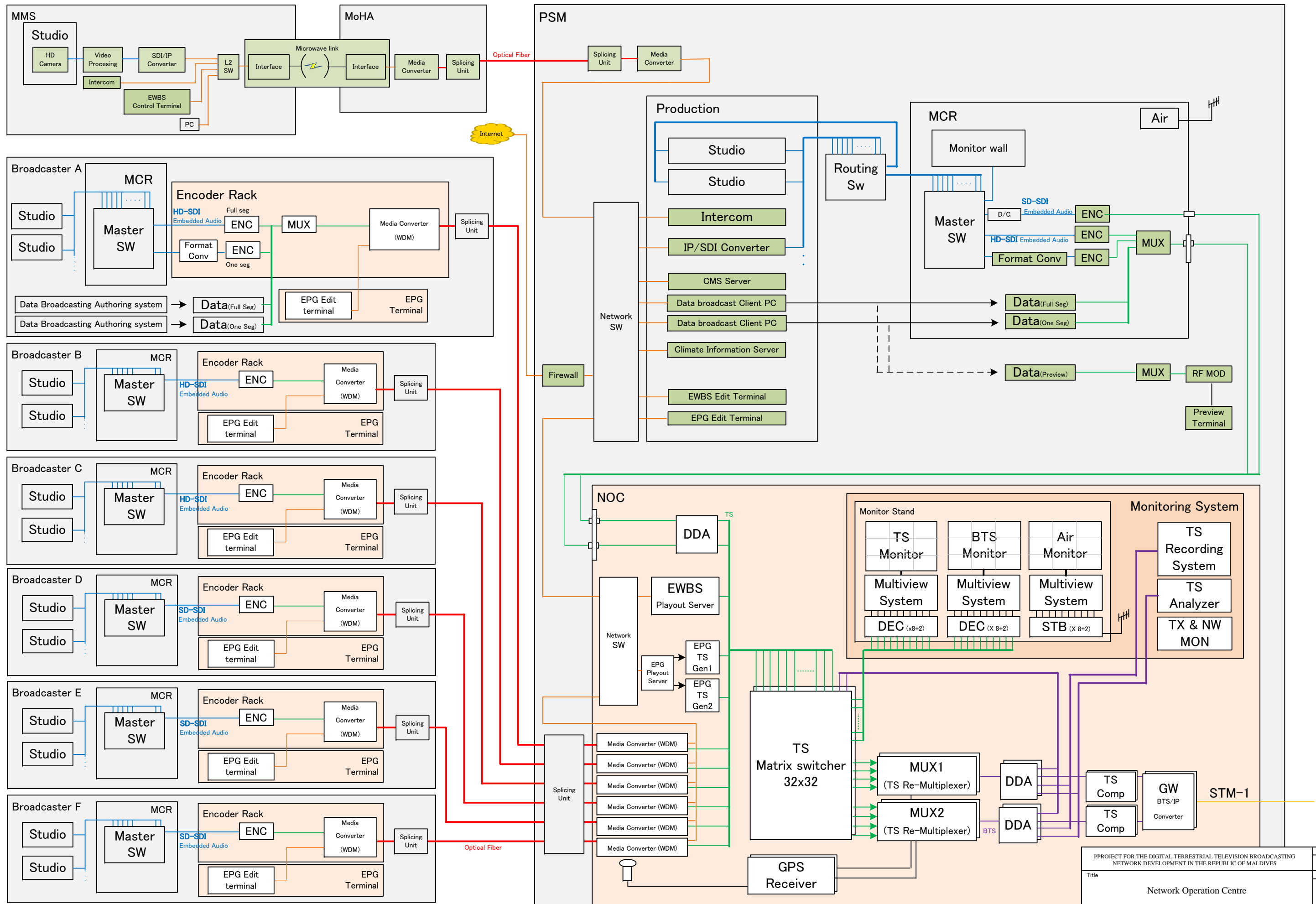
STA ANT /1  
1/2" Foam dielectric Cable  
12m Pole



: NFB space only

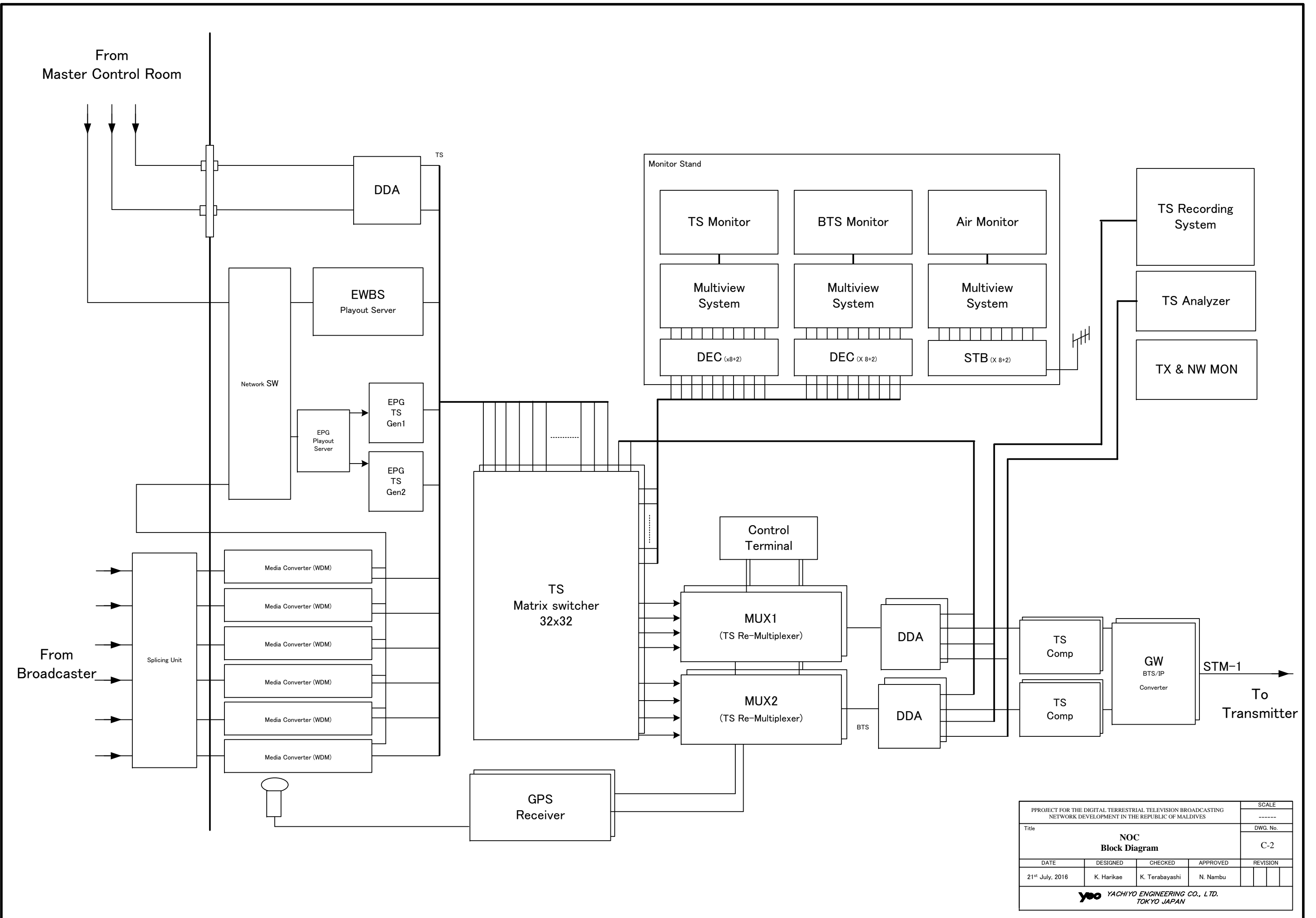
PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE
Title					-----
<b>Hithadhoo</b> <b>Transmitter Schematic Diagram (Optical receiving)</b>					DWG. No.
					B-21
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu		
<b>yoc</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN					




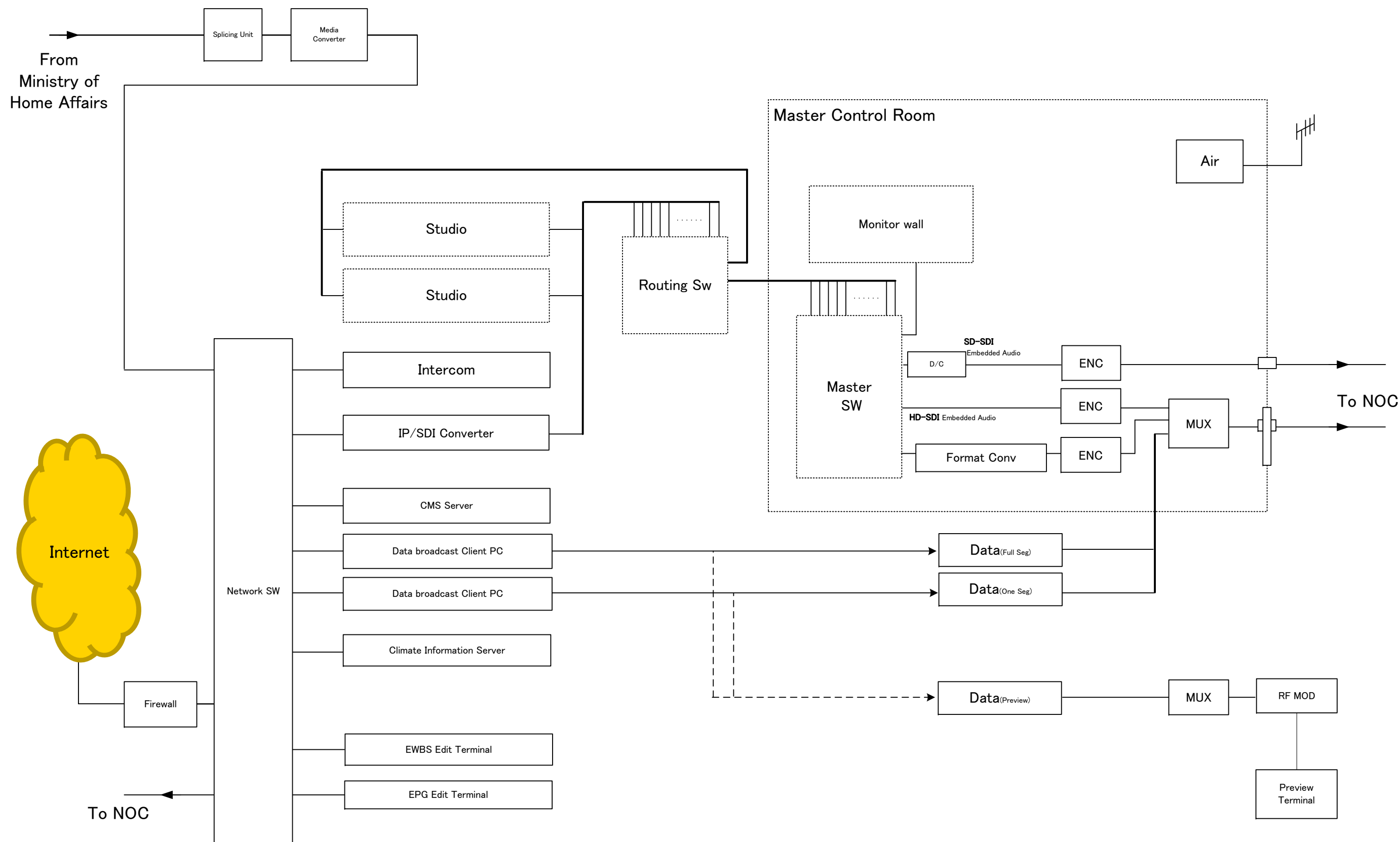


Requested scope of the Grant Aid  
 Requested scope of the Grant Aid

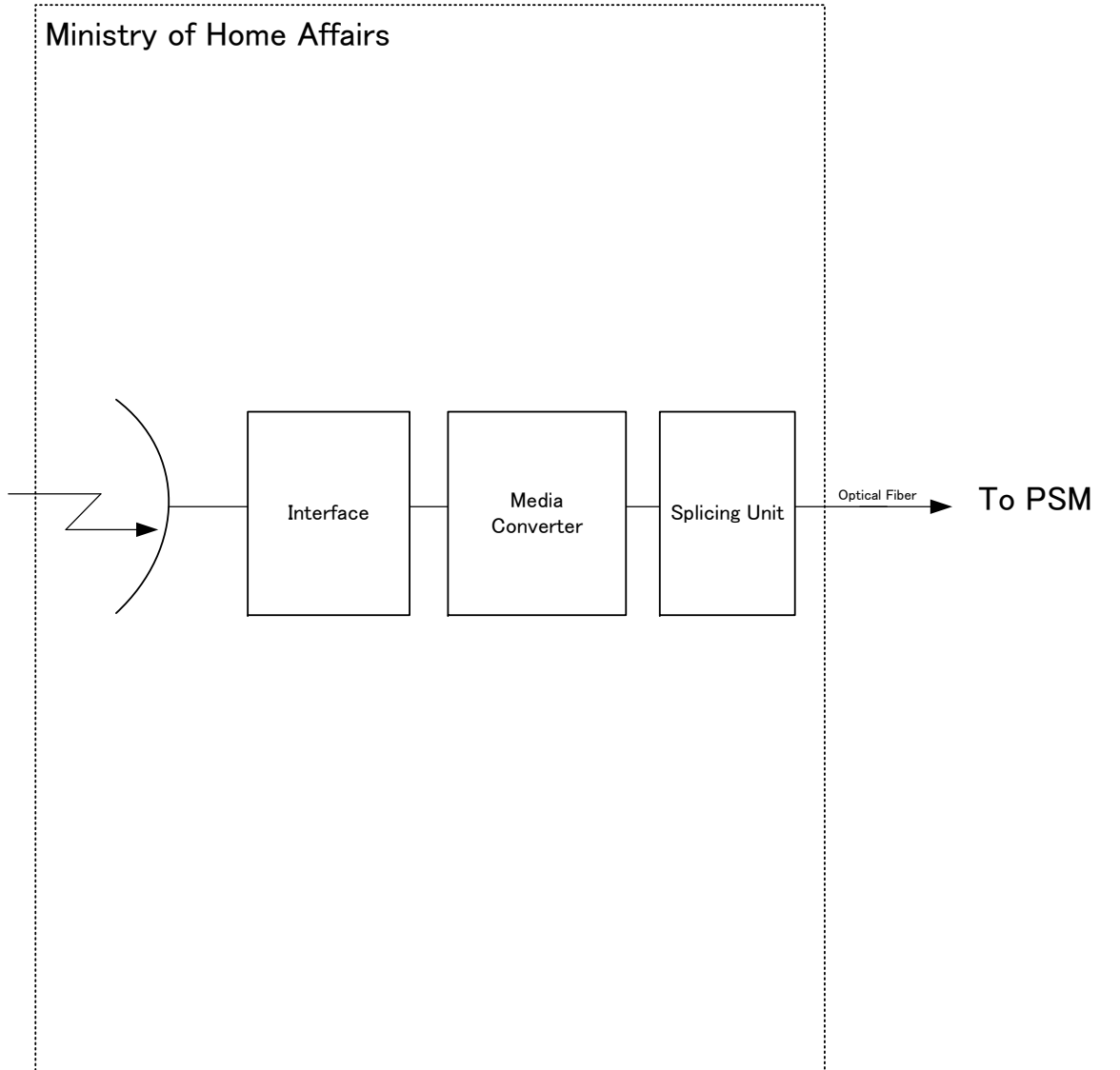
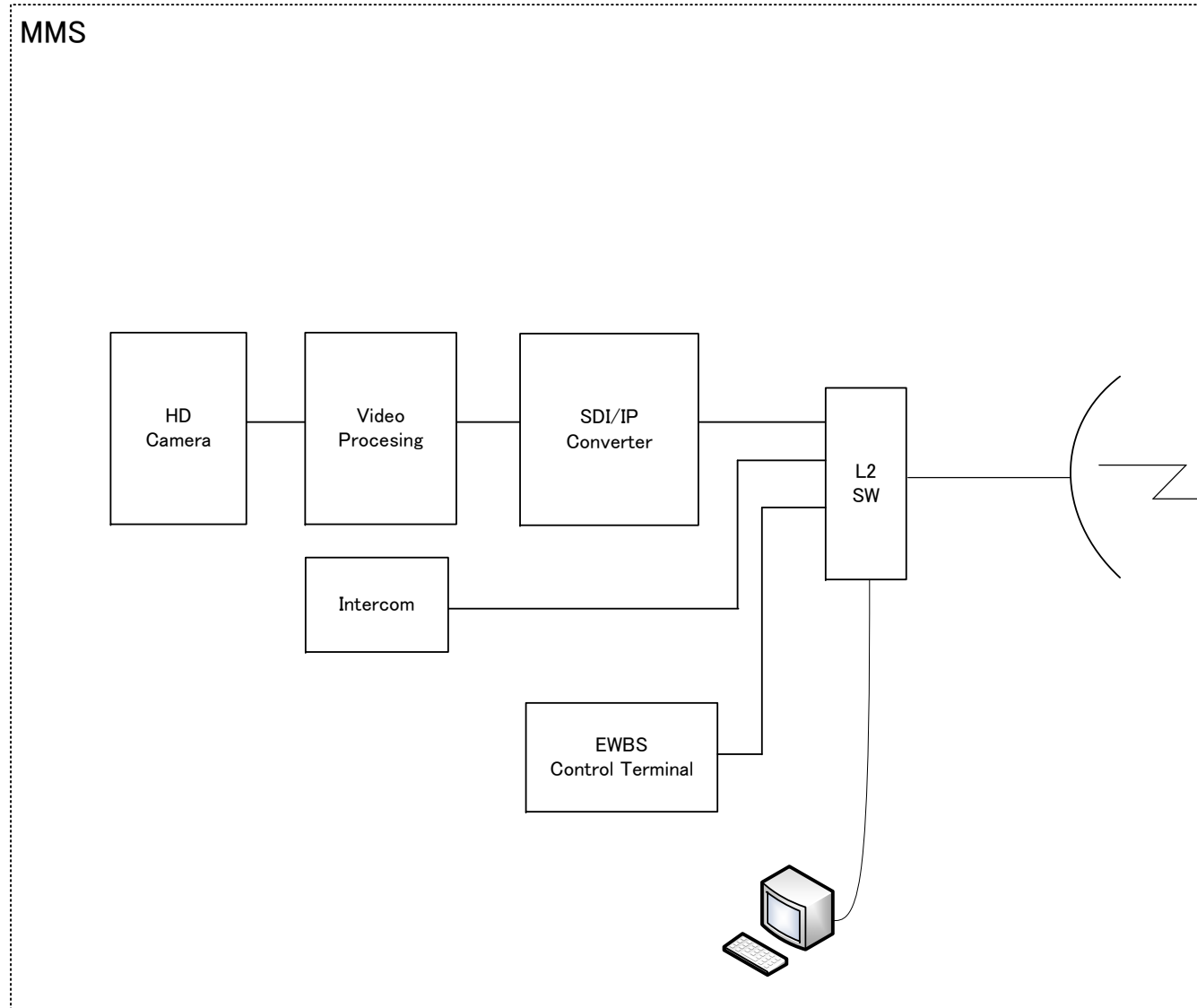
PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES					SCALE
Title					DWG. No.
Network Operation Centre					C-1
DATE	DESIGNED	CHECKED	APPROVED	REVISION	
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu		
<b>YACHIO ENGINEERING CO., LTD.</b> TOKYO JAPAN					




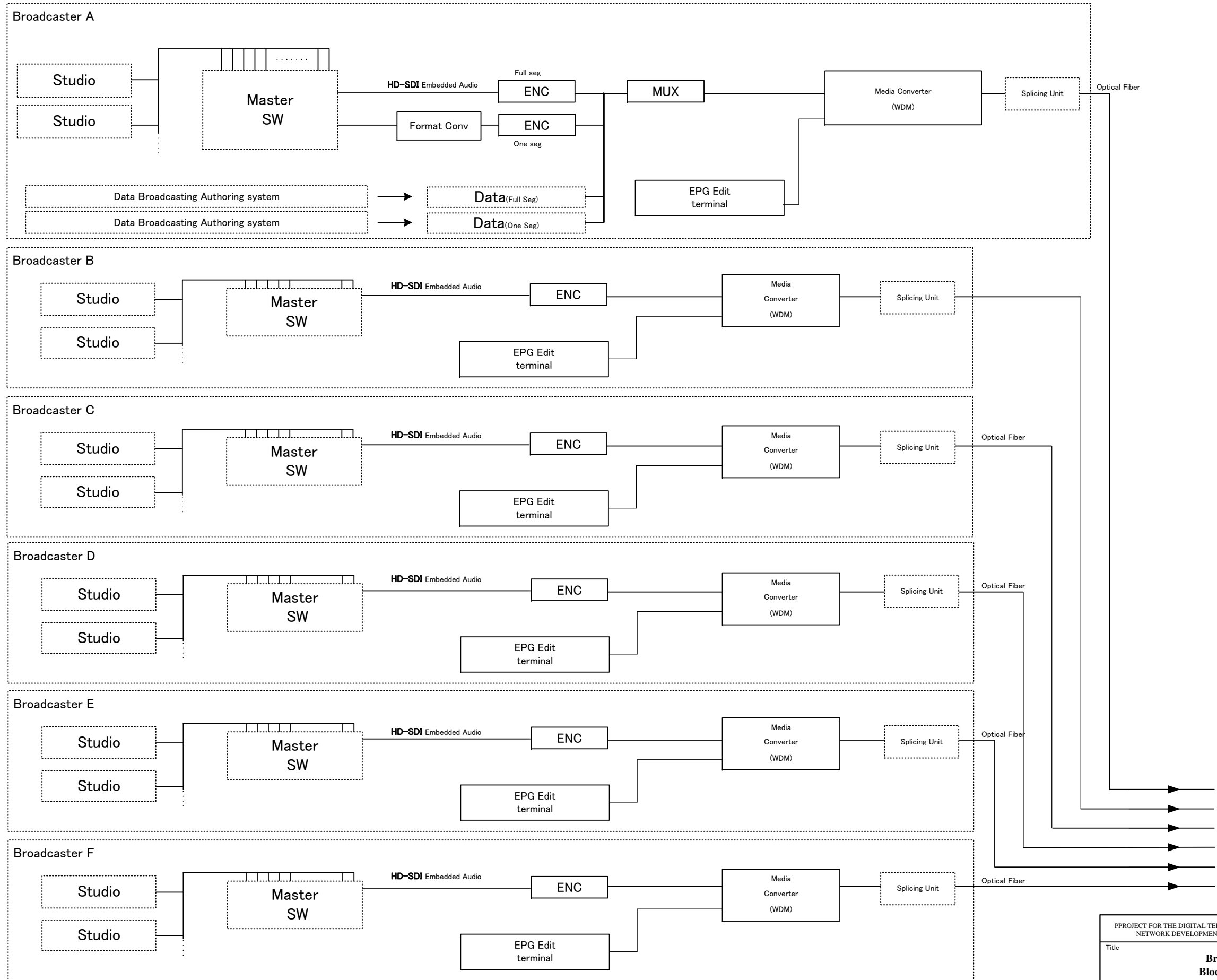
PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				DWG. No.
NOC Block Diagram				C-2
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
 YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				



PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				DWG. No.
<b>PSM Block Diagram</b>				C-3
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>yoo</b> YACHIYO ENGINEERING CO., LTD. TOKYO JAPAN				



PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE -----
Title <b>MMS &amp; MoHA Block Diagram</b>				DWG. No. C-4
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
 <b>YACHIO ENGINEERING CO., LTD.</b> TOKYO JAPAN				



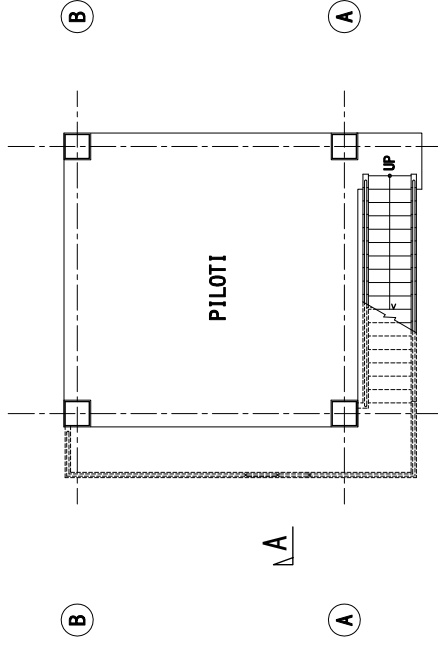
PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES				SCALE
Title				DWG. No.
<b>Broadcaster Block Diagram</b>				C-5
DATE	DESIGNED	CHECKED	APPROVED	REVISION
21 <sup>st</sup> July, 2016	K. Harikae	K. Terabayashi	N. Nambu	
<b>YACHIYO ENGINEERING CO., LTD.</b> TOKYO JAPAN				

### EXTERIOR FINISHING SCHEDULE

LOCATION	FINISHING SCHEDULE
ROOF	WATERPROOF COATING ON CONCRETE ROOF SLAB PROTECTION CONCRETE 80-130mm SLOPE
WALL	PAINT (A. E. P) on MORTAL STEEL TROWEL on CONCRETE BLOCK t=150mm
COLUMN BEAM	PAINT (A. E. P) on MORTAR STEEL TROWEL
FITTING	STEEL DOOR, ALUMINUM WINDOW

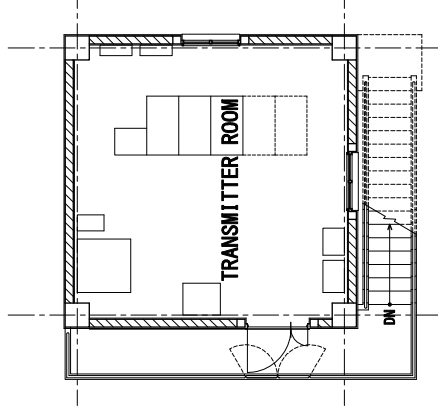
### EXTERIOR FINISHING SCHEDULE

PILOTY1		TRANSMITTER ROOM	
FLOOR	CONCRETE STEEL TROWEL FINISH	FLOOR	DUSTPROOF COATING ON CONCRETE SLAB
BASEBOARD	—	BASEBOARD	MORTAL STEEL TROWEL H=100mm
WALL	—	WALL	PAINT (E. P) on MORTAL STEEL TROWEL
CEILING	PAINT (A. E. P) on EXPOSED CONCRETE SLAB	CEILING	PAINT (E. P) on EXPOSED CONCRETE SLAB
COLUMN BEAM	PAINT (A. E. P) on MORTAR STEEL TROWEL	REMARKS	AIR-CONDITIONING, LIGHTING FIXTURE, OUTLET SOCKET



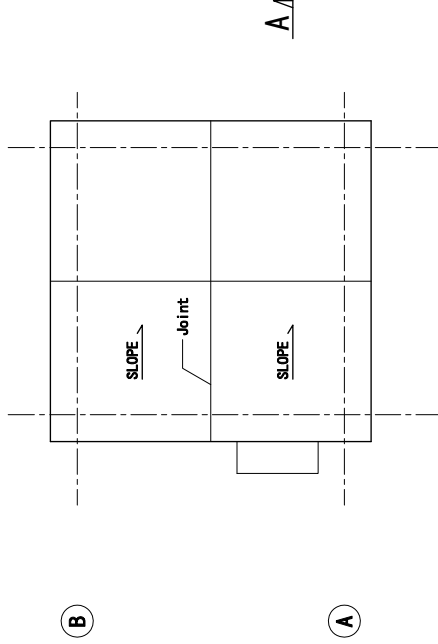
① ②

### 1st FLOOR PLAN



① ②

### 2nd FLOOR PLAN

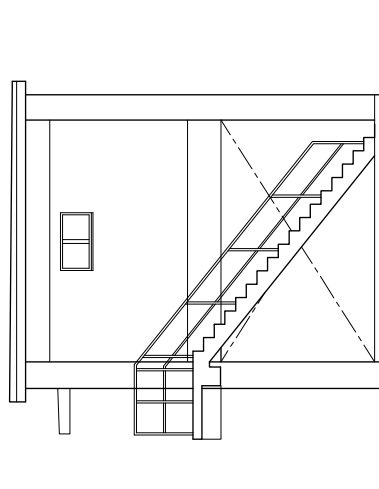


① ②

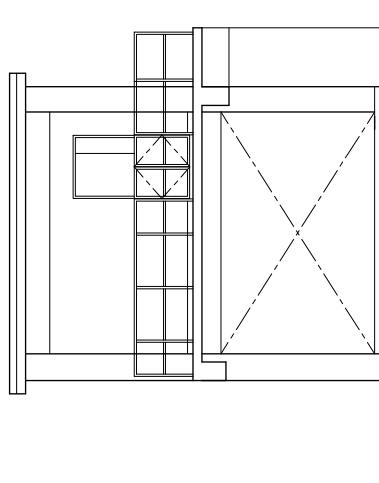
### ROOF PLAN

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING PLAN	S=1/100					AA-01
								REV. 0

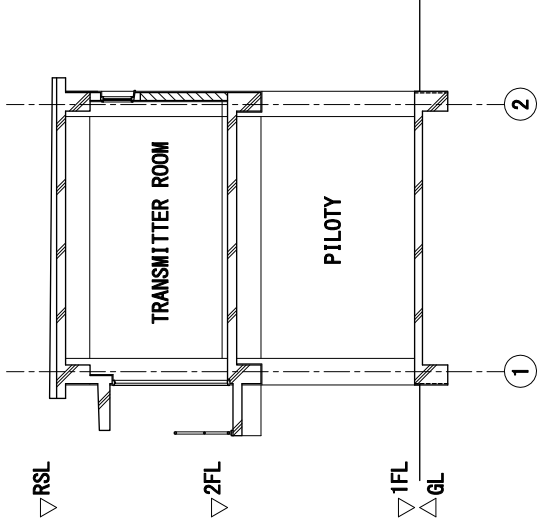
**yoo** YACHIYO ENGINEERING CO., LTD.



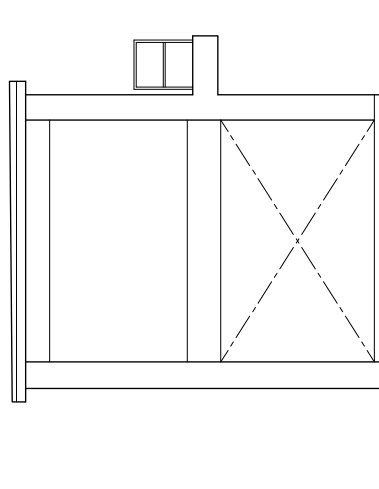
**A LINE ELEVATION**



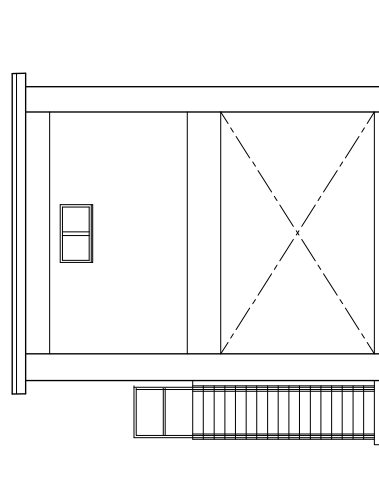
**1 LINE ELEVATION**



**A - A SECTION**



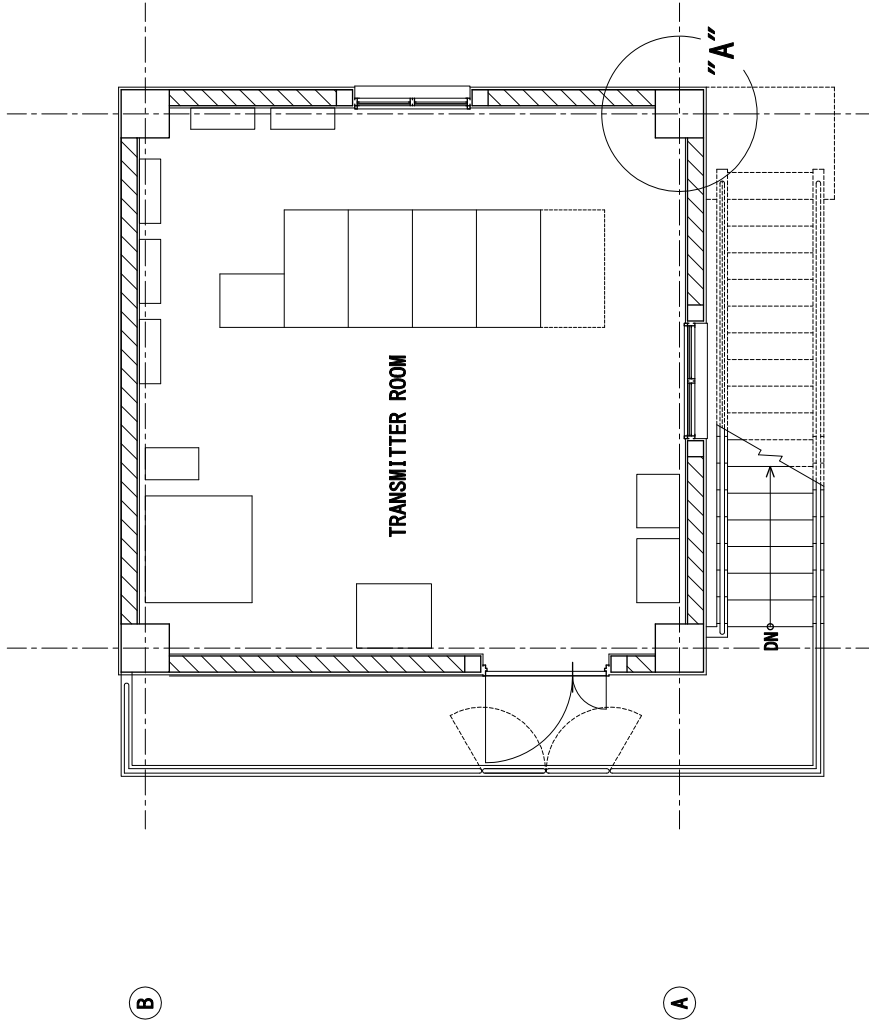
**B LINE ELEVATION**



**2 LINE ELEVATION**

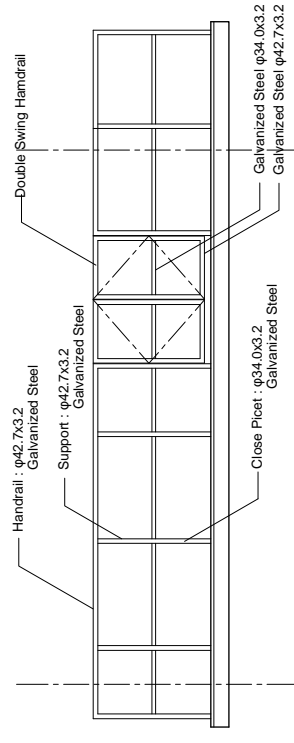
PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING ELEVATION & SECTION	S=1/100					AA-02
								REV.
								0

**yoo** YACHIYO ENGINEERING CO., LTD.



1

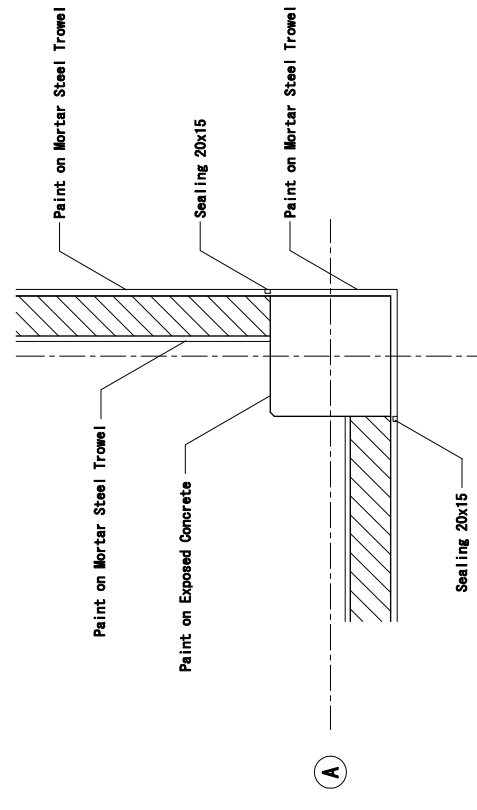
2



1

2

HANDRAIL ELEVATION S=1/50



A

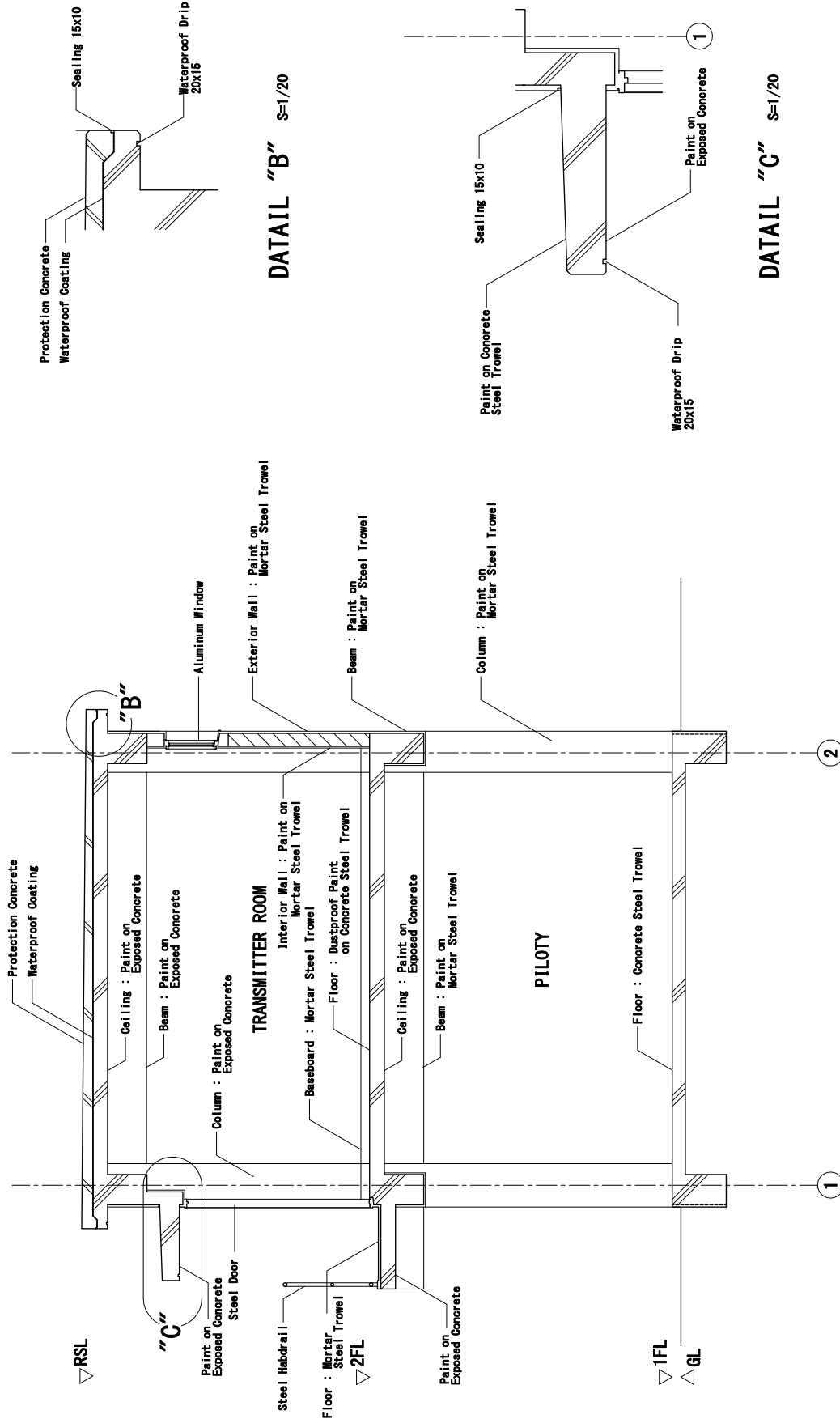
2

DETAIL "A" S=1/20

2nd FLOOR DETAIL PLAN S=1/50

PROJECT NAME	IMPLEMENTATION AGENCY	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES	TRANSMITTER BUILDING DETAIL	S=1/100					AA-03
	<b>yoo</b> YACHIYO ENGINEERING CO., LTD.						REV. 0





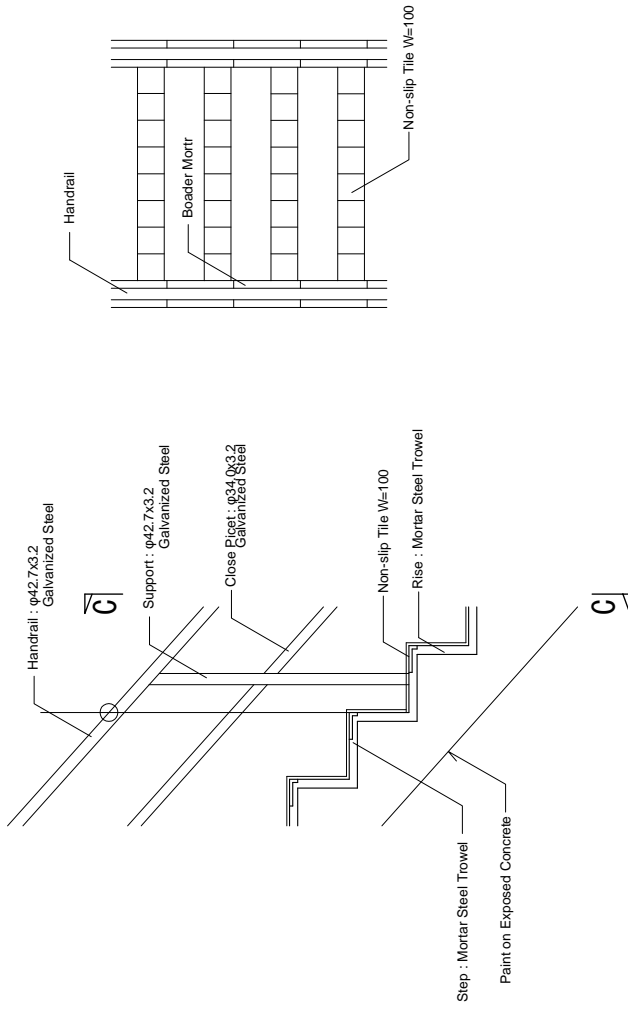
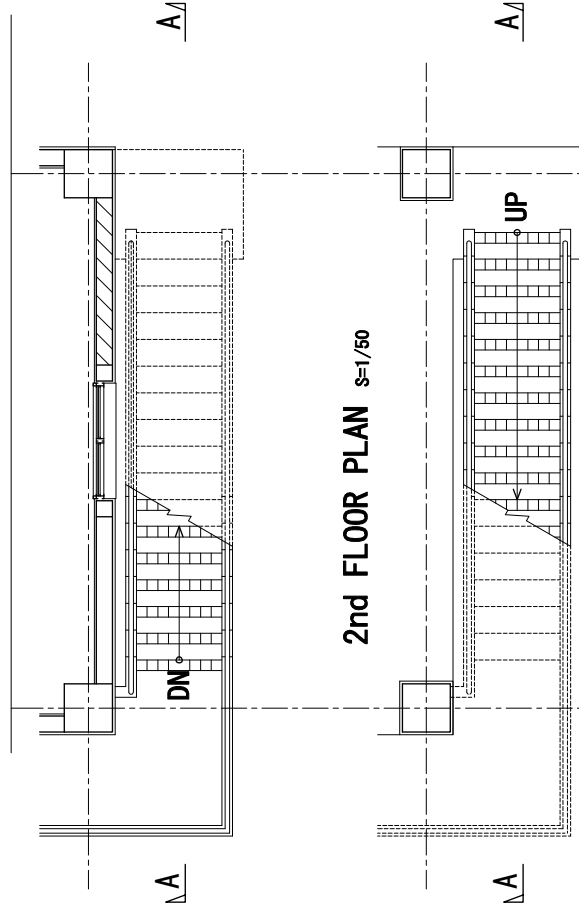
**A - A SECTION** S=1/50

**DETAIL "B"** S=1/20

**DETAIL "C"** S=1/20

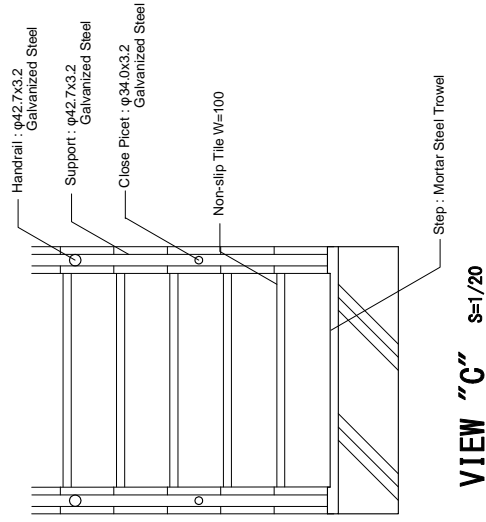
PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING ELEVATION & SECTION	S=1/50 S=1/20					AA-04
								REV.
								0

**yoo** YACHIYO ENGINEERING CO., LTD.



**DETAIL PLAN** S=1/20

**DETAIL "B"** S=1/20

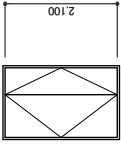



**A - A SECTION** S=1/50

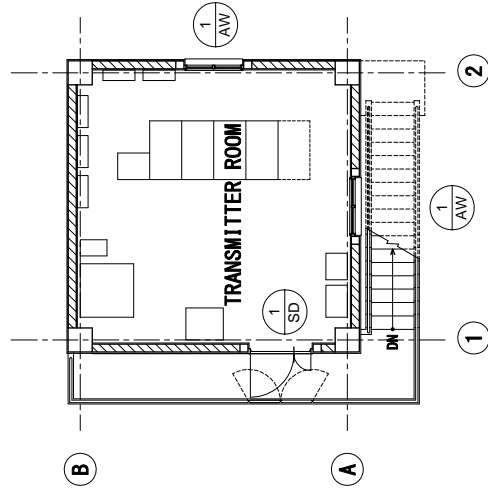
PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING DETAIL OF STAIR	S=1/50 S=1/20					AA-05
								REV. 0

**yoo** YACHIYO ENGINEERING CO., LTD.

# FITTING LIST

MARK · No.	(1/SD) X 1	(1/AW) X 2
ELEVATION		
TYPE	DOUBLE SWING DOOR	FIXED WINDOW
MATERIAL · FINISH	STEEL · OIL PAINT	ALUMINIUM · ELECTRO COLOR
GLASS		CLEAR GLASS t=5.0
HARDWEAR	HINGE, LEVER HANDLE, DOOR CLOSER, KEYLOCK	READY-MADE HARDWEAR
REMARK		

NOTE : 1. Master key system should be applied.  
 2. Door stopper should be installed for all doors.



# FITTING KEY-PLAN

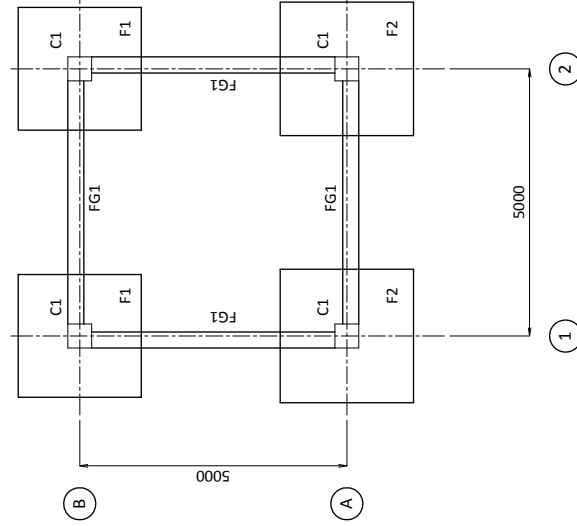
IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.	
	TRANSMITTER BUILDING FITTING SCHEDULE	S=1/100					AA-06	
<b>yoo</b> YACHIYO ENGINEERING CO., LTD.							REV.	0

PREPARATORY SURVEY ON THE PROJECT FOR  
 THE DIGITAL TERRESTRIAL TELEVISION  
 BROADCASTING NETWORK DEVELOPMENT IN  
 THE REPUBLIC OF MALDIVES

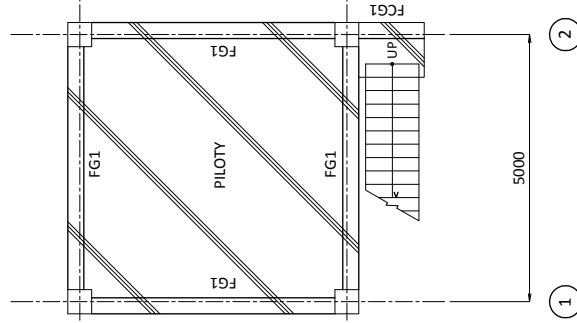
MEMBER SCHEDULE	
2-1C1	450x450
RG1	300x500
B1	300x500
2G1	300x550
S1	t=150+20
CG1	350x400
CS1	t=150+20
FG1	300x600
STAIR SLAB	t=180+20
F1	2500x2300x350
F2	2500x2500x350

MATERIAL UNLESS OTHERWISE NOTED	
CONCRETE	1stf-RF Fc=21Mpa
PLAIN CONCRETE	Fc=18Mpa
RE-BAR	D10-D16 SD295A D19-D22 SD345
ALLOWABLE SOIL BEARING CAPACITY	70kN/m <sup>2</sup>

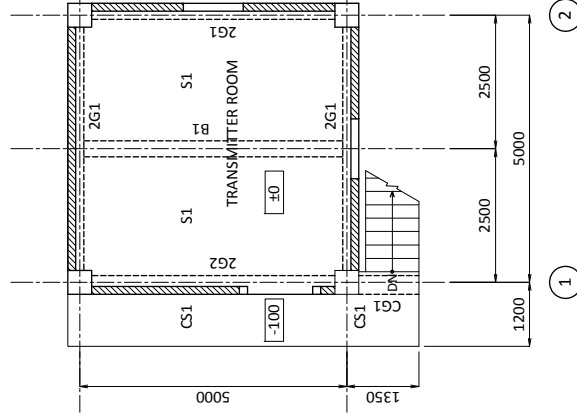
GENERAL NOTES	
1)	INDICATED ADDITIONAL CONCRETE
2)	CONCRETE BLOCK t=150
3)	OPENING
4)	INDICATED REINFORCED CONCRETE SLAB-ON GROUND



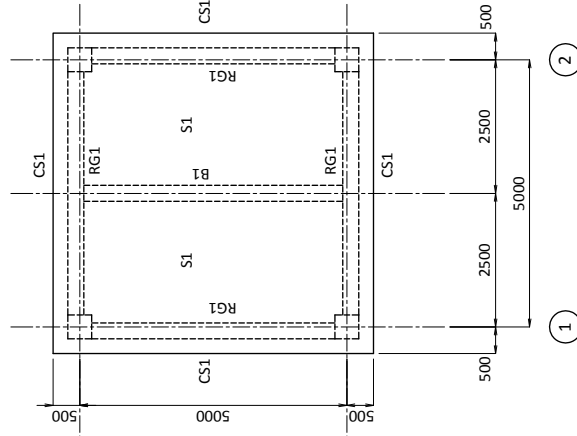
FOUNDATION PLAN S=1/100



1st FLOOR FRAMING PLAN S=1/100



2nd FLOOR FRAMING PLAN S=1/100

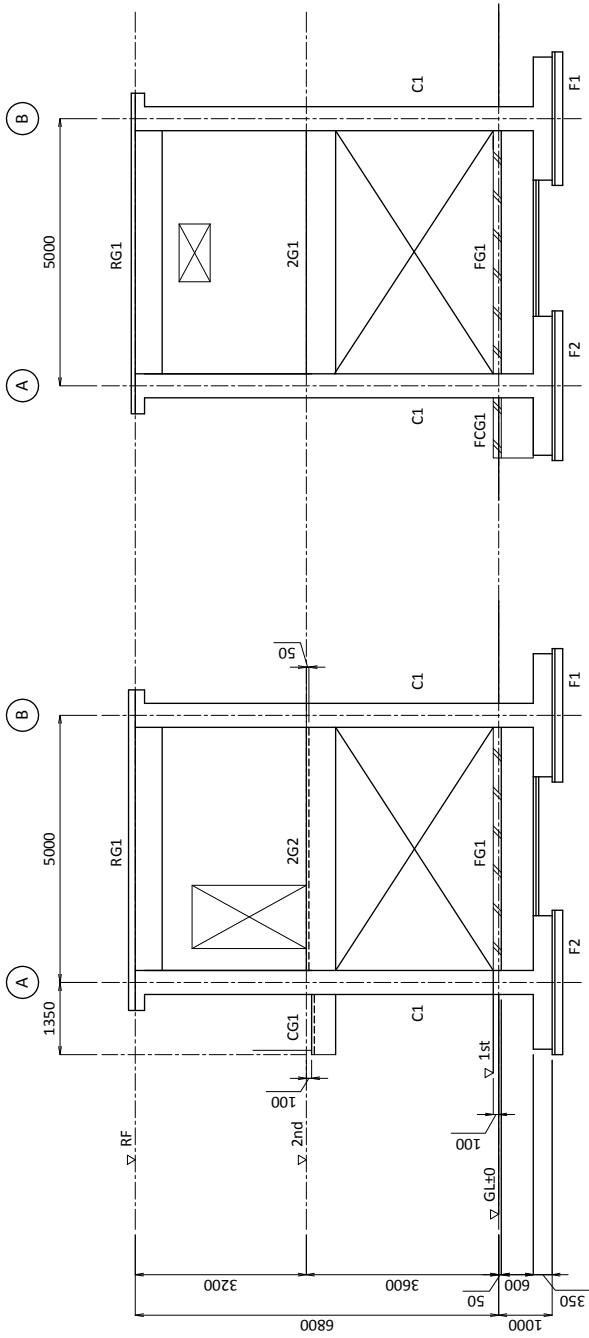


ROOF FRAMING PLAN S=1/100

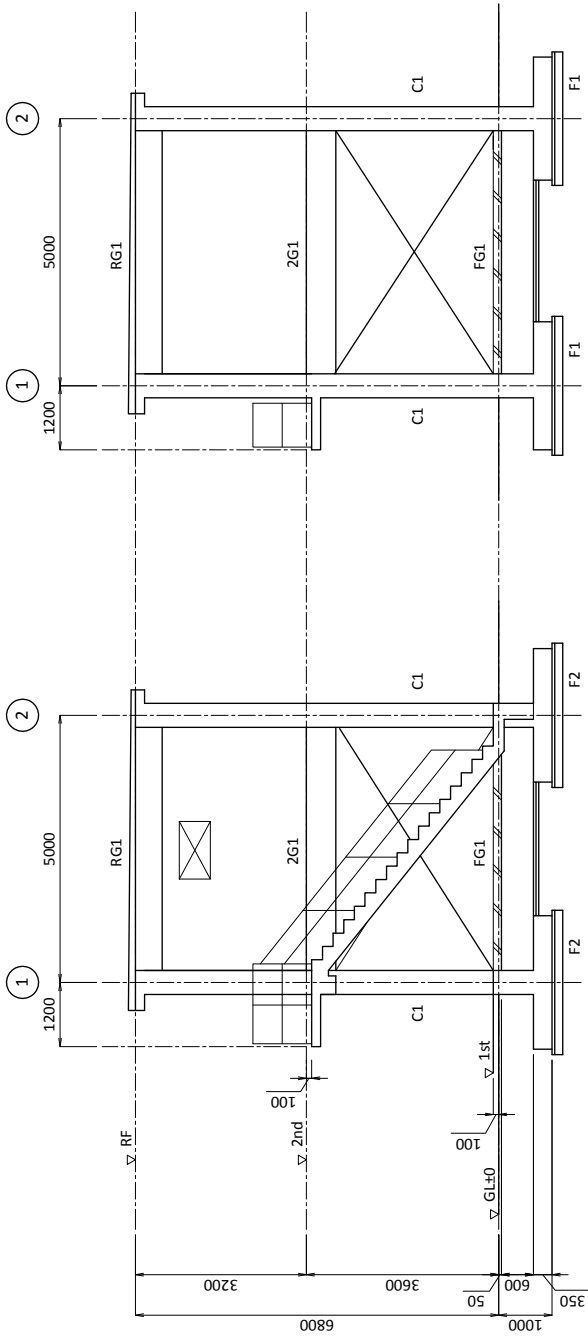
PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING FOUNDATION PLAN AND 1st, 2nd, ROOF FRAMING PLAN	S=1/100					AS-01
								REV. 0



YACHIYO ENGINEERING CO., LTD.

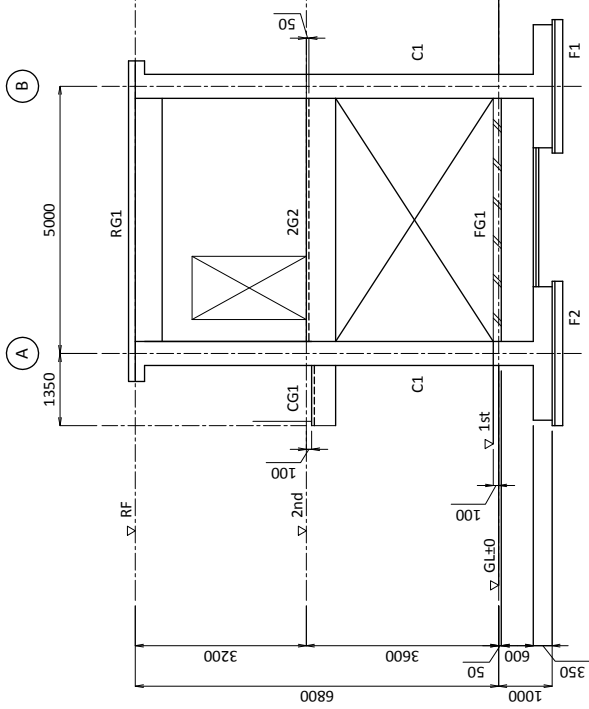


1 LINE FRAMING ELEVATION S=1/100

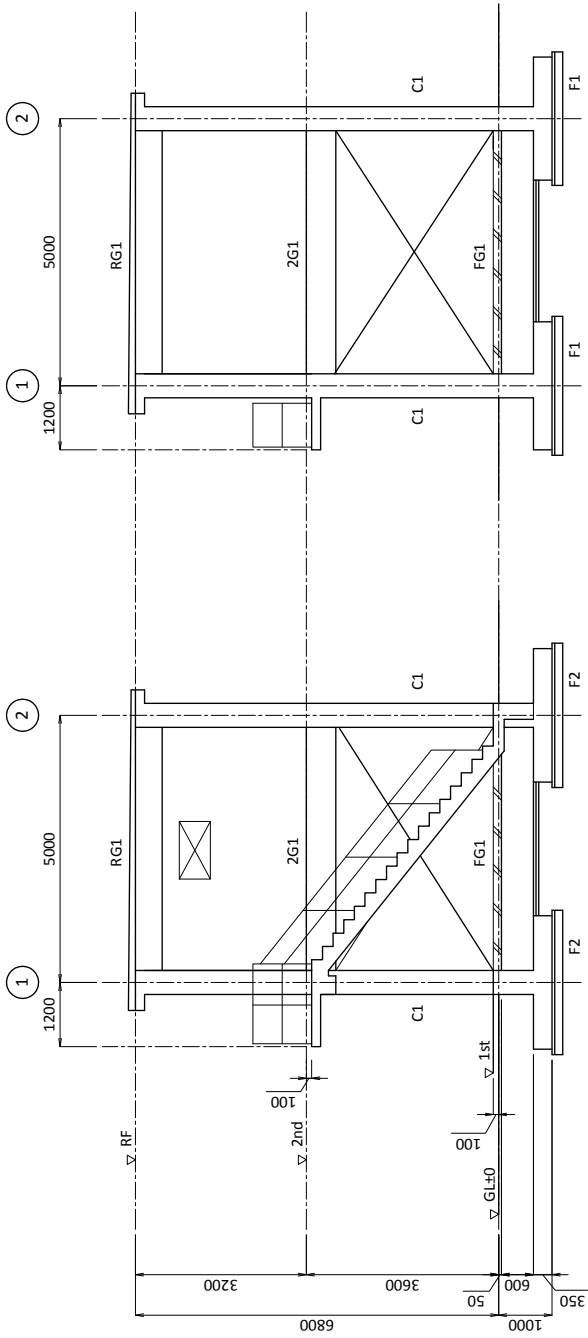


2 LINE FRAMING ELEVATION S=1/100

- GENERAL NOTES
- 1) INDICATED ADDITIONAL CONCRETE
  - 2) CONCRETE BLOCK t=150
  - 3) OPENING



A LINE FRAMING ELEVATION S=1/100



B LINE FRAMING ELEVATION S=1/100

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING FRAMING ELEVATION	S=1/100					AS-02
								REV.
								0

**yec** YACHIYO ENGINEERING CO., LTD.

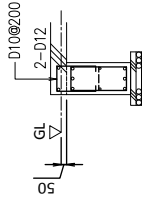


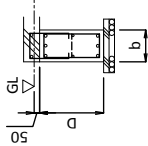
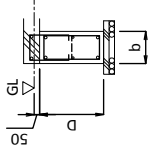


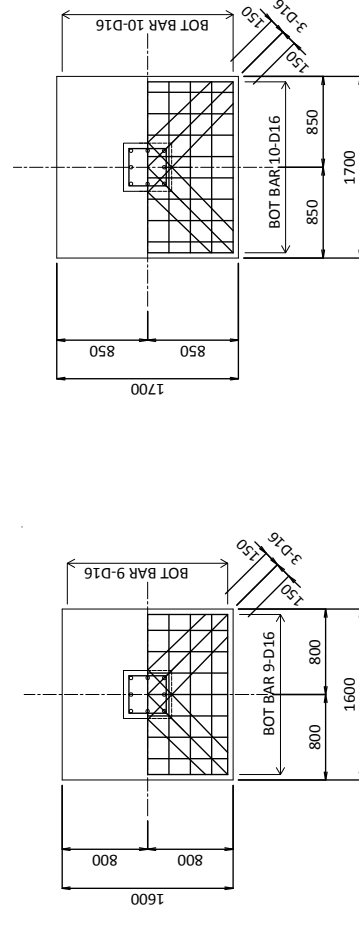
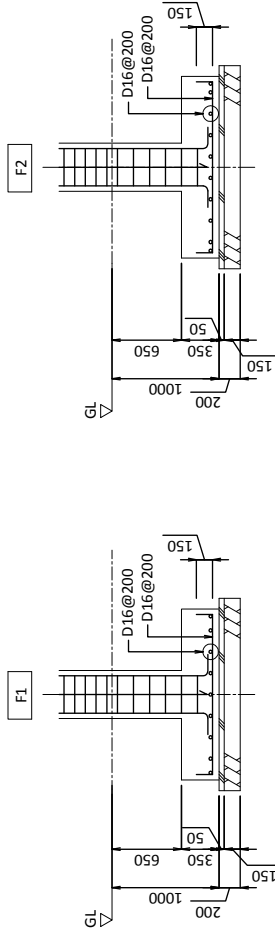




ADDITIONAL CONCRETE RE-OF FOUNDATION BEAM



FOUNDATION BEAM SCHEDULE		TIE BAR D10@1000	
MARKS	FG1	FCG1	ALL SECTION
LOCATION	ALL SECTION	ALL SECTION	
SECTION			
b x D	300x600	300x600	
TOP BAR	2-D20	2-D20	
BOTTOM BAR	2-D20	2-D20	
STIRRAP	□-D10@200	□-D10@200	
WEB BAR	2-D10	2-D10	



LOCATION SCHEDULE

LOCATION NUMBER	LOCATION	REMARK
5	Ungoofaaru	
6	Eydhafushi	
8	Male(Villingili)	
10	Falidhoo	
11	Dhangethi	
12	Feeali	
13	Nilandhoo	
14	Gan	
18	Fiyoori	
19	Thinadhoo	
21	Hithadhoo	
	11 LOCATIONS	

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING ALLOWABLE SOIL BEARING CAPACITY 140kN/m <sup>2</sup> FOUNDATION SCHEDULE	S=1/50					AS-06
								REV.
								0



YACHIYO ENGINEERING CO., LTD.

GIRDER SCHEDULE

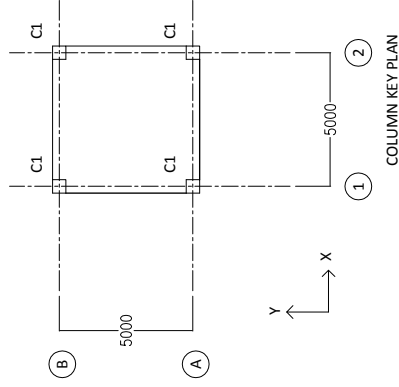
MARKS	G1	G2	CG1	CG1
LOCATION	END	CENTER	ALL SECTION	ALL SECTION
ROOF FLOOR				
b x D	300x500			
TOP BAR	3-D20	2-D20		
BOTTOM BAR	2-D20	2-D20		
STIRRAP	□ - D10@200			
WEB BAR	-			
GR FLOOR				
b x D	300x550	350x500	350x400	
TOP BAR	4-D20	5-D20	3-D20	
BOTTOM BAR	2-D20	3-D20	2-D20	
STIRRAP	□ - D10@200	□ - D10@200	□ - D10@200	
WEB BAR	-			

BEAM SCHEDULE

MARKS	B1	B1
LOCATION	END	CENTER
P FLOOR		
b x D	300x500	
TOP BAR	3-D20	2-D20
BOTTOM BAR	2-D20	3-D20
STIRRAP	□ - D10@200	
WEB BAR	-	

COLUMN SCHEDULE

MARKS	C1
LOCATION	ALL SECTION
2nd FLOOR	
B x D	450x450
MAIN BAR	8-D20
HOOP	□ - D10@100
TIE BAR	D10@600
1st FLOOR	
B x D	450x450
MAIN BAR	8-D20
HOOP	□ - D10@100
TIE BAR	D10@600



POST SCHEDULE

MARKS	P1 (FOR CB15)
LOCATION	ALL SECTION
SECTION	
B x D	150x150
MAIN BAR	2-D10
HOOP	□ - D10@100
TIE BAR	-

LINTEL SCHEDULE

MARKS	L1 (FOR CB15)
LOCATION	ALL SECTION
SECTION	
b x D	150x190
TOP BAR	2-D10
BOTTOM BAR	2-D10
STIRRAP	□ - D10@200
WEB BAR	-

PROJECT NAME

PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES

IMPLEMENTATION AGENCY

TRANSMITTER BUILDING GIRDER SCHEDULE COLUMN SCHEDULE

SCALE

S=1/40

TITLE

DWG No.

AS-07

APPROVED

CHECKED

DESIGNED

DATE

YAC

YACHIYO ENGINEERING CO., LTD.

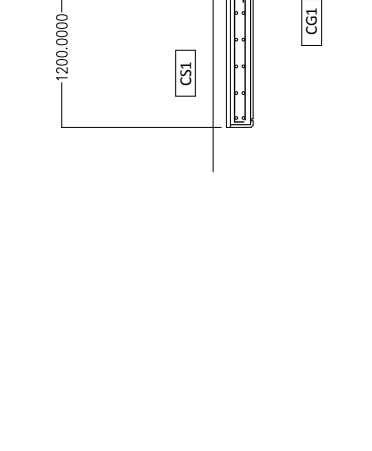
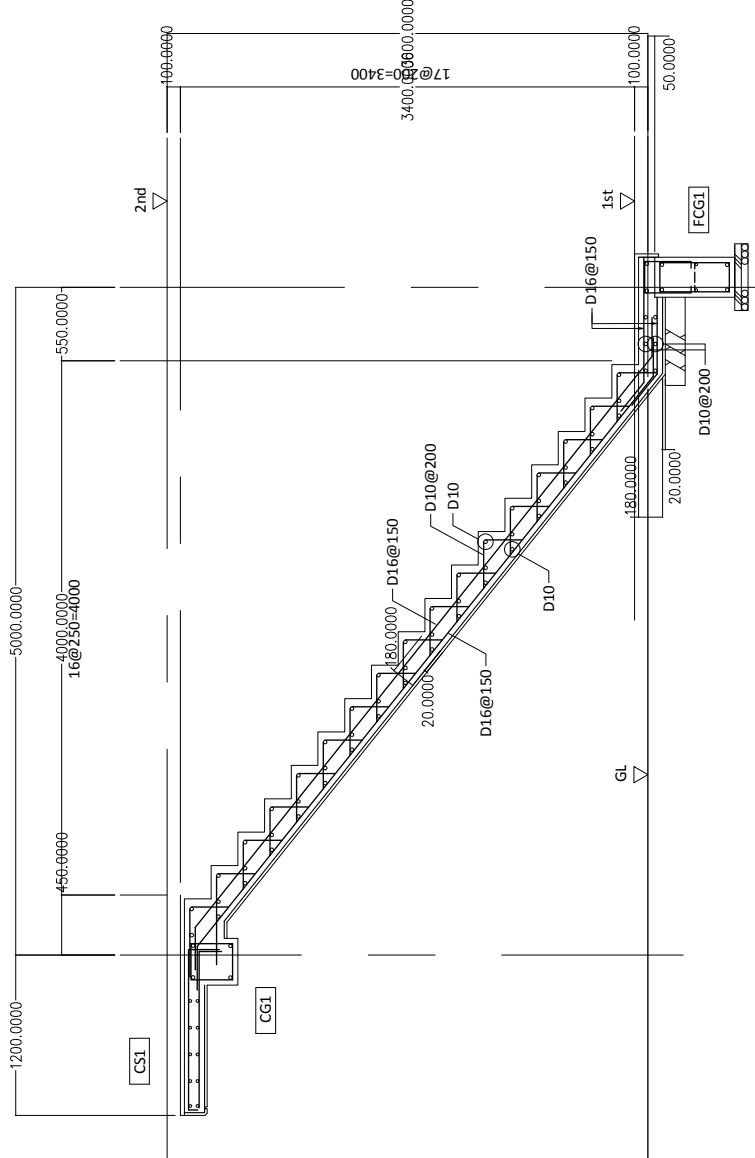
REV.

0

BAR ARRANGEMENT OF STAIR

1

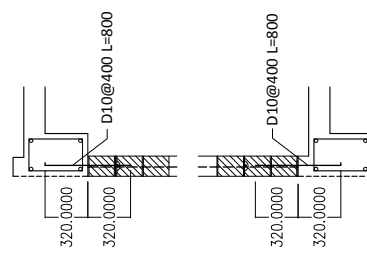
2



WALL SCHEDULE

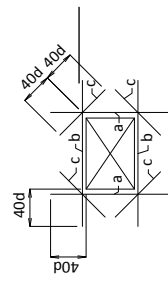
MARKS	SECTION
CB15	
t	150
VERTICAL BAR	D10@400
HORIZONTAL BAR	D10@400
END BAR	1-D12
CORNER BAR	1-D12

JOINT WITH BEAM



BAR ARRANGEMENT FOR OPENING IN THE WALL

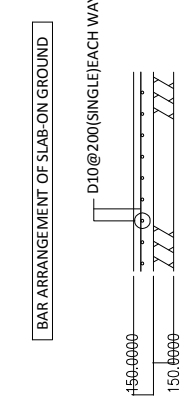
MARKS	a	b	c
CB15	1-D12	1-D12	-



RC-SLAB SCHEDULE

MARKS	DEPTH	PLACEMENT	SHORT SPAN DIRECTION			LONG SPAN DIRECTION			
			END	CENTER (TIP)	CORNER	END	CENTER	CORNER	
S1	t=150+20	TOP BAR	D12@200	←	←	←	D10@200	←	←
		BOTTOM BAR	D12@200	←	←	←	D10@200	←	←
CS1	t=150+20	TOP BAR	D12@200	←	←	←	D10@200	←	←
		BOTTOM BAR	D10@200	←	←	←	D10@200	←	←

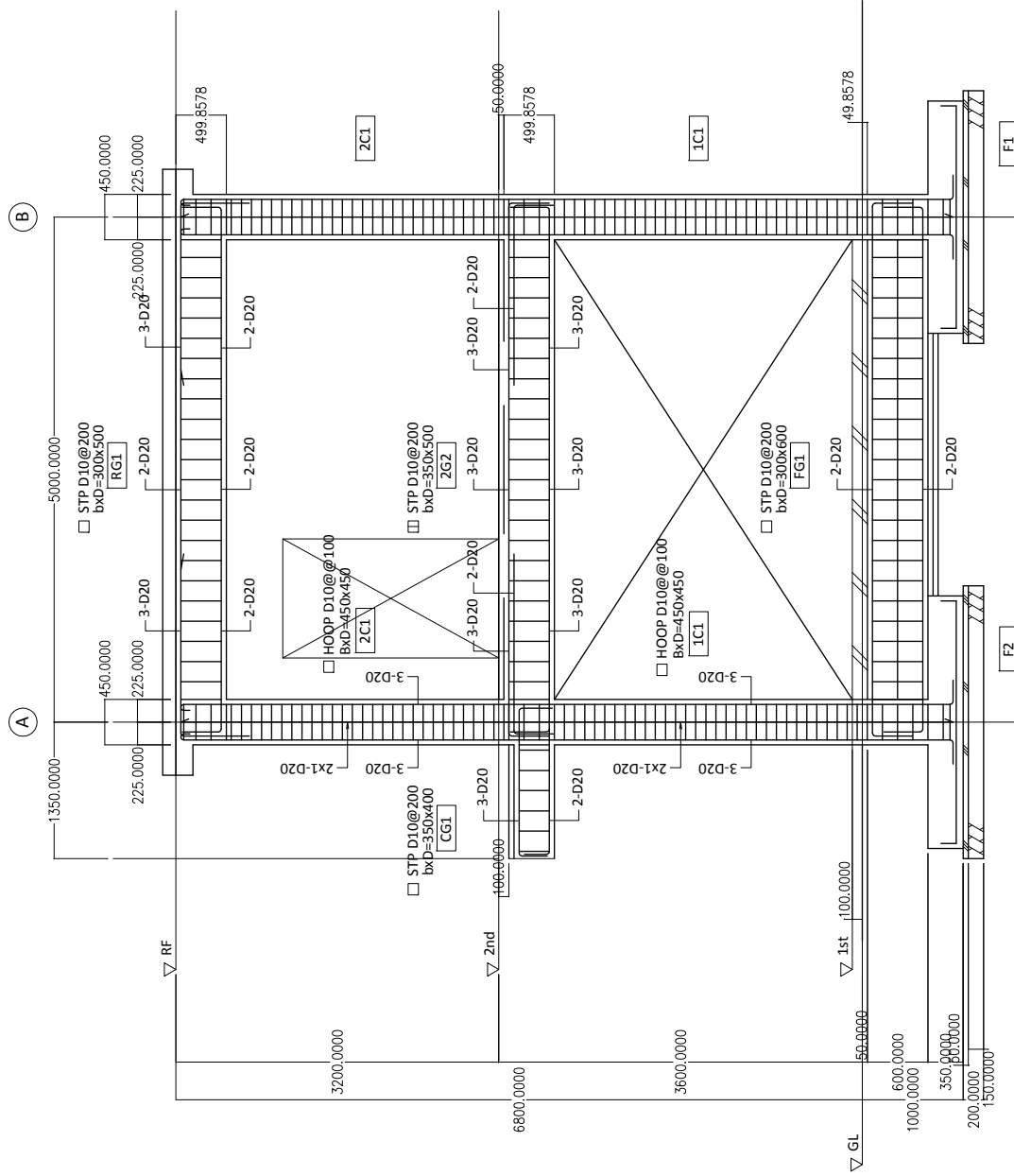
(CS-CANTILEVER SLAB)



PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING BAR ARRANGEMENT OF STAIR WALL AND SLAB SCHEDULE	S=1/40					AS-08
								REV.
								0

YACHIYO ENGINEERING CO., LTD.





1 LINE FRAMING ELEVATION S=1/50

COLUMN : TIE BAR D10@600  
 GIRDER : WEB BAR 2-D10  
 TIE BAR D10@1000

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING	S=1/50					AS-09
								REV. 0

**yec** YACHIYO ENGINEERING CO., LTD.



\* REFER TO THE FOLLOWING SIZE OF WIRE AND LAYING PIPES

----- IV3.5" x 3 E3.5" (E19)

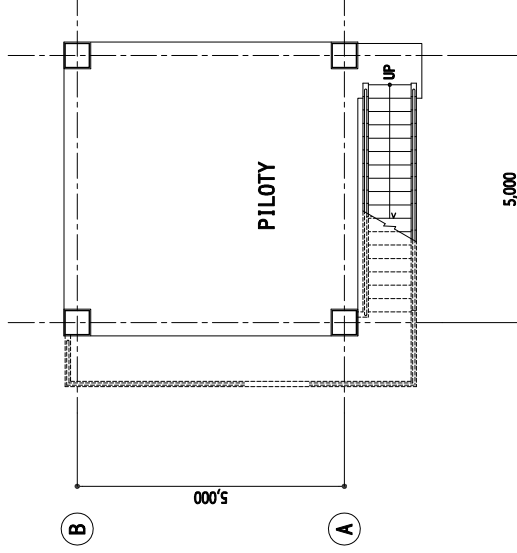
----- IV3.5" x 6 E3.5" (E25)

----- CV3.5" -4C(28)

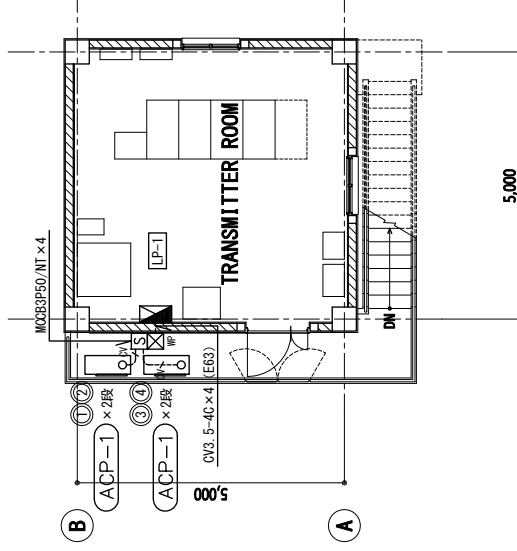
\* REFER TO THE FOLLOWING SIZE OF BOXES

☒ : 200x200x100

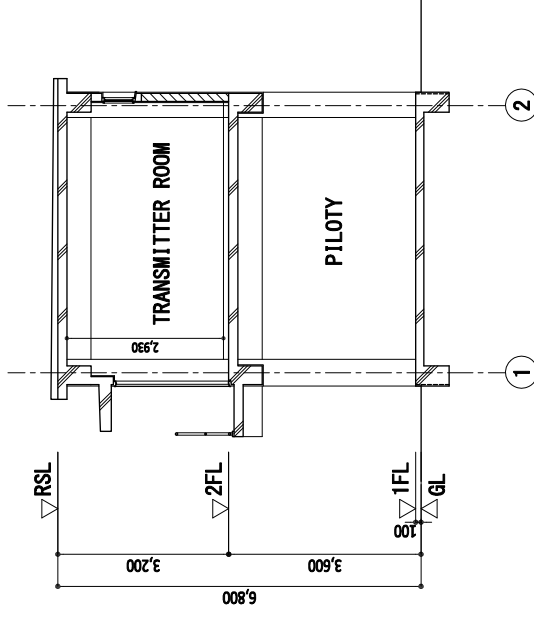
WP: STAINLESS STEEL



1st FLOOR PLAN



2nd FLOOR PLAN



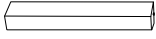
A - A SECTION

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING POWER SUPPLY PLAN	S=1/100					E-02
								REV.
								0

**yoo** YACHIYO ENGINEERING CO., LTD.

**LIGHTING FIXTURE SCHEDULE**

A	SURFACE MOUNTED REFLECTOR TYPE	G	Bracket Type, Water Proof
A321	LED35W	C21	LED12W
A321W	LED35W (Water Proof)		



**LEGEND**

- 1. RATED VOLTAGE : 1φ 240V-50Hz
- 2. POWER FACTOR : HIGH POWER FACTOR

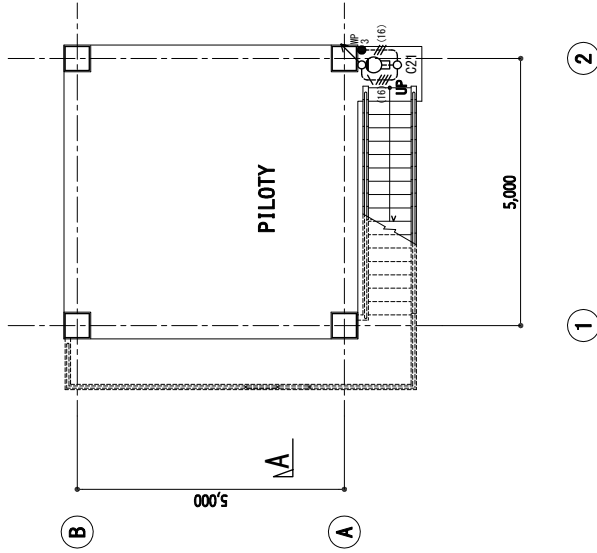
\* REFER TO THE FOLLOWING SIZE OF WIRE AND LAYING PIPES

- 1V3.5" x 2 E3.5" (E19)
- 1V3.5" x 4 E3.5" (E19)
- 1V3.5" x 2 (E19)
- (16) 1V3.5" x 2 E3.5" (16)
- (16) 1V3.5" x 4 E3.5" (16)
- (16) 1V3.5" x 2 (16)
- (16) 1V3.5" x 3 (E19)

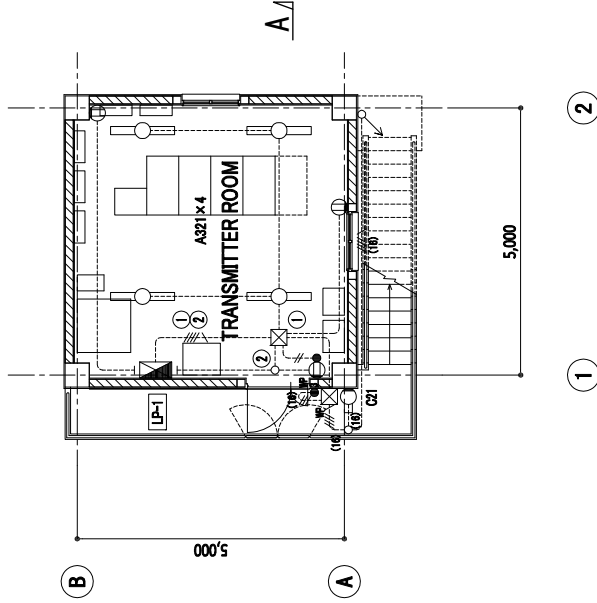
\* REFER TO THE FOLLOWING SIZE OF BOXES

☒ : 200 x 200 x 100

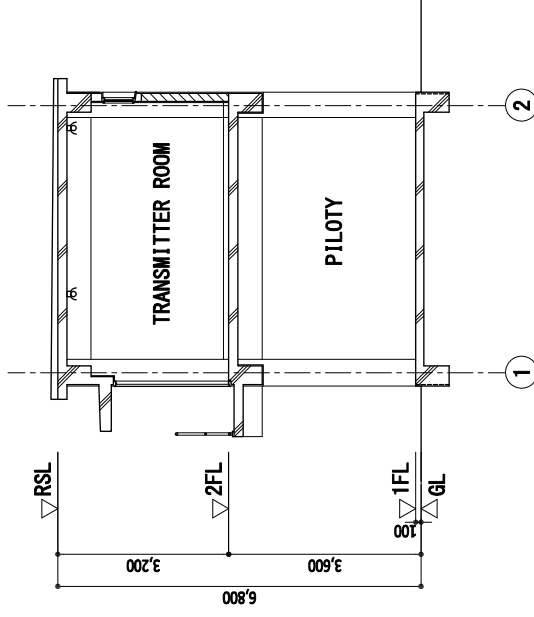
WP: STAINLESS STEEL



**1st FLOOR PLAN**



**2nd FLOOR PLAN**



**A - A SECTION**

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING LIGHTING FIXTURE & OUTLET SOCKET PLAN	S=1/100					E-03
								REV.
								0

**yoo** YACHIYO ENGINEERING CO., LTD.

**EQUIPMENT SCHEDULE**

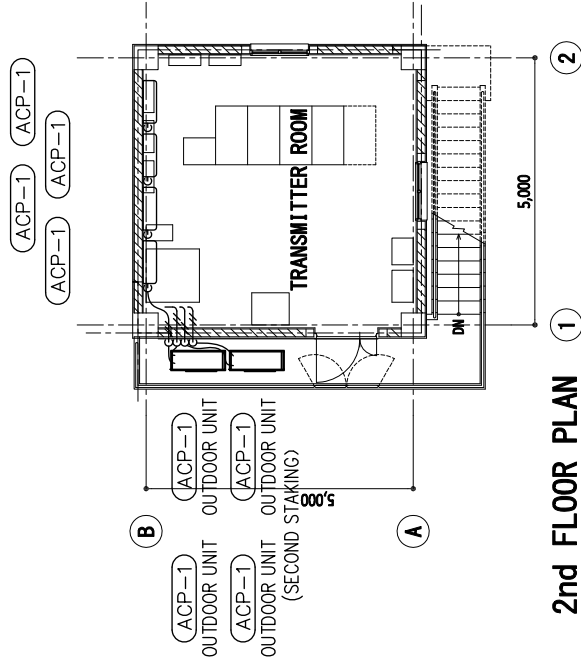
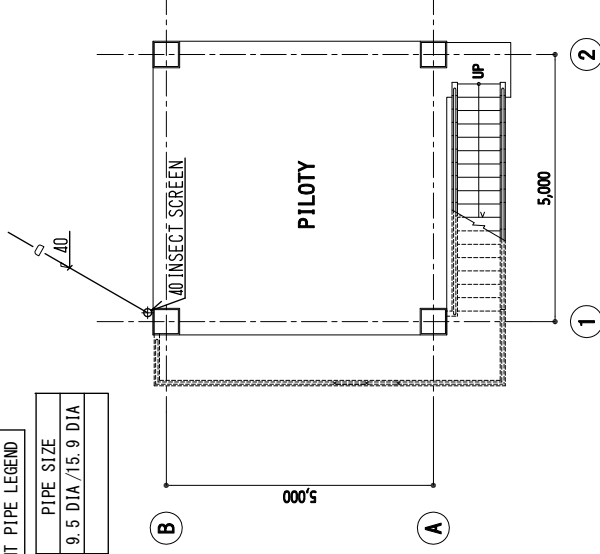
SYMBOL	DESCRIPTION	QTY	SPECIFICATION	LOCATION
ACP-1	WALL MOUNTED TYPE HEAT-PUMP SYSTEM AIR CONDITIONER (CORROSION PROOF TYPE)	4	COOLING CAPACITY : 8.0 kW CONSUMPTION POWER : 2.97 kW COMPRESSOR POWER : 1.3 kW INDOOR FAN POWER : 40 W OUTDOOR FAN POWER : 50 W POWER : 3 PHASE - 220 V - 60 Hz	TRANSMITTER ROOM

**LEGEND**

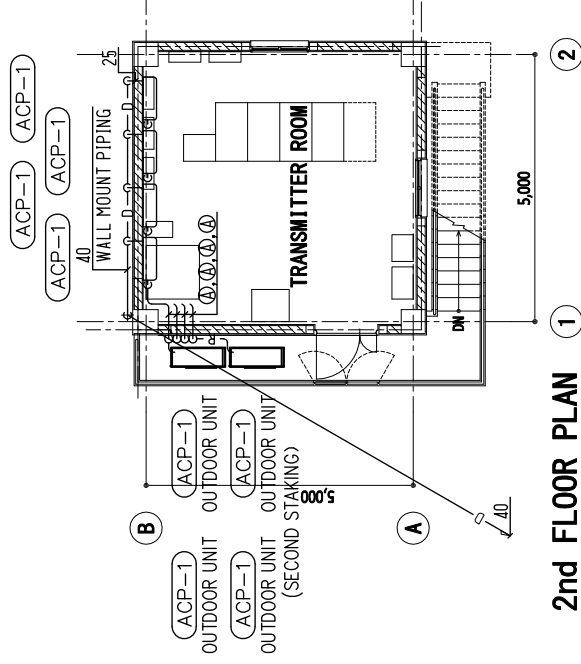
- R — REFRIGERANT PIPE (SECTION/LIQUID), COPPER TUB
- D — DRAIN PIPE (UNPLASTICIZED) POLY VINYL CHLORIDE
- WF — WF-1, 6 & CVV-2, 0-2C

**REFRIGERANT PIPE LEGEND**

SYMBOL	PIPE SIZE
Ⓐ	9.5 DIA / 15.9 DIA



**2nd FLOOR PLAN 1**

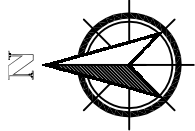


**2nd FLOOR PLAN 2**

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		TRANSMITTER BUILDING VENTILATION AND AIR CONDITIONING SYSTEM EQUIPMENT SCHEDULE	S=1/100					M-01
								REV.
								0

**yoo** YACHIYO ENGINEERING CO., LTD.





Projection: UTM/World Geodetic System 1984  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea Level (LMSEL)  
 Data provided and data provided by Maldivian Department of Hydrography

**BENCHMARK COORDINATES**

**BH01**  
 Northing: 761988.1201m  
 Easting: 291595.6904m  
 MSL Height: +1.59m

**BH02**  
 Northing: 761986.3892m  
 Easting: 291603.7824m  
 MSL Height: +1.59m

**BENCHMARK COORDINATES**

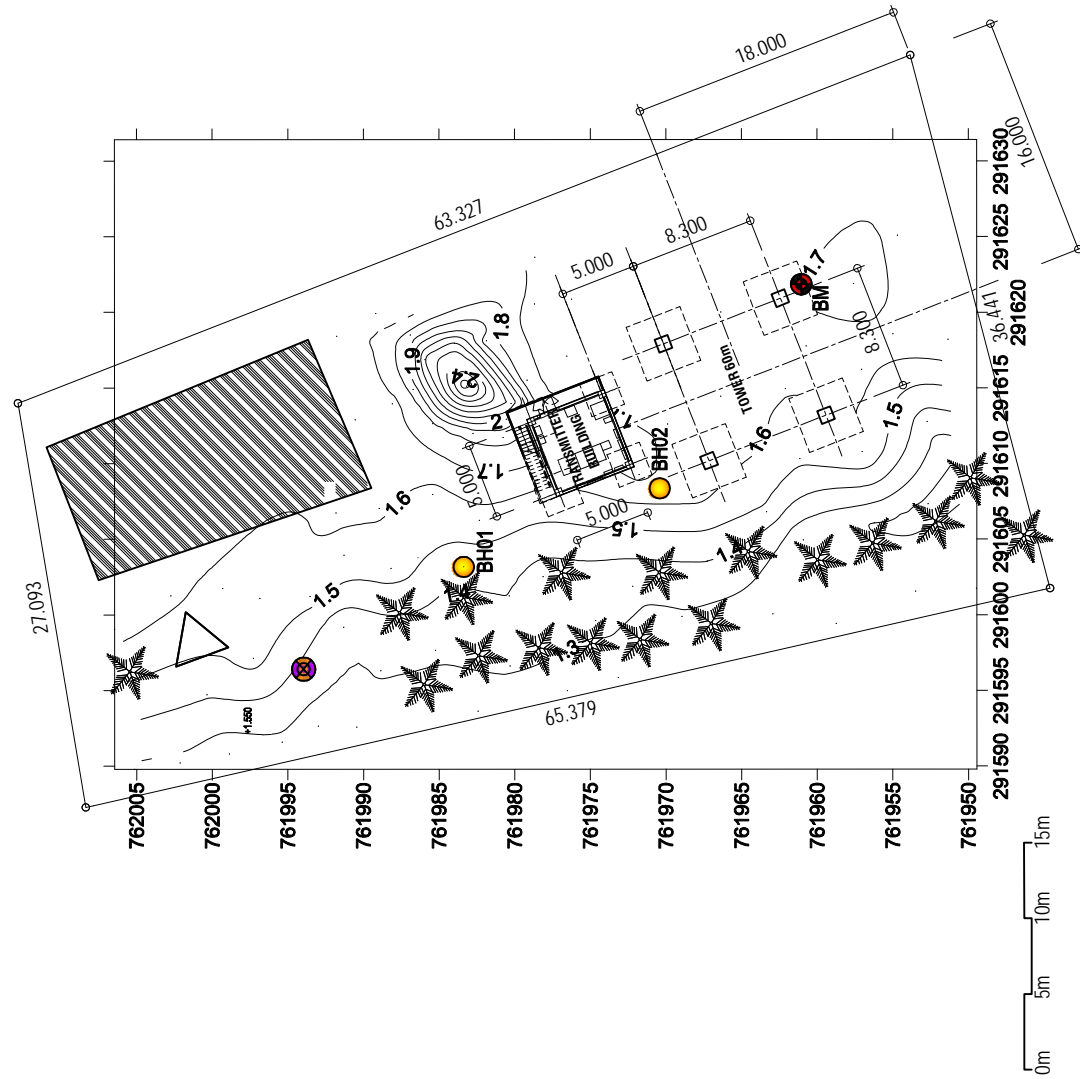
**BN**  
 Northing: 761961.6596m  
 Easting: 291621.8506m  
 MSL Height: +1.64m

**LEGEND**

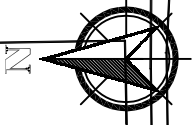
- BENCHMARK
- BOREHOLE
- ⊗ DISH ANTENNA
- △ ANTENNA
- ✱ PALM



Island: Dhidhdhoo  
 Atoll: Ha Alif  
 Client: ELS and Atuin International  
 Scale: As Shown  
 Surveyor: Mohamed Shifur  
 Asst. Surveyors: Mohamed Vidhan  
 Drawn by: Mohamed Shifur  
 Checked by: Ibrahim Muzil  
 Surveyed date: 20 December 2015



PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Dhidhdhoo IN HAA ALIF ATOLL	As Shown					L-01
<b>YACHIO ENGINEERING CO., LTD.</b> TOKYO, JAPAN								REV. <b>0</b>



Project Name: TVT Maldives, G.S. 328 (1) TBE  
 Elevation: 9/2024  
 Vertical Datum: Local Mean Sea Level (LMSL) derived  
 from geoid data (not provided) by Maldives  
 Department of Hydrology

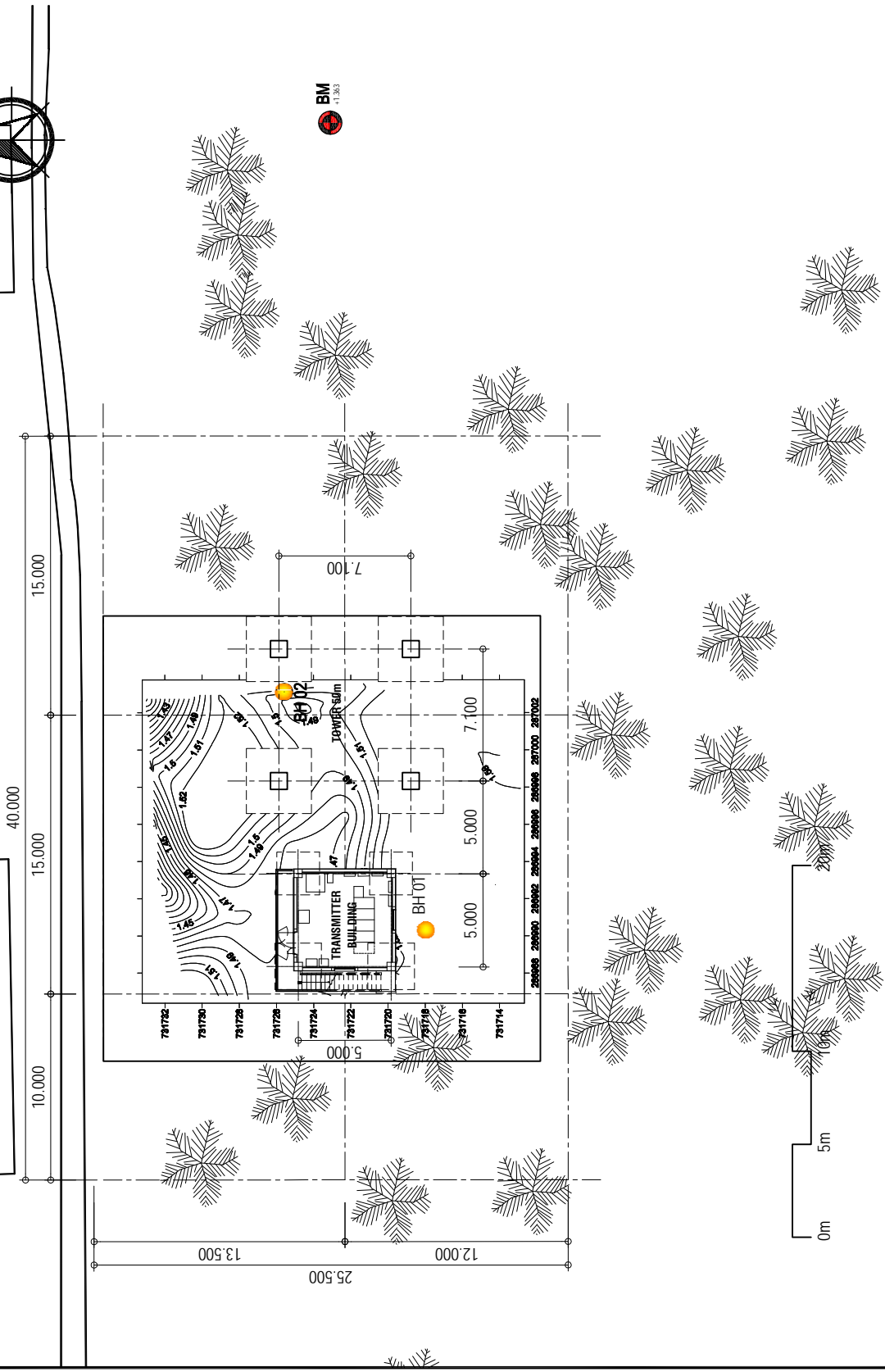
BOREHOLE COORDINATES	
BH01	Northing: 73174.2170m Easting: 23003.1210m MSL Height: +1.457m
BH02	Northing: 73174.4740m Easting: 23003.1210m MSL Height: +1.450m

BENCHMARK COORDINATES	
BM01	Northing: 73174.4747 Easting: 23003.1210 MSL Height: +1.363

**LEGEND**  
 BENCHMARK: BM  
 BOREHOLE: BH  
 RUI: RUI

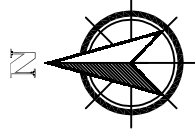


Client: Kuluhaafushi  
 Asst: Haa Dhaalu  
 Client: ELS and Amin International  
 Scale: As Shown  
 Surveyor: Mohamed Shalef  
 Asst. Surveyors: Mohamed Visham  
 Drawn by: Mohamed Shalef  
 Checked by: Ibrahim Miral  
 Surveyed date: 29 December 2015



PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Kuluhaafushi IN HAA DHAALU ATOLL	As Shown					L-02
								REV. 0





Projection: UTM/Zone 49Q UTM  
 Ellipsoid: 'WGS84'  
 Vertical Datum: Local Mean Sea Level (LMSL) derived  
 from geoid data provided by Maldives  
 Department of Meteorology

**BENCHMARK COORDINATES**

**BH01**  
 Northing: 679047.1387m  
 Easting: 311096.5482m  
 MSL Height: 11.461m

**BH02**  
 Northing: 679025.1582m  
 Easting: 311076.4222m  
 MSL Height: 11.462m

**BENCHMARK COORDINATES**

**BW01**  
 Northing: 679059.7010m  
 Easting: 311091.6330m  
 MSL Height: 11.469m

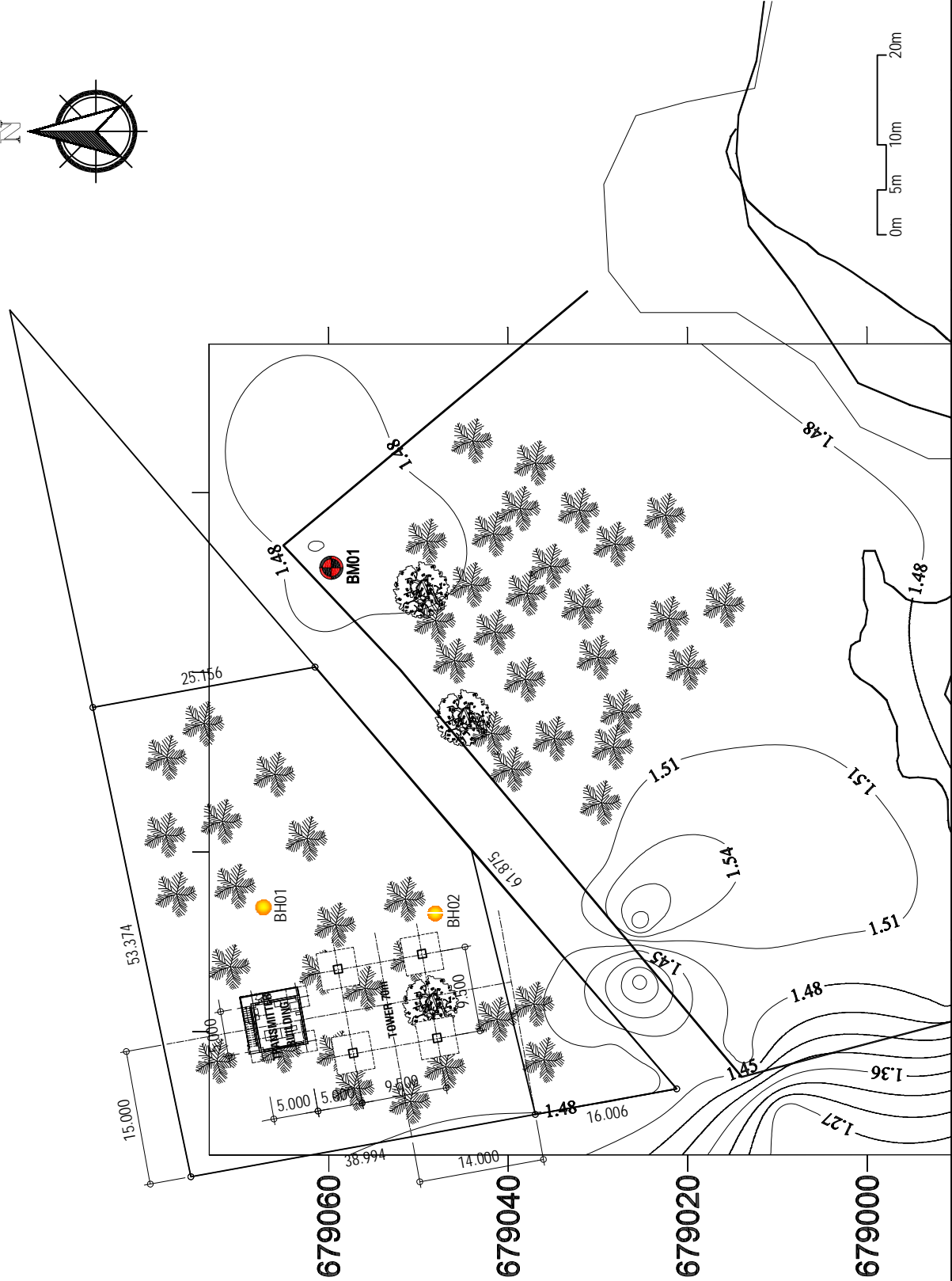
**LEGENDA**

- BENCHMARK
- BOREHOLE
- HERINDRU
- RUTH



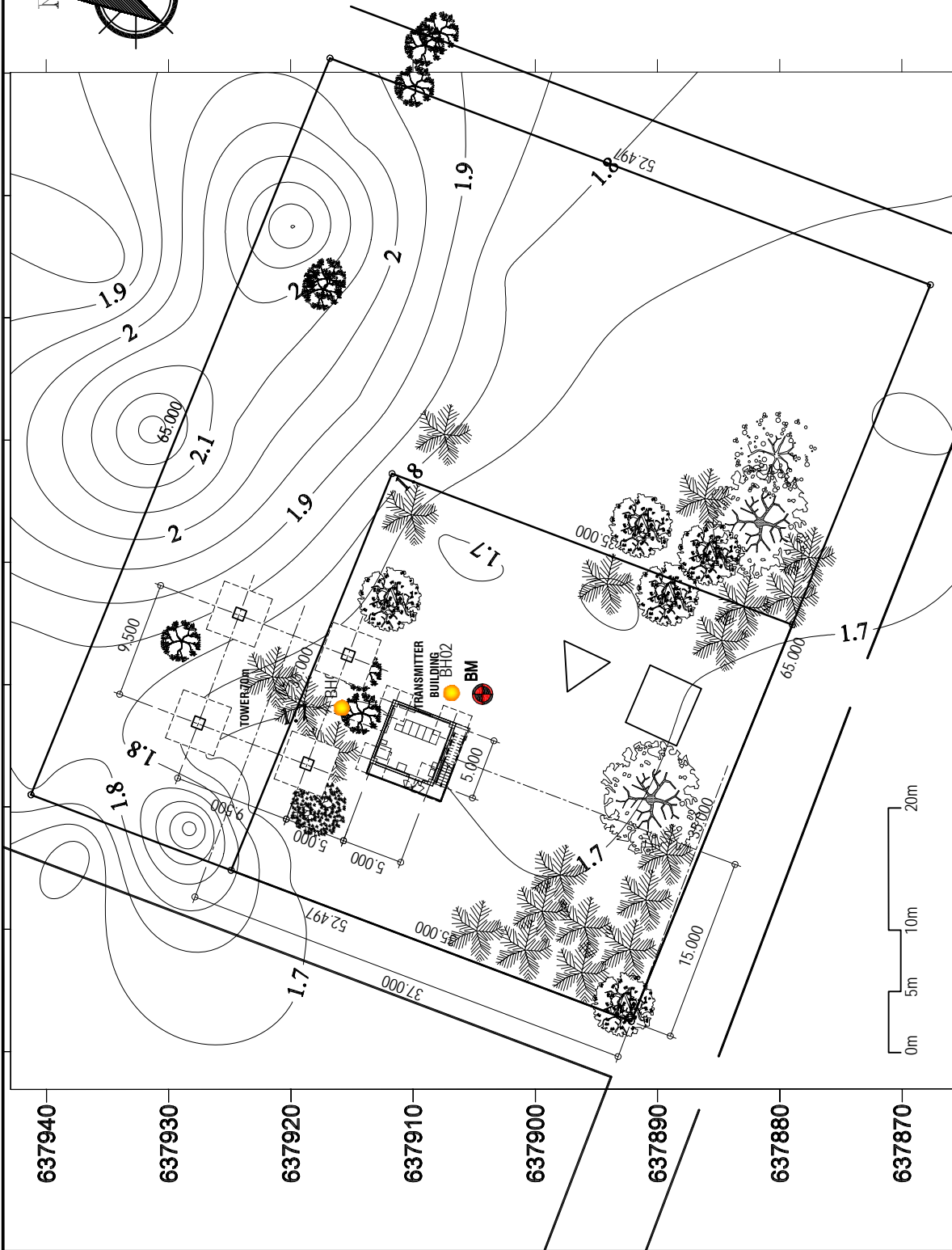
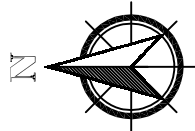
**Drawn by:** Muhammad Riyaz  
**Checked by:** Ibrahim Mital  
**Success date:** 10 December 2015

**Client:** U.S. and Amin International  
**Scale:** As Shown  
**Surveyor:** Mohamed Riyaz  
**Drawn by:** Muhammad Riyaz  
**Checked by:** Ibrahim Mital  
**Success date:** 10 December 2015



PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Funadhoo IN Shaviyani ATOLL	As Shown					L-03
								REV. 0



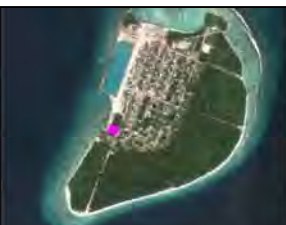


Projection: UTM/Eurasia/Zone 47  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea Level (MSL), derived from provided tide data provided by Maldives Department of Marineology

BOREHOLE COORDINATES	
BH04	637015.7800m
Northing	323928.1200m
MSL Height	1.600m
BH05	637013.1200m
Northing	323929.1300m
MSL Height	1.700m

BENCHMARK COORDINATES	
BM01	637001.0700m
Northing	323928.1200m
MSL Height	1.720m

LEGEND	
BENCHMARK	●
BOREHOLE	●
BANBUKEYO	●
IBURUNDHU	●
PUNA	●
POU	●
MIDHILI	●
BHODGAA	●
ANTENNA	▲
BUILDING	□

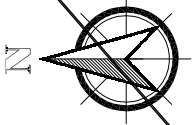


Owner:	Manadhoo
AMR:	Noonu
Client:	ELS and Amin International
Scale:	As Shown
Surveyors:	Mohamed Riyaz Mohamed Azmed
Drawn by:	Mohamed Riyaz
Checked by:	Ibrahim Mital
Surveyed date:	11 December 2015

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Manadhoo IN Noonu ATOLL	As Shown					L-04
								REV.
								0

**yoo** YACHYO ENGINEERING CO., LTD.  
 TOKYO, JAPAN





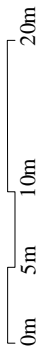
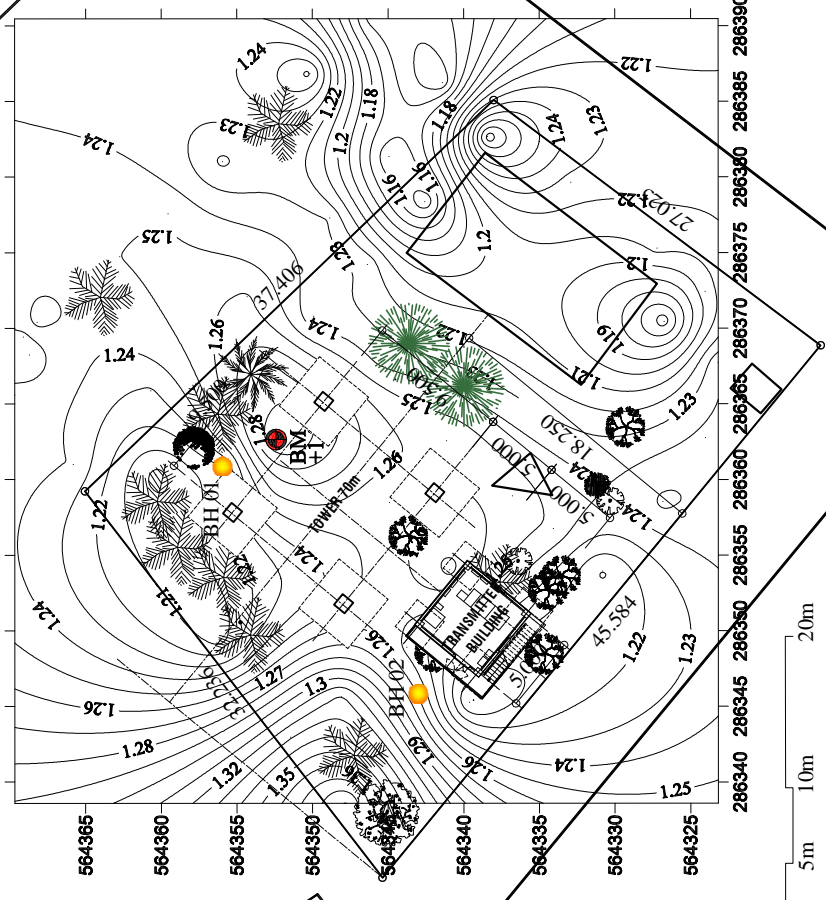
Projection: UTM/Zone: 48Q, UTM to WGS  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea Level (MSL) derived from provided tide data provided by Maldives Department of Meteorology

BOREHOLE COORDINATES	
BH01	Northing: 564355.8740m Easting: 286345.8170m MSL Height: +1.230m
BH02	Northing: 564342.8950m Easting: 286345.8170m MSL Height: +1.238m

BENCHMARK COORDINATES	
BM01	Northing: 564352.8660m Easting: 286342.8410m MSL Height: 1.309m

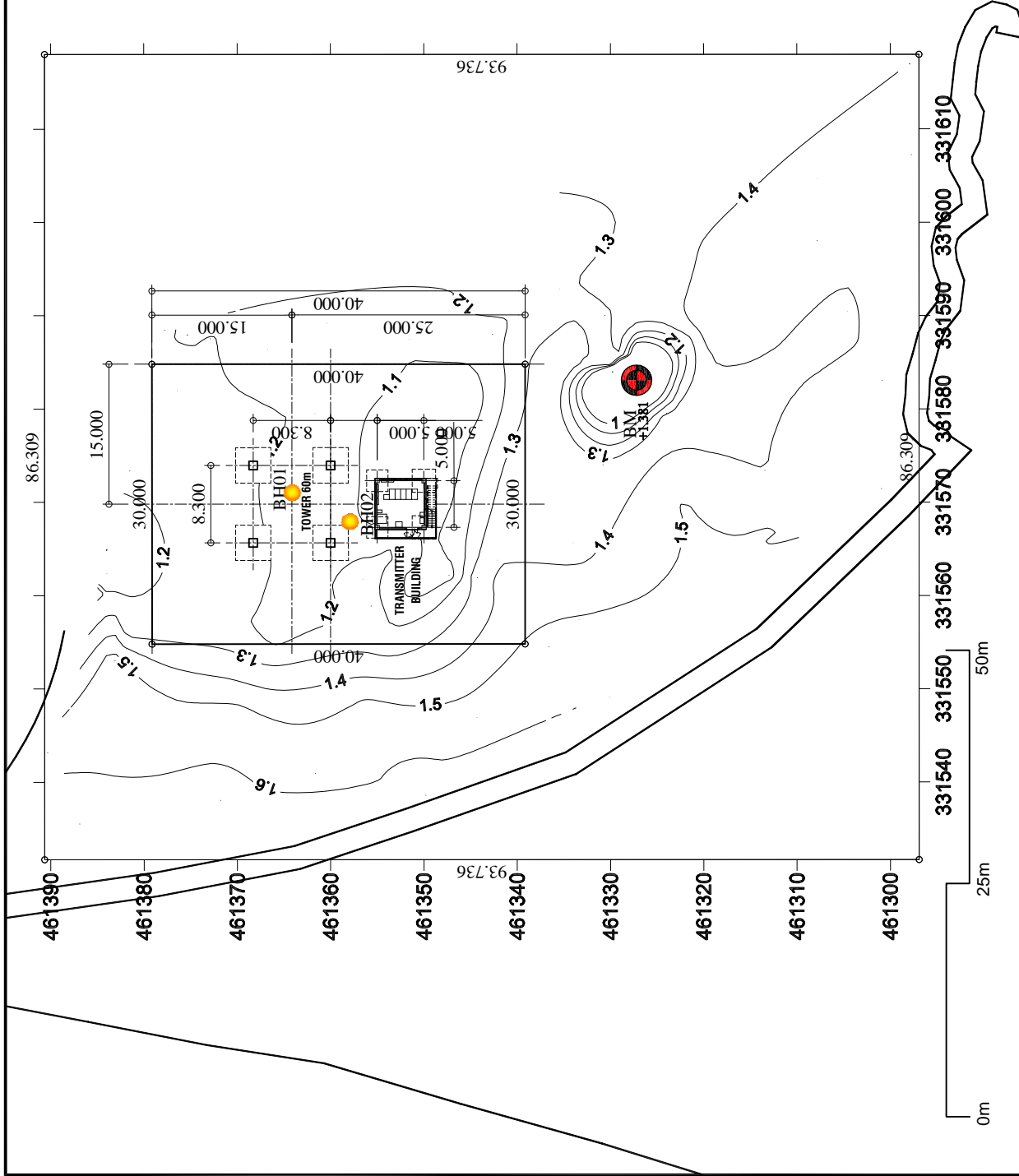
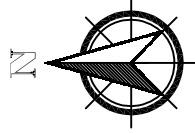
**LEGEND**  
 BENCHMARK  
 BOREHOLE  
 PTHROANU  
 BRUNDHU  
 RUF  
 MIDDILI  
 BRIGGAA  
 MOONIMAA  
 KAHIRU  
 KANDHU  
 ORIMAS

Name:	Eydhafushi
Attn:	Baa
Client:	ELS and Arain International
Scale:	As Shown
Surveyor:	Mohamed Riyaz
As-Surveyors:	Mohamed Azzed
Drawn by:	Mohamed Riyaz
Checked by:	Ibrahim Miral
Surveyed Date:	30 May 2016



PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Eydhafushi IN BAA ATOLL	As Shown					L-06
								REV.
								0





Projection: UTM32Q-06\_Zone\_43\_72E to 72E  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea level (MSL) derived  
 from certified tide data provided by Maldivian  
 Department of Meteorology

**BENCHMARK COORDINATES**

**BH01**  
 Northing: 461361.9960m  
 Easting: 331570.9870m  
 MSL Height: +0.588m

**BH02**  
 Northing: 46137.8090m  
 Easting: 33157.9600m  
 MSL Height: +0.328m

**BENCHMARK COORDINATES**

**BM**  
 Northing: 46137.2000m  
 Easting: 331583.0730m  
 MSL Height: +1.181m

**LEGEND**

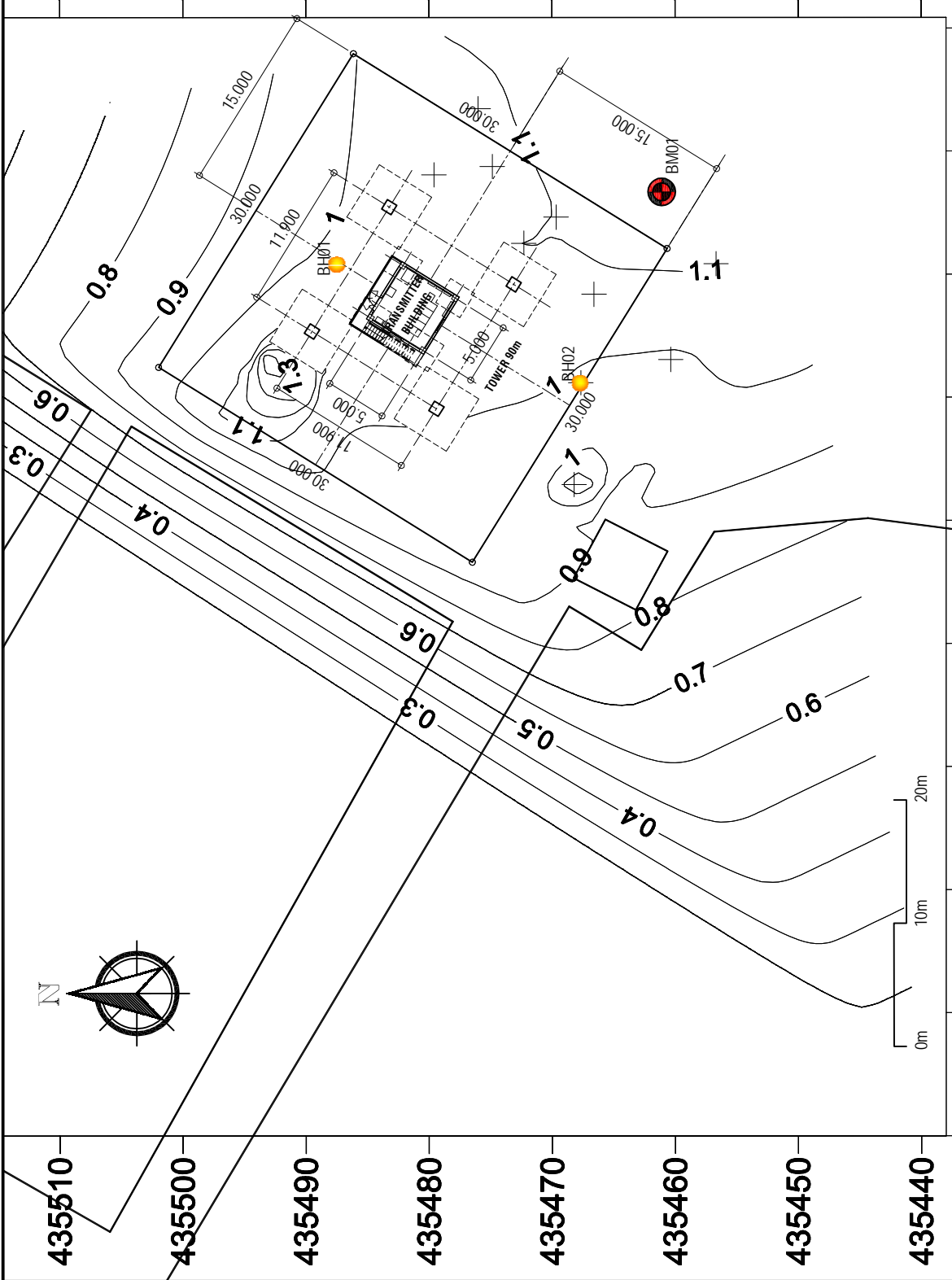
- BENCHMARK
- BENCHMARK



Name: Vilingili  
 Atoll: Kaafu  
 Client: ELS and Anini International  
 Scale: As Shown  
 Surveyor: Mohamed Shafiq  
 Assd. Surveyor: Mohamed Vilham  
 Drawn by: Mohamed Vilham  
 Checked by: Ibrahim Mizal  
 Surveyed date: 08 December 2015

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Vilingili IN Kaafu ATOLL	As Shown					L-08
	<b>yoo</b>	<b>YACHYO ENGINEERING CO., LTD.</b> TOKYO, JAPAN						<b>REV. 0</b>



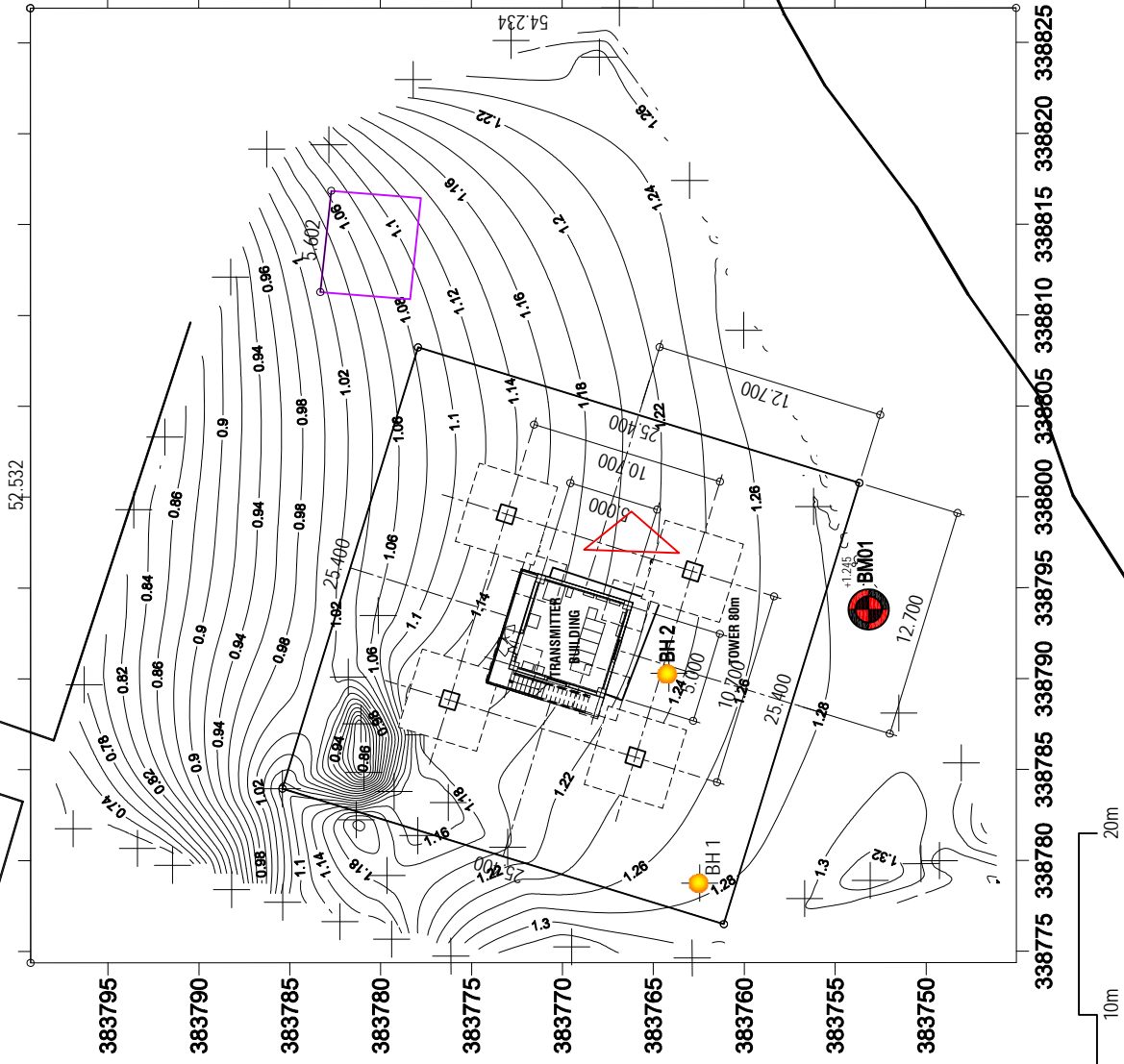
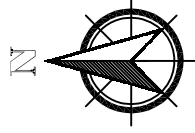


Projection: UTM/Zone 49Q Ellipsoid: WGS84 Vertical Datum: Local Mean Sea Level (MSL) derived from published tide data provided by Maldives Department of Hydrology	
<b>BENCHMARK COORDINATES</b>	
BH01	Northing: 43547.4294m Easting: 332310.7401m MSL Height: +0.947m
BH02	Northing: 43547.6800m Easting: 332301.1790m MSL Height: +0.977m
<b>BENCHMARK COORDINATES</b>	
BM01	Northing: 435461.0460m Easting: 332316.6837m MSL Height: +1.109m
<b>LEGEND</b> 	
Location:	Maafushi
Area:	South Kaafu
Client:	E.L.S and Amin International
Scale:	As Shown
Surveyor:	Mohamed Shifaf
Ass.Surveyors:	Mohamed Viham
Drawn by:	Mohamed Shifaf
Checked by:	Ibrahim Mial
Surveyed date:	20 December 2015

435510 435500 435490 435480 435470 435460 435450 435440

332240 332250 332260 332270 332280 332290 332300 332310 332320 332330

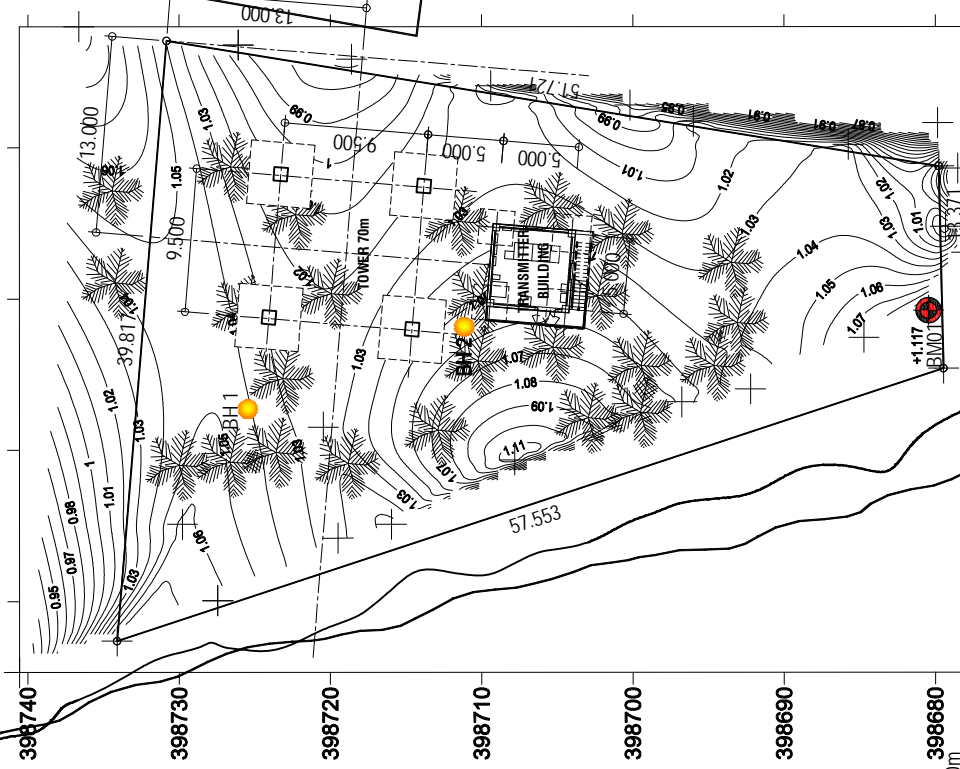
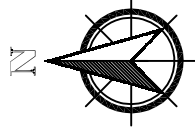
PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Maafushi IN Kaafu ATOLL	As Shown					L-09
					YACHYO ENGINEERING CO., LTD.			REV. 0
					TOKYO, JAPAN			



Projection: UTM (Zone 49, 72N) WGS 84 Ellipsoid: WGS84 Vertical Datum: Local Mean Sea Level (LMSL) based on mean sea level data provided by Maldives Department of Hydrography																			
<b>BENCHMARK COORDINATES</b>																			
BH001	Northing: 383762.450m Easting: 54234.000m MSL Height: +1.302m																		
BH002	Northing: 383764.185m Easting: 54236.200m MSL Height: +1.250m																		
<b>BENCHMARK COORDINATES</b>																			
BM001	Northing: 383733.131m Easting: 54236.000m MSL Height: +1.245m																		
<b>LEGEND</b>																			
●	BENCHMARK																		
○	BENCHMARK																		
□	BTT																		
△	ANTENNA																		
<table border="0"> <tr> <td>Island:</td> <td>Felidhoo</td> </tr> <tr> <td>Atoll:</td> <td>Vaavu</td> </tr> <tr> <td>Client:</td> <td>ELS and Amin International</td> </tr> <tr> <td>Scale:</td> <td>As Shown</td> </tr> <tr> <td>Surveyor:</td> <td>Mohamed Shihaf</td> </tr> <tr> <td>Asst. Surveyor:</td> <td>Mohamed Vidhan</td> </tr> <tr> <td>Drawn by:</td> <td>Mohamed Shihaf</td> </tr> <tr> <td>Checked by:</td> <td>Ibrahim Mital</td> </tr> <tr> <td>Surveyed date:</td> <td>10 Dec 2015</td> </tr> </table>		Island:	Felidhoo	Atoll:	Vaavu	Client:	ELS and Amin International	Scale:	As Shown	Surveyor:	Mohamed Shihaf	Asst. Surveyor:	Mohamed Vidhan	Drawn by:	Mohamed Shihaf	Checked by:	Ibrahim Mital	Surveyed date:	10 Dec 2015
Island:	Felidhoo																		
Atoll:	Vaavu																		
Client:	ELS and Amin International																		
Scale:	As Shown																		
Surveyor:	Mohamed Shihaf																		
Asst. Surveyor:	Mohamed Vidhan																		
Drawn by:	Mohamed Shihaf																		
Checked by:	Ibrahim Mital																		
Surveyed date:	10 Dec 2015																		



PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Felidhoo IN Vaavu ATOLL	As Shown					L-10
							YACHIYO ENGINEERING CO., LTD.	REV.
							TOKYO, JAPAN	0

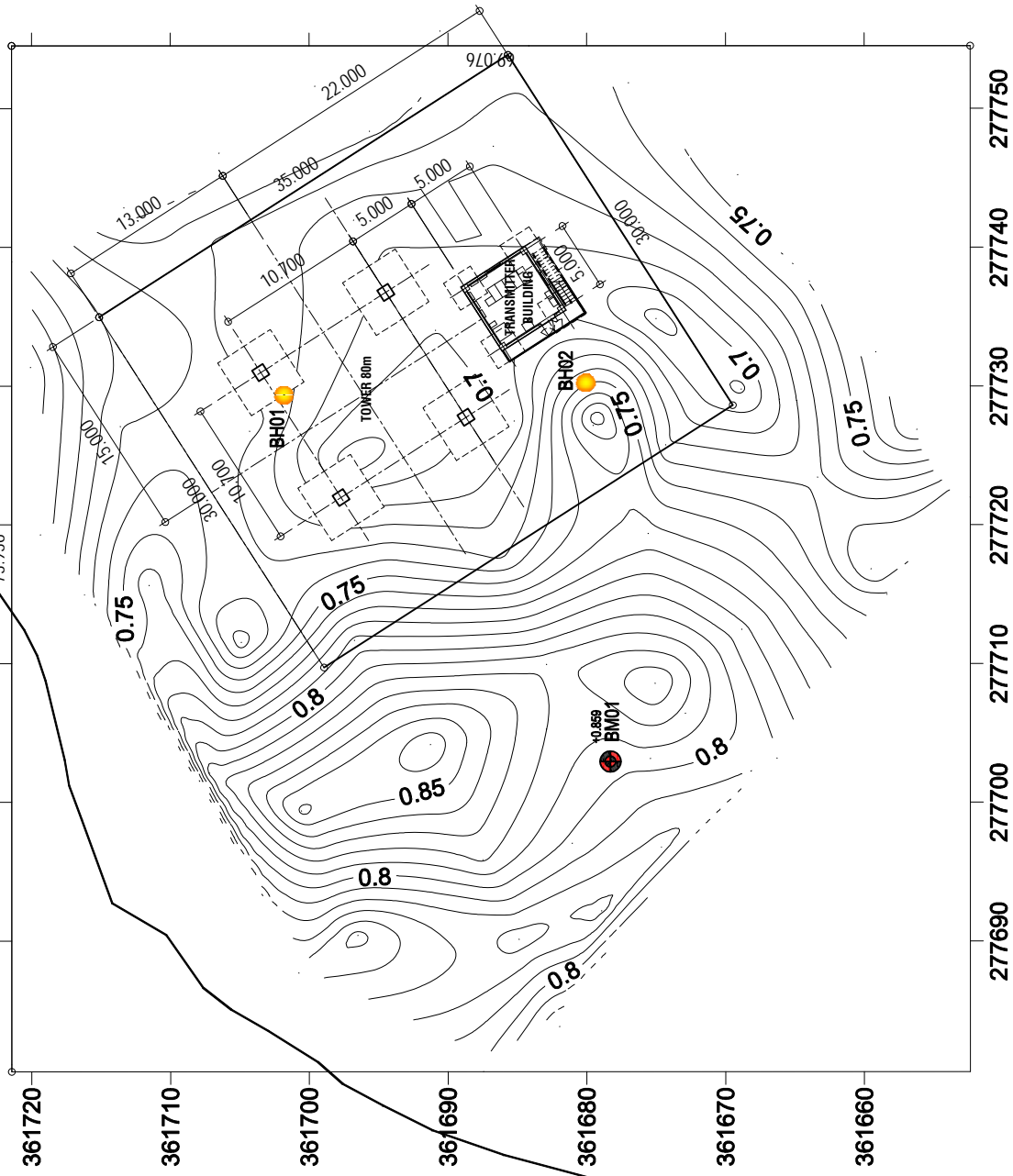
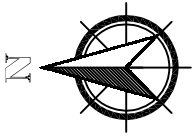


Project: 07242016-01_01_01 Sheet: W0004 Vertical Datum: Local Mean Sea Level (LMSL) derived from geoid data file provided by Maldives Department of Meteorology	
<b>BOREHOLE COORDINATES</b>	
BH01	Northing: -398729.781m Easting: -272815.108m MSL Height: -1.063m
BH02	Northing: -398720.468m Easting: -272821.530m MSL Height: -1.023m
<b>BENCHMARK COORDINATES</b>	
BM01	Northing: -398680.449m Easting: -272829.255m MSL Height: -1.117m
<b>LEGEND</b> BENCHMARK:  BENCHMARK BOREHOLE:  BOREHOLE BH:  BH	
Name: Dhangeethi A/E: AUF Dhaala Client: ELS and Amin International Scale: As Shown Surveyor: Mohamed Shafiq Asst. Surveyor: Mohamed Visham Drawn by: Mohamed Shafiq Checked by: Ibrahim Mital Surveyed date: 16 December 2016	

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Dhangeethi IN Ahiyu Dhaalu ATOLL	As Shown					L-11
								REV.
								0



YAO  
YACHYO ENGINEERING CO., LTD.  
TOKYO, JAPAN



Projection: UTM Zone 49Q, 32S, WGS 1984  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea level (MSL) derived from provided tide data provided by Maldives Department of Meteorology

BOREHOLE COORDINATES	
BH01	
Northing	361701.7360m
Easting	277729.2120m
MSL Height	+0.717m
BH02	
Northing	361680.0040m
Easting	277730.2510m
MSL Height	+0.679m

BENCHMARK COORDINATES	
BM01	
Northing	361678.2960m
Easting	277702.9480m
MSL Height	+0.839m

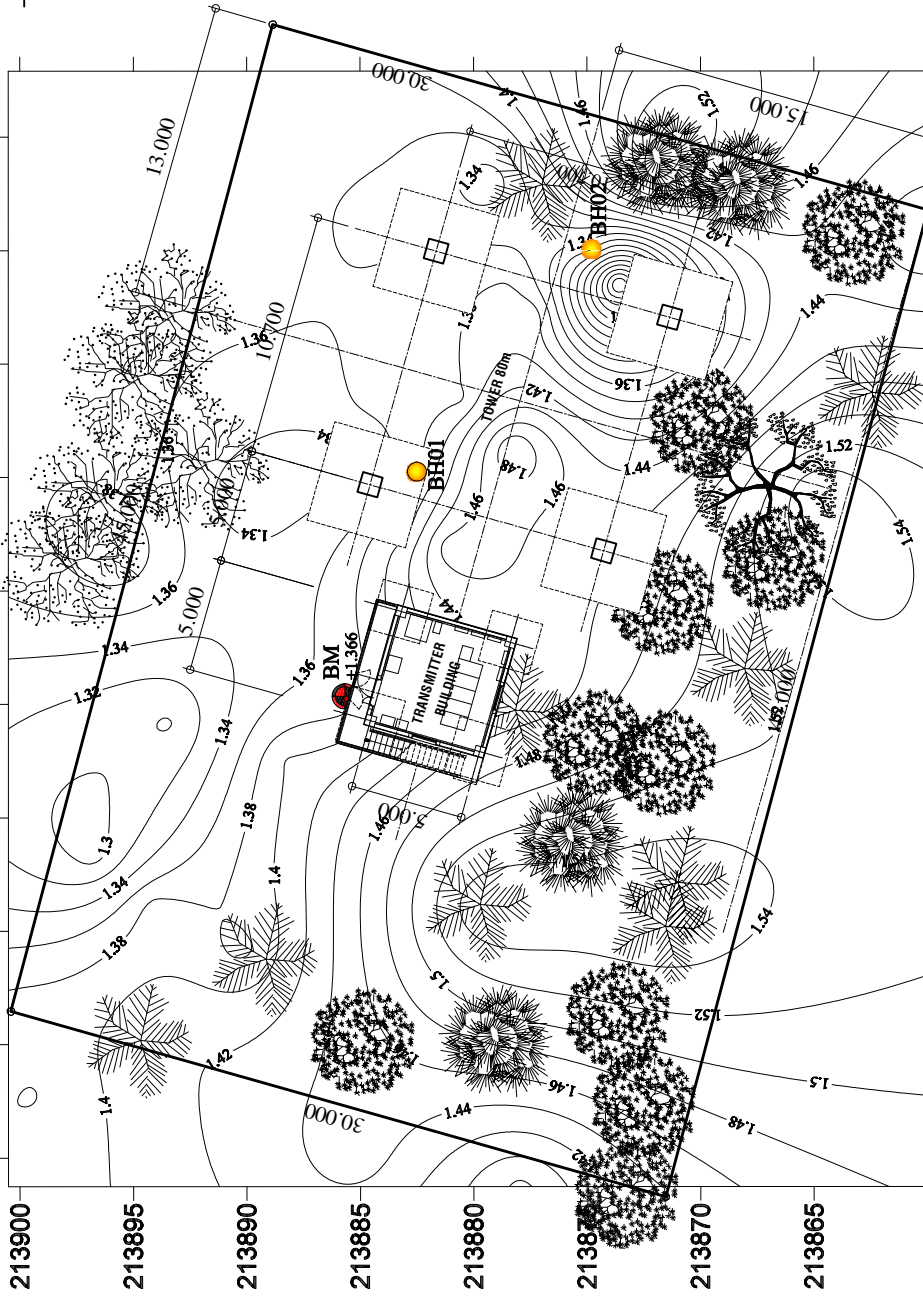
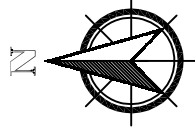
LEGEND:  
 BENCHMARK (Red circle with cross)  
 BOREHOLE (Yellow circle)



Island: Fushi  
 Atoll: Faafu  
 Client: E.L.S and Amin International  
 Scale: As Shown  
 Surveyor: Mohamed Shafiq  
 Asst Surveyors: Abdul Hameed Mohamed  
 Drawn by: Mohamed Shafiq  
 Checked by: Ibrahim Muzak  
 Surveyed date: 19 January 2016

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Fushi IN Aifu Dhaaflu ATOLL	As Shown					L-12
						YACHYO ENGINEERING CO., LTD. TOKYO, JAPAN		REV. 0





Projection: UTM, Zone 49Q, Datum: WGS84  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea Level (MCS) derived from provided tide data provided by Maldives Department of Meteorology

BOREHOLE COORDINATES	
BH01	213882.5370m
Northing	338300.2680m
Easting	+1.375m
BH02	213874.7990m
Northing	338310.0600m
Easting	+1.325m

BENCHMARK COORDINATES	
BM01	213885.6836m
Northing	338290.3596m
Easting	+1.360m

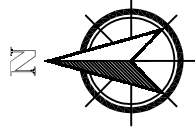
**LEGEND**

- BENCHMARK
- BOREHOLE
- RUB
- FUNA
- KASHIKEYO
- DHOGAA

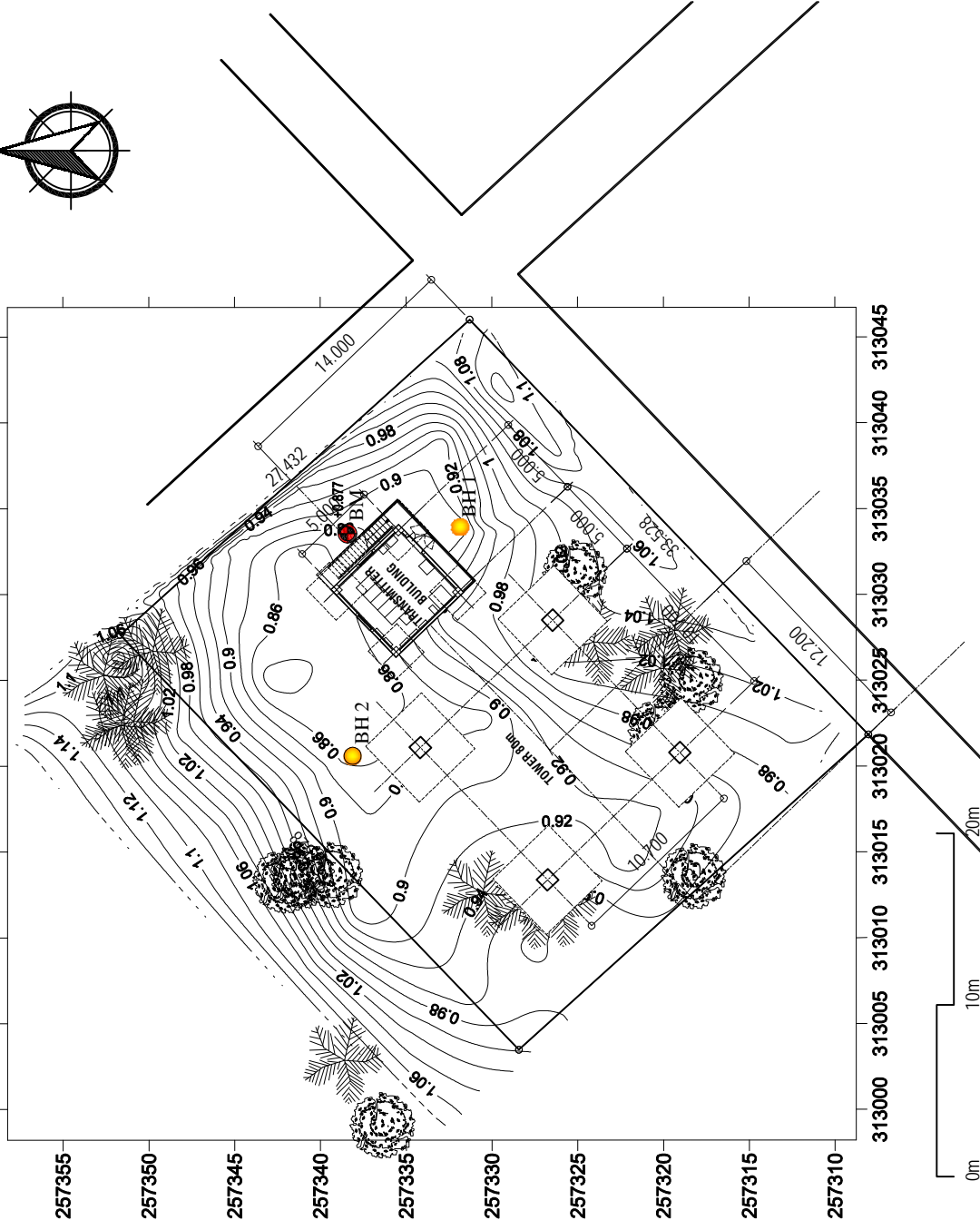
Scale: 0m  
 North: Lamu  
 Title: ELS and Atain International  
 Date: As Shown  
 Surveyor: Mohamed Riyaz  
 Field Supervisor: Mohamed Ahmed  
 Drawn by: Mohamed Riyaz  
 Checked by: Ibrahim Mirza  
 Issue Date: 15 March 2016



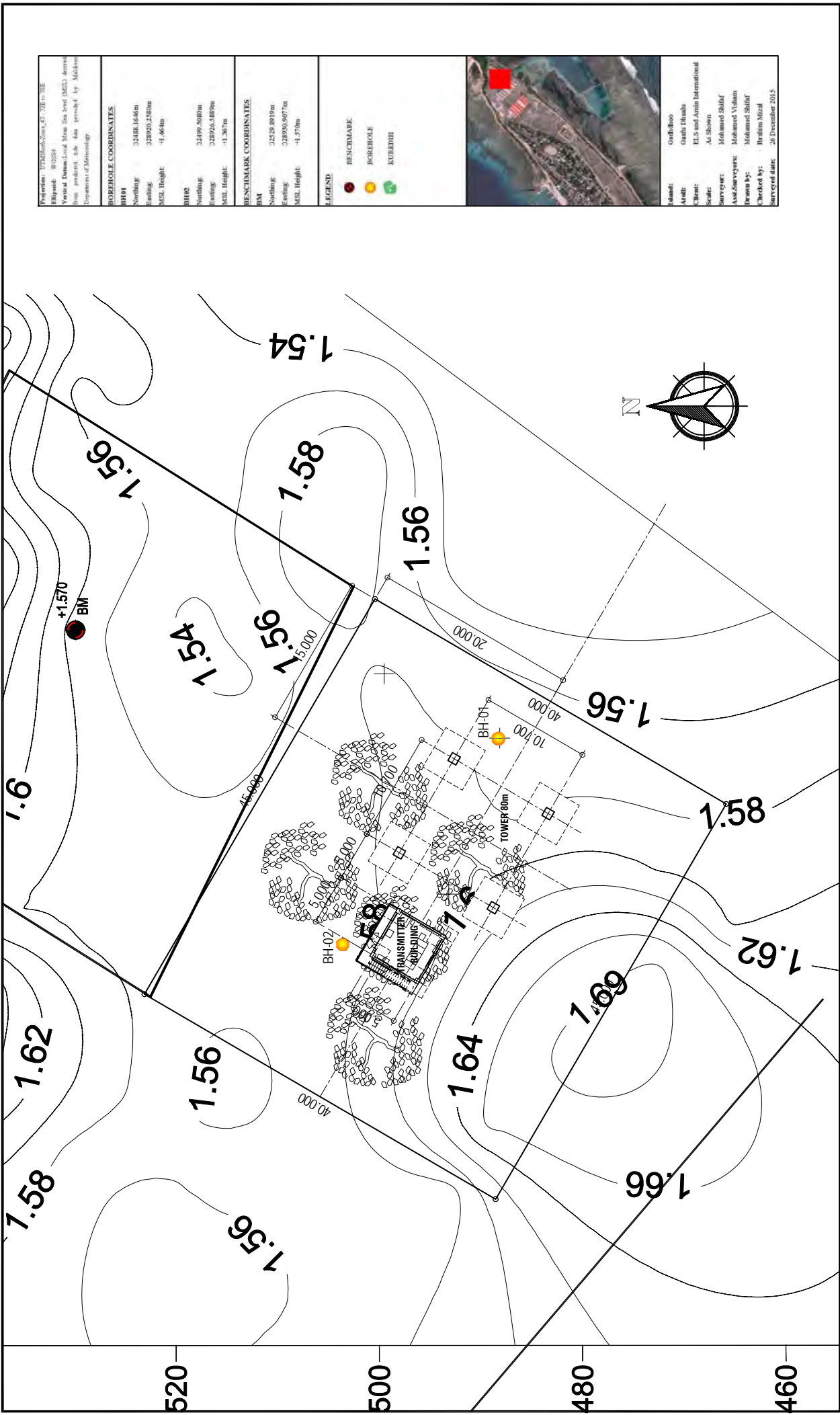
PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Gan IN Laamu ATOLL	As Shown					L-14
	<b>yoo</b>	<b>YACHYO ENGINEERING CO., LTD.</b> TOKYO, JAPAN						<b>REV. 0</b>



Projection: UTM Zone 48Q Ellipsoid: WGS84 Vertical Datum: Local Mean Sea Level (MSL) Datum: Indian Units: Meter Datum: Indian Department of Hydrology	<b>BENCHMARK COORDINATES</b> BM 01 Northing: 257324.57m Easting: 312900.056m MSL: -0.000m BM 02 Northing: 257334.877m Easting: 312917.620m MSL: -0.000m	<b>BENCHMARK COORDINATES</b> BM 01 Northing: 257333.170m Easting: 312900.592m MSL: -0.007m	<b>LEGEND</b> BENCHMARK BENCHMARK BENCHMARK BENCHMARK		Client: ELS and Atmin International Scale: As Shown Surveyor: Mohamed Riyaz Ass. Surveyors: Mohamed Vidwan Drawn by: Mohamed Riyaz Checked by: Ibrahim Miral Surveyed date: 23 June 2016
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PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Gridtower IN Thaa Atoll	As Shown					L-15
							YACHIYO ENGINEERING CO., LTD.	REV.
							TOKYO, JAPAN	0

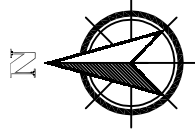


Projection: UTM22Q Easting: 370000 Vertical Datum: Local Mean Sea Level (LMSL) derived from reduced tide data provided by Maldives Department of Hydrography	
<b>BENCHMARK COORDINATES</b>	
BH01	Northing: 32488.1644m Easting: 328920.2480m MSL Height: +1.464m
BH02	Northing: 32499.5080m Easting: 328926.5489m MSL Height: +1.567m
<b>BENCHMARK COORDINATES</b>	
BM	Northing: 32529.8019m Easting: 328930.8077m MSL Height: +1.570m
<b>LEGEND</b> BENCHMARK (Red circle) BOREHOLE (Yellow circle) KAURETHI (Green circle)	
<b>CLIENT</b> Gadhhoob Gadh Dhaadu E.L.S and Amin International As Shown	
<b>SURVEYORS</b> Mohamed Shalef Mohamed Vilain Mohamed Shalef	
<b>DRAWN BY:</b> Ibrahim Mical <b>CHECKED BY:</b> <b>SURVEYED DATE:</b> 28 December 2015	

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR GADHDOOB IN GAATHU DHAADU ATOLL	As Shown					L-16
							YACHIYO ENGINEERING CO., LTD.	REV.
							TOKYO, JAPAN	0







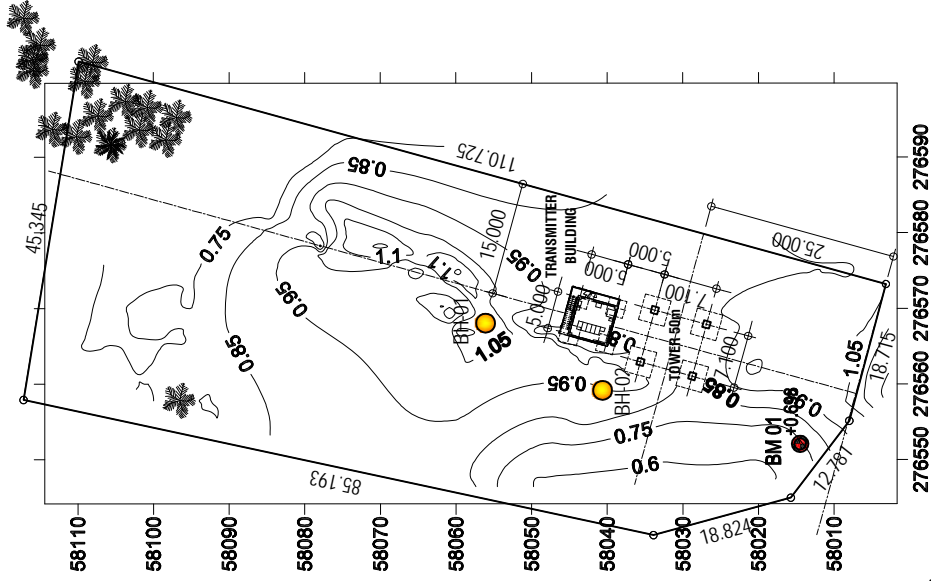
Projection: UTM/Zone 43J  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea Level (LMSL) derived from geoid. The data provided by Maldives Department of Hydrology.

BOREHOLE COORDINATES	
BH01	
Northing	58107.83
Easting	276571.657
MSSL Height	0.112
BH02	
Northing	58104.336
Easting	276570.289
MSSL Height	-0.906
BENCHMARK COORDINATES	
BM01	
Northing	58114.665
Easting	276552.070
MSSL Height	-0.698

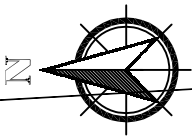
LEGEND	
	BENCHMARK
	BOREHOLE
	RUI



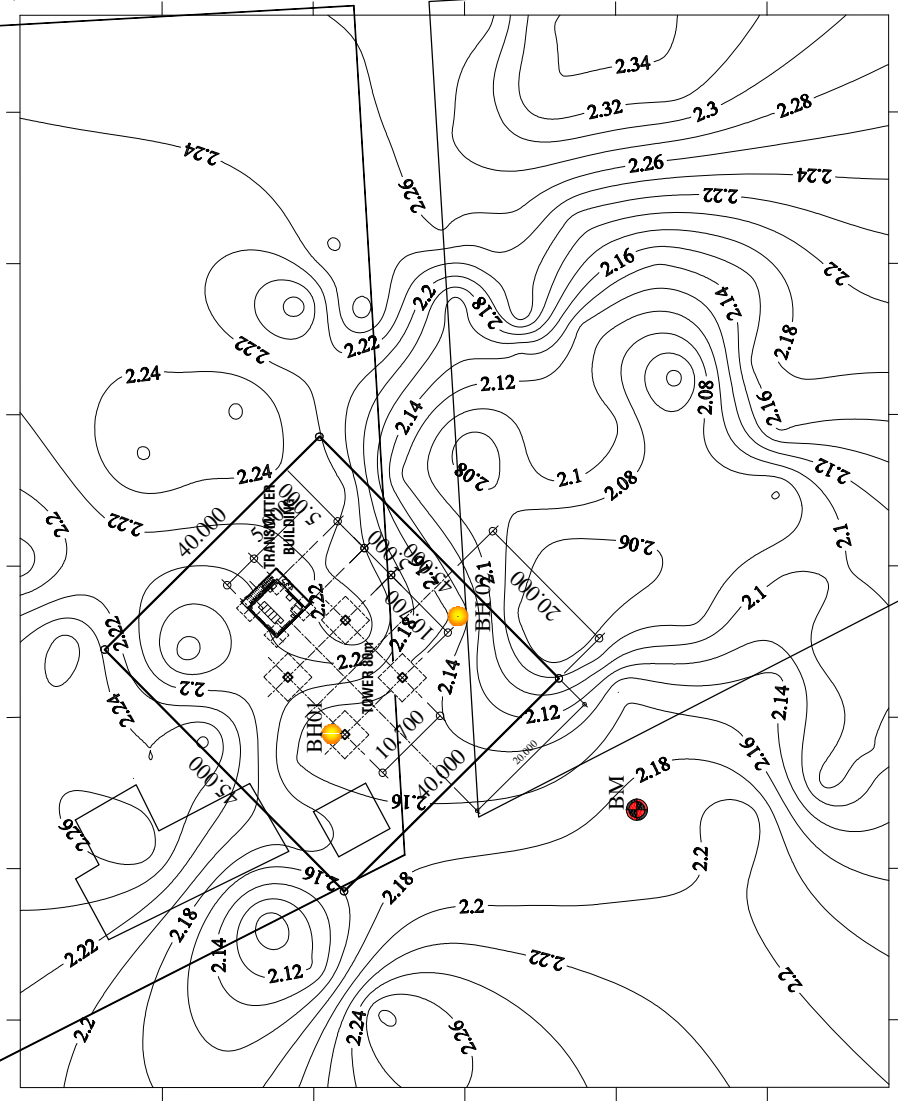
Island:	Thinadhoo
Atoll:	Gaaf Dhaaf
Client:	ELS and Amin International
Scale:	As Shown
Surveyor:	Mohamed Shifaf
Ass.Surveyor:	Mohamed Visham
Drawn by:	Mohamed Shifaf
Checked by:	Ibrahim Alifal
Surveyed date:	26 December 2015



PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Thinadhoo IN Gaaf Dhaafu ATOLL	As Shown					L-18
					YACHIYO ENGINEERING CO., LTD. TOKYO, JAPAN			REV. 0



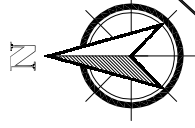
Projection: UTM/East, Zone 43 Ellipsoid: WGS84 Vertical Datum: Mean Sea Level (MSL) derived from geoidal tide data provided by Maldives Department of Hydrography	
<b>BENCHMARK COORDINATES</b>	
BH01	Northing: 84997.5740m Easting: 327717.8170m MSL Height: +1.156m
BH02	Northing: 84086.8658m Easting: 327733.1350m MSL Height: +1.156m
<b>BENCHMARK COORDINATES</b>	
BH01	Northing: -'m Easting: -'m MSL Height: -'m
BH02	Northing: -'m Easting: -'m MSL Height: -'m
<b>LEGEND</b>	
●	BENCHMARK
●	BORERHOLE
Name: Viligili Area: Gaafu Alif Client: ELS and Amin International Scale: As Shown Surveyor: Mohamed Riyaz As-Surveyors: Hussain Faisal Drawn by: Mohamed Riyaz Checked by: Ibrahim Minal Surveyed date: 21 December 2015	



84120 84100 84080 84060 84040 325680 325700 325720 325740 325760 325780 325800

0m 5m 10m 20m

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Viligili IN Gaafu Alifut ATOLL	As Shown					L-19
							REV.	0



Program: W2308  
 Ellipsoid: WGS84  
 Vertical Datum: Local Mean Sea Level (LMSL) derived from published tide data provided by Maldives Department of Hydrography

**BORERHOLE COORDINATES**

BH01	9967244.875m	3243693.156m	MSL Height: +1.566m
BH02	9967241.235m	3243812.288m	MSL Height: +1.576m

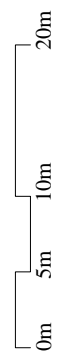
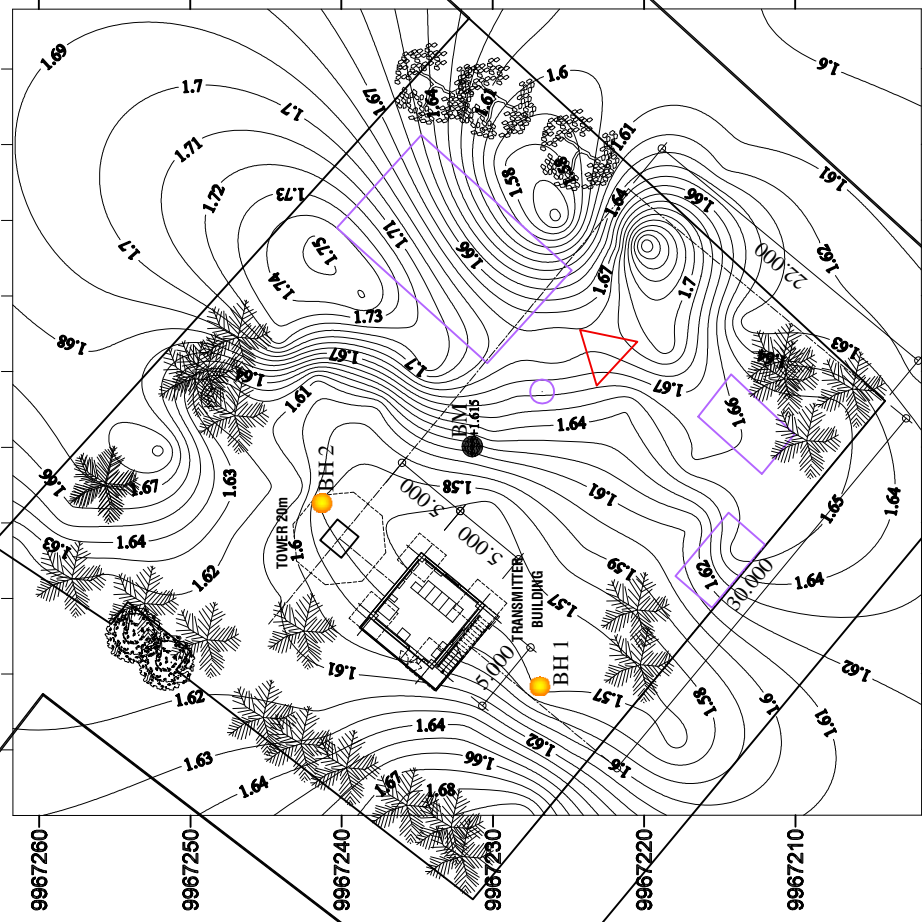
**BENCHMARK COORDINATES**

BW01	9967231.366m	3243833.090m	MSL Height: +1.615m
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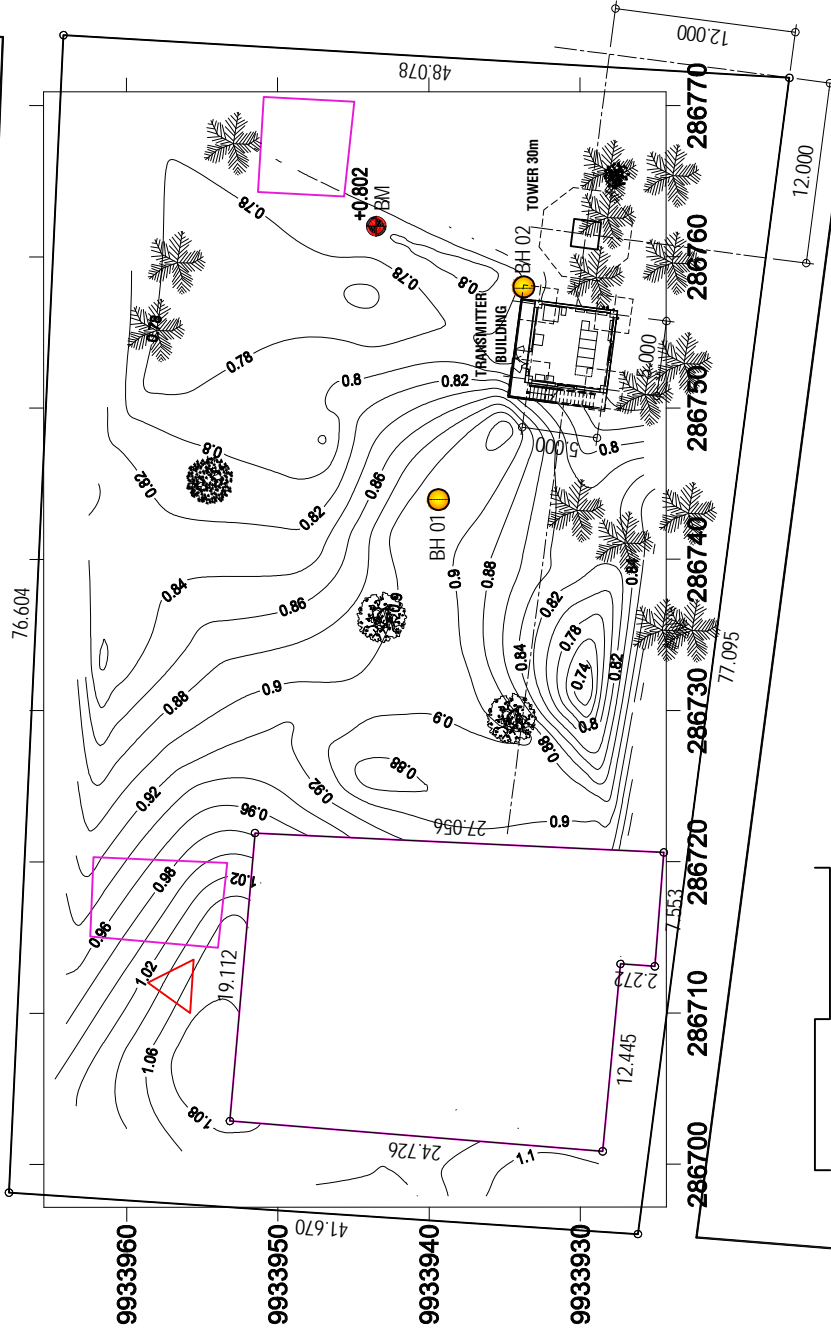
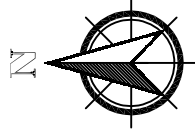
**LEGEND**

- BENCHMARK
- BORERHOLE
- FUNA
- PETRO
- RUI
- BUILDING
- ANTENNA

**Udank:** Fuvahmulah  
**Atoll:** Gaafu Dhuu  
**Client:** E.I.S and Atin International  
**Scale:** As Shown  
**Surveyor:** Mohamed Riyaz  
**Asst.Surveyors:** Mohamed Visham  
**Drawn by:** Mohamed Riyaz  
**Checked by:** Ibrahim Muzil  
**Surveyed date:** 05 January 2016



PROJECT NAME PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES	IMPLEMENTATION AGENCY	TITLE LAYOUT PLAN FOR Foammulah IN Gnaviyani ATOLL	SCALE As Shown	DATE	DESIGNED	CHECKED	APPROVED	DWG No. L-20
			PROJECT NO. YEC		YACHTO ENGINEERING CO., LTD. TOKYO, JAPAN		REV. 0	



Project: UTMHith-Cen_41_726 to 732 Ellipsoid: WGS84 Vertical Datum: Local Mean Sea Level (MSL) derived from geoid data provided by Maldives Department of Meteorology	
<b>BENCHMARK COORDINATES</b>	
BH004	Easting: 246675.6117m Northing: 9933943.5920m MSL Height: +0.777m
BH002	Easting: 246680.2246m Northing: 9933932.1273m MSL Height: +0.777m
<b>BENCHMARK COORDINATES</b>	
BH001	Easting: 246689.8444m Northing: 9933946.2372m MSL Height: +0.802m
<b>LEGEND</b>	
●	BENCHMARK
●	BENCHMARK
●	BENCHMARK
●	BENCHMARK
●	BENCHMARK
●	BENCHMARK
●	BENCHMARK
●	BENCHMARK
□	BUILDING
△	ANTENNA



Location:	Hithadhoo
Atoll:	Adha City
Client:	ELIS and Atuin International
Scale:	As Shown
Surveyor:	Mohamed Riyaz
Asst. Surveyors:	Hassan Feroed
Drawn by:	Mohamed Riyaz
Checked by:	Ibrahim Muzil
Surveyed date:	21 June 2016

PROJECT NAME	IMPLEMENTATION AGENCY	TITLE	SCALE	DATE	DESIGNED	CHECKED	APPROVED	DWG No.	
PREPARATORY SURVEY ON THE PROJECT FOR THE DIGITAL TERRESTRIAL TELEVISION BROADCASTING NETWORK DEVELOPMENT IN THE REPUBLIC OF MALDIVES		LAYOUT PLAN FOR Hithadhoo IN Seenu ATOLL	As Shown					L-21	
							YACHYO ENGINEERING CO., LTD.	REV.	0
							TOKYO, JAPAN		