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資料 1. 調査団氏名・所属

(201x年xx月xx日～201x年xx月xx日)

(1) 業務主任/河川施設計画 1	松本良治/三品孝洋	株式会社建設技研インターナショナル
(2) 副業務主任/河川施設設計 2	三品孝洋/石井昌樹	株式会社建設技研インターナショナル
(3) 施設設計(無償)(1)水門施設設計(土木)	我妻康弘	日本工営株式会社
(4) 施設設計(無償)(2)水門施設設計(土木)	石井昌樹/伊東達二	株式会社建設技研インターナショナル
(5) 施設設計(無償)(3)水門施設設計(土木)	梶浦建樹	日本工営株式会社
(6) 施設設計(無償)(4)水門施設設計(水門ゲート)	山口新	日本工営株式会社
(7) 施設設計(無償)(5)水門施設設計(水門ゲート)	山本正宏	日本工営株式会社
(8) 施設設計(無償)(6)水門施設設計(電気)	齊藤正義	日本工営株式会社
(9) 施設設計(無償)施工計画・積算	君島実	株式会社建設技研インターナショナル

資料 2

調査工程

作業項目	12	1	2	3	4	5	6	7	8
1. 無償案件形成		■							
2. 案件概要説明書作成		■							
3. インセプションレポート作成		■							
3. 基本設計			■						
4. プログレスレポート作成					■				
5. 詳細設計						■			
6. 詳細設計レポート作成							■		
7. 積算協議							■	■	■
インセプションレポート説明協議			▲	2/23					
テクニカルアドバイスノート協議						▲	5/15		
準備調査に関するMOD調印				▲	3/12				
本事業の交換公文調印								▲	7/5

資料 3 面会者リスト

面会者リスト

機関名 (所属) /氏名

役 職

Royal Irrigation Department(RID)

Mr. Chachawal Punyavateenun	Deputy Director General for Engineering
Mr. Prasit Sitho	Chief Engineer (Executive Advisor in Survey or Design)
Mr. Phuwanade Thongrunroj	Chief Engineer (Executive Advisor in Water Allocation and Maintenance)
Mr. Somkiet Prajumwong	Director of office of administer Project
Mr. Kosol Tienthongnukul	Director of office of Engineering Topographical and Geotechnical Survey
Mr. Panuphan Artsalee	Civil Engineer, Expert Level (Design)
Mr. Thongpeaw Kongjun	Director of Office of Engineering and Architecture Design
Mr. Noppadol Kosuwan	Chief of Improvement and Maintenance Division
Mr. Chaiyong Jongaresachart	Director of Regional Irrigation Office 2
Mr. Kanching Kawsaart	Chief of operation and maintenance Division of Regional Irrigation Office 3
Mr. Boontham Panpiamphot	Chief of water management of Regional Irrigation Office 4
Mr. Ugrid Thawonklaikool	Director of operation and maintenance Division of Regional Irrigation Office 10
Mr. Chainarin Panpinyaporn	Director of Regional Irrigation Office 11
Mr. Darongkorn Somton	Director of Regional Irrigation Office 12
Mr. Preecha Jarnthong	Director of Regional Irrigation Office 13
Mr. Jamnong Phungpuk	Director of Office of the National Economic and Social Development Board (NESDB)
Mr. Jirawat Ratisunthorn	Director of Water Crisis prevention center
Mr. Kanchadin Srapratoom	Chief of Loan Projects
Ms. Sukontha Airkarat	Representative of Director Bureau of Coordination for International Cooperation
Mr. Prayoon Yenjai	Chief of water management division of Regional Irrigation Office 13
Mr. Chonlathep Thatri	Chief of water management division of Regional Irrigation Office 3
Mr. Suparat Kosumapinan	Chief of Design group of Regional Irrigation Office 10
Mr. Klaileuk Inchayanan	

Mr. Pinyo Gessa	Plan and Policy Analyst, Senior Professional Level
Ms. Kobkul Rangsiyaroj	Engineer, Professional Level
Mr. Jaroern Amornmorakod	Irrigation Engineer
Mr. Weera Wangworrawong	Irrigation Engineer/ Regional Irrigation Office 10
Mr. Athaporn Punyachom	Irrigation Engineer/ Regional Irrigation Office 10
Mr. Suparat Kosumapinun	Ayutthaya project
Mr. Natthaphong Kosuma	Regional Irrigation Office 10
Mr. Narong Boonin	Regional Irrigation Office 10
Mr. Chatchai Boonlue	Director of Foreign Financial Project Administration Division

**Board of Directors for Progressive monitoring
and problems /obstacles**

Dr. Thawee Naritsirikul	Phra Nakhon Si Ayutthaya's Vice Governor
Mr. Praphon Aiamsunthorn	Public Works and Town & Country Planning of Phra Nakhon Si Ayutthaya
Mr. Surachai Ajonboon	Director of Office of the Natural Resources and Environment in Phra Nakhon Si Ayutthaya
Mrs. Bubpanat Chindet	The treasury of Phra Nakhon Si Ayutthaya
Mr. Sutham Noungam	Land Office of Phra Nakhon Si Ayutthaya
Mr. Sahaphum Phumtaritrat	Director of the 3rd Regional Office of Fine Arts, Phra Nakhon Si Ayutthaya
Commander Ratchata Pakafung	Director of Marine Department Ayutthaya
Mr. Chaicharn Pondokmai	Chief of Phra Nakhon Si Ayutthaya Railway Station
Acting Sub Lieutenant Somsong Sappakosolkul	Mayor of Phra Nakhon Si Ayutthaya City Municipality
Mr. Narong Danchaiwiroj	Mayor of Ayothaya Town Municipality
Mr. Adisak Boonrod	Chief Executive of the Han Tha Sub District Administrative Organization
Mr.Lamduan Kaisamrit	Chief Executive of the Ko Rian Sub District Administrative Organization
Mr. Somboon Imsuwan	Chief Executive of the Ban Ko Sub District Administrative Organization
Mr. Chaliew Sukprasert	Chief Executive of the Tanoo Sub District Administrative Organization
Mr. Maitree Pitinanon	Director of Regional Irrigation Office in Phra Nakhon Si Ayutthaya
Mr. Chatchai Gertputpiam	Chief of Engineering Branch (Ayutthaya office)

資料 4 討議議事録

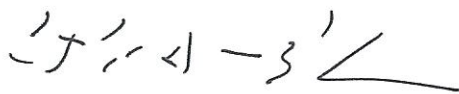
MINUTES OF DISCUSSIONS
ON
THE PREPARATORY SURVEY
FOR
THE FLOOD PREVENTION PROJECT
OF EAST SIDE OF THE PASAK RIVER IN AYUTTHAYA
IN THE KINGDOM OF THAILAND
(EXPLANATION OF DRAFT REPORT)

According to the Minutes of Discussions on the Preparatory Survey (hereinafter referred to as “The Survey”) on “the Flood Prevention Project of East Side of the Pasak River in Ayutthaya” (hereinafter referred to as “the Project”) on March 12, 2012, JICA Survey Team conducted series of field survey and discussion among related organization, and finally prepared the draft report of the survey.

In order to explain and consult with Royal Irrigation Department (hereinafter referred to as “RID”) on the components of the draft report, JICA sent the Draft Report Explanation Team (hereinafter referred to as “the Team”), headed by Mr. Kazuhiro Yoneda, Chief Representative, JICA Thailand Office, from September 5 to 7, 2012.

As a result of the discussions, both parties confirmed the items described on the attached sheets.

Bangkok, September 7, 2012



Mr. Kazuhiro Yoneda
Leader
Draft Report Explanation Team
Japan International Cooperation Agency



Mr. Lertviroj Kowattana
Director General
Royal Irrigation Department,
Ministry of Agriculture and Cooperatives

Attachment

1. Components of the draft report and related documents

RID agreed and accepted the contents of the draft report and the related document prepared by the JICA survey team. The Japanese side will finalize the Final Report according to the comments from RID.

2. Tentative Schedule of the Project

The Team explained and RID agreed the tentative implementation schedule as shown in Annex-2.

3. Japan's Grant Aid Scheme

RID understood Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Thailand as explained by the Team which was described in the Minutes of Discussions signed on March 12, 2012.

4. Confidentiality on Detailed Specification

Both sides confirmed all the information related to the Project including technical specifications and drawings and other technical information shall not be released to any other party(ies) before the signing of all the Contract(s) for the Project.

5. Undertakings of Government of Thailand

5-1 To provide required information and documents to carry out the Project,



5-2 To provide required land for office, storage, stock yard, temporary spoil bank, coffering, temporary access road, etc.,

5-3 Explanation of the Project and construction works, and request for cooperation to construction works to the stakeholders through the stakeholders meeting,

5-4 To establish implementation framework including budget and staff member for compensation of land acquisition, resettlement and its implementation,

5-5 To establish implementation framework for conducting the Project including budget and staff (with counterpart) and its implementation (including relocation cost of water pipe, electricity line, etc.),

5-6 To open an account in a designated bank in Japan for the Banking Arrangement (B/A), and issue the Authorization to Pay (A/P), bear the advising commission of the A/P and the payment commissions to the bank,



- 5-7 To take necessary measures to ensure prompt unloading and Customs clearance upon entry into Thailand and transportation inside Thailand for the goods procured for the implementation of the Project,
- 5-8 To take necessary measures to exempt the contractor and the consultant from Customs duties, internal taxes and other fiscal levies imposed in Thailand for their supply of goods, services, and equipment,
- 5-9 Special treatment related to the entry and the resident in Thailand for the persons who are assigned to the Project based on the authorized contract,
- 5-10 Providing the required permission, authorization, right, etc., to carry out the Project,
- 5-11 The budget and sufficient number of staffs for the operation and maintenance to the floodgates constructed by the Japan Grant Aid,
- 5-12 Quick action to settle the problems from third parties and non-related people to the Project during the construction works, and
- 5-13 To secure the safety from the conflict, disturbance, rioting, rebellion, etc. to the Japanese citizen to be engaged in the Project.

6. Necessary measures and schedule of land acquisition

The team requested RID to take necessary measures in time to meet the following deadlines, and explained that JICA can not verify a process of contract otherwise.

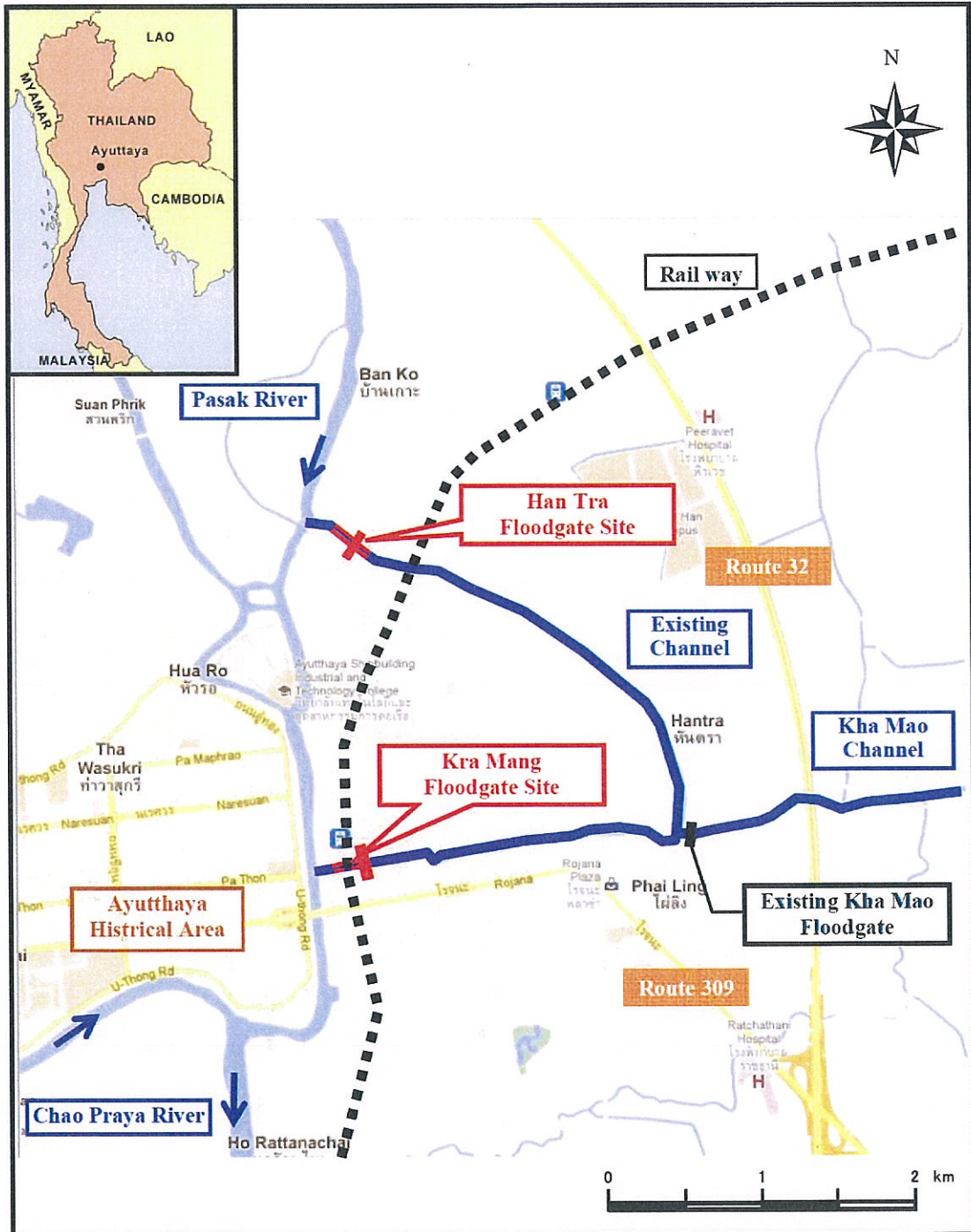
- 6-1 Agreement on land acquisition and/or resettlement with land owner(s) and/or resident(s) with any types of document shall be secured by the time of Bid Announcement or the middle of October.
- 6-2 Land acquisition and/or resettlement shall be completed by the Contract Agreement with a contractor.

RID agreed and promised to take necessary measures for those mentioned above (6-1 and 6-2).



The Contents of the Project

1. Site Location



Location Map

Justing

2. Contents of the Project

Facilities and Equipment

Items	Dimensions
1. Han Tra Floodgate	
Type	Stainless Steel type Roller Gate
Span	6 m
Number of Gate	3 nos.
Top Elevation of Gate	EL.+4.6 m
Bottom Elevation of Gate	EL.-2.5 m
Top Elevation of Floodgate	EL.+7.5 m
Foundation	Pile foundation
2. Kra Mang Floodgate	
Type	Stainless Steel type Roller Gate
Span	6 m
Number of Gate	3 nos.
Top Elevation of Gate	EL.+4.6 m
Bottom Elevation of Gate	EL.-0.5 m
Top Elevation of Floodgate	EL.+7.5 m
Foundation	Pile Foundation
3. Riverbank Protection in Han Tra Canal	
Type	
Length	212 m (Left)+272 m (Right)=484 m (Total)
Elevation of Pile Coping	EL.+2.5 m
Slope	1:2.0
Top Elevation of Fill	EL.+4.5 m
4. Drainage Pump with Truck	
Drainage Capacity	0.5 m ³ /sec/unit (30 m ³ /min/unit)
Head	10 m
Type of Pump	Submersible Pump
Generator	Diesel Generator
Truck Size	8 ton Class Truck
Number	10 numbers

Soft Component Plan

Activities	Content
1 Preparation of coordinated gate operation and pump operation manual	Necessity of coordinated operation method, method of operation, operation record sheet, formation of communication network, communication method of each gate, pump, drain pump truck and office, communication record sheet
2 Guidance of coordinated gate operation and pump operation	Communication training, coordinated gate operation training

MINUTES OF MEETING
ON
FINAL REPORT MEETING
FOR
The Flood Prevention Project
of
East Side of The Pasak River in
Ayutthaya
in
The Kingdom of Thailand

Final report
(Draft)

September 5, 2012

Between
Japan International Cooperation Agency
And
Royal Irrigation Department

I. Introduction

The Record of discussion on Project for Comprehensive Flood Management Plan for the Chao Phraya River Basin was concluded on 13 January 2012. The Study Team of Japan International Cooperation Agency (hereinafter referred to as “JICA”) submitted a Final Report (Draft) to Royal Irrigation Department (hereinafter referred to as “RID”) on 5 September 2012 for “Flood Prevention Project of East Side of The Pasak River in Ayutthaya in The Kingdom of Thailand” (hereinafter referred to as the Study).

The major items discussed in the Technical meeting are summarized as follows:

II. Major Items Discussed

Major discussions made in the Technical Meeting among RID and JICA are as follows:

1. ITEM 1: Introduction

RID Mr. Suthep Noipairoj (Deputy Director General for Operation and Maintenance and also the chairman of this meeting updated the progress of Kra Mang Floodgate and Han Tra Floodgate Construction Projects.

- The Consultant Team has adjusted the Floodgate drawings in accordance with requesting of RID last meeting.

2. ITEM 2: Report of Records of Discussion and substantial issues

RID Mr. Suthep Noipairoj (Deputy Director General for Operation and Maintenance and also the chairman of this meeting) updated the progress of Kra Mang Floodgate and Han Tra Floodgate Construction Projects.

RID has 3 items to be discussed with JICA and Consultant Team

- 1) RID has agreed with the drawings except the pile. RID is worried about the quality of timber pile, which is used for permanent structure of floodgate construction. RID recommended the consultant team to use concrete pile instead of timber pile because the timber is made from Eucalyptus in Thailand. It is soft wood and not good quality. Moreover, it is more expensive than concrete pile. The consultant team informed RID about the timber pile in Japan. It is popular in Japan to use for floodgate construction. The timber pile in Japan is different from the timber in Thailand because the timber pile is made from Pine wood in Japan but the timber in Thailand made from Eucalyptus. The consultant team agreed to change the timber pile to concrete pile.
- 2) RID will process the land procurement and compensation for affected people for Kra Mang floodgate and Han Tra floodgate construction projects. RID agreed to submit the

agreement between RID and affected people within the mid of October 2012.

RID is so worried about land use of State Railway of Thailand. It is so hard to deal with this agency in Thailand because it is the one of State Enterprise in Thailand. It takes time to get the permission or result of land use of State Railway of Thailand. If RID has any problems with State Railway of Thailand RID will request JICA to assist them.

- 3) To propose the letter to government agencies for relocation and cost estimation of utilities, RID would like Regional Irrigation Office 10 in Ayutthaya to take responsibility to submit letters to agencies.

RID has already issued the letters for 4 government agencies, State Railway of Thailand, Thetsaban Nakhon Nakhon Si Ayutthaya Waterworks, Provincial Waterworks Authority in Ayutthaya and Provincial Electricity Authority in Ayutthaya. The consultant team and the officer from Regional Irrigation Office 10 in Ayutthaya will go to submit the letter to those agencies on Friday 7, September 2012 at 3.00 p.m.

3. ITEM 3: Report of operation process for construction area preparation

RID Mr. Ugrid Thawonklaikool (Director of Operation and Maintenance Division of Regional Irrigation Office 10 and also a counterpart of this project)

- RID and the consultant team had meeting with Chief, Phra Nakhon Si Ayutthaya Permanent Way Inspector and his staff to request them to survey land use of State Railway of Thailand on Thursday 19 July, 2012 at 10.00 a.m.
- Phra Nakhon Si Ayutthaya Permanent Way Inspector has sent the request documents to Nakhon Sawan Permanent Way Inspector.
- Regional Irrigation Office 10, Mr. Ugrid has contacted to Mr. Nattha (Officer of Nakhon Sawan Permanent Way Inspector) to check about the progressive operation on Tuesday 4 September, 2012. He said that this issue is still on process for consideration at Nakhon Sawan and he will let us know when he has to send the documents to the center of State Railway of Thailand.

4. ITEM 4: Report of the progress of JICA related projects

The Consultant Team Mr. ISHII Masaki (Deputy Team Leader) updated the progress of JICA related projects.

- The grant aid project reached an agreement with JICA and RID and identified projects to assist.
- The Consult Team agreed to change timber pile to concrete pile in accordance with RID suggestion.

5. ITEM 5: Explanation of Draft Report

**JICA MR. MATSUMOTO Hideaki (Deputy Director Disaster Management Division 1)
Global Environment Department**

- JICA asked RID about the Panya Consultant team:
Does RID still need some help from Panya Consultant team?
The chairman of the meeting doesn't want any help from consultant team because the process of land procurement and compensation should be responsible by RID.
- JICA asked RID about the State Railway of Thailand process.
RID explained the State Railway of Thailand process as follow:
 - 1) The local agency of State Railway of Thailand for this project is Phra Nakhon Si Ayutthaya Permanent Way Inspector will inspect area and send the documents to Nakhon Sawan Permanent Way Inspector for consideration.
 - 2) After consideration, Nakhon Sawan Permanent Way Inspector will send the documents to the center of State Railway of Thailand in Bangkok
 - 3) The State Railway of Thailand in Bangkok will send the documents to involved agencies to do the cost estimation and relocation of communication line, and then they will send all the documents back to Nakhon Sawan Permanent Way Inspector
 - 4) The last stage will be ended at Phra Nakhon Si Ayutthaya Permanent Way Inspector
Remark: Before the operation process of relocation communication line of State Railway of Thailand, RID has to pay for the expenditure first otherwise they won't do anything.
- He has explained the draft report to RID.

6. ITEM 6: Additional item for Final Report

The Consultant Team Mr. MISHINA Takahiro (Team Leader)

- Mr. MISHINA mentioned item 5-5 (To establish implementation framework for conducting the Project including budget and staff (with counterpart) and its implementation (including relocation cost of water pipe, electricity line,etc.) is the only one additional item for final report (draft) of Consultant Contract between RID and Consultant Team.

7. ITEM 7: Requested Information

RID Mr. Kanchadin Srpratam (Chief of Loan Projects)

- Mr. Kanchadin requested JICA and Consultant Team to submit the contract agreement

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(draft) between RID and Consultant Team in Thai version to Procurement and Supply Division before the signed contract date.

Mr. ISHII will send the contract agreement (draft) between RID and Consultant Team in Thai version to Procurement and Supply Division during 10-14 September, 2012.

- Mr. Kanchadin asked JICA and Consultant Team to change the Tentative Implementation Schedule, Item Consultant Contract to third week of September (Thursday 20 September, 2012).

8. ITEM 8: Confirm the Minutes of Discussions (Draft Report)

RID Mr. Suthep Noipairoj (Deputy Director General for Operation and Maintenance and also the chairman of this meeting)

- Mr. Suthep has confirmed the signing between RID and JICA about the Minutes of Discussions on the Preparatory Survey on The Flood Prevention Project of East Side of The Pasak River in Ayutthaya in The Kingdom of Thailand on Friday 7 September, 2012 at 11.30 a.m. at Royal Irrigation Department (Samsen).

8.1 Presentation of Work Plan

Suggestion for the studies to include following:

- 4) Study based on topographic data for appropriate design of dykes and flood walls.
- 5) Concept of shelter that is accessible and away from potential flood area
- 6) RID would like to know the scope of work and the role of RID

9. ITEM 9: Other Business (if any)

The meeting was adjourned at 12.10 p.m.

Appendix-1

Record of Discussions in Final Report (Draft) Meeting on Wednesday 5 September, 2012

I. Participants

Thai Attendants (Royal Irrigation Department)

NAME-SURNAME	IN CHARGE	ORGANIZATION	CONTACT NUMBER
Mr. Suthep Noipairoj	Deputy Director General for Operation and Maintenance	Royal Irrigation Department (Samsen)	084-700-0522
Mr. Chatchai Boonleu	Director of Foreign Financed Project Administration Division	Royal Irrigation Department (Samsen)	084-700-5327
Mr. Kanchadin Srapratum	Chief of Loan Projects	Royal Irrigation Department (Samsen)	081-721-0034
Mr. Panuphan Artsalee	Expert on Civil Engineering (Design)	Royal Irrigation Department (Samsen)	081-923-7897
Mr. Krairerk Inchayanunth	Chief of Design Standards Group	Royal Irrigation Department (Samsen)	089-121-1146
Mr. Thanet Somboon	Hydrologist (Experienced Level)	Royal Irrigation Department (Samsen)	084-725-4777

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Thai Attendants (Regional Irrigation Office)

NAME-SURNAME	IN CHARGE	ORGANIZATION	CONTACT NUMBER
Mr. Maitree Pitinanon	Director of Phra Nakhon Si Ayutthaya Provincial Irrigation Office	Regional Irrigation Office 10 (Ayutthaya)	081-817-9155
Mr. Chatchai Kertputpium	Chief of Engineering Branch	Regional Irrigation Office 10 (Ayutthaya)	087-118-3499
Mr. Ugrid Thawonklaikool	Director of Operation and Maintenance Project	Regional Irrigation Office 10 (Lop Buri)	081-853-3063
Mr. Attaporn Panyachohm	Chief of Water Management Branch	Regional Irrigation Office 10 (Lop Buri)	081-829-5753

Minutes of Meeting for Final Report

Japanese Attendants

NAME-SURNAME	INCHARGE	ORGANIZATION	CONTACT NUMBER
Mr. MATSUMOTO Hideaki	Deputy Director Disaster Management Division 1	JICA	
Mr. MISHINA Takamiro	Team Leader	JICA Study Team	086-075-7961
Mr. ISHII Masaki	Deputy Team Leader	JICA Study Team	084-712-7480
Mr. Kobchai Songsrisanga	Interpreter	JICA	02-261-5250
Mr. Chawalit Chanamai	Engineer	JICA Study Team	087-678-8046
Ms. Kamolnit Ariyakamolpat	Interpreter	JICA Study Team	087-029-2288