

APPENDICES

APPENDIX 1

SCOPE OF WORK


**SCOPE OF WORK
FOR
FOLLOW-UP COOPERATION
FOR
EMERGENCY STUDY ON THE PLANNING AND SUPPORT
FOR BASIC PHYSICAL AND SOCIAL INFRASTRUCTURE
IN JUBA TOWN AND THE SURROUNDING AREAS
IN THE SOUTHERN SUDAN**

**AGREED UPON BETWEEN
THE GOVERNMENT OF SOUTHERN SUDAN
AND
JAPAN INTERNATIONAL COOPERATION AGENCY**

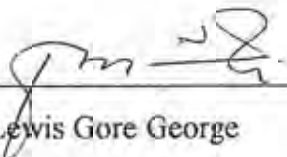
Juba, 29 August, 2008



Dr. Daniel Wani
Under Secretary
Ministry of Transport and Roads



Mr. Koichi MIYAKE
Team Leader
Preparation Team for Follow-up Cooperation
Japan International Cooperation Agency



Eng. Lewis Gore George
Director General
Ministry of Physical Infrastructure
Central Equatoria State

I. INTRODUCTION

The Japan International Cooperation Agency (hereinafter referred to as "JICA") has decided to conduct the follow-up cooperation for "Emergency Study on the Planning and Support for Basic Physical and Social Infrastructure in Juba Town and the Surrounding Areas in the Southern Sudan" (hereinafter referred to as "Follow-up Cooperation"), in close cooperation with the authorities concerned of the Government of Southern Sudan (hereinafter referred to as "the GOSS").

The Ministry of Transport and Roads of GOSS (hereinafter referred to as "MTR") shall act as the responsible body to Japanese Follow-up Cooperation team and also as the coordinating body in relation with other concerned governmental. The Ministry of Physical Infrastructure of the Central Equatoria State (hereinafter referred to as "MOPI") shall act as the co-responsible body to the Japanese study team.

The present document constitutes the implementing arrangement between GOSS and JICA.

II. OBJECTIVES OF FOLLOW-UP COOPERATION

Objectives of Follow-up Cooperation are:

1. To support establishing and strengthening the related organizations in charge of supervising, operating and managing Juba River Port,
2. To improve management and operation skills of the staff of Juba River Port, and
3. To improve cargo handling capacity with provision of additional facilities and/or equipments.

III. SCOPE OF FOLLOW-UP COOPERATION

In order to achieve the objectives mentioned above, Follow-up Cooperation shall cover following articles:

<1st Phase>

- (1) Planning for entire Follow-up Cooperation activities
 - (1.1) Collection of relevant data/information
 - (1.2) Preparation of Inception Report
 - (1.3) Presentation and discussion on Inception Report
- (2) Review and analysis of present conditions of Juba River Port
 - (2.1) Extract and relation analysis of stakeholders
 - (2.2) Investigation of the situation before Juba Port Construction (barge utilization and operation)
 - (2.3) Investigation of current situation
 - (2.4) Review & analysis on loading/unloading operating at Juba River Port
 - (2.5) Onsite examination of cargo handling operation

- (2.6) Identification of issues to be solved in short-term / mid -term
- (2.7) Investigation of procurement conditions

<2nd Phase>

- (3) Formulation of the improvement plan of Juba River Port (hereinafter referred to as "Improvement Plan")
 - (3.1) Examination of the appropriate management and operation for Juba River Port
 - (3.2) Improvement planning for loading /unloading operations
 - (3.3) Procurement planning for required additional facilities & equipments
 - (3.4) Implementation planning
 - (3.5) Capacity development planning of the related organizations
- (4) Execution of Improvement Plan
 - (4.1) Selection of components that need urgent action from Improvement Plan
 - (4.2) Provision of selected facilities & equipments
 - (4.3) Capacity development of the related organizations, through the establishment of port operation system
 - (4.3.1) Drafting operation guideline
 - (4.3.2) Trial operation of loading/unloading activities
 - (4.3.3) Evaluation of the trial operation / finalizing operation guideline
- (5) Holding seminars for promoting the utilization of Juba River Port
- (6) Overall evaluation and recommendations

IV. SCHEDULE OF FOLLOW-UP COOPERATION

Follow-up Cooperation shall be implemented in accordance with the following tentative schedule. The schedule is tentative and subject to be modified when both parties agree upon and any necessity that may arise during the course of Follow-up Cooperation.

Month	1	2	3	4	5	6	7	8
Work in Sudan	■		■					
Work in Japan	□	□						
Report Presentation	△ IC/F			△ IT/R				△ F/R

Legend IC/R: Inception Report
 IT/R: Interim Report
 F/R: Final Report

V. UNDERTAKINGS OF THE GOVERNMENT OF SOUTHERN SUDAN

(1) In order to facilitate a smooth and efficient execution of the Follow-up Cooperation, GOSS shall take the following necessary measures:

- To secure the safety of the member of Follow-up Cooperation;
- To permit the members of Japanese Follow-up Cooperation team to enter, leave and sojourn in Southern Sudan for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees;
- To exempt the members of Japanese Follow-up Cooperation team from taxes, duties and any other charge on equipment, machinery and other material brought into Southern Sudan for the implementation of Follow-up Cooperation;
- To exempt the members of Japanese Follow-up Cooperation team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to them for their services in connection with the implementation of Follow-up Cooperation;
- To provide necessary facilities to Japanese Follow-up Cooperation team for the remittance as well as utilization of the funds introduced into Southern Sudan from Japan in connection with the implementation of Follow-up Cooperation;
- To secure permission for the team of Follow-up Cooperation to take all data and documents including topographic maps and original manuscripts related to Follow-up Cooperation out of Southern Sudan to Japan; and
- To facilitate medical services as needed. Its expenses will be chargeable on the members of Follow-up Cooperation.

(2) GOSS shall bear claims, if any arises, against the members of Japanese Follow-up Cooperation team resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of Follow-up Cooperation, except when such claims arise from gross negligence or willful misconduct on the part of Follow-up Cooperation team.

(3) GOSS shall, at its own expense, provide Japanese Follow-up Cooperation team with the following, in cooperation with other organizations concerned:

- Security related information as well as measures to ensure the safety of Japanese follow-up cooperation team;
- Information on as well as support in obtaining medical service;
- Available data and information related to Follow-up Cooperation; and
- Counterpart personnel.

END



APPENDIX 2

MINUTES OF MEETING

**FOLLOW-UP COOPERATION FOR
EMERGENCY STUDY ON THE PLANNING AND SUPPORT FOR
BASIC PHYSICAL AND SOCIAL INFRASTRUCTURE IN JUBA TOWN AND
THE SURROUNDING AREAS IN THE SOUTHERN SUDAN**

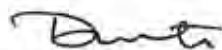
MINUTES OF MEETING

The signing of the Scope of Work and the Minutes of Meetings on the follow-up cooperation for "Emergency Study on the Planning and Support for Basic Physical and Social Infrastructure in Juba Town and the Surrounding Areas in the Southern Sudan" (hereinafter referred to as "Follow-up Cooperation") was held on 29 August, 2008 at the Ministry of Transport and Roads (hereinafter referred to as "MTR"). The list of attendants is in Annex -1.

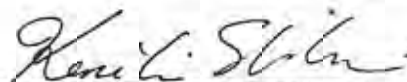
On that occasion, the Government of Southern Sudan (hereinafter referred to as "GOSS") gave a clear instruction as to the role of each party concerned to port management and operation as the followings:

- GOSS is the regulatory and body, making policies and taking all responsibility on river port management.
- The Government of Central Equatoria State (hereinafter referred to as "CES") is the operating body of river port.
- The private sector is to participate in and play a key role in port operation under the supervision of CES.
- The department of River Transport and the Ministry of Physical Infrastructure of CES will cooperate for efficient port management and operation.

Juba, 1 September, 2008



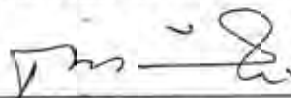
Dr. Daniel Wani
Under Secretary
Ministry of Transport and Roads



Mr. Kenichi Shishido
Resident Representative
Sudan Office
Japan International Cooperation Agency



Eng. Abdu S.M. Lako
Director General
Department of River Transport
Ministry of Transport and Roads



Eng. Lewis Gore George
Director General
Ministry of Physical Infrastructure
Central Equatoria State

The List of Participants**Sudanese Side**

Dr. Daniel Wani	Under Secretary, Ministry of Transport and Roads
Eng. Abdu S.M. Lako	Director General, Department of River Transport, Ministry of Transport and Roads
Mr. Lewis Core George	Director General, Directorate of Housing and Construction, Ministry of Physical Infrastructure, Central Equatoria State

Japanese Side

Mr. Koichi Miyake	Leader of JICA Preparatory Team for Follow-up Cooperation Japan International Cooperation Agency
Mr. Shoji Hasegawa	Member of JICA Preparatory Team for Follow-up Cooperation Japan International Cooperation System
Mr. Naomichi Murooka	Member of JICA Preparatory Team for Follow-up Cooperation Japan International Cooperation Agency
Mr. Yukitaka Date	Port Management / Institutional Strengthening System Science Consultants, Inc.
Mr. Kensuke Tsujino	Ship / Port Safety Planning Consultant
Mr. Kiyoshi Muka	Procurement of Equipment / Supervision of Construction Katahira & Engineers International
Mr. Kenichi Shishido	Resident Representative, JICA Sudan Office

APPENDIX 3

QUESTIONNAIRE & RESULT

Follow-up Cooperation for Emergency Study on the Planning and Support for Basic Physical and Social and Infrastructure in Juba Town and the Surrounding Areas in the Southern Sudan

This is a questionnaire to evaluate the new pier which was constructed by the Government of Japan through its implementation agency JICA (Japan International Cooperation Agency) in 2007.

Please let us know your opinions about the following issues.

If you do not have any relations with particular issues, please skip it.

We will not disclose any information that can lead to a certain organization or individual to the public.

We are planning to collect this questionnaire by ourselves, please keep this until collection or please drop this to our field office at Ministry of Physical Infrastructure, Central Equatoria State, near UNOPS.

I. Management

Q1. Do you think the river port management body keeps track of vessels docked/undocked?

- Yes
- No
- Don't know.

Q2. Do you think vessels docked/undocked inform the river port management body of their movements?

- Yes
- No
- Don't know.

Q3. Do you think usage conditions of the new pier go well with actual vessels operation?

- Yes
- No
- Don't know.

Q4. Do you think the old river port operated well before abandoned?

- Yes
- No
- Don't know.

Q5-a. Do you think there are any differences of usage conditions between the old river port side and natural bank side?

- Yes
- No
- Don't know.

If Yes, please let us know as much as possible.

Q5-b. Do you think there are any differences of usage conditions between the old river port side and the new pier side?

- Yes
- No
- Don't know.

If Yes, please let us know as much as possible.

Q6. Regarding loading and unloading operations, which is more convenient for you to use the new pier or natural river bank?

- The New Pier
- Natural River Bank
- Don't know.

Q7. Do you think there is any difference of usage fees between the new pier and natural river bank?

- Yes
- No
- Don't know.

If Yes, please let us know as much as possible.

II. User-Friendliness

Q8. Have you ever used the new pier or natural river bank?

- Yes, but only the new pier.
- Yes, but only natural river bank.
- Yes, both of them.
- No, not at all.

If No, please go to Q10.

Q9. How often do you use the new pier and/or natural river bank?

· The New Pier

- Daily
- Twice a week
- Once a week
- Twice a month
- Once a month
- Other ()

· Natural River Bank

- Daily
- Twice a week
- Once a week
- Twice a month
- Once a month
- Other ()

Q11. What do you think is necessary to improve usage of the new pier? (Multiple selections allow)

- | | |
|--|--|
| <input type="checkbox"/> Standard Pallet | <input type="checkbox"/> Pallet with Rope/Chain/Wire |
| <input type="checkbox"/> Hand Pallet Truck | <input type="checkbox"/> Pallet Rack |
| <input type="checkbox"/> Fork Lift Truck | <input type="checkbox"/> Power Generator |
| <input type="checkbox"/> Warehouse | <input type="checkbox"/> Container Type Office |
| <input type="checkbox"/> Landing Ramp | <input type="checkbox"/> Security and Maintenance Boat |
| <input type="checkbox"/> Security Guard Post | <input type="checkbox"/> Security Lighting |
| <input type="checkbox"/> Debris Barrier | <input type="checkbox"/> Oil Barrier |
| <input type="checkbox"/> Heavy Duty Chain Link Fence & Gate | |
| <input type="checkbox"/> Large-Scale Crane (Jib Crane, Crawler Crane, Rough Terrain Crane) | |
| <input type="checkbox"/> Other (|) |

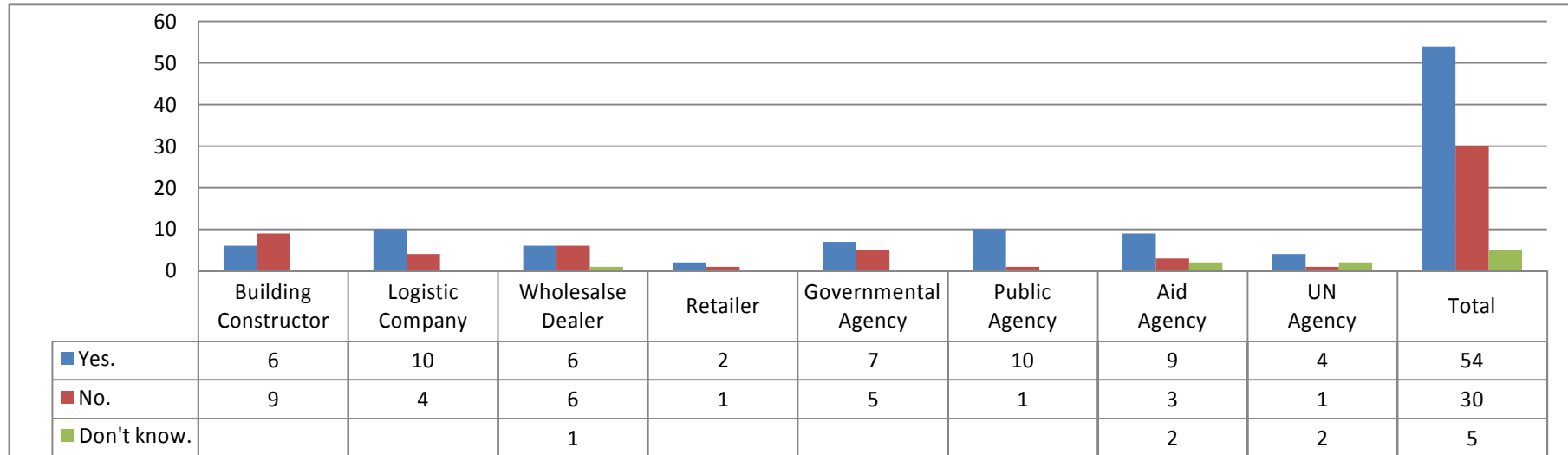
At last please let us know about yourself, if you don't mind.

- Name of the Affiliated Organization, if possible.
()
- Type of Business
 - Governmental Agency (GoSS, CES, Other States)
 - Public Agency (County, Town, Payam, Community, etc)
 - United Nation Agency
 - Aid Agency
 - Bilateral
 - International NGO
 - Local NGO
 - Logistics Company
 - Retailer
 - Building Constructor
 - Wholesale Dealer
 - Other ()

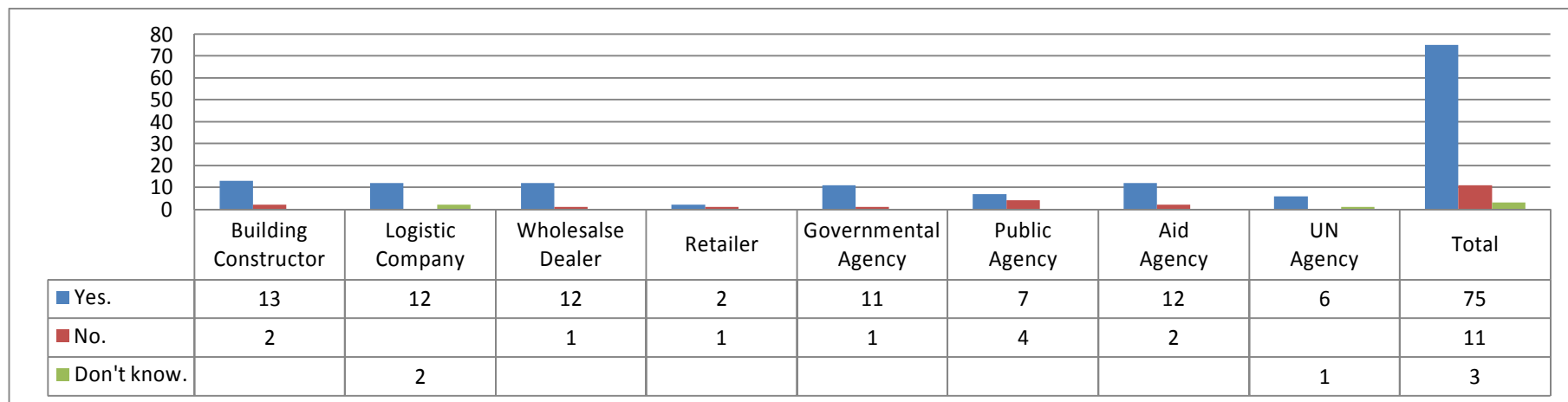
Thank you for your cooperation.

I. Management

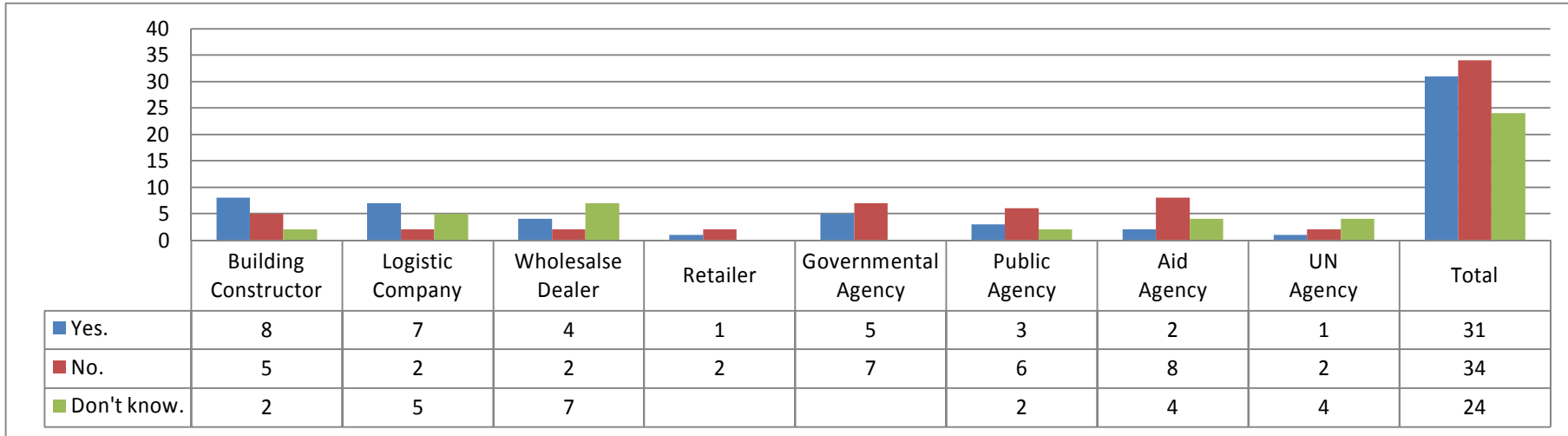
Q1. Do you think the river port management body keeps track of vessels docked/undocked?



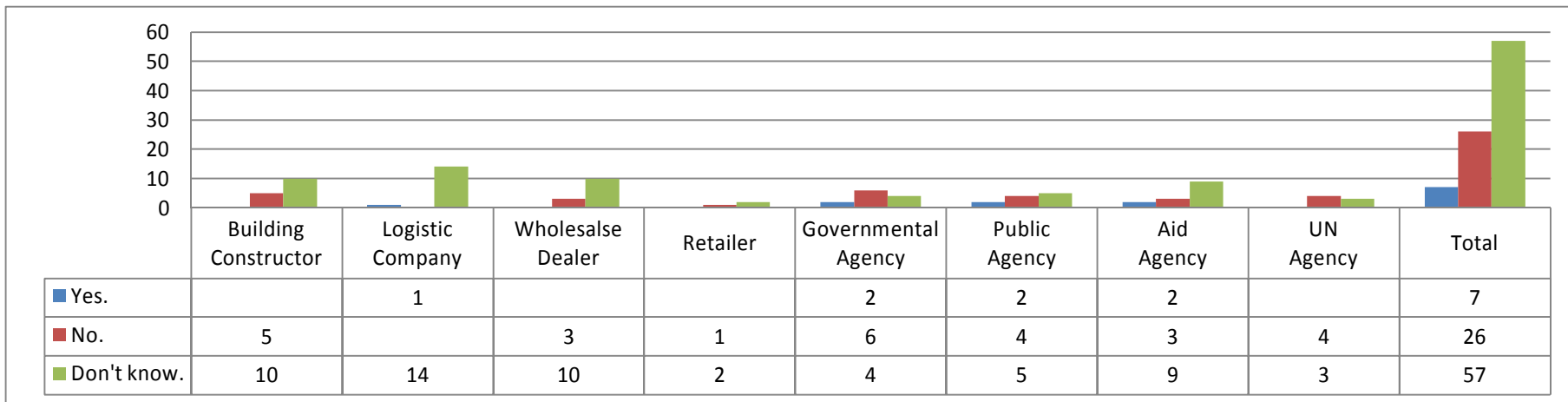
Q2. Do you think vessels docked/undocked inform the river port management body of their movements?



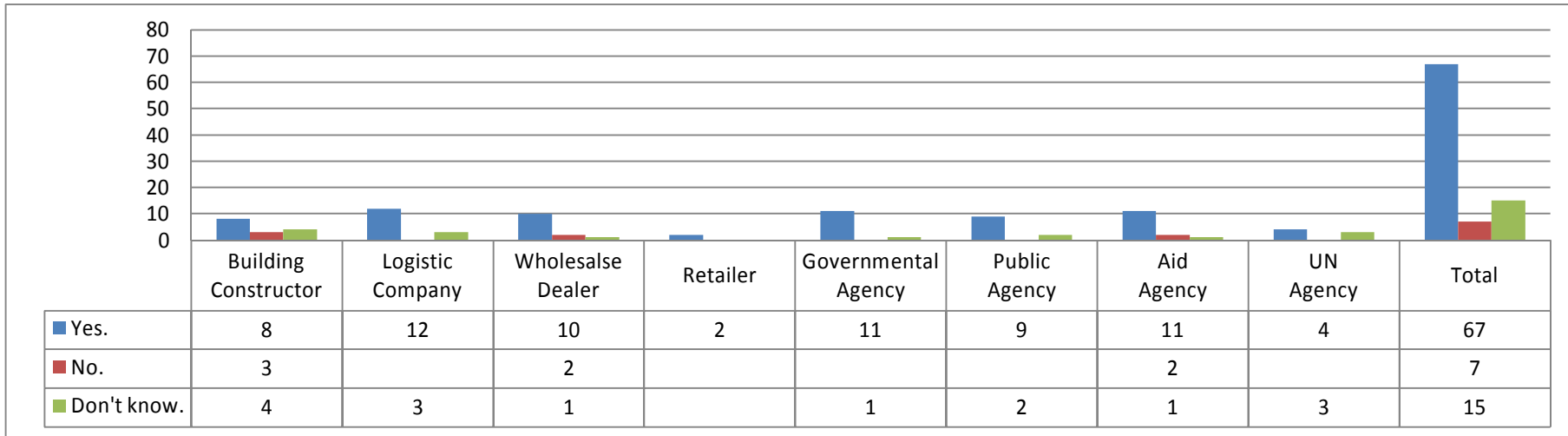
Q3. Do you think usage conditions of the new pier go well with actual vessels operation?



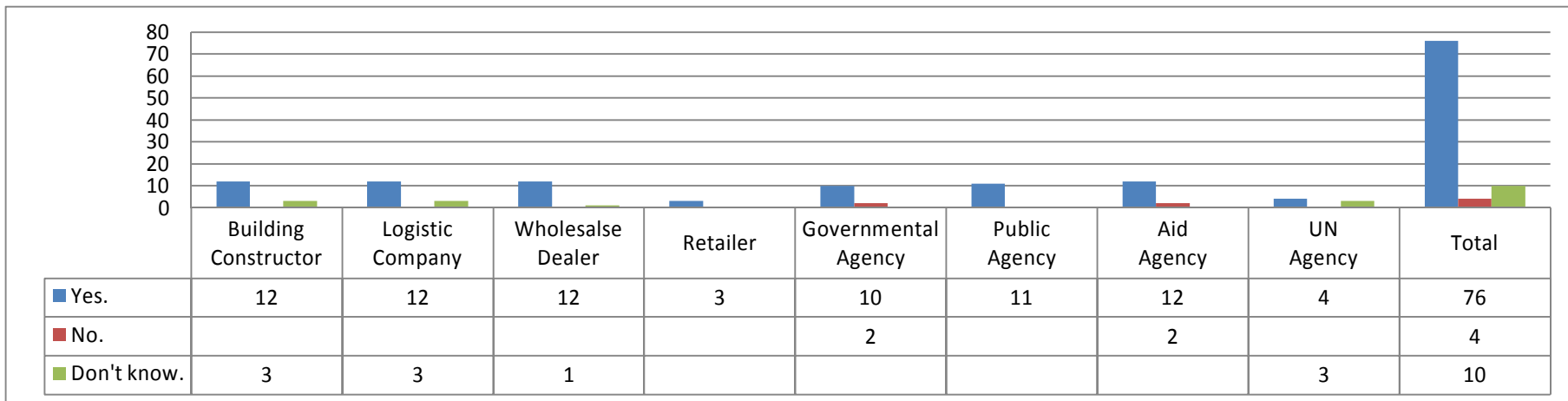
Q4. Do you think the old river port operated well before abandoned?



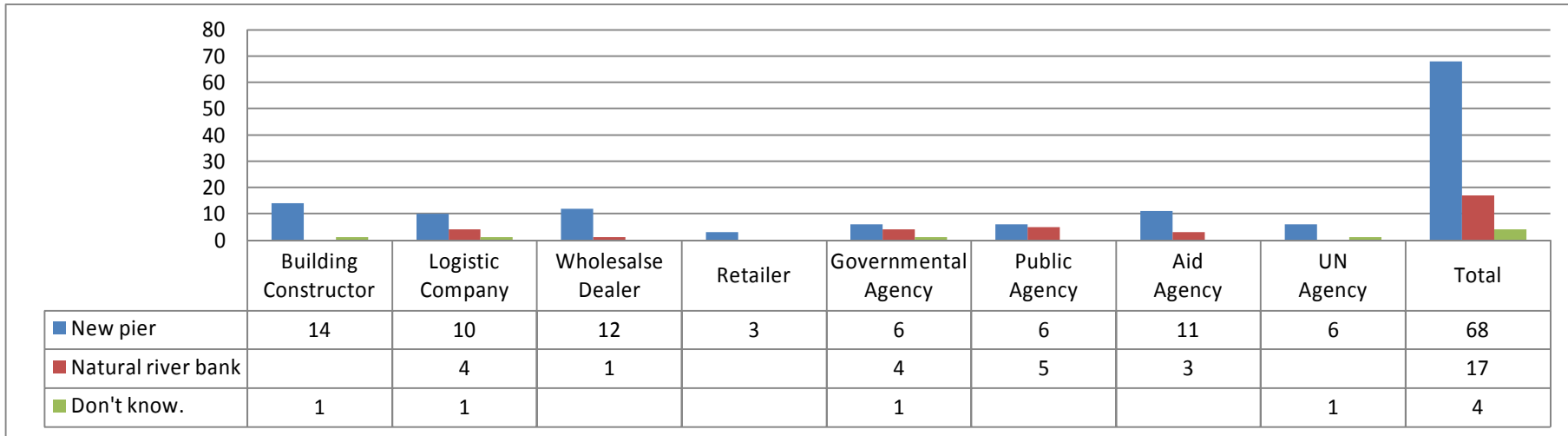
Q5-a. Do you think there are any differences of usage conditions between the old river port side and the natural bank side?



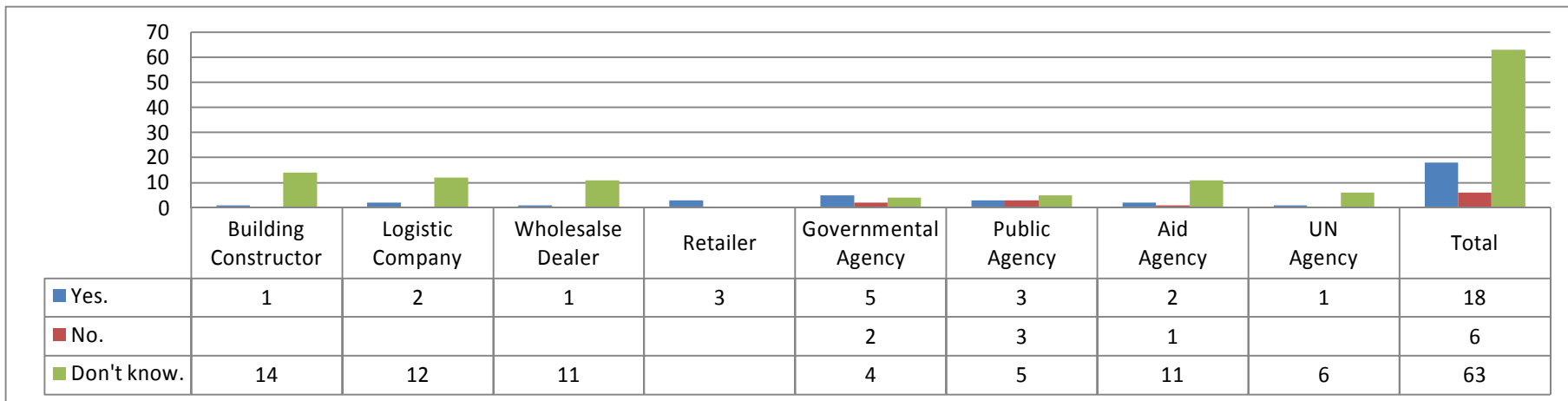
Q5-b. Do you think there are any differences of usage conditions between the old river port side and the new pier side?



Q6. Regarding loading and unloading operations, which in more convenient for you to use the new pier or the natural river bank?

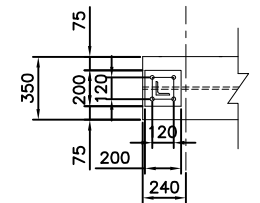
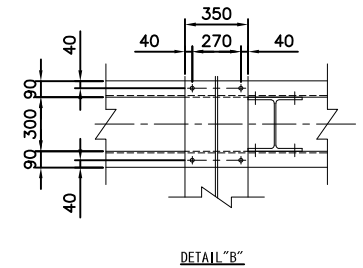
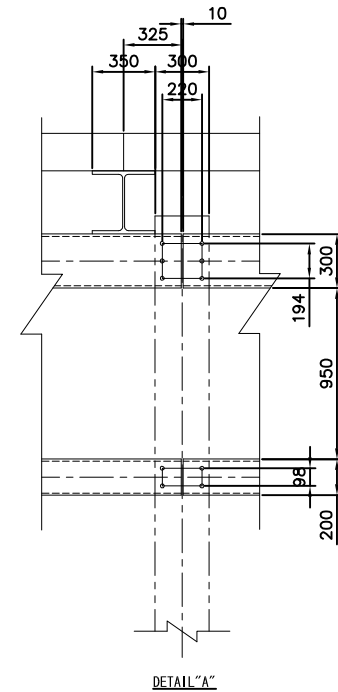
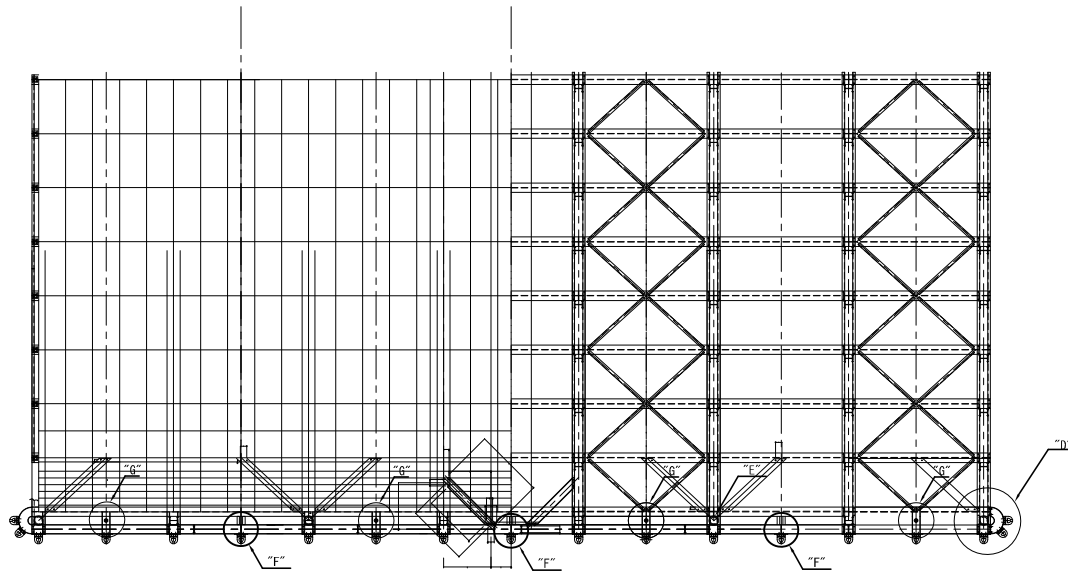
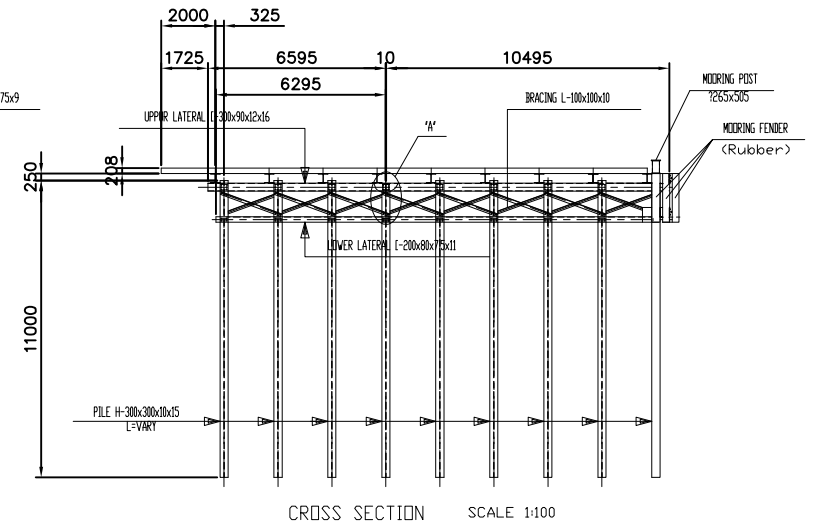
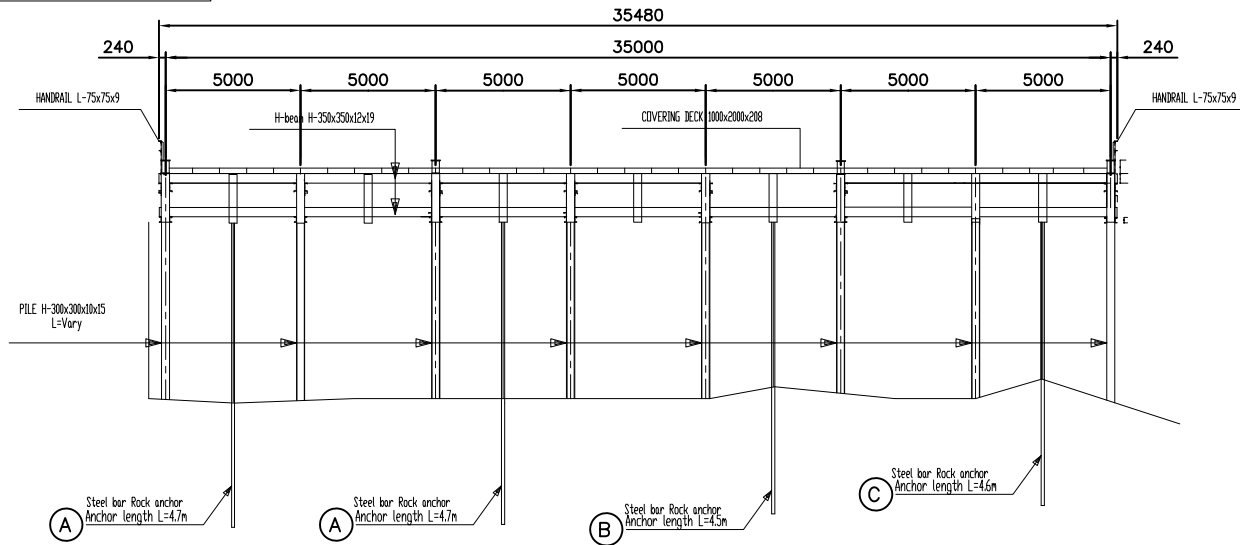


Q7. Do you think there is any difference of usage fees between the new pier and the natural river bank?



APPENDIX 4

JETTY REPAIR WORKS AS BUILT DRAWINGS



DRAWING OF DITAILS SCALE 1:30

JUBA PORT JETTY REPAIR WORKS UNDER THE EMERGENCY STUDY ON THE PLANNING AND SUPPORT FOR BASIC PHYSICAL AND SOCIAL INFRASTRUCTURE IN JUBA TOWN AND THE SURROUNDING AREAS IN THE SOUTHERN SUDAN

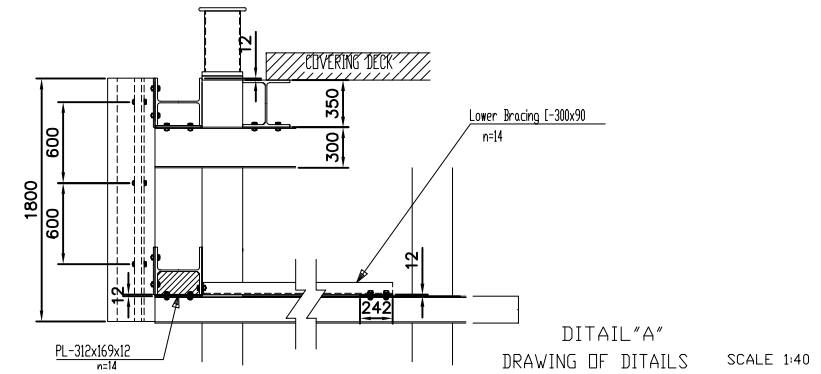
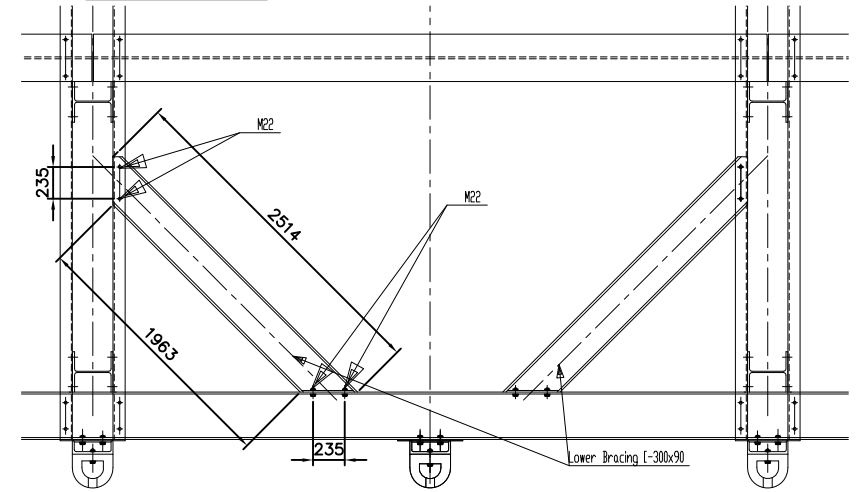
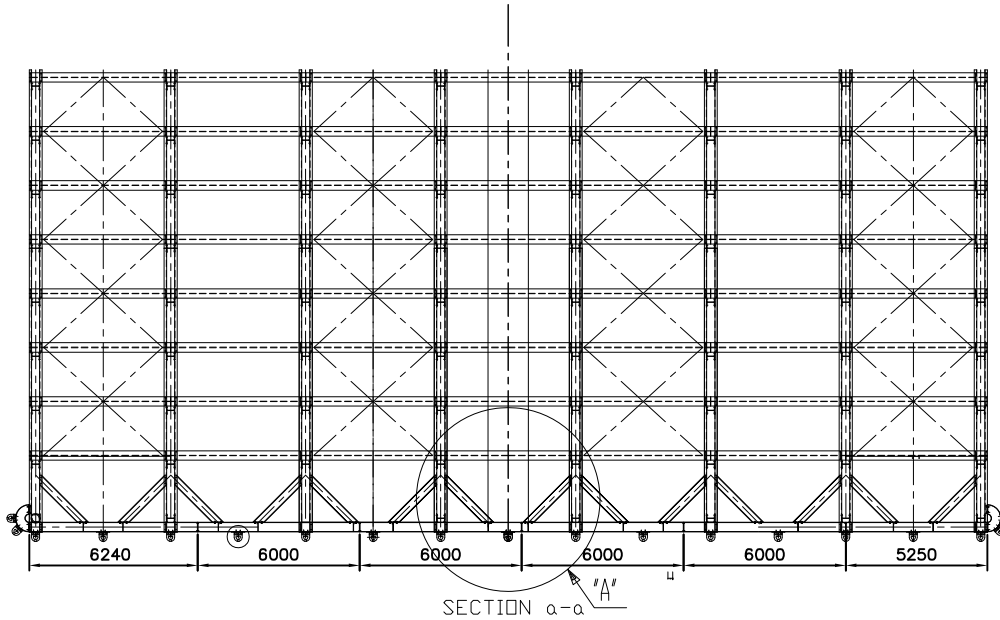
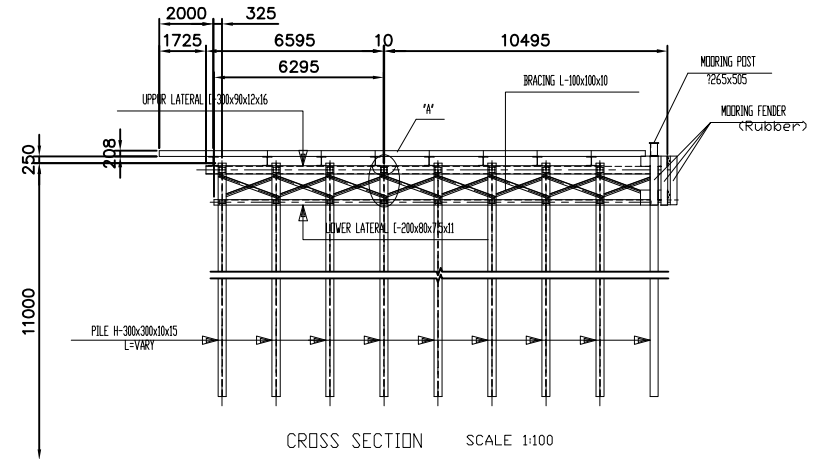
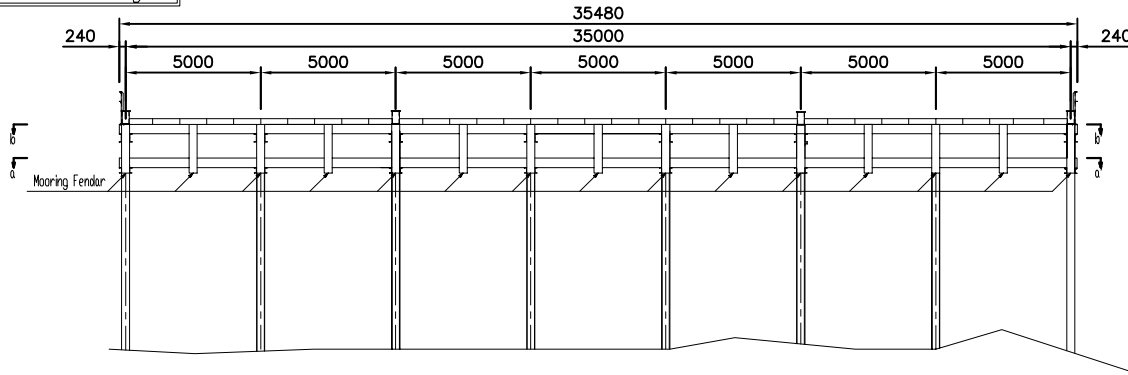
JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL
SYSTEM SCIENCE CONSULTANTS
HAKATAMARINE

TITLE :
DRAWING OF JETTY STRUCTURE

SCALE
1:100

Drawing No.
P-1

AS-Built Drawing

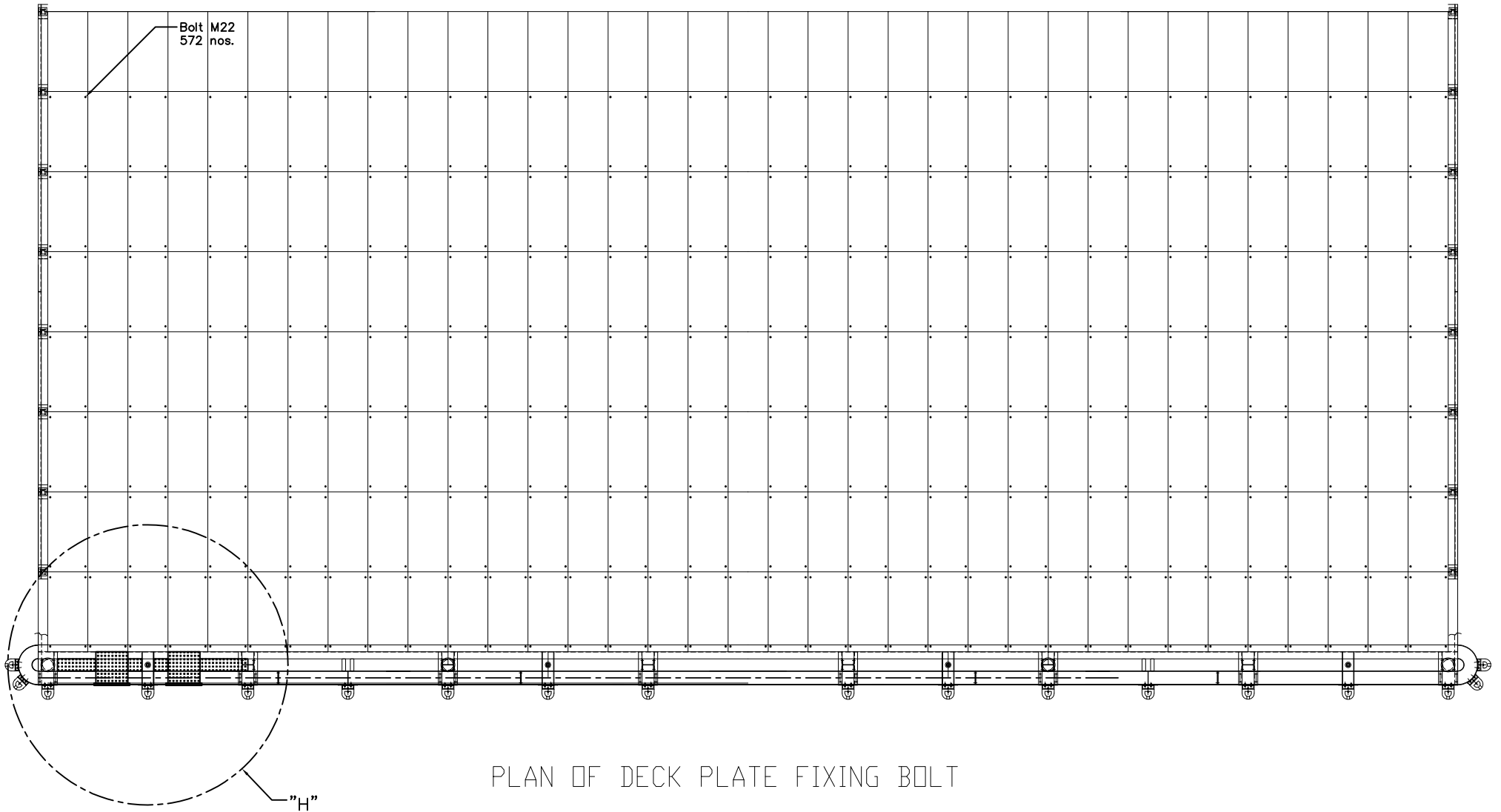


JUBA PORT JETTY REPAIR WORKS UNDER THE EMERGENCY STUDY ON THE PLANNING AND SUPPORT FOR BASIC PHYSICAL AND SOCIAL INFRASTRUCTURE IN JUBA TOWN AND THE SURROUNDING AREAS IN THE SOUTHERN SUDAN

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL
SYSTEM SCIENCE CONSULTANTS
HAKATAMARINE

TITLE :
DRAWING OF JETTY STRUCTURE

SCALE 1:200
Drawing No. P-2



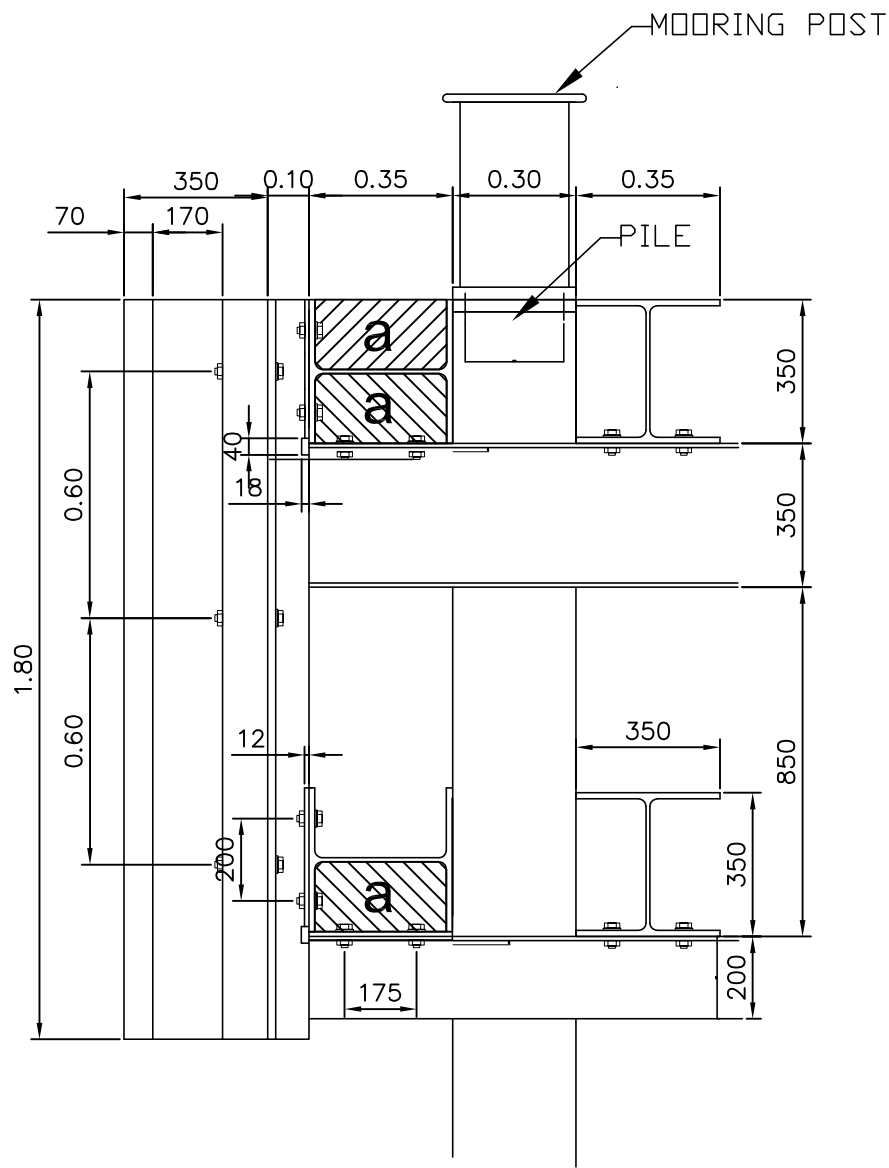
JUBA PORT JETTY REPAIR WORKS UNDER THE EMERGENCY STUDY ON THE
PLANNING AND SUPPORT FOR BASIC PHYSICAL AND SOCIAL INFRASTRUCTURE IN
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KATAHIRA & ENGINEERS INTERNATIONAL
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HAKATAMARINE

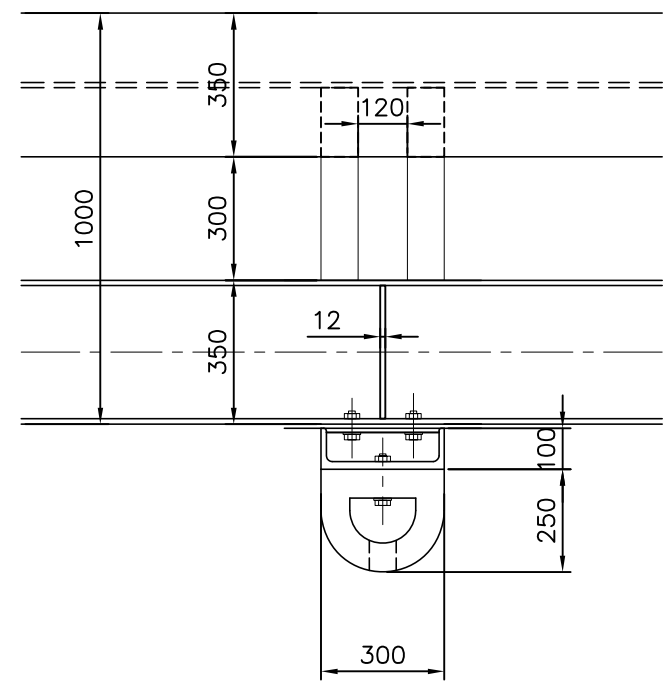
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SCALE
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P-3

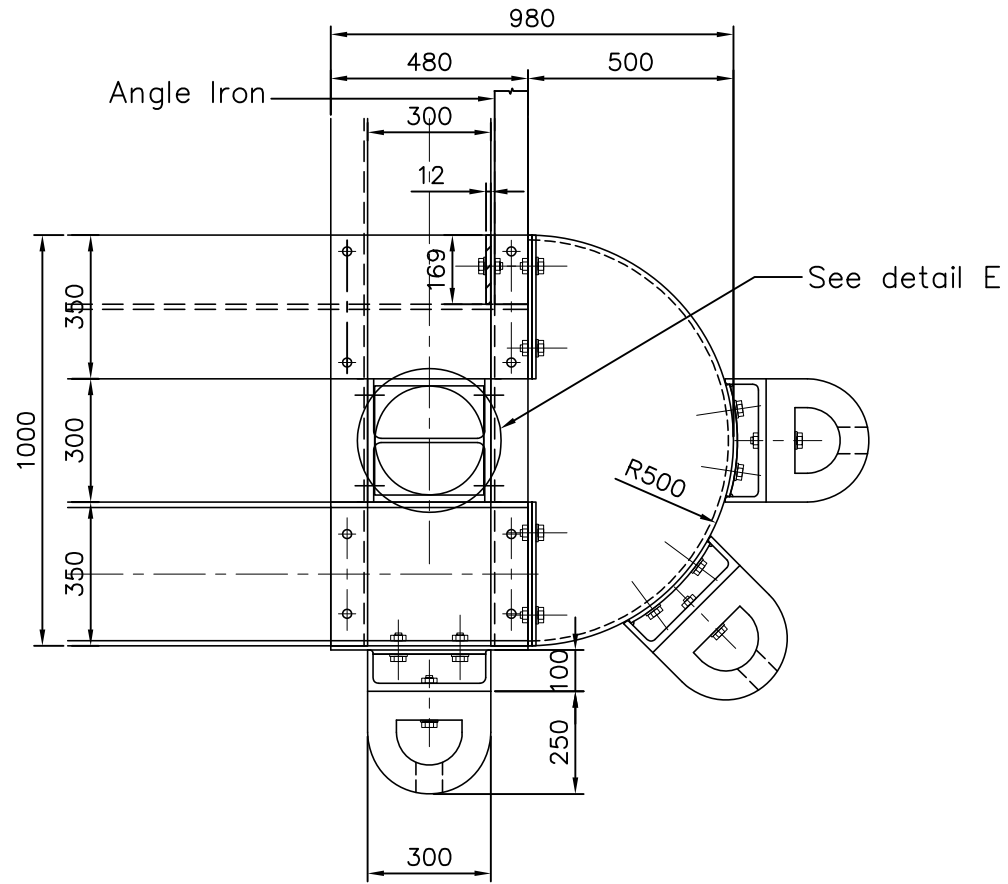


SIDE VIEW

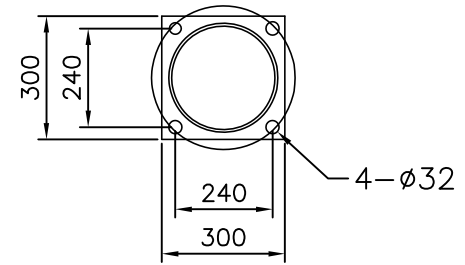
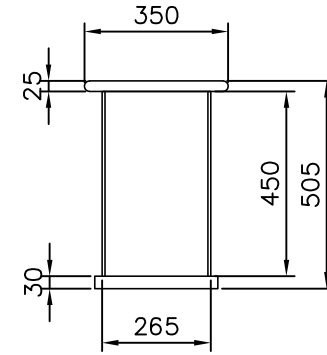


DETAIL "F"

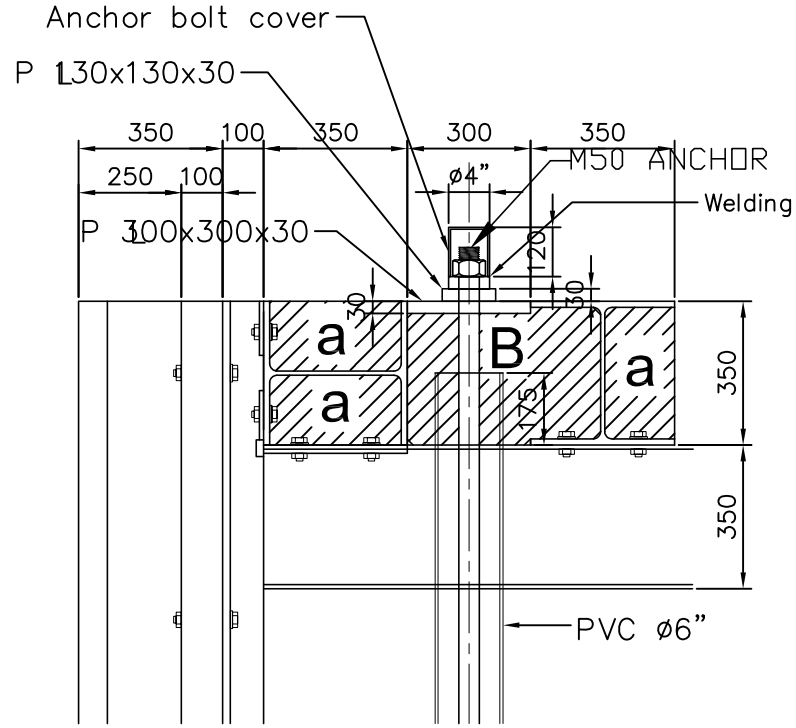
Plate a = 302x169x24



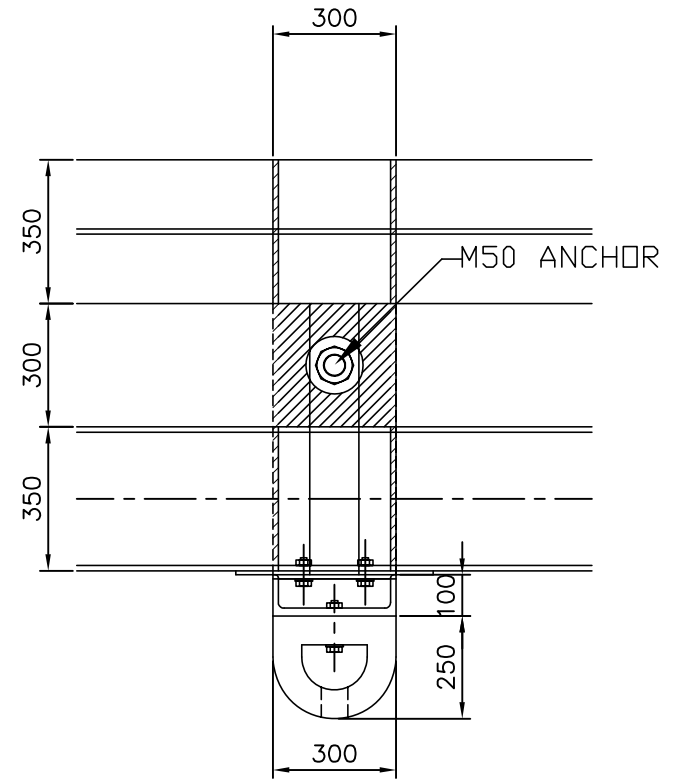
DETAIL "D"



DETAIL "E"



SIDE VIEW



DETAIL "G"

TOP VIEW

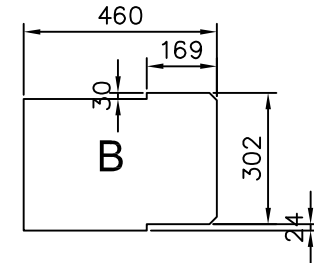
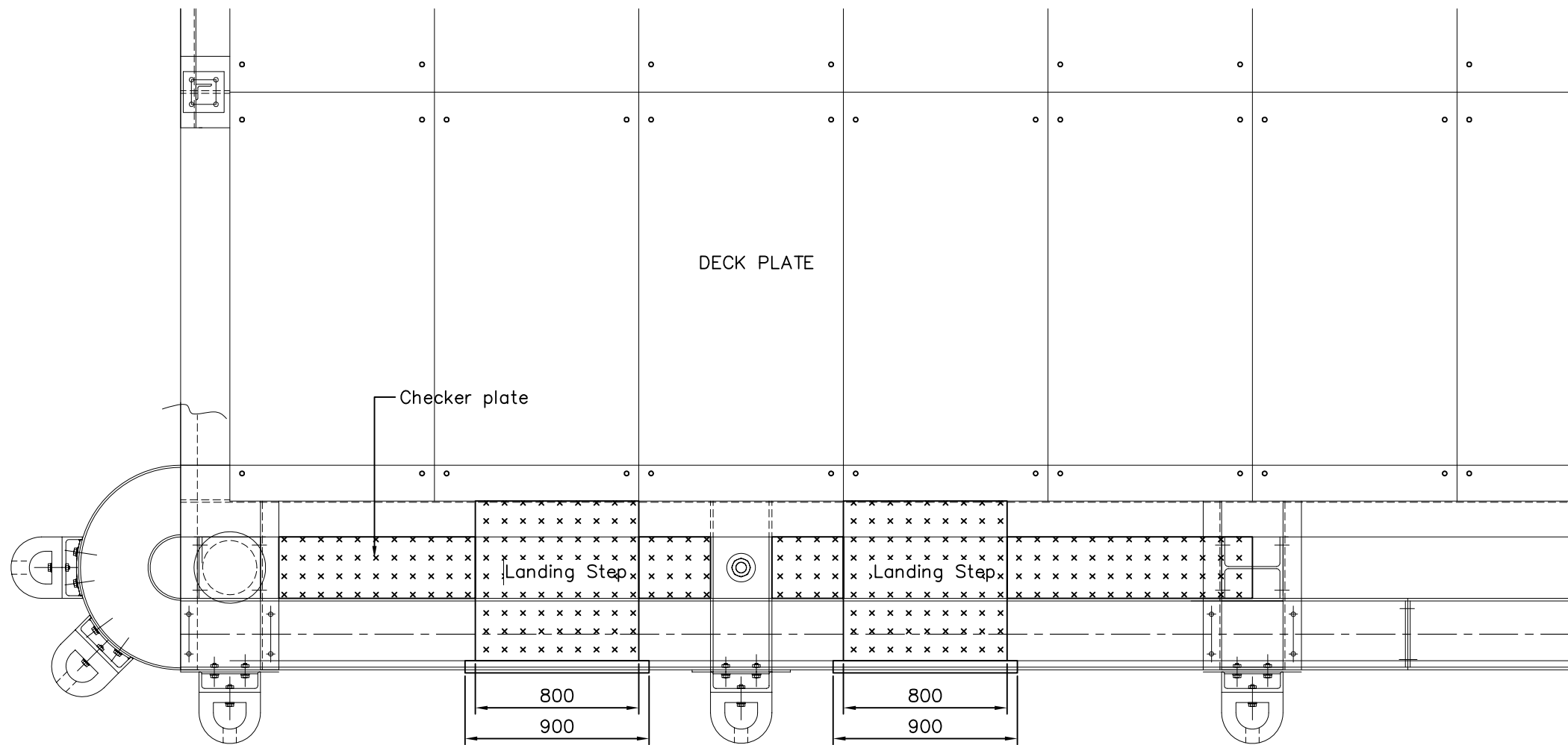
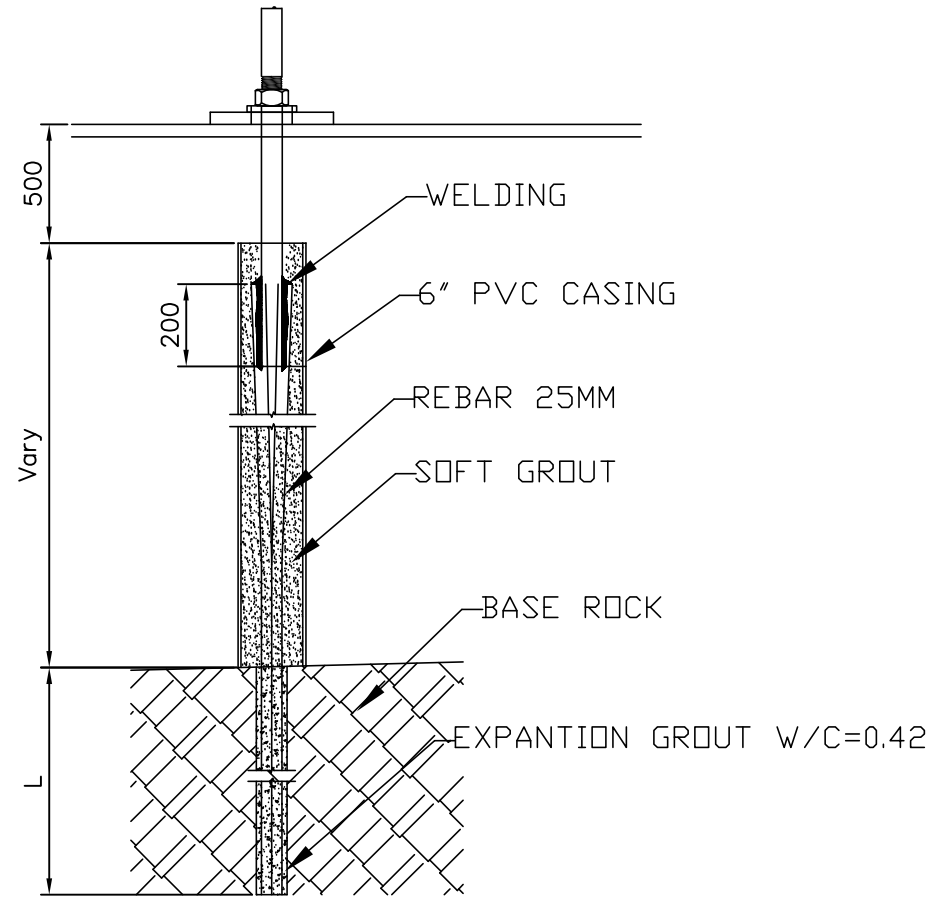


Plate B Thickness = 24 mm.

Plate a = 302x169x24



DETAIL "H"



- Length (L)
- A = 4.70 m.
 - B = 4.50 m.
 - C = 4.60 m.

DETAIL ANCHOR

APPENDIX 5

GEAR MANAGEMENT FORM

Equipment Management List No.1

Equipment No.	Name of Equipment	Sub No.	Component	Unit	Q'ty	Brought Out		Return		Remarks (i.e. Defect, Damage, etc.)	Brought Out		Return		Remarks (i.e. Defect, Damage, etc.)	Brought Out		Return		Remarks (i.e. Defect, Damage, etc.)			
						Date	Time	Date	Time		Date	Time	Date	Time		Date	Time	Date	Time				
						Number	Number	Number	Number		Number	Number	Number	Number		Number	Number	Number	Number				
		Name		Name		Name		Name		Name		Name		Name		Name							
1	Plastic Pallet			pcs	100																		
2	Wire Net	2-1	180cm×180cm	set	6																		
		2-2	200cm×200cm	set	6																		
3	Pallet Sling			set	6																		
4	Drum Hook			set	6																		
5	Shackle	5-1	SB-20	pcs	24																		
		5-2	SB-22	pcs	24																		
		5-3	SB-26	pcs	24																		
		5-4	SB-28	pcs	24																		
		5-5	SB-32	pcs	24																		
6	Wire Clip	6-1	F-18	pcs	48																		
		6-2	F20-22	pcs	48																		
		6-3	F24-25	pcs	48																		
		6-4	F26-28	pcs	48																		
		6-5	F30-32	pcs	48																		

Equipment Management List No.2

Equipment No.	Name of Equipment	Sub No.	Component	Unit	Q'ty	Brought Out		Return		Remarks (i.e. Defect, Damage, etc.)	Brought Out		Return		Remarks (i.e. Defect, Damage, etc.)	Brought Out		Return		Remarks (i.e. Defect, Damage, etc.)		
						Date	Time	Date	Time		Date	Time	Date	Time		Date	Time	Date	Time			
						Number	Number	Number	Number		Number	Number	Number	Number		Number	Number	Number	Number			
		Name		Name		Name		Name		Name		Name		Name		Name		Name				
7	Mooring Rope		φ50mm×200m	set	1																	
8	Fiber Rope	8-1	φ14mm×200m	set	1																	
		8-2	φ20mm×200m	set	1																	
		8-3	φ26mm×200m	set	1																	
		8-4	φ30mm×200m	set	1																	
9	Oil Barrier		10m	set	10																	
10	Debris Barrier		DF-400 20m	set	3																	
11	Plastic Sheet		25m X 25m	set	12																	
12	Fire Extinguisher	12-1	Form Building Chemical Type	set	4																	
		12-2	Powder Type	set	4																	
13	Storage Shelf	13-1	1200×571×1800 4 steps	set	12																	
		13-2	1200×471×2100 5 steps	set	8																	
14	Landing Ladder	14-1	SXN300-40-100	set	2																	
		14-2	SXN300-40-100 Special	set	1																	
		14-3	Joint Support	set	1																	

APPENDIX 6

MEMORANDUM ON THE PROPERTY AND MANAGEMENT ORGANIZATION OF JUBA RIVER PORT

Memorandum
on
the Property and Management Organization of Juba River Port
between
Ministry of Transport and Roads, the Government of Southern Sudan
and
Ministry of Physical Infrastructure, the Government of Central Equatorial State


Ministry of Transport and Roads (hereinafter referred to as "MoTR"), the Government of Southern Sudan (hereinafter referred to as "GoSS"), and Ministry of Physical Infrastructure (hereinafter referred to as "MoPI"), Central Equatorial State (hereinafter referred to as "CES") had a discussion on "the property and management organization of Juba river port".

Both parties clarified and confirmed the contents of the Attachment.

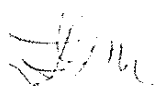
29th June, 2009



Dr. Daniel Wani
Undersecretary
Ministry of Transport and Roads
Government of Southern Sudan



Eng. Lewis Gore George
1st Director General
Ministry of Physical Infrastructure
Central Equatorial State



Attachment: Understanding on Property and Management Organization of Juba River Port

1. Property

Right and Responsibility of port property (Land ,Facilities)

- 1) Land right of Juba river port premise belong to CES.
- 2) Ownership of facilities in the port (Jetty and Crane) belongs to CES.

2. Management organization

(1) Juba River Port Administration

MoTR and MoPI discussed and clarified the following issues described in the Letter from GoSS dated on May 6, 2009 regarding Juba River Port, Staff and Revenues

1) Assignment of Staff to Port Administration

MoTR is considering that staffs of Port Administration shall be trained properly for smooth operation. MoTR is preparing budget of training for the staffs.

- a. Port Administration shall be responsibility of CES.
- b. RTD assigned six(6) staffs and CES will assign six(6) of its staffs for Port Administration immediately.

2) Port Revenue

- a. Port Revenue shall be use for port operation and activity.
- b. Port Revenue system shall be approved by Parliament, after finalization of the system, MoTR and MoPI discuss and clarify how to share revenue between two parties.
- c. Port Revenue will go to the Ministry of Finance and Economic Planning (MOFEP),GoSS. After discussion MOFEP and MoTR, MoTR will use 60% of Port Revenue for port operation.
- d. The remaining 40% of Port Revenue will be divided between GoSS and CES.

3) Target transfer schedule

Target transfer schedule of the responsibility for collection of port revenue including port administration from GoSS to CES.

- a. Training of port staff will take time for their establishment.
- b. MoTR is considering to transfer port management after completion of staff training of Port Administration. MoTR, GoSS will transfer port management to CES.
- c. Target schedule of management transfer will be finalized after staff training.

4) Legal status of Port

- a. Legal registration of Port is under preparing by the Directorate of Lands and Town Planning, CES. Registration of the Port will be finalized soon.

(3) Organization Structure

- a. Auditor for Port Administration must be organized by MOFEP.
- b. MoTR accepts the Committee established by Commercial Companies in Juba river port.
- C. MoTR consider that Port Security Agencies must be minimized

3. Other issue

- a. New construction of buffet, shop and office in the port premise shall be reconsidered by MoTR

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APPENDIX 7

APPLICATION FORM FOR TECHNICAL COOPERATION

APPLICATION FORM FOR JAPAN'S TECHNICAL COOPERATION

1. **Date of Entry:** Day 28 Month February Year 2009
2. **Applicant:** The Government of Southern Sudan
3. **Project Title:** The Project for Improvement of Operation and Maintenance of Inland Water Way in Southern Sudan
4. **Implementing Agencies:** Department of River Transport, Ministry of Transport & Roads, Government of Southern Sudan
Address: Department of River Transport, MT&R, GOSS
Contact Person: Eng. Abdu S.M. Lako, Director General, RTD, MT&R, GOSS
Tel. No.: _____ Fax No. _____
E-Mail: _____

5. Background of the Project

(Current conditions of the sector, Government's development policy for the sector, issues and problems to be solved, existing development activities in the sector, etc.)

According to the CPA, GNU is responsible for the rehabilitation and the improvement of the River Transport. So far nothing has happened since the signing of the CPA on the 9th January 2005 and today River Transport represents the most difficult modes of transport in the South. Yet, River Transport is cheap affordable to most users, and is a vital link between the South and the North. The overall navigational portion of the Nile between Juba to the South and Kosti to the North is 1,500 km. Much of the river is silted and would require dredging which is a very expensive exercise. Along the Nile to Kosti there are 15 ports some of which ranging from small to large ports carrying different goods and passengers, all of which require improvement and development.

6. Outline of the Project

(1) Overall Goal

(Development effect expected as a result of achievement of the "Project Purpose" in several years after the end of the project period)

To contribute to reconstruction/ rehabilitation of the Southern Sudan through improvement of inland waterway transport mode

(2) Project Purpose

(Objective expected to be achieved by the end of the project period. Elaborate with quantitative indicators if possible)

- i. To improve port management system
- ii. To improve awareness and safeties for use of port facilities, equipments, and gears
- iii. To improve efficiency of loading and off loading activities
- iv. To improve safeties and efficiency of inland waterway along River Nile

(3) Outputs

(Objectives to be realized by the “Project Activities” in order to achieve the “Project Purpose”)

- i. Port management system is functioned properly and independently.
- ii. Port safety management capability is improved sufficiently.
- iii. Inland waterway capacity is improved sufficiently.

(4) Project Activities

(Specific actions intended to produce each “Output” of the project by effective use of the “Input”)

- 1.1 Port management skills are improved
- 1.2 Revenues from port related activities are properly collected
- 1.3 Expenditures for port related activities and maintenance works are properly allocated

- 2.1 Port safety skills are improved
- 2.2 Port security measures are secured

- 3.1 Port facilities along River Nile are developed
- 3.2 Inland waterway navigation aids are improved

(5) Input from the Recipient Government

(Counterpart personnel (identify the name and position of the Project manager), support staff, office space, running expenses, vehicles, equipment, etc.)

- a. Administration Staff of 5 from the GOSS
- b. Technical Staff of 3 and Operation Staff of 5 from the State Government
- c. Office Spaces in RTD Main Office and Port Field Office
- d. Coordination with Related Public Sectors, such as Security, Revenue, Standards
- e. Coordination with Related Private Sectors, such as Inland Waterway Operators, Loader’s

& Driver's Unions

(6) Input from the Japanese Government

(Number and qualification of Japanese experts, training (in Japan and in-country) courses, seminars and workshops, equipment, etc.)

(Long Term Experts)

- a. Chief Advisor / Port Management Planner
- b. Deputy Chief Advisor / Port Safety & Security Planner
- c. Project Coordinator

(Short Term Experts)

- d. Operation & Maintenance Specialist
- e. Port Facility & Inland Waterway Navigation Specialist
- f. Training & Evaluation Specialist

(Training in Japan / Seminar)

- ✓ Port Administration & Facility Improvement Planning

(Training in-country / Workshop)

- ✓ Port & Inland Waterway Operations & Maintenance Management

(Gears, Equipments, and Facilities)

- ✓ Loading / Off Loading Gears, Safety Gears, etc.

7. Implementation Schedule

Month April Year 2010 ~ Month March Year 2012

8. Implementing Agency

(Budget, staffing, etc.)

The technical and management personnel at the River Transport Department, Ministry of Transport & Roads, Government of Southern Sudan and Mechanical Transport Department, Ministry of Physical Infrastructure, Government of Central Equatorial State will be available to support the implementation of the project.

9. Related Activities

(Activities in the sector by the recipient government, other donors and NGOs)

10. Gender Consideration

(Any relevant information of the project from gender perspective.)

11. Environmental and Social Considerations

(Please fill in the attached screening format.)

12. Beneficiaries

(Population for which positive changes are intended directly and indirectly by implementing the project and gender disaggregated data, if available)

13. Security Conditions

There have not been any incidences of insecurity in the project area, and it is expected that the security situation will continue to be stable throughout the project implementation period.

14. Others

Screening Format

Question 1 Address of a project site

Juba, Central Equatorial State, Southern Sudan (Initial Stage)
Shambey, Jonglei State & Malakal, Upper Nile State (Later Stage)

Question 2 Outline of the project

2-1 Does the project come under following sectors?

Yes No

If yes, please mark corresponding items.

- Mining development
- Industrial development
- Thermal power (including geothermal power)
- Hydropower, dams and reservoirs
- River/erosion control
- Power transmission and distribution lines
- Roads, railways and bridges
- Airports
- Ports and harbors
- Water supply, sewage and waste treatment
- Waste management and disposal
- Agriculture involving large-scale land-clearing or irrigation
- Forestry
- Fishery
- Tourism

2-2 Does the project include the following items?

Yes No

If yes, please mark following items.

- Involuntary resettlement (scale: households, persons)
- Groundwater pumping (scale: 2,700 m³ / year)
- Land reclamation, land development and land-clearing (scale: 5.4 hectares)
- Logging (scale: 3.6 hectares)

2-3 Did the proponent consider alternatives before request?

Yes: Please describe outline of the alternatives

()

No

2-4 Did the proponent have meetings with related stakeholders before request?

Yes No

If yes, please mark the corresponding stakeholders.

Administrative body

Local residents

NGO

Others ()

Question 3

Is the project a new one or an on-going one? In case of an on-going one, have you received strong complaints etc. from local residents?

New On-going (there are complaints) On-going (there are no complaints)

Others ()

Question 4 Name of laws or guidelines:

Is Environmental Impact Assessment (EIA) including Initial Environmental Examination (IEE) required for the project according to laws or guidelines in the host country?

Yes No

If yes, please mark corresponding items.

Required only IEE (Implemented, on going, planning)

Required both IEE and EIA (Implemented, on going, planning)

Required only EIA (Implemented, on going, planning)

Others: ()

Question 5

In case of that EIA was taken steps, was EIA approved by relevant laws in the host country? If yes, please mark date of approval and the competent authority.

Approved: without a supplementary condition

Approved: with a supplementary condition

(Date of approval: Competent authority:)

Not yet started an appraisal process

Others:()

Question 6

If a certificate regarding the environment and society other than EIA, is required, please indicate the title of certificate.

Already certified Required a certificate but not yet done

Title of the certificate : ()

Not required

Others ()

Question 7

Are following areas located inside or around the project site?

Yes No Not identified

If yes, please mark the corresponding items.

- National parks, protected areas designated by the government (coast line, wetlands, reserved area for ethnic or indigenous people, cultural heritage) and areas being considered for national parks or protected areas
- Virgin forests, tropical forests
- Ecological important habitat areas (coral reef, mangrove wetland, tidal flats)
- Habitat of valuable species protected by domestic laws or international treaties
- Likely salts cumulus or soil erosion areas on a massive scale
- Remarkable desertification trend areas
- Archaeological, historical or cultural valuable areas
- Living areas of ethnic, indigenous people or nomads who have a traditional lifestyle, or special socially valuable area

Question 8

Does the project have adverse impacts on the environment and local communities?

Yes No Not identified

Reason: ()

Question 9

Please mark related environmental and social impacts, and describe their outlines.

- | | |
|---|---|
| <input type="checkbox"/> Air pollution | <input type="checkbox"/> Social institutions such as social infrastructure and local decision-making institutions |
| <input type="checkbox"/> Water pollution | <input type="checkbox"/> Existing social infrastructures and services |
| <input type="checkbox"/> Soil pollution | <input type="checkbox"/> The poor, indigenous of ethnic people |
| <input type="checkbox"/> Waste | <input type="checkbox"/> Maldistribution of benefit and damage |
| <input type="checkbox"/> Noise and vibration | <input type="checkbox"/> Local conflict of interests |
| <input type="checkbox"/> Ground subsidence | <input type="checkbox"/> Gender |
| <input type="checkbox"/> Offensive odors | <input type="checkbox"/> Children's rights |
| <input type="checkbox"/> Geographical features | <input type="checkbox"/> Cultural heritage |
| <input type="checkbox"/> Bottom sediment | <input type="checkbox"/> Infectious diseases such as HIV/AIDS etc. |
| <input type="checkbox"/> Biota and ecosystem | <input type="checkbox"/> Others () |
| <input type="checkbox"/> Water usage | |
| <input type="checkbox"/> Accidents | |
| <input type="checkbox"/> Global warming | |
| <input type="checkbox"/> Involuntary resettlement | |
| <input type="checkbox"/> Local economy such as employment and livelihood etc. | |
| <input type="checkbox"/> Land use and utilization of local resources | |

Outline of related impacts:

[]

Question 10

Information disclosure and meetings with stakeholders

10-1 If the environmental and social considerations are required, does the proponent agree on information disclosure and meetings with stakeholders in accordance with JICA Guidelines for Environmental and Social Considerations?

Yes No

10-2 If no, please describe reasons below.

[]

APPENDIX 8

APPLICATION FORM FOR GRANT AID

APPLICATION FORM FOR JAPAN'S GRANT AID
FOR GENERAL PROJECT

1. Date of Entry : February 2009
2. Applicant : the Government of Southern Sudan
3. Project Title : Improvement of Juba River Port
4. Sector : Transport, Port / Inland Waterway
5. Project Type :
1. Equipment Supply
 2. Facilities Construction
6. Target Site : (province/country name) : Central Equatorial State, Southern Sudan
 : (city/town/village name) : Juba
 : (from the metropolis) : about 3 weeks from Khartoum by Waterway
 : (from the metropolis) : about 1 week from Khartoum by Land
 : (from the metropolis) : about 2 hours from Khartoum by Air

(Please refer Appendix 1 "Project Location Map")

7. Requested Amount :
- | | |
|---------|--------------------------|
| Phase 1 | <u>JPY 2,371,000,000</u> |
| Phase 2 | <u>JPY 2,124,000,000</u> |
| Total | <u>JPY 4,495,000,000</u> |

8. Desired Fiscal Year of Implementaion:

Phase 1

- Survey : FY 2010
 Implementation : FY 2011 to 2012

Phase 2

- Survey : FY 2013
 Implementation : FY 2014 to 2015

Implementation Schedule

	Project Area	2009	2010	2011	2012	2013	2014	2015	2016
Phase 1	1.92 ha		Survey	Implementation					
Phase 2	1.68 ha					Survey	Implementation		

9. Implementing Agency :

Ministry of Transport and Roads, Government of Southern Sudan

Person in charge: (full name) Dr. Daniel WANI

(affiliation) Under Secretary

Address: Ministry of Transport and Roads, GOSS

Telephone No.: 012-959-7005 / 0477-102-509

Ministry of Physical Infrastructure, Government of Central Equatorial State

Person in charge: (full name) Eng. Luis Gore George

(affiliation) Director General

Address: Ministry of Physical Infrastructure, CES

Telephone No.: 012-220-4739 / 0477-112-364

10. Outline of the Implementing Agency

(1) Authorities and Duties of the Ministry

(MOTR / GOSS)

Administration of infrastructural plans and other works including Land, Air, and River Transport, as well as Roads, Air Ports, and River Ports, and proposed Southern Sudan Inland Transport Authority responsible for standards and maintenance are included in the duty.

(MOPI / CES)

(2) Annual Budget

Actual Expenditure in Year 2006, 2007, and 2008 was as follows (in Thousand Sudan Pounds):

(MOTR / GOSS)	<u>2006</u>	<u>2007</u>	<u>2008</u>
Salaries & Indemnities	n/a	n/a	1,150
Operational Expenditure & Small Repair	n/a	n/a	-
Public Administration & Subsidies	n/a	n/a	-
Social & Cultural Expenditure	n/a	n/a	-
<u>Capital Expenditure</u>	<u>n/a</u>	<u>n/a</u>	<u>8,340</u>
Total			9,490

(MOPI / CES)	<u>2006</u>	<u>2007</u>	<u>2008</u>
Salaries & Indemnities	328,750	269,071	33,047
Operational Expenditure & Small Repair	-	-	374
Public Administration & Subsidies	-	-	-
Social & Cultural Expenditure	-	-	-
<u>Capital Expenditure</u>	-	-	-
Total	328,750	269,071	33,421

(3) Personnel

(MOTR / GOSS)

Total number of the personnel is 653 in 2008 excluding temporary employees.

(MOPI / CES)

Total number of the personnel is 2,941 in 2008 excluding temporary employees.

(4) Organization Chart of the Ministry

(Please refer Appendix 2 “Organization Chart of MOTR, RTD, and MOPI)

Annual budget and staff member of responsible department or section for the last three years and future prospects

Name of the Department/Section: River Transport Department (RTD) / MOTR / GOSS

Year	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Annual Budget (‘000 SDG)	n/a	n/a	9,490	11,400	
Number of Staff Members	n/a	n/a	107	79	

Name of the Department/Section: Mechanical Transport Department (MTD) / MOPI / CES

Year	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Annual Budget (‘000 SDG)	n/a	n/a	439		
Number of Staff Members (MTD)	n/a	n/a	84		

11. Background of the Request

(1) Background;

According to the CPA, GoNU is responsible for the rehabilitation and the improvement of the River Transport. So far nothing has happened since the signing of the CPA on the 9th January 2005 and today River Transport represents the most difficult modes of transport in the South. Yet, River Transport is cheap affordable to most users, and is a vital link between

the South and the North. The overall navigational portion of the Nile between Juba to the South and Kosti to the North is 1,500 km. Much of the river is silted and would require dredging which is a very expensive exercise. Along the Nile to Kosti there are 15 ports some of which ranging from small to large ports carrying different goods and passengers, all of which require improvement and development.

(2) Problem to be solved;

- ✓ Navigational Waterway, currently limited by primarily river bed weed growth, water hyacinth, silting
- ✓ Port Facilities, currently very poor condition
- ✓ Fleet Maintenance Facilities, currently lacking
- ✓ Centralized River Transport Management, currently lacking
- ✓ Vessels, currently very old ones still being used

(3) Relation between the Sector and the Project

Name of Plan:

Period: From

(4) Reason Why Japan's Grant Aid is requested for this Particular Project

All these ports are considered priority but since rehabilitation program would require a lot of money, it is appropriate for the Ministry to prioritize the implementation program so as to achieve value for money. To rehabilitate the River Transport and to bring it to a reasonable standard, it was estimated to be 150 Million US Dollars when Sudan Consortium was held in Paris between 9th and 10th March 2006. This amount includes the rehabilitation of the small and large ports which have been identified and the dredging of the rivers, however, with GoJ assistance, Ministry will be able to expand its implementation program from major ports to minor ports.

12. Relation with the Government's Development Plan and Other Factors.

(1) Relation with the Government's National Development Plan.

Name of the Plan : Social Economic Development Plan

Period : from 2006 to 2010

(2) Relation with the Sector Comprehensive/Overall Program.

Name of the Program : Port, Primary Roads and Water Restoration Project

Period : from 2006 to 2010

13. Objectives (Itemize as Concretely as Possible.)

- (1) Objectives/purpose of the project.
 - (i) To rehabilitate and extend river port capacity
 - (ii) To facilitate movement of pushers in docking at the river port
 - (iii) To reduce local way of loading and unloading equipments through improvement of port and roads
 - (iv) To stimulate the local economy by means of better river transport network

- (2) Overall goal/medium and long-term objectives.
 - (i) To stimulate economic growth in areas such as Juba Rumbek, Borl and Yei
 - (ii) To enhance investment and development activities through improved access to the area
 - (iii) To increase the opportunity for extending better social services ,Public administration and security
 - (iv) To increase the capacity of the Ministry of Transport & Roads, GOSS as well as Ministry of Physical Infrastructure, CES
 - (v) Maintenance of Country's Ports and Roads Network
 - (vi) To provide means for transport for goods and passengers – Mangala, Bor, Malakal, and Renk ports.
 - (vii) To enhance trade, tourism and development activities with Northern Sudan.

14. Outline of the Project and Request (Itemize as concretely as possible.)

- (1) a. In the case of facilities construction project.
 - (i) Concept
 - (a) Provision of Docking Facilities (Extending Jetty with Landing Slope, Bank Protection, Mooring Post, etc.)
 - (b) Provision of Cargo Handling Yard (Interlocking Block Pavement, and Drainage, etc.)
 - (c) Provision of Storage Facilities (Warehouse, Storage Lacks, etc.)
 - (d) Provision of Administration Facilities & Equipment (Offices, Vehicles, Boats, Radios, etc.)
 - (e) Provision of Security Facilities (Security Fence & Gate, Guard Post, Flood Lights, ID System, etc.)
 - (f) Provision of Life Lines (Generator, Deep Well, Water Tank & Hydrant, Toilet & Shower, Septic Tank, Soak Pit, etc.)
 - (g) Provision of Cargo Handling Equipment & Gears (Folk Lift, Rough Terrain / Gibb Crane , Pallet, etc.)

(ii) Component

Phase 1 (19,200 sq. m)	Improvement Component ('000 JPY)	
	Civil Works	1,812,000
	Facilities	150,000
	Equipment	150,000
	Consultant Fee	259,000
	Total	2,371,000
Phase 2 (16,800 sq. m)	Improvement Component ('000 JPY)	
	Civil Works	1,584,000
	Facilities	150,000
	Equipments	150,000
	Consultant Fee	240,000
	Total	2,124,000

(Please refer Appendix 3 "Proposed River Port Improvement Layout Plan")

(1) b. In the case of Equipment Supply Project.

List of requested equipment (such as the name and address of the site to install the equipment, equipment-selecting criteria, name, specifications, quantity, unit price, total amount, etc. of the equipment)

(Please refer Appendix 4 "Proposed River Port Improvement Equipment List")

(1) c. Methods to operate, manage, and maintain the facilities or equipment, expected number of persons to be secured, together with their technical levels, and prospect to secure necessary budget.

(i) Maintenance and Management of Facility:

Carried out by Joint Staff from Mechanical Transport Department, Ministry of Physical Infrastructure, Government of Central Equatorial State, and River Transport Department, Ministry of Transport & Roads, Government of Southern Sudan

(ii) Budget for Maintenance and Management:

(iii) Expected number of person to be secured:

Administration Staff;	6
Technical Staff;	12
Sub-Ordinate Staff;	6

(iv) Budget:

Partially covered by Revenue from Entrance Fee, Docking Fee, and Storage Fee

Partially covered by Government Own Budget

(1) d. Financial sources for management and maintenance after completion of the requested project.

Fully borne by the government,

Partially borne by beneficiaries,

Fully borne by beneficiaries (estimated amounts and number of persons)

(2) Breakdown of total amount of the facilities and equipment and supporting data.

(i) Breakdown of Total Amount

Phase 1	JPY 2,371,000,000
Phase 2	JPY 2,124,000,000
Total	JPY 4,495,000,000

(ii) Breakdown of Phase 1

Improvement Works		Quantity	Unit	Unit Price (‘000 JPY)	Amount (‘000 JPY)
Civil Works	Jetty	3,100	m2	360	1,116,000
	Bank	2,600	m3	120	312,000
	Yard	19,200	m2	15	288,000
	Auxiliaries	19,200	m2	5	96,000
	Sub Total				1,812,000
Facilities		1	L.S.	150,000	150,000
Equipment		1	L.S.	150,000	150,000
Sum of Improvement Works Cost					2,112,000
Consultant Fee		Quantity	Unit	Unit Price (‘000 JPY)	Amount (‘000 JPY)
Basic Design Stage		1	L.S.	90,000	90,000
Detailed Design & Construction Supervision		1	L.S.	169,000	169,000
Sum of Consultant Fee					259,000
Total Request Amount					2,371,000

(iii) Breakdown of Phase 2

Improvement Works		Quantity	Unit	Unit Price (‘000 JPY)	Amount (‘000 JPY)
Civil Works	Jetty	2,600	m2	360	936,000
	Bank	2,600	m3	120	312,000
	Yard	16,800	m2	15	252,000
	Auxiliaries	16,800	m2	5	84,000
	Sub Total				1,584,000
Facilities	1	L.S.	150,000	150,000	
Equipment	1	L.S.	150,000	150,000	
Sum of Improvement Works Cost					1,884,000
Consultant Fee		Quantity	Unit	Unit Price (‘000 JPY)	Amount (‘000 JPY)
Basic Design Stage		1	L.S.	90,000	90,000
Detailed Design & Construction Supervision		1	L.S.	150,000	150,000
Sum of Consultant Fee					240,000
Total Request Amount					2,124,000

(3) Additional Information.

a. Existing Facilities:

~~No~~

Yes Current situation of the existing facilities plans, specifications, supporting photographs, material used, etc.

- ✓ Jetty (35m by 16m)
- ✓ Cargo Handling Yard (35m by 14m) ; [To be extended to 50m x 30m]
- ✓ Equipment Storage (3m by 3m x 2)
- ✓ Access Road (10m wide by 680m long)

(Please refer Appendix 5 “Photographs of Existing Facilities”)

b. List of existing equipment covering the name, quantity, year purchased, country of origin of the equipment, together with the manufacturer's name and operating conditions (A = operable, B = partially operable, and C = not operable and the reason(s) for such inoperability.)

Also attach photographs of the equipment so that the current conditions can be grasped.

- ✓ Gantry Crane; 1 set, 2007, Thailand, Siam Tone, B (due to crash of barge, rail realignment will be necessary and it will be repaired under Follow-Up Cooperation by JICA soon)
- ✓ Generator (25 kVA); 1 set, 2007, Japan, Nihon Sharyo, A
- ✓ Hoist (1.50 ton); 1 set, 2007, Japan, Mitsubishi Electric, A

(Please refer Appendix 6 “Photographs of Existing Equipment”)

c. Project site preparation (including expropriation)

Land:

Already Secured

Name of the Landowner : Central Equatorial State Government

Area : Total land area is approximately 5.40 ha, and of which 1.80 ha is for Proposed Road Reserve (Juba Circumferential Road), and remaining 3.60 ha is for Port Yard (Water Surface is not included in above mentioned area)

- Current Situations of the Project Site, such as leveling, drainage, availability of power, water supply, telephone, etc.

Most part of Port Area has not been mechanically leveled yet, except where Jetty and Cargo Handling Yard and Access Road constructed under the Pilot Project of Emergency Study by JICA between 2006 and 2007. Drainage was partially provided along above-mentioned access road in line with said project; however, most part of drainage and pipe culverts was blocked by excess sand & silt and gavages since then without proper maintenance works. Power is available for only Gantry Crane Operation by Auxiliary Generator. City power, water, telephone lines are not available in the Area yet except mobile phone networks. Temporary Field Offices (4 rooms), Deep Well (30m deep), Toilet (Gent & Lady), and Generator (30 kVA) will be provided by JICA & JICS in line with Follow-Up Cooperation by end of March 2009

- Data on Natural Conditions.

N/A

- Security Situation.

The security situation in this area is considered to be free of UXO. There is no threat from land mine. UXO clearance would be conducted in any areas where deemed necessary before the commencement of the requested project.

d. Related Grant Aid cooperation in the past

N/A

15. Benefit and effect of the project.

(1) Area that will benefit from the project (specify the total area, if possible) :

- (i) Directly Benefited Area: Juba, Central Equatorial State
- (ii) Indirectly Benefited Area: the other part of Central Equatorial State and neighboring states, such as Western Equatorial State, Eastern Equatorial State, and the other states along River Nile as well

(2) Population that will benefit (directly and indirectly) :

- (i) Population that will benefit directly from the Project; 2.0 million
- (ii) Population that will benefit indirectly from the Project; 3.5 million

(3) Expected social and economic effects (itemize concretely):

- (i) Regional trade and local economy are expected to stimulate by the rehabilitation
- (ii) Increasing of investment and activities are expected to enhance
- (iii) Better transportation also enhances educational and social development, public administration regional integration and security.

16. Relation with Technical Cooperation, etc.

(1) Feasibility Study: "Emergency Study on the Planning and Support for Basic Physical and Social Infrastructure in Juba Town and the Surrounding Areas"

Already effected/being effected

From January 2006 to December 2007

Conducted by: JICA

Other Agency (specify : _____)

~~Not yet effected.~~

(2) Technical Cooperation.

Which of the following of assistance do you require?

(1) project-type technical cooperation

~~(2) long term experts : _____ persons~~

~~(3) short term experts : _____ persons~~

~~(4) JOCV : _____ persons~~

~~(5) acceptance of trainees : _____ persons~~

~~(6) not needed~~

When the technical cooperation is underway,

Title: The Project for Improvement of Operation and Maintenance of Inland Water Way in Southern Sudan

Period: form April 2010 to March 2012

(1) project-type technical cooperation

~~(2) long term experts : persons~~

~~(3) short term experts : persons~~

~~(4) JOCV : persons~~

~~(5) acceptance of trainees : persons~~

17. Request to other donors for same project.

None

18. Aid by third countries or international organizations in the same or related fields.

Name of Donor	Period	Type	Amount	Outline (concretely)	Relationship with the present request
USAID	18m	Road Construction	\$100M	Inter Regional Roads Construction Program	Feeders from/to the `Port
EU					
WFP	36m	Road Repair	\$50M	Emergency Roads Repair Program	Feeders from/to the `Port
World Bank	48m	Road Construction	\$400M	Intra Regional Roads Construction Program	Feeders from/to the `Port

19. Other information with special remark (whether or not privatization policy is effected; If yes, indicate the relationship with the requested project.)

- ✓ Improvement of Proposed Juba Circumferential Road (Road Reserve Total; Approx. 1.8 ha) passing through subject Port Area (Secured Port Area Total; Approx. 5.4 ha) is not included in this request
- ✓ Coordination with Juba Old Port Rehabilitation Program will be required
- ✓ Coordination with National Transport Network Improvement Program will be also required

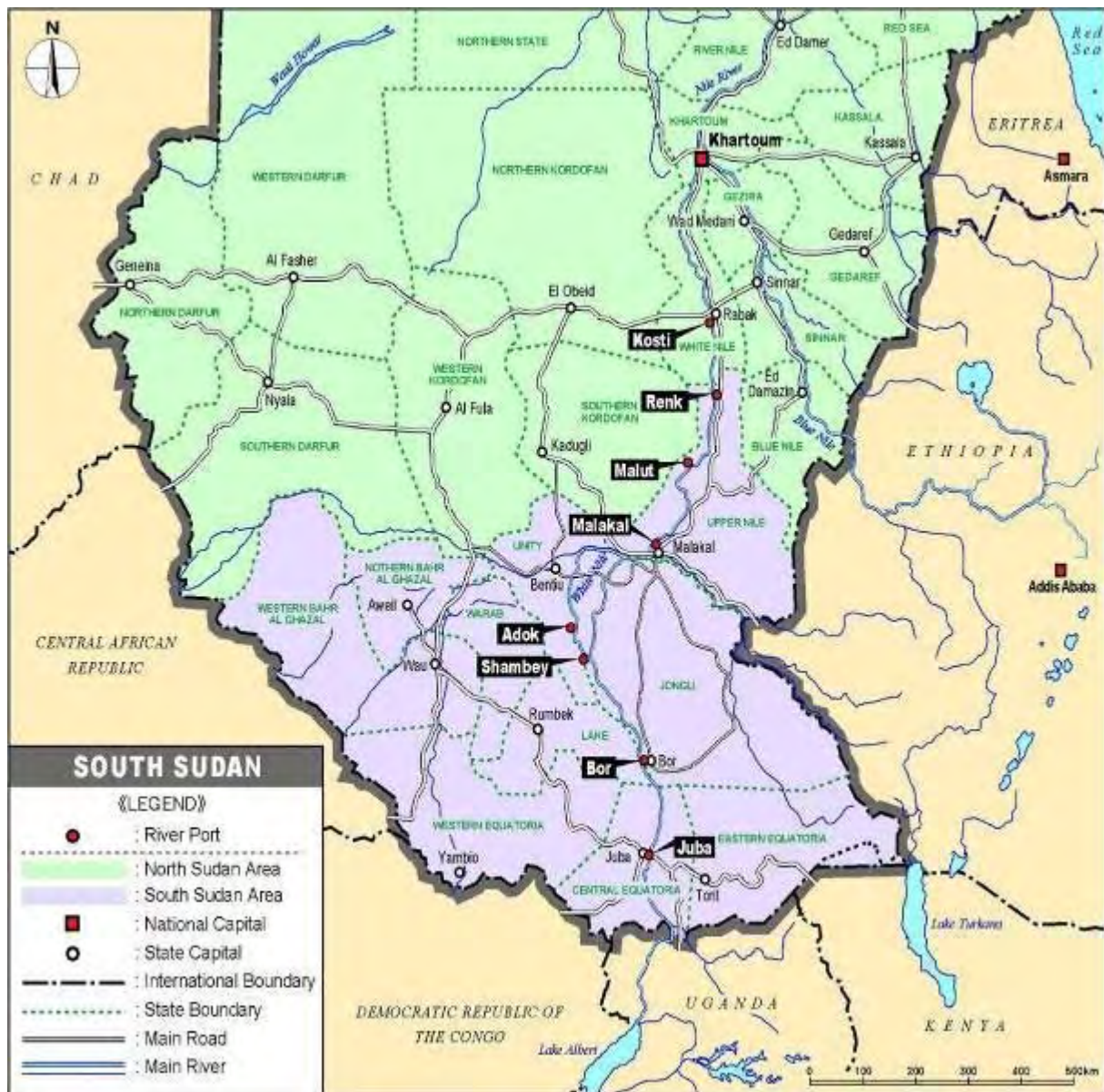
Project Location Map-1 (Sudan)



Map No. 3707 Rev. 10 UNITED NATIONS
April 2007

Department of Peacekeeping Operations
Cartographic Section

Project Location Map-2 (Land & River Transport Networks in Southern Sudan)

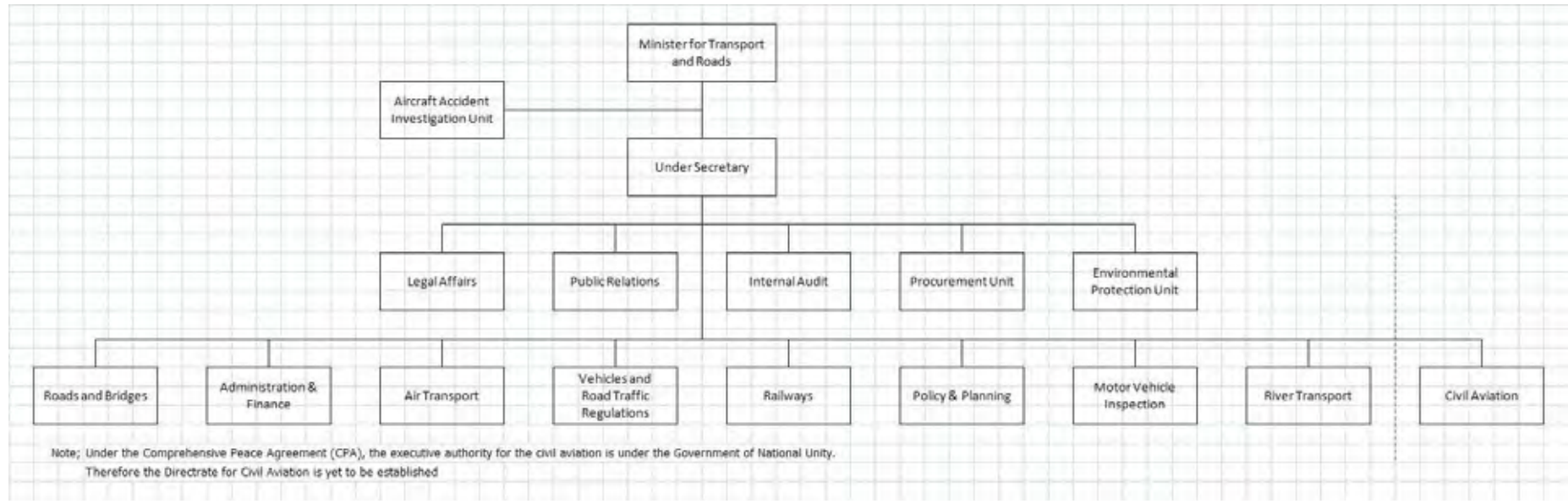


Project Location Map-3 (Juba Port Area)



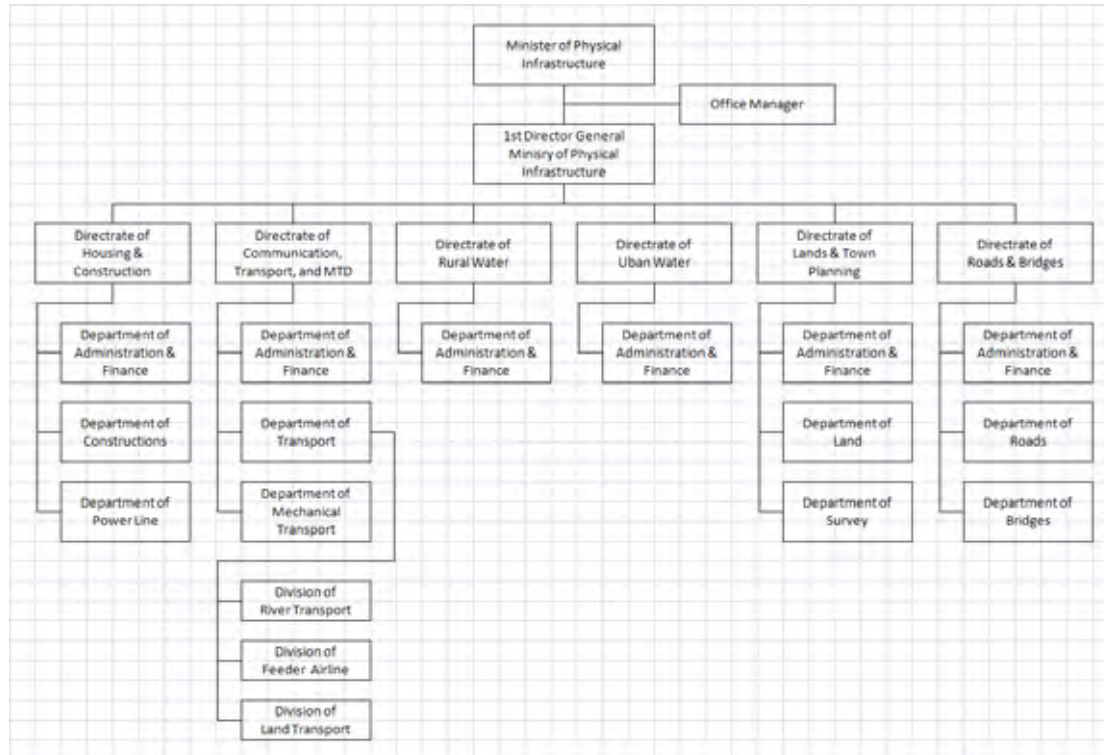
Organization Chart-1

(Ministry of Transport & Roads, Government of Southern Sudan)

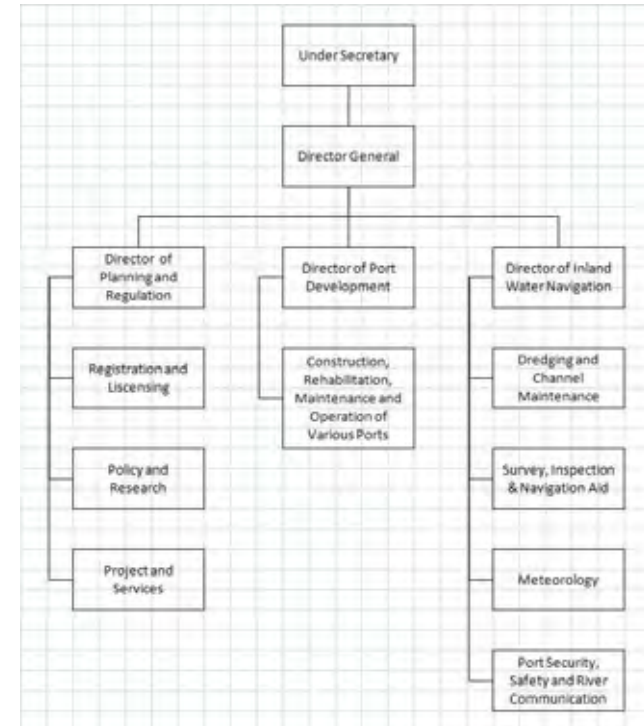


Organization Chart-2

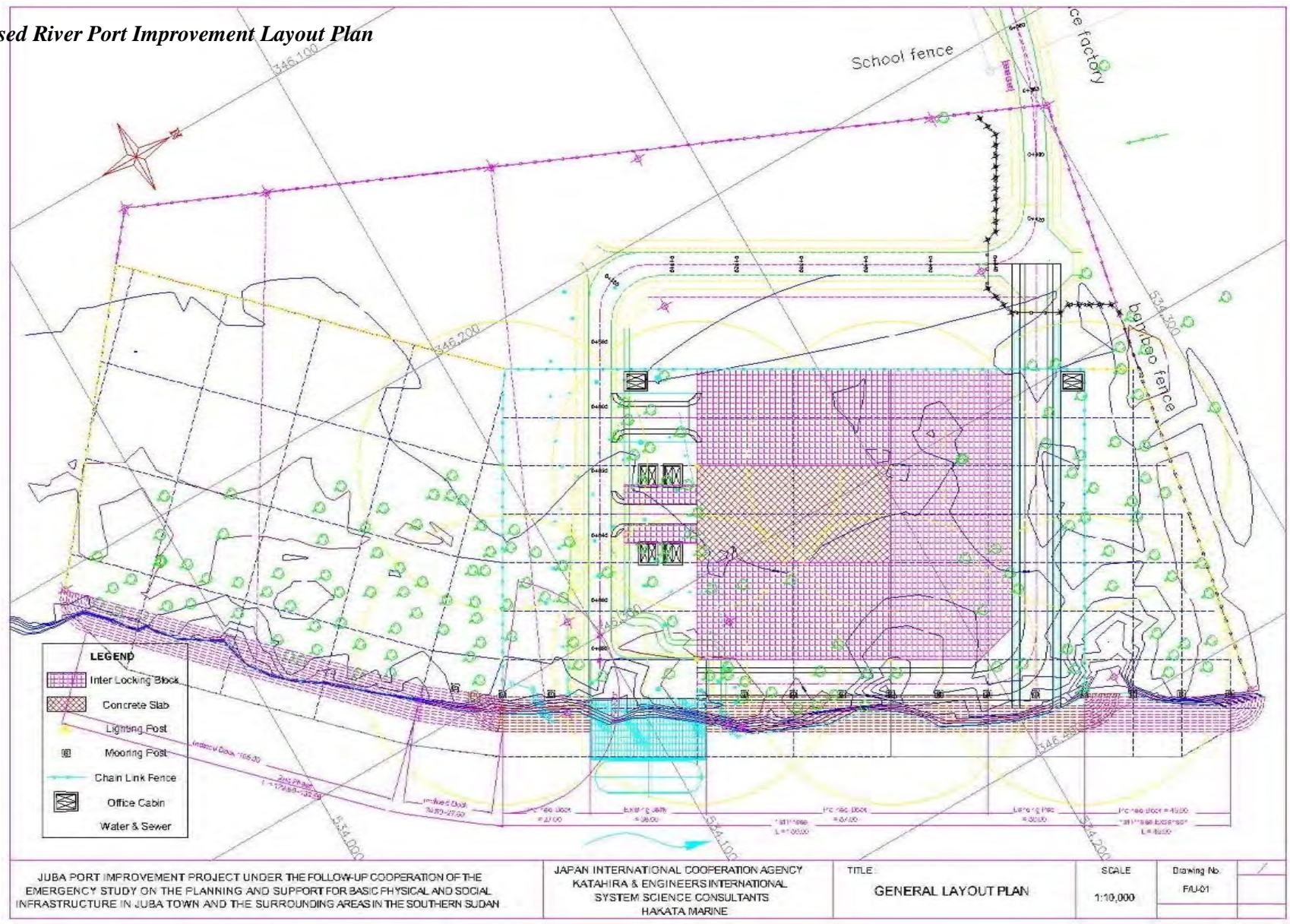
(Ministry of Physical Infrastructure, Government of Central Equatorial State)



(Department of River Transport, MOTR, GOSS)



Proposed River Port Improvement Layout Plan



Proposed River Port Improvement Facilities & Equipment List

Cat.	Items	Description	Unit	Quantity	
				Phase 1	Phase 2
M	Hand Pallet Truck	1.0-ton Manual Type	set	3	3
	Fork Lift Truck	3.5-ton Engine Type	set	2	2
	Oil Pump	Heavy Duty Type (30 kilo litter per hour or higher)	set	3	3
	Generator	45-kVA w/ Sound Attenuation Canopy	set	2	2
	Landing Craft	18-ft w/ 40hp Outboard Engine	set	1	1
	4WD Vehicle	6-Seat w/ Extra 4-Jump Seat	set	2	2
L	Truck / Jib Crane	Heavy Duty Type (50-ton & 30m-long arm)	set	1	1
S & M	Warehouse	Tent Type (10m × 30m × 6m)	set	6	6
	Office	Double Container Type (2 x 8-ft x 20-ft) w/ 24-BTU Air Conditioner	set	4	4
	Shed	Tent Type (4.5m × 7.2 m × 3.35 m)	set	2	2
	Fence	Heavy Duty Chain Link w/ Barbed Wire (h = 3.0m)	m	360	270
	Vehicle Gate	Heavy Duty Steel Flamed Sliding Type (1.8m × 12.0m)	set	2	1
	Personal Gate	Heavy Duty Chain Link w/ Pipe Flames(2.0m × 1.8m)	set	2	1
	Security Post	Cabin Container Type (8-ft x 12-ft)	set	2	1
	Water Supply	Deep Well (30m) w/ Pump & Elevated Tank (2 qu. m)	L.S.	2	2
	Sanitation	Toilet (3 + 1) w/ Septic Tank (3 qu. m) & Soak Pit	L.S.	2	2
	Tap & Shower	Public Tap w/ Sink (x 6) & Shower (4 + 2)	L.S.	2	2

Note; M: Medium Size Equipment, L: Large Size Equipment, S & M: Security & Maintenance Related Items

Photographs of Existing Facilities-1 (under Pilot Project of Emergency Study)

Jetty & Cargo Handling Yard



Access Road



Equipment Storage



Photographs of Existing Facilities-2 (in line with Follow-Up Cooperation of Emergency Study)

Field Offices



Toilet



Generator Shed & Fuel Storage



Photographs of Existing Equipment (under Pilot Project of Emergency Study)

Gantry Crane



Generator



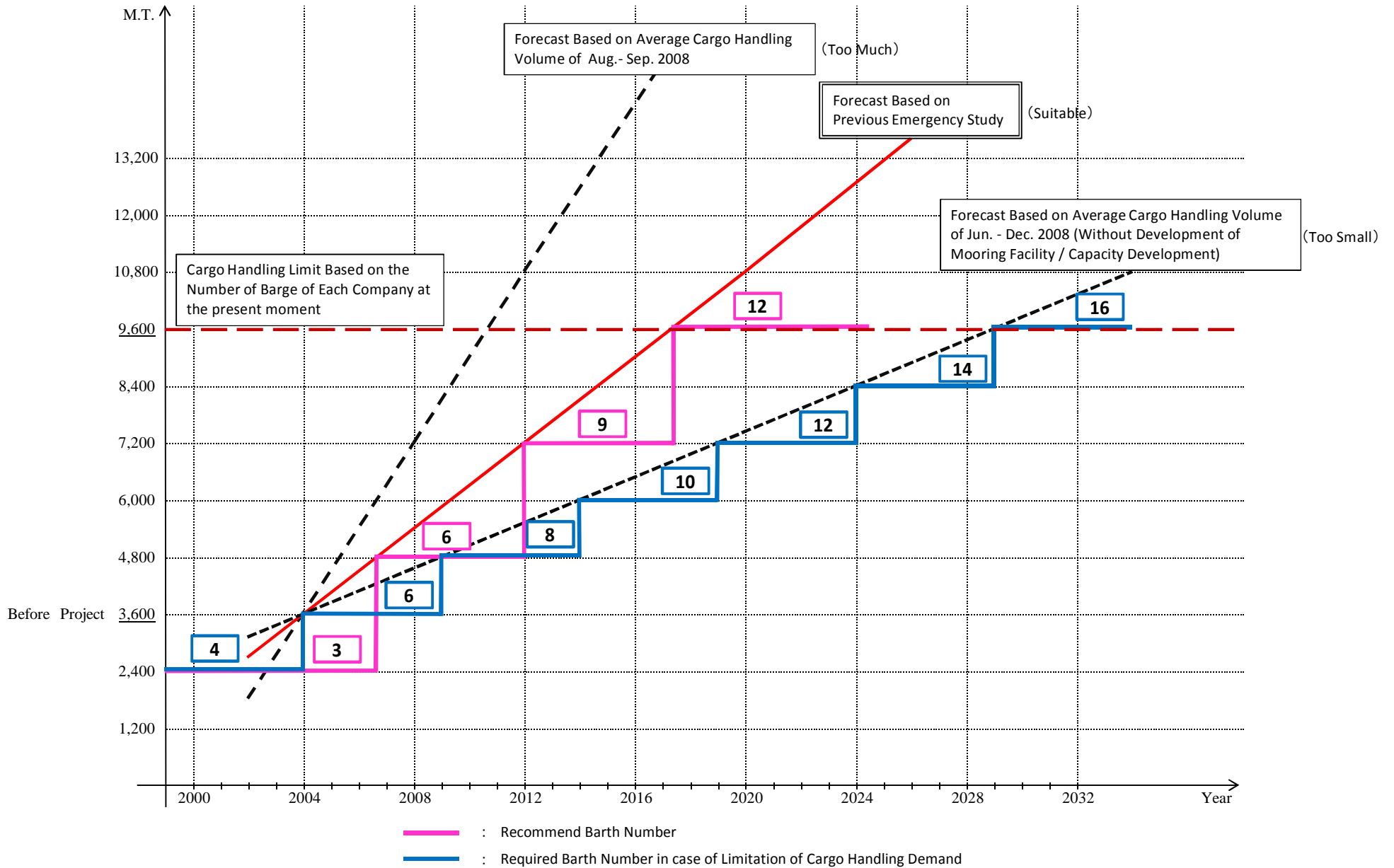
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APPENDIX 9

CARGO HANDLING FORECAST AND BERTH NUMBER

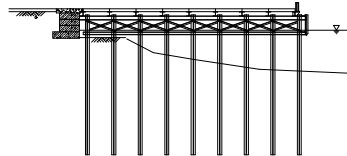
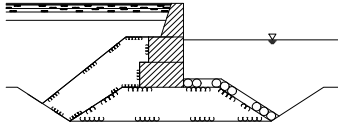
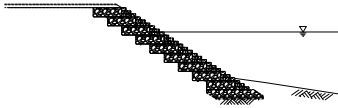
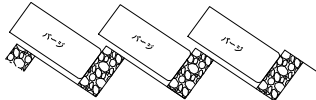
Cargo Handling Forecast and Required Barth Number



APPENDIX 10

COMPARITIVE TABLE OF BERTH TYPE

Comparative Table of Berth Type

Type	Weight	Jetty Berth		Vertical Concrete Berth		Slope Berth (Parallel Type)		Slope Berth (Saw Type)					
Image													
Necessary Berth Length/Barge	1	• 36m (Side touch down)	2	• 36m (Side touch down)	2	• 9m (Vertical touch down)	4	• 20m (Diagonal touch down)	3				
Durability	2	• Low resistance against barge impact & pulling	2	• Strong against barge impact	4	• Relatively strong because sandbags play cushion roll.	3	• Strong against barge impact	4				
Landing/Leaving Berth	3	• Necessary for training	2	• Necessary for training	2	• Relatively easy	3	• Easy	4				
Cargo Handling	3	• Easy for loading/off-loading of container • Easy because of side touch down • Difficult for RORO	3	• Easy for loading/off-loading of container • Easy because of side touch down • Difficult for RORO	3	• Difficult for loading/off-loading of container • Difficult because of vertical touch down • Relatively easy for RORO	2	• Relatively easy for loading/off-loading of container • Relatively easy because of diagonal touch down • Easy for RORO	5				
Sand Settlement/Scouring	1	• Few impact	4	• Necessary to consider sand settlement/Scouring	2	• Necessary to consider sand settlement/Scouring	3	• Necessary to consider sand settlement/Scouring	3				
Construction Cost	3	• Transportation cost is very high but relatively low	3	• High because of tons of concrete	2	• Relatively low	4	• High because of tones of concrete & long berth length	2				
Construction Condition	3	• Necessary for special machine but easy construction	4	• Difficult construction because of underwater work	2	• Easy construction because of manpower work	4	• Difficult construction because of underwater work partly	3				
Local Material	2	• Necessary to procure almost all materials from other countries	2	• Possible to procure almost all materials at the site.(Cement is import)	3	• Possible to procure almost all materials at the site.(Gabion is import)	4	• Possible to procure almost all materials at the site.(Gabion & Cement is import)	3				
Maintenance	2	• Circumstantially necessary for large-scale repair	2	• Maintenance free	5	• Necessary for easy repair	3	• Necessary for easy repair	4				
overall Evaluation	100	△		54	△		55	○		66	◎		70

APPENDIX 11

NUMBER OF NECESSARY BERTH AND POSSIBLE BERTH

Number of Necessary Berth and Possible Berth

Year	Cargo Handling Volume (ton/month)	Number of Arrival Berge		Number of Necessary Berth			Number of Possible Berth Number			
		(/month)	(/month)	Mooring Period Loading:2 Days Offloading:2 Days	Mooring Period Loading:1 Day Offloading:2 Days	Mooring Period Loading:1 Day Offloading:1 Day	Type of Berth			
							Jetty Berth	Vertical Concrete Berth	Slope Berth (Parallel Type)	Slope Berth (Saw Type)
2002	2,400	8	2	4	3	2	—	—	—	—
2007	4,800	16	4	8	6	4	1	—	—	—
2012	1st Phase	7,200	24	6	12	9	6	6	14	9
2017	2nd Phase	9,600	32	8	16	12	9	9	23	15
2023		12,000	40	10	20	15	9	9	23	15
2028		14,400	48	12	24	18	9	9	23	15



: Number of necessary berth in case of short mooring period because capacity development proceeds and efficiency of cargo handling improves

Sketch

