



REPUBLIC OF INDONESIA
MINISTRY OF NATIONAL DEVELOPMENT PLANNING/
NATIONAL DEVELOPMENT PLANNING AGENCY


PUBLIC PRIVATE PARTNERSHIP

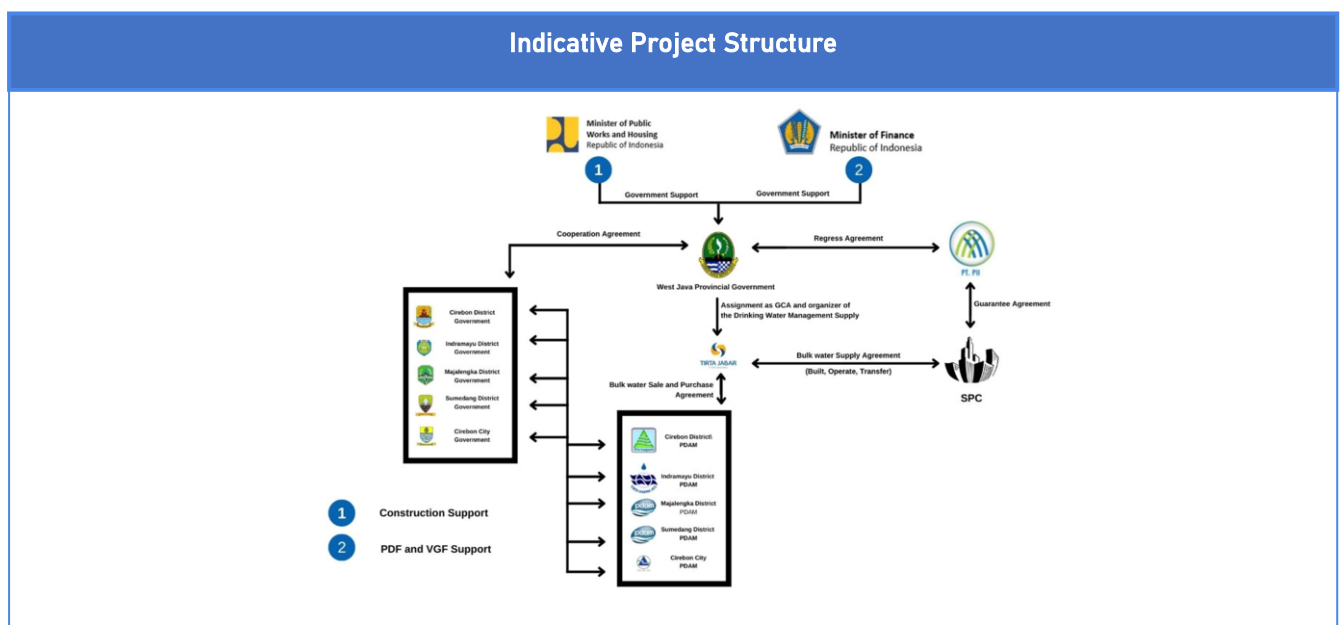
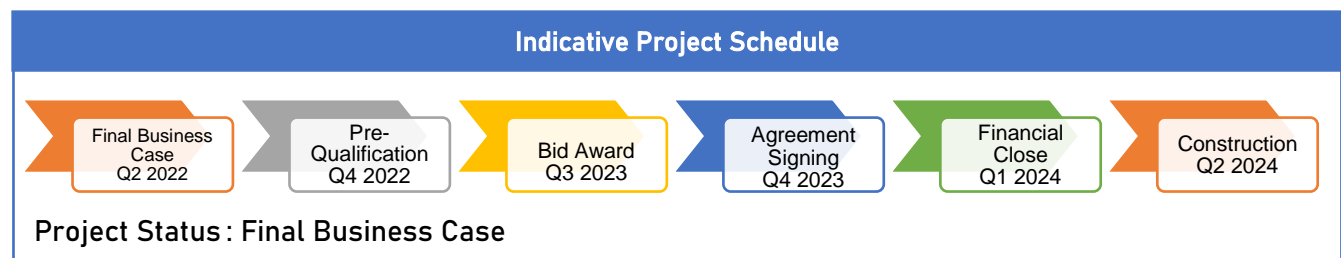
INFRASTRUCTURE PROJECTS PLAN IN INDONESIA

2022

Development of Jatigede Regional Water Supply System

Location : West Java Province

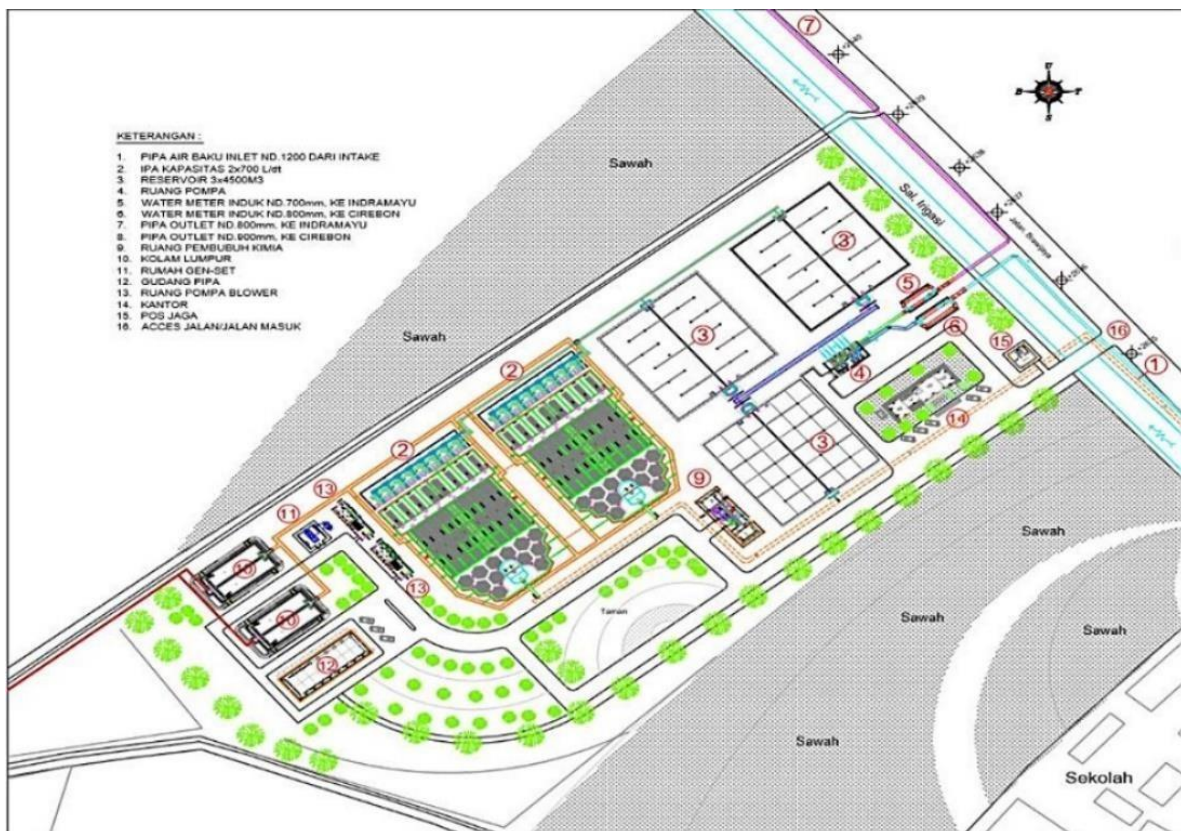
Sector : Water Supply	Sub-Sector : Water Supply
	<p>Description: The Jatigede Water Supply Project aims to increase the water supply capacity to meet the demand in West Java. The off-takers of the drinking water are five regionals: Sumedang Regency, Majalengka Regency, Cirebon Regency, Indramayu Regency, and the City of Cirebon. The drinking water capacity is 2,000 lps at Kadipaten, Majalengka Regency.</p> <p>Estimated Project Cost: USD 144.07 Million</p> <p>Financial Feasibility: IRR : 15% NPV : USD 4.532 Million</p> <p>Estimated Concession Period: 30 years</p>
<p>Government Contracting Agency: Governor of West Java and will be mandated to Director of PT Tirta Jabar (PT Tirta Gemah Ripah)</p> <p>Type of PPP: Solicited</p> <p>Return of Investment: User Charge</p>	



Project Digest

Project Title	Construction of Jatigede Regional Water Supply System
Government Contracting Agency	Governor of West Java hand over the authority to Director of PT Tirta Jabar (PT Tirta Gemah Ripah)
Implementing Agency	PT Tirta Jabar (PT Tirta Gemah Ripah)
Preparation Agency	PT. Sarana Multi Infrastruktur (PDF assignment by the Ministry of Finance)
Project Cost	USD 144.07 Million
Estimated Concession Period	30 years
Location	West Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 – Layout of Jatigede Water Supply System

2. The Opportunity

2.1. Project Background

The implementation of regional Water Supply is one of the efforts for a more efficient and adequate water supply in terms of technical and economic aspects. In addition, the limited funding sources for the water supply implementation would be carried out through the Public Private Partnership scheme.

Jatigede Regional Water Supply is a National Strategic Project, where the governments both central and regional will coordinate and establish a series of policies to accelerate the implementation of the project.

2.2. Project Description

The service area for Jatigede regional water supply are as follows:

- Sumedang Regency;
- Majalengka Regency;
- Cirebon sub Regency;
- Indramayu Regency; and
- Cirebon city

Jatigede regional water supply will be implemented by the DBFOMT mechanism. The scope of activities that will be cooperated for the Jatigede Regional Water Supply include:

- Special Purpose Company sell treated water (bulk water) to PDAM through GCA using the 'take or pay' method;
- Target Area: Sumedang sub district, Majalengka sub district, Indramayu sub district, Cirebon sub district, Cirebon city;
- Water treatment plant phase I: 3 x 500 lps;
- Main distribution network: 56.3 km;

The distribution reservoir has three locations at each off-taker (Tomo, Jatitujuh, and Jatiwangi). WTP will be located in Kadipaten. The production capacity of 1,500 lps consists of 3 WTPs with a capacity of 500 lps. Each WTP consists of processing units: coagulation, flocculation, sedimentation and filtration. The construction phase is planned to be carried out in 2020 for three years and will start operating in 2022.

2.3. Project Objectives

The objective of Jatigede Water Supply is to provide clean water services to the community in the service area.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer
Roles and responsibilities of business entity are as follows:

1. To build and manage Water Treatment Plants and ensure low water production losses;
2. To build and manage bulk water transmission pipeline, ensure low water losses on the transmission unit, and perform maintenance of transmission pipelines;
3. To build, manage, and maintain distribution reservoirs, including the main water meter.

4. Technical Specification

The technical specifications for Jatigede Regional Water Supply are as follows:

No.	Description	Capacity
I	Intake	
	1. Construction	Reinforced Concrete
	2. Pump capacity	3 x 550 lps
II	Water Treatment Plant	
	1. Construction	Reinforced Concrete
	2. Capacity	3 x 550 lps
III	Transmission Pipe	
	1. Capacity	1,500 lps
	2. Maximum Pressure	60 - 80 m water column
	3. Minimum Pressure	5 - 10 m water column
IV	NRW	
	1. Intake	2%
	2. Production Facilities	5%
	3. Transmission Pipeline	1-2%
V	Operation time	24 hours/day
VI	Water Quality	Minister of Health Regulation No. 49/2010 and WHO Guidelines for Drinking Water Quality, 2011
VII	Material Standard	Indonesia: SNI International: ISO, JIS, AWWA, ASTM, ANSI, DIN, BS
VIII	Continuity of supply	Indonesia: SNI International: ISO, JIS, AWWA, ASTM, ANSI, DIN, BS
	The average duration of the termination	1 hour in 24 hours
	Termination of operations for maintenance	2 days in 365 days
	Termination of operations due to electrical Interference	1 day in 365 days
IX	Monitoring system	SCADA
	1. Centralized automatic system	
	2. Meter system	
	3. Communication system	

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Until June 2018, the Housing and Settlement Agency is completing an Environmental Impact Assessment (AMDAL) for the PPP Project of Jatigede Regional Water Supply. In OBC document explained that due to a change in location and a large capacity of 2,000 lps of the Intake, the Agency needs to revise the AMDAL of Jatigede Regional Water Supply and propose the environmental permit from the West Java Governor.

6. Land Acquisition and Resettlement Action Plan

In Jatigede Regional Water Supply, the initial identification of the project development intake location, transmission pipeline, and the reservoirs is as follows:

No	Land Purpose	Land Area (ha)	Land Ownership	Contract /Land Acquisition Method
1.	Intake located in Cilutung	0.89 ha	Owned by BBWS Cimanuk-Cisanggarung	West Java Provincial Government as GCA, get from BBWS Cimanuk-Cisanggarung
2.	Raw water Transmission Pipeline	4.58 ha	Owned by BBWS Cimanuk-Cisanggarung, National road, village and community land	West Java Provincial Government as GCA, get from BBWS Cimanuk-Cisanggarung, Bina Marga, and acquiring village and community land
3.	WTP Located in Kadipaten (including reservoir)	5.03 ha	Owned by West Java Provincial Government	
4.	Pipeline (from WTP to each reservoir)	Total area 20.42 ha	2.74 will be placed on Inspeksi irigasi road 0.84 will be placed on Rumija Toll land	Inspeksi irigasi road: permit for utilization of roads from the MoPWH and a lease agreement with the MoPWH. Rumija Tol: Permit for utilization of roads from the PT. Lintas Marga Sedaya.
5.	Tomo Reservoir	0.09 ha	Owned by Sumedang sub-district	Built on Sumedang's LG land.
6.	Jatiwangi Reservoir	0.09 ha	Owned by Majalengka sub-district	Built on Majalengka's LG land.
7.	Jatitujuh Reservoir	0.12 ha	Owned by Majalengka sub-district	Built on Majalengka's LG land.
8.	Jatibarang Reservoir	0.12 ha	Owned by Indramayu sub-district	Built on Indramayu's LG land.
9.	Krangkeng Reservoir	0.16 ha	Owned by Indramayu sub-district	Built on Indramayu's LG land.

10.	Babadan Reservoir	0.08 ha	Owned by Cirebon sub-district	Built on Cirebon's LG land.
11.	Kepompongan Reservoir	0.25 ha	Owned by Cirebon city	Built on Cirebon city's LG land.

7. Project Cost Structure

Estimated Project Cost		USD 144.07 Million
Indicative Debt to Equity Ratio		
- Debt Level		70%
- Equity Level		30%
IRR		15%
NPV		USD 4.532 Million

8. Government Support and Guarantee

The project is indicated to require government support in the form of fiscal and non-fiscal. Government support includes VGF from the Ministry of Finance, Government Guarantee from PT PII, and Technical Support from the Ministry of Public Works and Housing.

9. Contact Information

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