

7.5 現地プレゼンテーション資料

Preparatory Survey on Water Quality Improvement Project for Japanese Bridge Area, Hoi An in Socialist Republic of Vietnam

INCEPTION MEETING

December, 2013

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

Nihon Suido Consultants Co., Ltd.

Purpose of the Inception Meeting

- Inception meeting is held to share same understandings regarding the preparatory survey, among GOV side, JICA, and JST (JICA Survey Team) at the beginning of the survey activities.

Purpose of the Inception Meeting

- During the Inception Meeting
 - Project scope requested by GOV
 - Purpose of the Preparatory Survey
 - Policies of the Survey
 - Schedule/Contents of the Survey
 - Undertakings of GOV side
 - Japan's Grant Aid Scheme
- will be explained following contents of an
"Inception Report"

Member of JICA Preparatory Survey Team (JST)

➤ JICA Members

Name	Organization
Mr. Kenichi Yamamoto	Senior Representative, JICA Vietnam Office PPP Specialist
Ms. Hatsuka Naito	Assistant Director, Environmental Management Division, Environmental Management Group, Global Environment Dep., JICA HQ
Mr. Satoshi Yamamoto	JICA Vietnam Office
Mr. Nguyen Vu Tiep	JICA Vietnam Office, National Staff
Ms. Nguyen Bich Ngoc	Translator (VN-JP)

Member of JICA Preparatory Survey Team (JST)

➤ Consultant Members

Name	Title	Organization
Mr. Kazuhiro Asada	Chief Consultants Sewerage Planning Specialist	Nihon Suido Consultants Co., Ltd.
Mr. Takashi Hoshino	Deputy Chief Consultants	
Mr. Tetsuo Wada	Sewerage Treatment Facility Plan & Design Specialist	
Mr. Yoshinobu Nakajima	Sewer Pipeline Plan & Design / Public Education Specialist	
Mr. Akira Oguro	Procurement / Construction Plan / Cost Estimation Specialist	
Mr. Daizo IWATA	O&M Planning / Financial Planning Specialist	
Mr. Tatsuya TOBE	Environmental and Social Considerations Specialist	

Contents of the Inception Report (IC/R)

1. Background of the Project
2. Scope of the Project Requested by the GOV
3. Survey Objectives
4. Survey Process
5. Survey Policies
6. Survey Contents and Methodologies
7. Items Requested by JST
8. Japan's Grant Aid

1. Background of the Project

- Hoi An City, registered as a World Heritage Site, is closely related with Japan historically by forming “Japan Town” in seventeenth century symbolized by “Japanese Bridge”
- “Japanese Bridge” is one of the tourist attractions and tourists are increasing rapidly with recording annual 140 million presently.

1. Background of the Project

- However, the water quality of a Channel flowing under “Japanese Bridge” is being aggravated because of direct inflow of domestic wastewater without proper treatment.
- Odors from the Channel is also one of the problems in dry season, therefore, it is afraid that tourism industry would be negatively influenced.

1. Background of the Project

- In July 2009, the GOV made a request to the GOJ for Grant Aid for the Water Quality Improvement Project for Japanese Bridge Area, Hoi An
- The GOJ entrusted the Japan International Cooperation Agency (JICA) to examine the viability of the Project.
- JICA decided to conduct a Preparatory Survey and sent the JICA Preparatory Survey Team (JST) to Vietnam.

2. Scope of the Project Requested by the GOV

Sewage Treatment Facility	- capacity: 2,000 m ³ /day - with sludge treatment facility - proposed treatment method is Sequencing Batch Reactor Process, so-called SBR method
Upgrading Open Channel	- with concrete and concrete lid in order to seal odors and incoming trashes - length: approximately 2 km
Convertible Truck*	- for maintenance
Inspection Equipment*	- for water quality control
Personal computer / printer*	- for logging

* In the Inception Meeting, it will be confirmed whether the above Equipment were included in the requests as Japan's Grant Aid, since those descriptions shown in the Application Form are unclear.

3. Survey Objectives

- To study and to confirm a background, purpose, necessity, effect, and technical / economical relevancy of the project.
- To conduct relevant Outline Design and general cost estimates based on the necessary and appropriate scope and scale of the project.
- To propose necessary burden on Vietnamese side, project implementation plan, and operation and maintenance program.

4. Survey Process

The Survey would be conducted in 5 stages of 2 Phase

- First Phase
 - Field surveys in Vietnam (First and Second)
 - First study in Japan
- Second Phase
 - Third Field Survey in Vietnam
 - Second study in Japan
 - Explanation / Discussion of Draft Final Report (DFR)

4. Survey Process

Description	2013	2014										
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Inception Report	▲											
First Field Surveys in Vietnam	■	■										
Second Field Surveys in Vietnam			■	■	■							
First Study in Japan					▬	▬						
Third Field Survey in Vietnam							■					
Second Study in Japan								▬	▬			
Draft Final Report											▲	
Explanation / Discussion of DFR												■
Final Report												▲

4. Survey Process

- Implementation of the Preparatory Survey does NOT mean commitment of the implementation of the project by Japan's Grant Aid.
- It is important for both sides to understand that at the Survey stage no commitment is made from the Japanese side concerning the realization of the Project.

4. Survey Process

- The final report will be used by the GOJ to decide whether or not the Project or some components of the Project would be executed under the scheme of Grant Aid
- The basic concept, size, contents and the related items of Grant Aid (in case it is executed) are also to be decided from the results of the Survey.

5. Survey Policies (Operational Approach)

- (1) Clarifying Conditions for Project Implementation and Hoi An CPC & JST's Roles
- (2) Monitoring the Status of Conditions by Milestone
- (3) Sustaining the Cooperative Relation during Study in Japan

5. Survey Policies (Technical Approach)

(1) Suitable Measures to Improve Water Quality for Japan Bridge Area

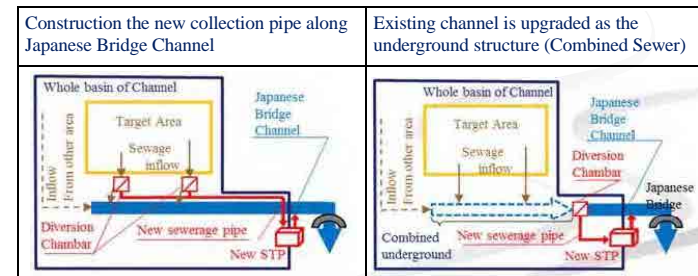
- After technical evaluation and the discussion with Vietnamese side, suitable measures are selected taking account of social environmental conditions such as land acquisition, regulations related to world heritage of UNESCO.

Sewerage System	Flush System by pumping Hoi An river water	Dredging	Direct River Water Purification System
			

5. Survey Policies (Technical Approach)

(2) Efficient Sewage Collection System




- To determine the collection method; i) economical efficiency, ii) easiness of maintenance, and iii) actual performance in Vietnam should be considered.



5. Survey Policies (Technical Approach)

(3) Effective Sewage Treatment Process

- Sewage treatment process would be selected considering the space of Sewage Treatment Plant (STP) at a proposed area and buffer zone regulated by Vietnamese Infrastructure code (QCVN-07:2010/BXD).

Sequencing Batch Reactor (SBR)	Advanced Low Energy Sewage Treatment	Biological Aerated Filter
		

5. Survey Policies (Technical Approach)

(4) Confirmation of Validity of the Project

- Compliance with upper level plan in Vietnam; such as, National Plan of Vietnam, sewerage treatment plan of entire Hoi An City, Master Plan of Hoi An City (2011), and Hoi An city-Ecocity etc
- Meeting Country Assistance Policies of ODA of GOJ
- Adequate and the effective for the Project to be conducted by Japan's Grant Aid

5. Survey Policies (Technical Approach)

(5) Coordination and Cooperation between French Project

- Investigation on updated support program and implementation schedule
- Possibility of coordination and/or cooperation on O/M and cost recovery activities

5. Survey Policies (Technical Approach)

(5) Environmental and Social Considerations

- JST will support DONRE and PWC for preparation of the related reports for land acquisition, consensus with PAPs (Project Affected Persons) and approval of EIA (Environmental Impact Assessment).

5. Survey Policies (Technical Approach)

(6) Prompt Establishment of O&M Structure and Formulation of Sufficient Training Program

- JST will prepare;
 - Organization chart which responsible for O&M,
 - Necessary staff number and technical level for O&M organization,
 - Staff training plan,
 - Training program,
 - Through the field survey and discussion with counterparts

5. Survey Policies (Technical Approach)

(7) Realistic Source of Funds for the Project O&M cost

- Following 4 alternatives for source of funds shall be discussed with Vietnamese side.
 - Existing environmental protection Charge
 - Establishment of sewerage charge
 - Subsidy from city's or provincial budget
 - Billing to tourists (environmental fee)
- Based on the discussion, possible plan of source of funds is prepared utilizing one of the alternatives or combination of them.

5. Survey Policies (Technical Approach)

In the Inception Report, “Items to be discussed” is included in Section 4.2, discussions on these items will be conducted after this presentation

6. Survey Contents and Methodologies

- Flow chart for the preparatory survey is shown in the Inception Report, page 19.
- The survey includes the following sub-contract
 - Geotechnical Investigation
 - Line and plan topographic investigation
 - Social condition survey
 - Environmental and social consideration study
 - Procurement condition survey
 - Investment project report preparation

7. Items Requested by JST

- (1) Provide JST with available relevant data, information and materials necessary for the execution of the Survey
- (2) Coordinate with French Project such as holding meeting and obtaining data / information relevant to the French Project
- (3) Carry out stakeholder meetings, as required with assistance from JST

7. Items Requested by JST

- (4) Assign full-time counterparts to the JST team during their stay in Vietnam, on the following:
 - Making appointments, setting up meetings with authorities, departments, relevant institutions, and organizations JST requires to visit
 - Accompanying JST onsite surveys and other visits and making the necessary arrangements for accommodation, transportation, and obtaining permissions if required
 - Assisting and advising JST on collection of data and information as much as possible

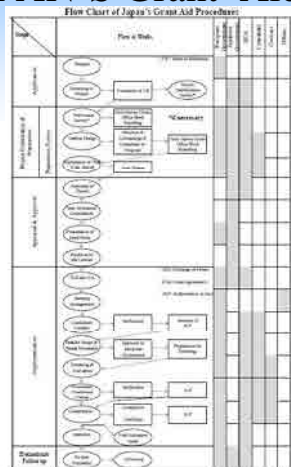
7. Items Requested by JST

- (5) Secure the permission to photograph and enter into private properties and restricted areas as required;
- (6) Inform JST members of any dangers and/or risks expected in the survey areas, and take the necessary measures to ensure the safety of the members of JST;
- (7) Make arrangements to allow JST to bring back to Japan any necessary data, maps and materials, related to the study, subject to approval by the GOV, in order to prepare the reports

7. Items Requested by JST

- (8) Supply office space in Hoi An for JST. The required space would be about 100 m² with basic furniture and Air Conditioner, at least 10 desks and chairs. Electricity and telephone line connections would be also required. The telephone charge would be borne by JST.

8. JAPAN'S Grant Aid



The chart is presented in P.26 of Inception Report

8. JAPAN'S Grant Aid

Major Undertakings to be taken by Each

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	to secure land necessary for the implementation of the Project and to clear the sites;		•
2	To ensure prompt customs clearance of the products and to assist internal transportation of the products in the recipient country		
	1) Marine (Air) transportation of the Products from Japan to the recipient country	•	
	2) Tax exemption and custom clearance of the Products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	•	•
3	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the purchase of the products and the services be exempted.		•

8. JAPAN'S Grant Aid

Major Undertakings to be taken by Each

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
4	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
5	To ensure that the Facilities and the products be maintained and used properly and effectively for the implementation of the Project		●
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project		●

8. JAPAN'S Grant Aid

Major Undertakings to be taken by Each

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
7	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
8	To give due environmental and social consideration in the implementation of the Project.		●

(B/A : Banking Arrangement, A/P : Authorization to pay)

Regarding "Supply of Equipment", installation costs should be borne by the Recipient Side.

Items to be Discussed

Expected Due Date	Items Implemented by the Hoi An CPC							Remarks	Items of Cooperative Activity by the CPC and JST
	Approval of Project	EIA, LAP	Land Acquisition	Consensus-building with Residents	Construction Permission	O&M	Others		
By the End of 1st Field Survey in VN (Jan. 17, 2014)	Information for Investment Project Report (IP/R)	Approval for preliminary EIA			Approval for detailed-EIA				Proposal for method of sewage collection system and method of W/Q improvement at JPN Bridge
By the End of 2nd Field Survey in VN (Mar. 14, 2014)	Preparation of IP/R	Preparation of ARAP and detailed-EIA	Holding stakeholder meeting	Explanation to residents living in the vicinity of new treatment plant	Providing information for regulations and permissions for construction		Considering measures for connecting to the collection system from outflow		Preparation of detailed-EIA, IP/R, organization chart for O&M, staff training plan, and soft-component plan
Before the Commencement of 3rd Field Survey in VN (May 31, 2014)	Approval for IP/R and Project Implementation	Approval for detailed-EIA	Statement of mutual agreement for land acquisition & compensation plans from the land owners.	Completion of consensus-building with residents living in the vicinity of new treatment plant		Draft O&M, organization charts, and staff training plan, financial budget plan for O&M.	Framing method of tariff collection from beneficiary	Items left are progress and status for to commence 3rd Field Survey in VN	Monitoring of the "Requirements" to commence 3rd Field Survey in VN.
Before DFR (Sep. 30, 2014)	Remaining items and/or additional matters decided in 3rd Field Survey in VN								
Before E/N and G/A (Jan. 31, 2015)			Congressional authorization and acquisition of the land			Congressional authorization for expenses budget of O&M cost			
Before the PQ and Tendering (Jul 31, 2015)	Approval for detailed design				Approval for the facility constructions	Establishment of O&M organization	Installation of gate and fence around site Construction of access road to the site		
Before the commencement of Construction (Sep 30, 2015)							Securing land such as dumping site, stock yard, etc. necessary for the construction. Facility for power line, city water, gas, telephone line, etc. to the site.		
Before Operation (Dec 31, 2016)						Activities of training for O&M staff			Soft-component activities

Items to be Discussed

Roles of Hoi An CPC and JST (1/2)

No.	Items	Roles of CPC	Roles of JST
1.	Methodology for sewage collection system	Providing data and information to JST	Field survey and proposing the method
2.	Methodology for W/Q improvement at JPN Bridge	Providing data and information to JST	Field survey and proposing the method
3.	Stakeholder meeting (SH/M)	Hosting SH/M	Supporting explanation from technical aspects
4.	Land acquisition & abbreviated resettlement action plan (ARAP)	ARAP preparation and proceeding approval for ARAP	Assisting ARAP preparation consigning to local company
5.	Project component and design direction	Meeting and discussion with JST	Conducting topo., geo. and socio economic surveys consigning to local company
6.	Detailed EIA Report	Providing information for IP/R, and Preparing EIA report	Assisting EIA preparation consigning to local company
7.	Investment project report (IP/R)	Providing information for IP/R, and Preparing IP/R	Assisting IP/R preparation consigning to local company
8.	Framing for operation and maintenance (O&M) plan	Preparing O&M plan	Assisting O&M plan preparation
9.	Framing for training of O&M staff	Preparing training plan	Assisting training plan preparation including soft component plan
10.	Framing for financial budget plan for O&M	Preparing financial budget plan for O&M	Assisting financial budget plan preparation

Items to be Discussed

Roles of Hoi An CPC and JST (2/2)

No.	Items	Roles of CPC	Roles of JST
11.	Consensus-building for land acquisition & compensation plans	Obtaining statement of mutual agreement with the land owners	Monitoring and advising for the consensus building
12.	Consensus-building with residents living in the vicinity of new treatment plant	Obtaining statement of mutual agreement with the residents	Monitoring and advising for the consensus building
13.	Considering measures for connecting to the collection system from outlets	Proposing methodology, budget, etc.	Field survey and assisting the method, cost estimation, etc.
14.	Approval for detailed EIA	Detailed EIA preparation and proceeding approval for EIA	Monitoring and advising for the approval
15.	Approval for Project implementation	Proceeding approval for IP/R and Project implementation	Monitoring and advising for the approvals
16.	Approval for sewage financial budget plan for O&M	Proceeding approval for sewage financial budget plan for O&M	Monitoring and advising for the approval
17.	Obligations by the Client (Hoi An CPC) before the contract of construction for the Project	Installation of gate and fence, construction of access road to the site, securing land such as dumping site, stock yard, etc., facility for power line, city water, city gas, telephone line to the site, etc.	Field survey and advising to CPC and other relevant organizations; then JST will requests appropriate documents to assure the obligations from those organizations, etc.
18.	O&M training before operation of facilities constructed	Training O&M staff	Assisting the training with soft component plan during construction stage

Thank you for your attention



Japan International Cooperation Agency

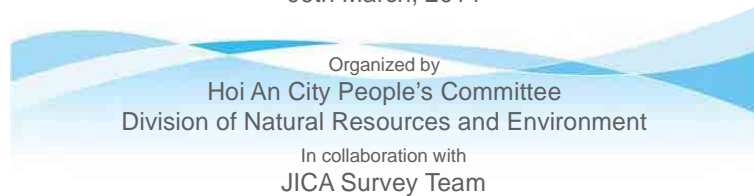


Hoi An City People's Committee
Division of Natural Resources and Environment

Water Quality Improvement Project for Japanese Bridge Area,
Hoi An in Socialist Republic of Vietnam

The Stakeholders' Meeting

06th March, 2014



Agenda

Session I; Meeting with Concerned Agencies (8.00 – 9.00)

1. Opening Speech (Hoi An CPC, DONRE)
2. General introduction of the Project
3. Introduction of environmental & social considerations on the Project
4. Question and answer
5. Conclusion and close the meeting

Session II; Meeting with Concerned Residents and Businesses (9.00 – 10.00)

2

Objectives of the Meeting

Objectives

- To have mutual agreement on key contents of the Project
- To introduce, discuss and agree on environmental social considerations of the Project

Participants

- Key officials from Hoi An CPC
- Key agencies concerned
- Concerned Residents and Businesses (only Session II)

3

Confirmation of Handouts

- Agenda & Participants List
- Presentation handout
- Opinion Sheet

Please fill in your opinions and recommendations on the Opinion Sheet and submit it to JICA Survey Team.

Please fill in the Attendant List and hand on it to the next.

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1. Opening Speech

- Hoi An CPC
- DONRE

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2. General introduction of the Project

- Mr. Kazuhiro ASADA**
– Team Leader of the JICA Survey Team

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Background and Objectives

Background

- The water quality of the Channel flowing under the Japanese Bridge is being deteriorated caused by directly inflow of domestic wastewater without proper treatment.
- Odors from the Channel is also one of the problems.

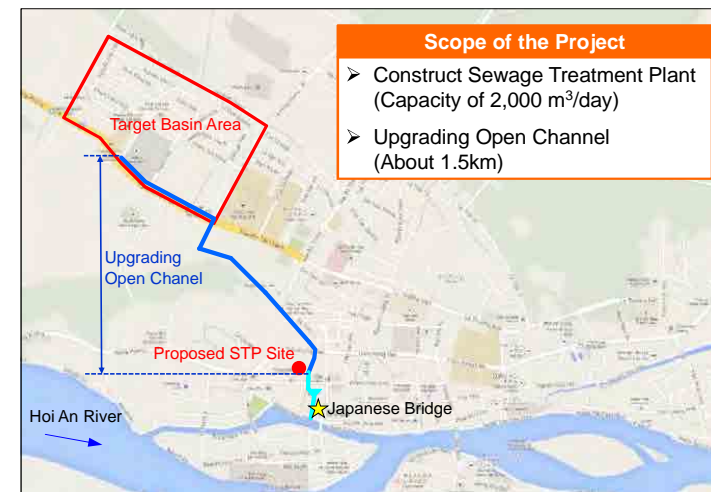
Agreement on preparatory survey for water quality improvement project between Quang Nam PPC / Hoi An CPC and JICA (December, 2013)

Objectives

- Improve the water quality of the channel flowing under the Japanese Bridge
- Prevent the odors and improve the sanitation along the Channel

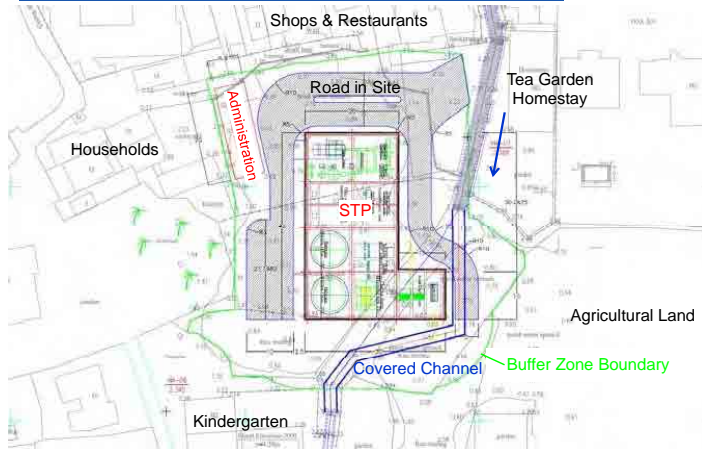
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Scope of the Project



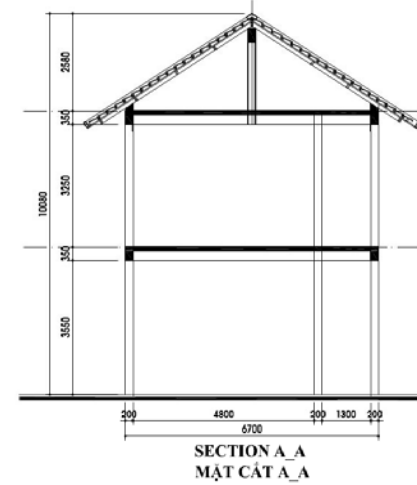
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Sewage Treatment Plant - Tentative Layout

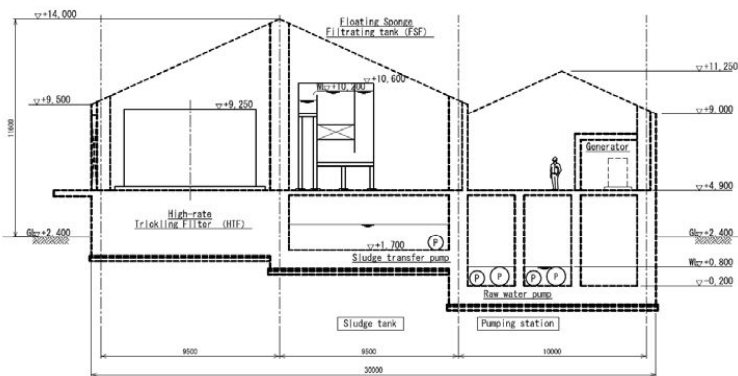


Buffer zone of 15m regulated by Vietnamese Infrastructure Code is required to make consideration of surrounding environment.

Sewage Treatment Plant - Administration Building



Sewage Treatment Plant - STP Building



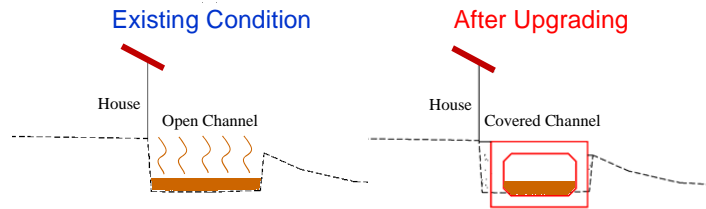
Sewage Treatment Plant - Tentative Building Design



STP building is designed with consideration for landscape based on the regulation for Zone II-A of historical protection area.

Upgrading Open Channel

Image of Cross Section



- Box culvert or drain with lid is constructed to prevent odors diffusion.
- Existing discharge capacity in the Channel doesn't change.

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Tentative Schedule

- Preparatory Survey ; to November, 2014
- Signing of E/N and G/A ; January, 2015
- Commencement of Construction ; September, 2015
- Commencement of Operation ; December, 2016

(E/N; Exchange of Notes, G/A; Grant Agreement)

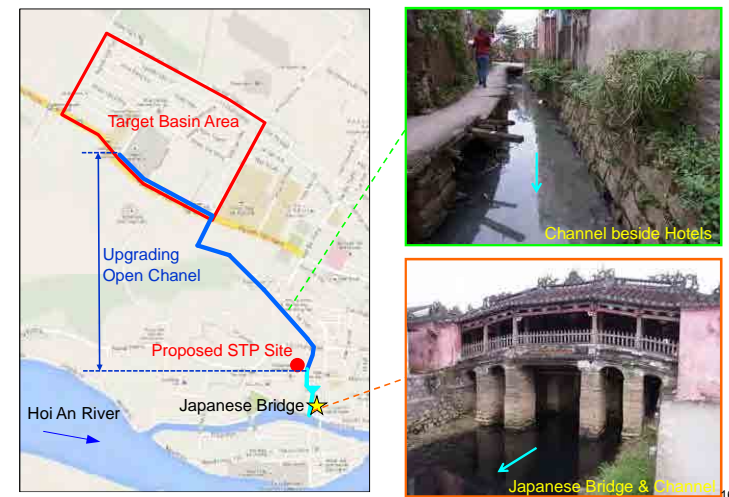
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3. Introduction of environmental & social considerations on the Project

- Mr. Tatsuya TOBE**
– Environmental Engineer of the JICA Survey Team

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Current Conditions (1)



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Current Conditions (2)



Main Impacts & Mitigation Measures

In Construction Phase (STP & Channel)

Impact	Source of Pollution	Mitigation Measures
Dust & Emission	<ul style="list-style-type: none"> ➢ Dust from earthworks & construction ➢ Gas emission from construction machines and vehicles for material transportation 	<ul style="list-style-type: none"> ➢ Watering on road and construction site ➢ Drive vehicles slowly with canvas covers ➢ Use low-emission machines
Noise & Vibration	<ul style="list-style-type: none"> ➢ Construction machines and vehicles for material transportation 	<ul style="list-style-type: none"> ➢ Drive vehicles slowly ➢ Construction during only daytime
Solid Waste	<ul style="list-style-type: none"> ➢ Soil from excavation ➢ Construction waste ➢ Domestic waste from workers 	<ul style="list-style-type: none"> ➢ Implement proper solid waste collection & disposal

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Main Impacts & Mitigation Measures

In Operation Phase (STP)

Impact	Source of Pollution	Mitigation Measures
Noise	<ul style="list-style-type: none"> ➢ Pump & some equipment ➢ Private electric generator in emergency 	<ul style="list-style-type: none"> ➢ Not much equipment arise loud noise ➢ Install all equipment inside the closed building
Odors	<ul style="list-style-type: none"> ➢ All treatment process ➢ Sludge drying process 	<ul style="list-style-type: none"> ➢ Install all processes inside the closed building ➢ Deodorization by activated carbon adsorption
Solid Waste	<ul style="list-style-type: none"> ➢ Sludge from STP ➢ Domestic waste from operators 	<ul style="list-style-type: none"> ➢ Implement proper solid waste collection & disposal

There are little noise and odors around STP as a result of closed building and deodorization process.

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Tentative Monitoring Plan

It is important to monitor the environmental impacts periodically during construction phase and operation phase.

Element	Items	Frequency	Location
Dust & Emission	TSP, SO _x , NO _x , CO	2 times/year	<ul style="list-style-type: none"> ➢ STP & Surrounding Area ➢ Upstream of Channel
Odors	NH ₃ , H ₂ S	2 times/year	
Noise	Decibel (dBA) levels	2 times/year	
Waste Water Quality	pH, BOD, COD, TSS, NO ₃ -N,	2 times/year	➢ STP
Surface Water Quality	NH ₄ -N	2 times/year	➢ Japanese Bridge
Groundwater Quality	pH, COD, TDS, TSS, hardness	2 times/year	➢ Wells near STP

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Land Acquisition and Compensation

1. Land Acquisition in Proposed STP Site (6 Lots)

- 4 private (3 households) and 2 public lots

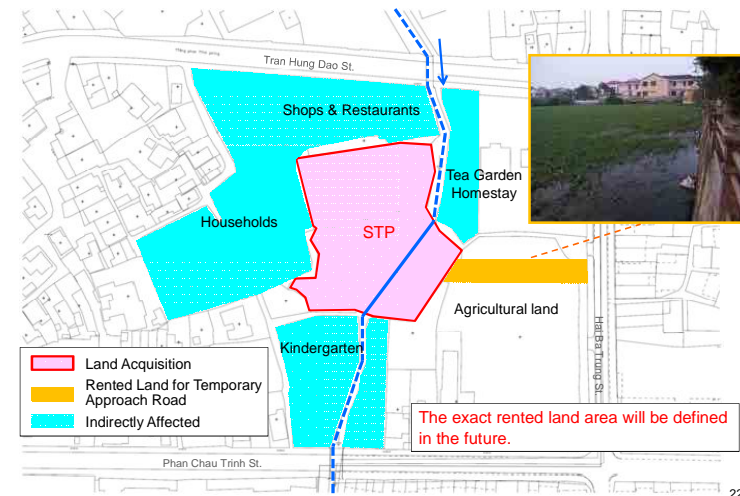
The following compensation will be required by commencement of construction.

- Rented Land for Temporary Approach Road in Construction
- Cutting of Bamboo along the Channel for Construction

- Compensation of lost assets and temporary rented land according to current regulations.
- Due considerations to poor people along the Channel.

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Affected Households & Businesses (1)



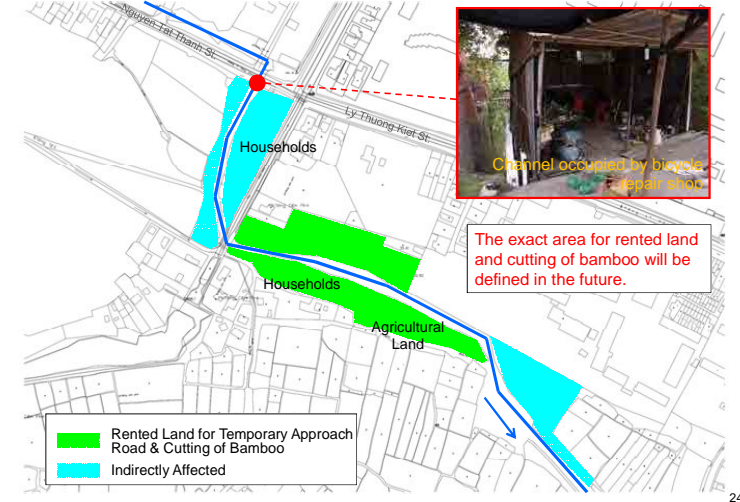
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Affected Households & Businesses (2)



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Affected Households & Businesses (3)



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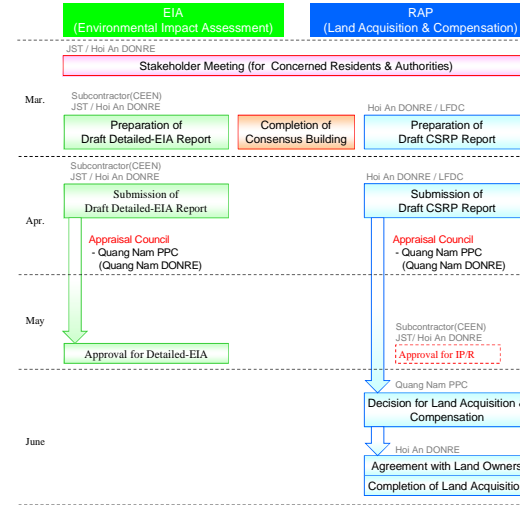
Affected Households & Businesses (4)



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EIA & RAP Schedule

*CSR(P: Compensation, Support and Resettlement Plan); RAP specified in Vietnamese Regulations
 *LFDC(Land Fund Development Centre), Institution for Survey and Measurement on Compensation



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A7-30

4. Question and answer

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