

TECHNICAL NOTE
FOR
URGENT REHABILITATION PROJECT FOR SEWERAGE AND DRAINAGE SYSTEM IN LAHORE
(RETRIEVAL OF SEWERAGE AND DRAINAGE SYSTEM IN LAHORE CITY (PHASE- II))
IN
THE ISLAMIC REPUBLIC OF PAKISTAN


Based on the Minutes of Discussion for Urgent Rehabilitation Project for Sewerage and Drainage System in Lahore (Retrieval of Sewerage and Drainage System in Lahore City (Phase-II)) (hereinafter referred to as "the Project") signed between the Pakistani side and the Japan International Cooperation Agency (hereinafter referred to as "JICA") Preparatory Survey (Basic Design) Team on September 5, 2009, the field survey was completed in close cooperation between the and counter personnel of the Water and Sanitation Agency, Lahore (hereinafter referred to as "WASA") .

In the course of the survey, technical issues have been discussed for the Project to be implemented under the Japan's Grant Aid, and WASA and the Preparatory Survey (Basic Design) Team (hereinafter referred to as "the Team") confirmed the main items described in the attached sheets.


Lahore, September 15, 2009

前田 剛和

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ATTACHMENT

1. Proposal for Revision of the Request

As a result of the field survey, the Team recognized that the pumping stations at Shad Bagh including Khokhar Road and Siddique Pura are functioning as the same drainage and sewerage system as well as covering the same drainage area. In addition, it was also clarified that the existing pumping capacity of these pumping stations is insufficient to improve inundation conditions in the area. WASA and the Team (hereinafter referred to as “the both sides”) therefore recognized that additional two pumps and an automatic rake system in pumping stations at Shad Bagh including Khokhar Road should be provided as the highest priority to mitigate the damage at a repeatedly inundated northern area in Lahore city. The both sides confirmed that the request by the Pakistani side will be revised as shown in attached **Annex-1**. The both sides agreed that the possibility of this revision will be considered in the survey in Japan.

2. Eligible Source Country

In terms of purchase of the products and services from third countries, WASA recommends and requests the Team that only the quality products of Japanese manufacturers made outside Japan, i.e. third country should be made acceptable under the Project since the Japanese manufacturers have been reliable and satisfactory based on their experiences. The Team agreed that the Basic Design will be carried out considering this requests.

3. Demarcation of Electric Work inside the Pumping Stations

The both sides agreed that demarcation of electric work inside the pumping stations requested by the Project will be decided as shown in attached **Annex-2**.

LIST OF ANNEXES

Annex-1: Items Requested by the Pakistani Side (revised)

Annex-2: Demarcation of Electric Work inside the Pumping Stations

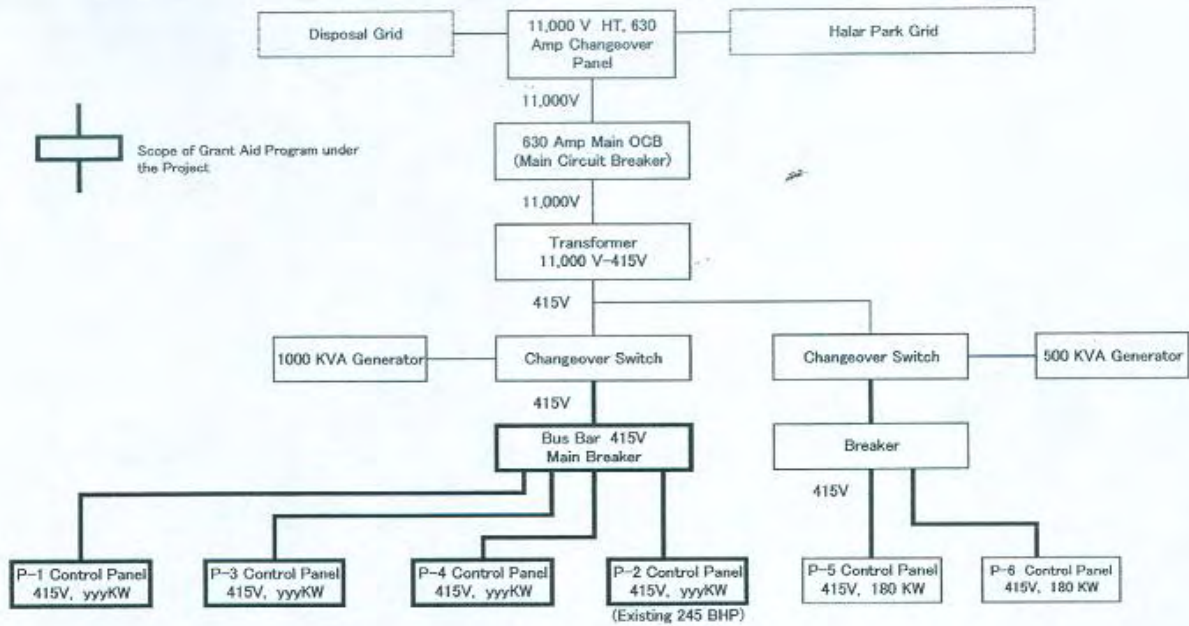


Annex-1: Items Requested by the Pakistani Side (revised)

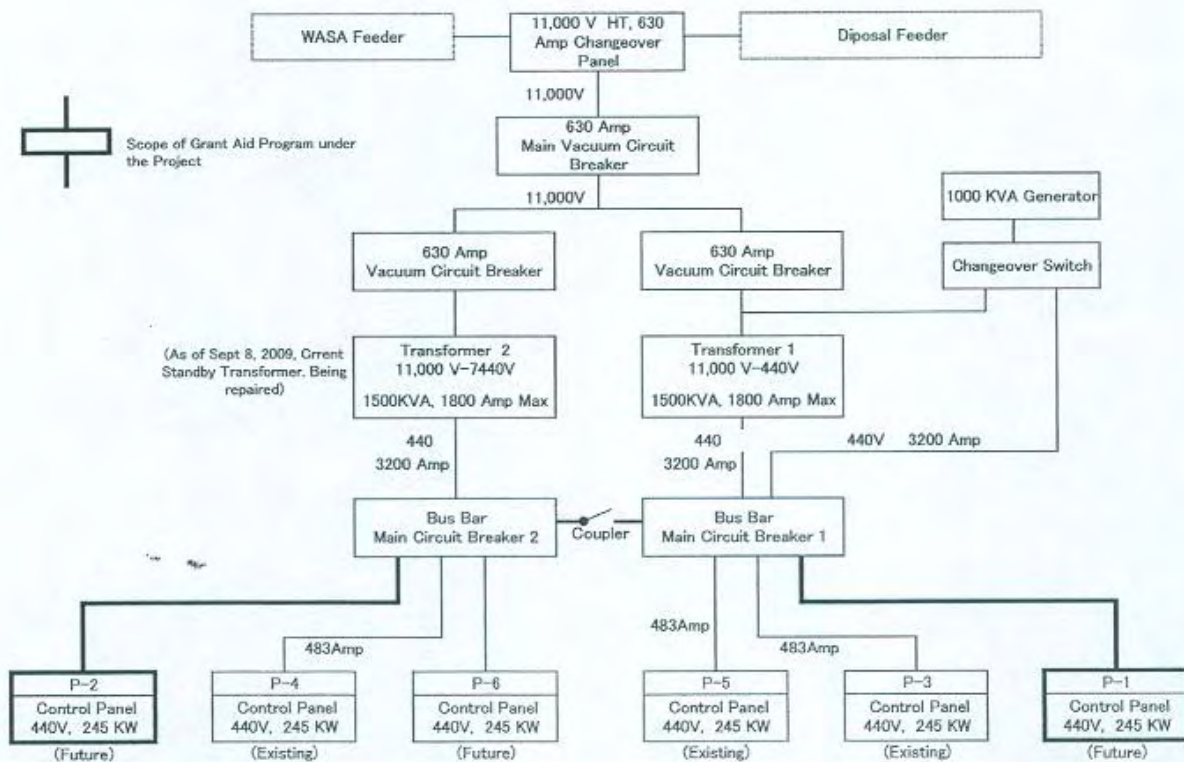
	Requested Components	Revised Request				
	Items	Items	Specification	Number	Priority	
Shad Bagh Pumping Stations	Pump 4 units Motor 4 units Suction valve 4 units Check valve 4 units Discharge Valve 4 units Pipes 4 units Electric Panel 4 units	Vertical Axial Flow type sewage pump	Q:1.13m ³ /s (40 cusec), H:36 feet	4 units (Shad Bagh)	Priority 1	
		Suction manual operated sluice valve with extension handle	Nominal dia.700 mm (28 inch)			
		Flap type check valve	Nominal dia.600 mm (24 inch)			
		Suction piping	Pipes and fittings			
		Discharge piping	Pipes and fittings			
		Vertical type squirrel cage induction motor	180 kw, 415V, 50 Hz	4 units (Shad Bagh)		
		Electrical control panel	Low voltage panel			
		Trash Rake System 1unit	Vertical Axial Flow type sewage pump	Q:1.58m ³ /s (56 cusec), H:36 feet		2 units (Khokhar Road)
			Suction manual operated sluice valve with extension handle	Nominal dia.900 mm (36 inch)		
			Flap type check valve	Nominal dia.800 mm (32 inch)		
	Suction piping		Pipes and fittings			
	Discharge piping		Pipes and fittings			
	Vertical type squirrel cage induction motor		245 kw, 415V, 50 Hz			
	Trash Rake System 1unit	Automatic trash rake system	Out door type	2 units (Khokhar Road)		
		Trash transfer conveyer	Belt conveyer	1 unit (Shad Bagh) 1 unit (Khokhar Road)		
Gulshan-E-Ravi Pumping Station	Pump 8 units Motor 8 units Suction valve 8 units Check valve 8 units Discharge Valve 8 units Pipes 8 units Electric Panel 8 units	Vertical Axial Flow type sewage pump	Q:1.13m ³ /s (40 cusec), H:36 feet	4 units	Priority 2 Priority 3	
		Suction manual operated sluice valve with extension handle	Nominal dia.700 mm (28 inch)			
		Suction piping	Pipes and fittings	4 units		
		Discharge piping	Pipes and fittings			
		Vertical type squirrel cage induction	180 kw, 3300V, 50 Hz			
		Electrical control panel	High voltage panel	4 units		
				4 units		
Multan Road Pumping Station	Pump 4 units Motor 4 units Suction valve 4 units Check valve 4 units Discharge Valve 4 units Pipes 4 units Electric Panel 4 units	Vertical Axial Flow type sewage pump	Q:1.13m ³ /s (40 cusec), H:36 feet	4 units	Priority 1	
		Suction manual operated sluice valve with extension handle	Nominal dia.700 mm (28 inch)			
		Flap type check valve	Nominal dia.600 mm (24 inch)			
		Discharge motor operated sluice valve with extension handle	Nominal dia.600 mm (24 inch)			
		Suction piping	Pipes and fittings			
		Discharge piping	Pipes and fittings			
		Vertical type squirrel cage induction	180 kw, 3300V, 50 Hz			
		Electrical control panel	High voltage panel			4 units
	Trash Rake System 1unit	Automatic trash rake system	Out door type	1 unit	Priority 3	
		Trash transfer conveyer	Belt conveyer			

Annex-2: Demarcation of Electric Work inside the Pumping Stations

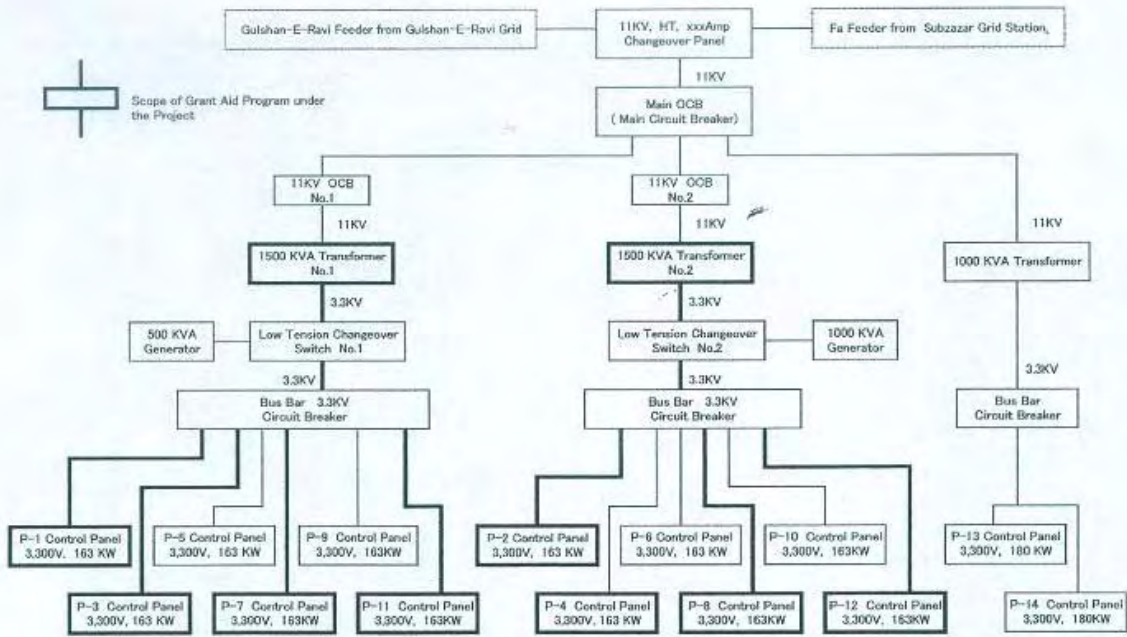
Power Supply System of Shad Bagh Pumping Stations (Shad Bagh)



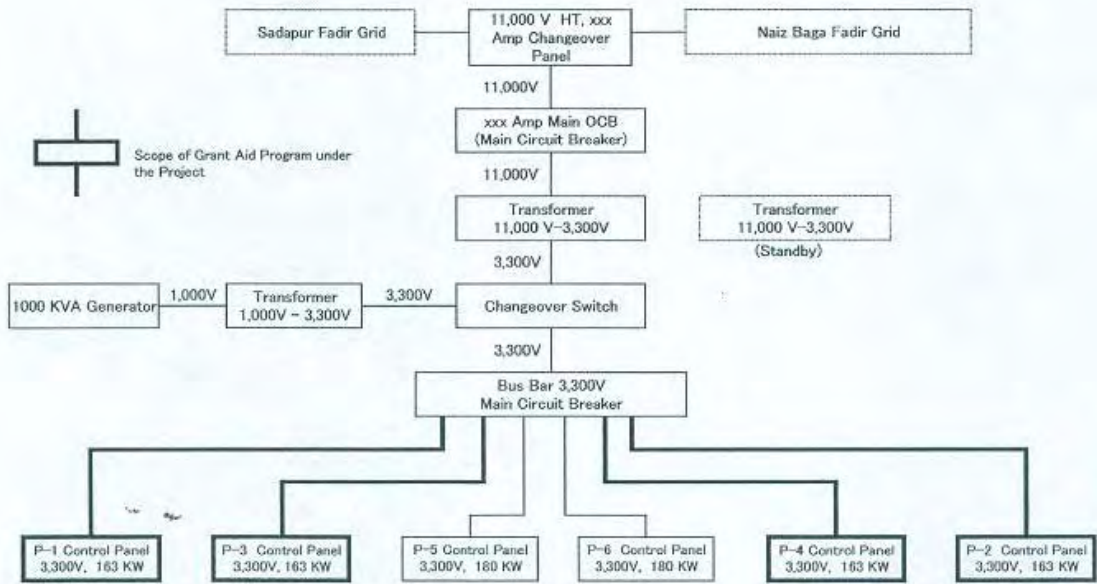
Power Supply System of Shad Bagh Pumping Stations (Khokhar Road)



Power Supply System of Gulshan-E-Ravi Pumping Station



Power Supply System for Multan Road Pumping Station



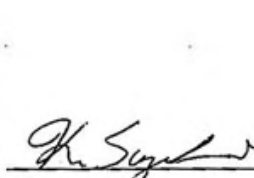
**MINUTES OF DISCUSSIONS
ON THE PREPARATORY SURVEY (BASIC DESIGN STUDY)
ON URGENT REHABILITATION PROJECT FOR SEWERAGE AND DRAINAGE SYSTEM
IN LAHORE
(EXPLANATION ON DRAFT BASIC DESIGN STUDY REPORT)**

In August and September 2009, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Preparatory Survey (Basic Design Study) Team on "Urgent Rehabilitation Project for Sewerage and Drainage System in Lahore (hereinafter referred to as "the Project")" to the Islamic Republic of Pakistan. Through discussion, field survey and technical evaluation of the results in Japan, JICA has prepared the draft basic design study report (hereinafter referred to as "the Draft Report").

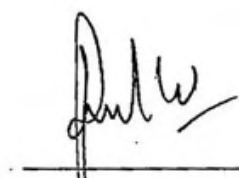
In order to explain and consult with the Government of the Punjab/Pakistan on the components of the Draft Report, JICA has sent to Pakistan the Draft Report Explanation Team (hereinafter referred to as "the Team"), headed by Mr. Kazuya Suzuki, from 22 to 27 January 2010.

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

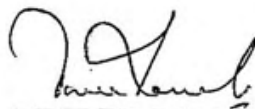
Lahore, 26 January, 2010



Mr. Kazuya Suzuki
Leader
Preparatory Survey Team
Japan International
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Japan



Dr. Javed Iqbal
Managing Director
Water and Sanitation Agency
Lahore Development Authority



Mr. Omer Rasul
Director General
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Mr. Irfan Ali
Secretary
Housing Urban Development and
Public Health Engineering
Department
Government of the Punjab



Mr. Ubaid Rubbani
Secretary
Planning & Development
Department
Government of the Punjab



Mr. Zafar Hasan Reza
Joint Secretary (ADB/Japan)
Economic Affairs Division
Government of Pakistan

Attachment

1. Components of the Draft Report

The Pakistani side agreed and accepted in principle, the contents of the Draft Report explained by the Team. Both sides confirmed the contents of the Project as shown in ANNEX-1.

2. Japan's Grant Aid Scheme

The Pakistani side understood the Japan's Grant Aid Scheme and the necessary measures to be taken by the Pakistani side as explained by the Team as per the Minutes of Discussions signed by both sides on 5th September 2009 (hereinafter referred to as "the previous M/D").

3. Schedule of the Study, Project Approval and Necessary Procedure for Implementation

3-1. Schedule of the Study

JICA will complete the final report in accordance with the previous M/D and send it to the Government of Pakistan by the end of March 2010.

3-2. Project Approval

Based on the Draft Report and the previous M/D, the Project will be evaluated by the Japanese authorities and sent to the Japanese Cabinet for final decision.

3-3. Necessary Procedure for Implementation

After the Project is approved by the Japanese Cabinet, both sides shall proceed to signing of Exchange of Notes (hereinafter referred to as "E/N") and Grant Agreement (hereinafter referred to as "G/A"). E/N is agreed and concluded between the Government of Pakistan and the Government of Japan. G/A is agreed and concluded between the Government of Pakistan and JICA.

4. Other relevant issues

4-1. Project title

The Team explained that the Ministry of Foreign Affairs of Japan already approved the title of the Project for Preparatory Survey under the name of "Urgent Rehabilitation Project for Sewerage and Drainage System in Lahore" instead of the former "Retrieval of Sewerage and Drainage System in Lahore City (Phase-II)". Pakistani side and the Team (hereinafter referred to as "both sides") agreed that "Urgent Rehabilitation Project for Sewerage and Drainage System in Lahore" will be used for E/N and the title of "Retrieval of Sewerage and Drainage System in Lahore City (Phase-II)" will be used as a sub-title for documents in Pakistan.

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4-2. Project Cost Estimation

The Team explained that the cost estimation of the Project as described in ANNEX-2. Both sides agreed that the Project Cost Estimation should never be duplicated or released to any outside parties and should be kept CONFIDENTIAL before signing of all the Contract(s) for the Project. Both sides also understood that the Project Cost Estimation attached as ANNEX-2 is not final and is subject to change.

4-3. Revision of PC-I

The Pakistani side explained that the Project cost in Japanese yen indicated in ANNEX-2 is not more than 15% excess of the Project cost in Japanese yen in the PC-I approved in September 19 2007, as shown below. The Pakistani side asserted that the PC-I therefore does not require fresh approval of CDWP because no scope has changed and the difference of both costs resulted from change of the exchange rate between Pakistani Rupee and Japanese Yen.

Cost in PC-I approved in September 19, 2007 (Exchange rate: 1.0 Japanese Yen = 0.528 Rs.):
1,115 million Japanese Yen (588.73 million Rs.)

Cost in Project Cost Estimation in this Survey (Exchange rate: 1.0 Japanese Yen = 0.741 Rs.):
1,248 million Japanese Yen within 15% of the original (924.44 million Rs.)

4-4. Definition of the Pakistani Side

The Pakistani side means:

1. The Government of Pakistan
2. Planning and Development Department, Government of the Punjab
3. Housing Urban Development and Public Health Engineering Department, Government of the Punjab
4. Lahore Development Authority
5. Water and Sanitation Agency (WASA), Lahore Development Authority

END

ANNEX-1: The Contents of the Project

ANNEX-2: Project Cost Estimation

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Handwritten signatures and initials in black ink, including a large stylized signature and several smaller initials.A handwritten mark consisting of a large 'X' or a similar symbol.

The Contents of the Project

Pumping Station	Pump/Automatic Trash Rake Systems	Quantity
Shad Bagh (Shad Bagh)	Pump	4
	Automatic Trash Rake Systems	1
Shad Bagh (Khokhar Road)	Pump	2
	Automatic Trash Rake Systems	1
Gulshan-E-Ravi	Pump	6
Multan Road	Pump	4