



INFORMATION MEMORANDUM FOR SAN PABLO CITY WATER DISTRICT BULK WATER SUPPLY PROJECT PHASE II

January 2021



DISCLAIMER

The San Pablo City Water District (SPCWD) have prepared this Information Memorandum ("IM"). While the drafters of this document exerted their best effort to provide a fair and comprehensive description of the Project based on the Project Business Case and other available information, this IM does not purport to be all-inclusive or to contain all of the information that a prospective participant may consider material or desirable in making its decision to participate in the tender.

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All information in this IM is qualified by the terms and conditions of the Instructions to Private Sector Participants. All information in this IM shall also be qualified by the terms and conditions of the Instructions to Eligible Bidders to be released to Eligible Bidders, and the Joint Venture (JV) Agreement and its Annexes, including the Minimum Performance Standards and Specifications ("MPSS") and its Annexes. Drafts of the JV Agreement and its Annexes will be made available to Eligible Bidders. In case of any conflict between the information and terms in this IM and the Instructions to Private Sector Participants and Instructions to Eligible Bidders, the information and terms in the Instructions to Private Sector Participants and Instructions to Eligible Bidders shall prevail.

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1.0 PROFILE OF THE IMPLEMENTING AGENCIES

San Pablo Water District

The San Pablo City Water District (SPCWD) is a government-owned and controlled corporation (GOCC) formally organized on January 1, 1974, pursuant to the provisions of Presidential Decree (PD) 198. The SPCWD is tasked to contribute to the improvement of the quality of life of the residents of the San Pablo City by providing potable, adequate and affordable water supply in the entire city while remaining to be self-reliant and financially viable water district.

2.0 PROJECT BACKGROUND AND RATIONALE

A very important element in the socio-economic and industrial development of the SPCWD is the adequate, reliable and sustainable supply of potable water for domestic, commercial and industrial use. The current supply for domestic, commercial and industrial water were not sufficient enough to meet the demands of the increasing population as well as the economic and industrial development at the northern part of the SPCWD's service areas. More particularly, the steady increase in the number of tourists and transients, local and foreign alike, as well as the growing industrial and commercial sectors, demonstrates the need for an adequate, reliable, efficient and sustainable water system.

An augmentation program for additional capacity of potable water supply is imperative for the city of San Pablo to have a water security for the next 25 years.

The water sources of SPCWD supplying these areas partially comes from springs and mostly from deep wells. SPCWD has developed eight (8) production wells within the study area, San Marcos Production Well 1 and 2, San Mateo Production Well 1 and 2, Sta Catalina Production Well, Sto Angel Production Well, San Pedro Production Well and CG. Brion Production Well. Four (4) of these have already encountered problems regarding quality due to presence of high iron and manganese content, Sto Angel, San Marcos 1 and 2 and San Pedro. Further, San Marcos Production Well 1 and Sta Catalina Production Well are in the brink of being abandoned due to over extraction for being operated on a 24/7 status for several decades in operation unfortunately, San Pedro Production Well at present was abandoned due to over extraction that leads to sand pumping. Moreover, San Mateo Production Well 1 and 2 shall likewise to be use only as standby supply considering that the production cost of both wells has an actual production cost of Php 28.00 per cu.m meter way above the effective water rate of SPCWD at Php 22.00 per cu.m. of produced potable water. There is also the possibility of creating a vacuum down under if the rate of drawn water would be higher than the recharge rate. To avert such problems, there is a need for SPCWD to look for alternative source(s) like well field and possibly surface waters, ensuring in the process, ecological balance.

Furthermore, additional transmission and distribution pipelines are also needed to be installed to maintain the required line pressure at the service area at all times particularly during peak hour and peak day demand where consumption are twice the water usage during regular hour. Household connections that requires supply of potable water at the study area are fast increasing in terms of residential and commercial establishment considering that the city proper at present are fully occupied and congested.

Additional impounding ground reservoir will be a major project component that will addressed the following requirements needed in a water supply system:

1. These reservoirs provide the facility of storage of water for meeting the fluctuations in the hourly demand of water.
2. They help in maintaining constant pressure in distribution mains. In their absence the pressure in distribution mains will fall as the demand of water will increase.
3. The provision of these reservoirs results in an overall reduction in the size of pumps, pipes and treatment units. Thus the distribution system becomes economical.
6. These reservoirs serve as storage for emergencies such as breakdown of pumps, bursting of mains, heavy fire demand, interruption in power supply, temporary floods, etc.

SPCWD face a number of obstacles particularly in terms of financial capability that impringe their ability to fulfill their mandate and expand service to fully cover the service areas in the northern part of the city limits. In view of these, the SPCWD considered forging a partnership with a private proponent to address these obstacles and meet the current and projected water demand.

The Project shall follow the procurement pursuant to the Revised Guidelines and Procedures for Entering Into Joint Venture (JV) Agreements Between Government and Private Entities approved by the National Economic and Development Authority (NEDA).

3.0 **PROJECT DESCRIPTION**

Study Area

The Study Area that will be supplied by the proposed bulk water shall be the northern part of the SPCWD's service area that will include the barangays of Del Remedio, Sta Ma. Magdalena, San Marcos, San Mateo, Sta Catalina, San Buenaventura, Dolores, San Lorenzo, San Pedro, San Lucas 1 and San Lucas 2. The combined daily demand requirement of this area is estimated to reach 13,000 cu.m. per day by the end of 2022. Fig 1 shows the propose service area.

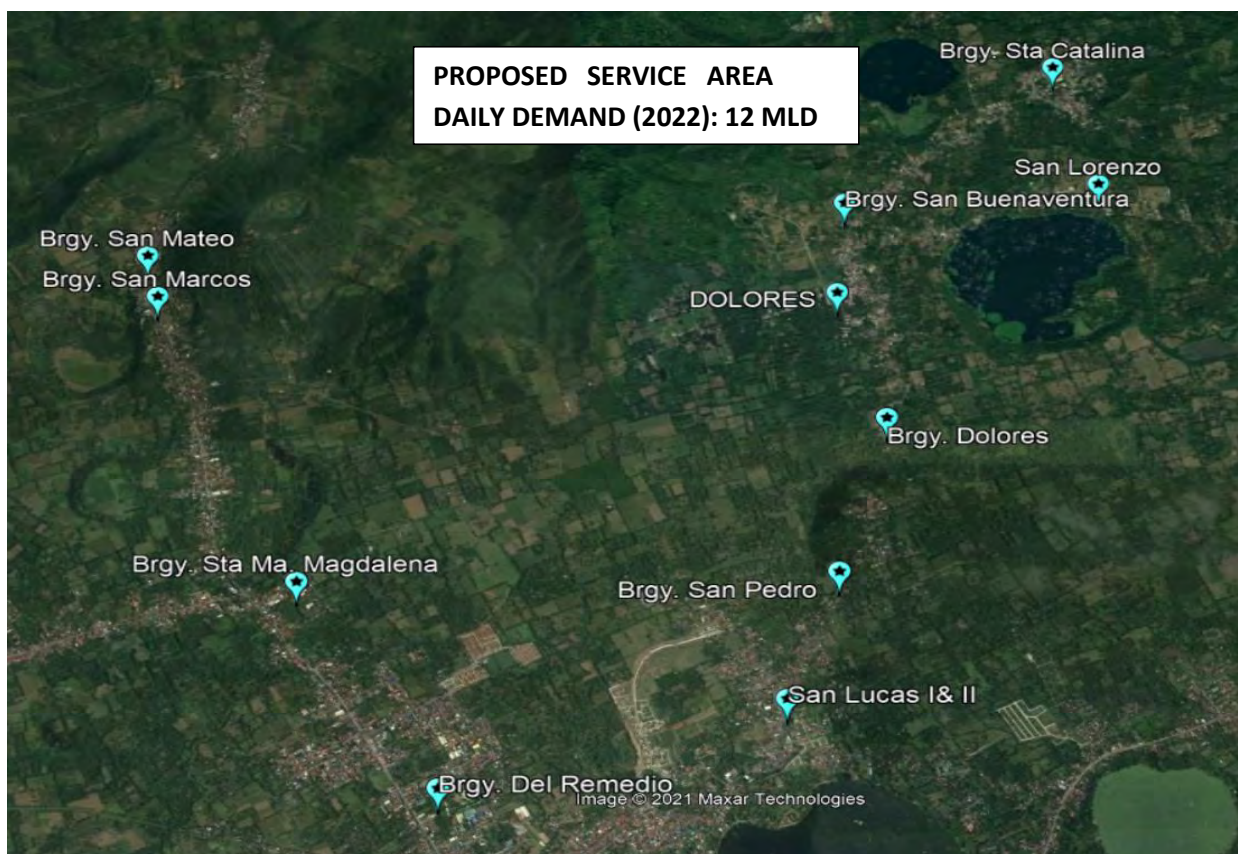


Fig: 1 Map of the Propose Service Area

Water Source

The propose sites of well field shall be constructed and drilled as suggested in the geo-resistivity conducted by a private entity for San Pablo City Water District in 2020. Four well sites shall be provided that will have a combined design capacity of 10 MLD. The following locations were suggested Figure 2 shows the map of the proposed well sites.

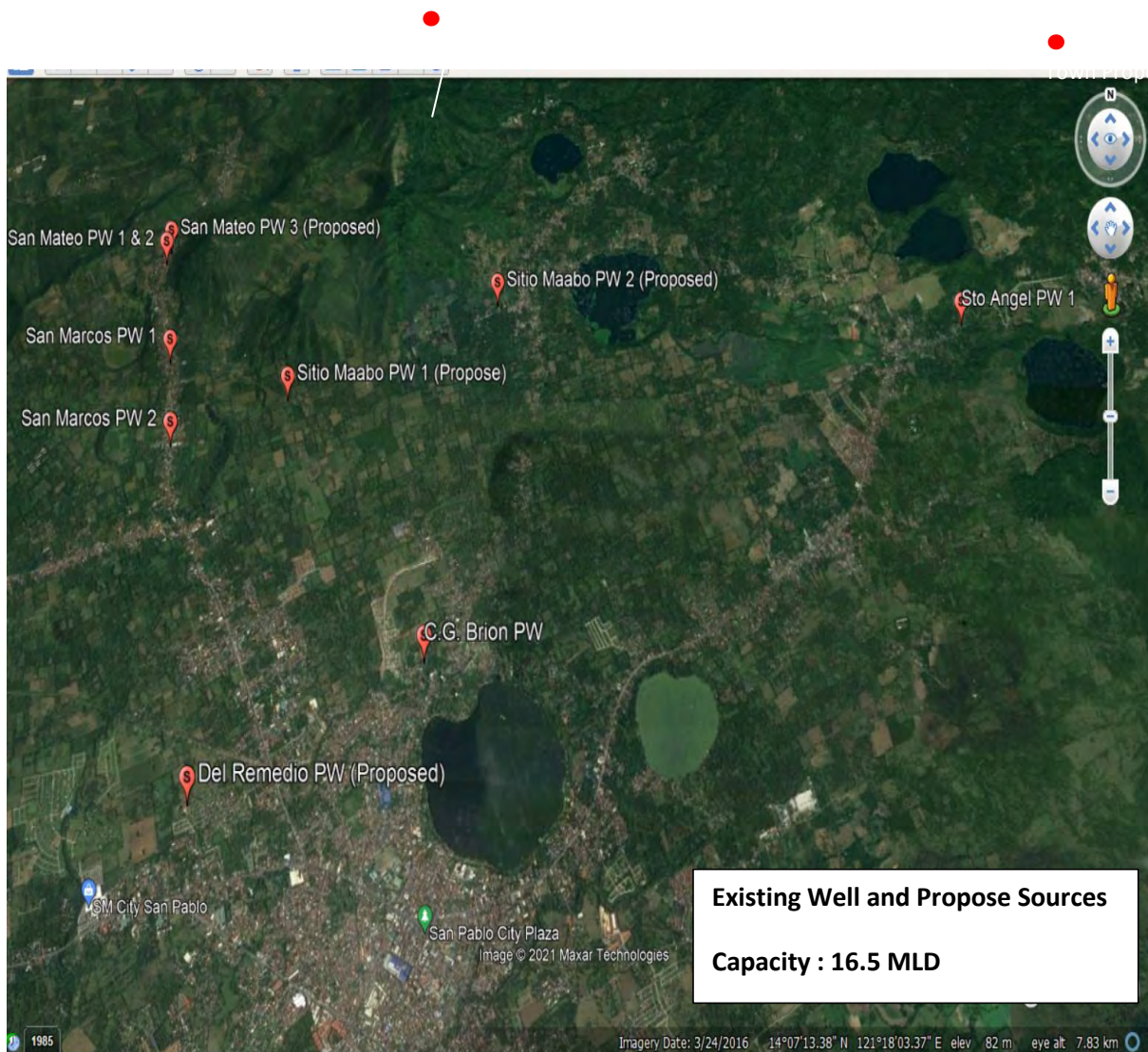


Fig: 2 Map of Well Sites

NUMBER OF HOUSEHOLD AND DEMAND PROJECTIONS

PROJECTED NUMBERS OF CONCESSIONAIRES OF SPCWD NORTH WESTERN SERVICE AREA FROM YEAR 2022- 2046																
Location/ Barangay	Actual number of household as of 2021 per City Population Ofc.	Year														
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
1 Del Remedio	5196	3630	3721	3814	3909	4007	4107	4210	4315	4423	4533	4647	4763	4882	5004	5129
2 San Mateo	736	590	605	620	635	651	668	684	701	719	737	755	774	793	813	834
3 San Marcos	684	685	702	720	738	756	775	794	814	835	855	877	899	921	944	968
4 Sta. Maria Magdalena	704	476	488	500	513	525	539	552	566	580	594	609	625	640	656	673
5 San Lorenzo	569	248	254	261	267	274	281	288	295	302	310	317	325	334	342	350
6 San Buenaventura	1059	777	796	816	837	858	879	901	924	947	970	995	1019	1045	1071	1098
7 San Pedro	753	256	262	269	276	283	290	297	304	312	320	328	336	344	353	362
8 Sta Catalina	680	471	483	495	507	520	533	546	560	574	588	603	618	633	649	666
9 Dolores	775	328	336	345	353	362	371	380	390	400	410	420	430	441	452	463
10 San Lucas 2	1170	897	919	942	966	990	1,015	1,040	1,066	1,093	1,120	1,148	1,177	1,206	1,236	1,267
11 San Lucas 1	1813	737	755	774	794	813	834	855	876	898	920	943	967	991	1016	1041
12 Lynville San Marcos		300	300	300	300	300	200									
13 MERALCO Housing Project		250														
TOTAL ESTIMATED NUMBER OF CONCESSIONAIRES	14139	9,645	10,172	10,705	11,244	11,789	12,340	12,497	12,761	13,031	13,308	13,592	13,883	14,182	14,487	14,801

Demand Projection in cu.m /day (CMD)	13,309.89	13,732.50	14,238.02	14,817.41	15,489.94	16,242.98	17,071.55	17,981.15	18,978.99	20,063.28	21,245.22	22,527.95	23,915.19	25,412.98
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SOURCES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
PRODUCTION WELL															
OPERATIONAL															
1 San Mateo 1&2	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00
2 San Marcos PW 1 & 2	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
3 C.G. Brion PW	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
4 Sto Angel Biuyan	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
ON GOING NEGOTIATION															
1 Sitio Maabo PW 1 & 2	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
2 San Mateo PW 3	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
3 Del Remedio	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
TOTAL ESTIMATED DAILY PRODUCTION	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00

No	Location/ Barangay	Year									
		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
1 Del Remedio		5,257	5,389	5,523	5,662	5,803	5,948	6,097	6,249	6,406	6,566
1 San Mateo		854	876	898	920	943	967	991	1,016	1,041	1,067
2 San Marcos		992	1,017	1,042	1,068	1,095	1,122	1,151	1,179	1,209	1,239
3 Sta. Maria Magdalena		689	707	724	742	761	780	799	819	840	861
4 San Lorenzo		359	368	377	387	396	406	417	427	438	449
5 San Buenaventura		1,125	1,153	1,182	1,212	1,242	1,273	1,305	1,338	1,371	1,405
6 San Pedro		371	380	390	399	409	419	430	441	452	463
7 Sta Catalina		682	699	717	735	753	772	791	811	831	852
8 Dolores		475	487	499	512	524	537	551	565	579	593
9 San Lucas 1		1,067	1,094	1,121	1,149	1,178	1,208	1,238	1,269	1,300	1,333
10 San Lucas 2		1,299	1,331	1,365	1,399	1,434	1,470	1,506	1,544	1,583	1,622
TOTAL ESTIMATED NUMBER OF CONCESSIONAIRES		15,122	15,351	15,689	16,035	16,389	16,753	17,126	17,507	17,899	18,300

Demand Projection in cu.m /day (CMD)	18,902.57	19,189.19	19,611.11	20,043.58	20,486.85	20,941.21	21,406.93	21,884.29	22,373.59	22,875.11
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SOURCES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
PRODUCTION WELL										
OPERATIONAL										
1 San Mateo 1&2	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00
2 San Marcos PW 1 & 2	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
3 C. G. Brion	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
4 Sto Angel Biuyan	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
ON GOING NEGOTIATION										
1 Sitio Maabo PW 1 & 2	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
2 San Mateo PW 3	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
3 Del Remedio	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
TOTAL ESTIMATED DAILY PRODUCTION	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00

Conveyance Facilities

Additional transmission and distribution pipelines shall be installed. Pipe materials for transmission lines shall be made of Ductile Iron with diameter sizes ranging from 200 mm to 250 mm and uPVC pipe for distribution pipelines of which diameter sizes ranges from 50mm to 150 mm. Fig 3 shows the proposed pipelaying activities to be implemented.

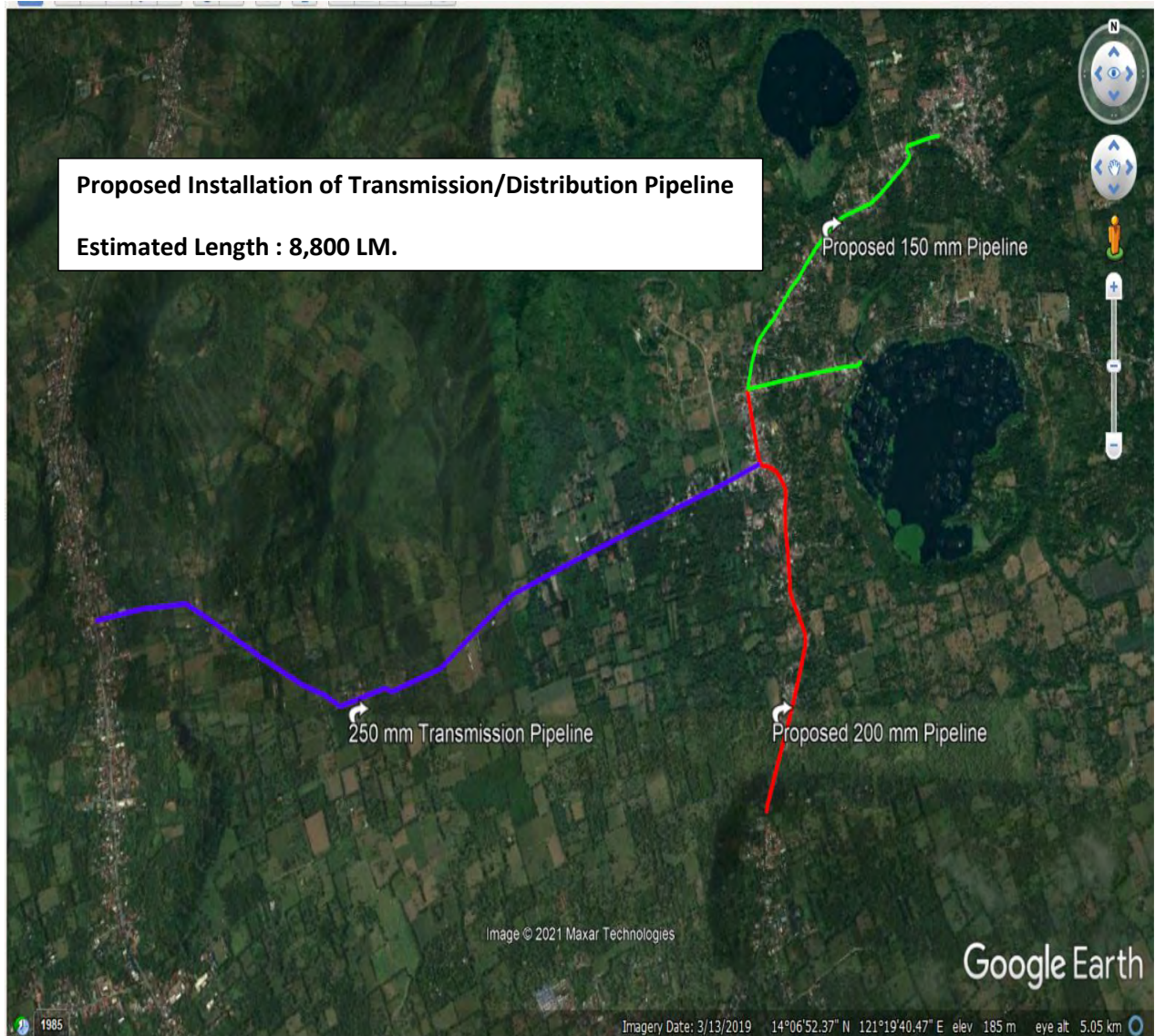


Fig: 3 Proposed Pipelaying of Transmission and Distribution Lines

Reservoir

Ground reservoir made of steel with a capacity of 3000 cu.m. shall be constructed at the location as shown in Fig. 4

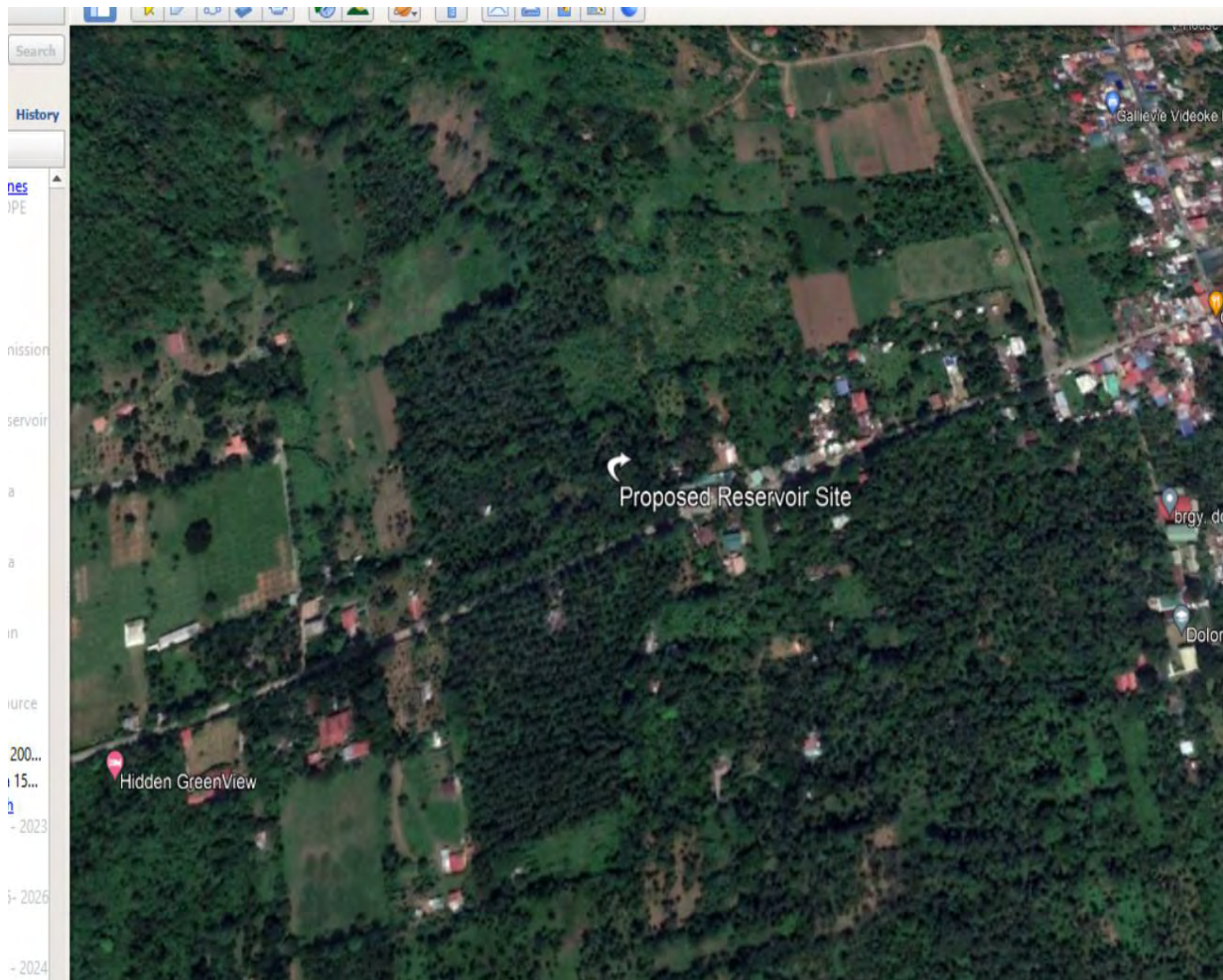


Fig: 4 Proposed Reservoir Site

Objectives

The San Pablo City Water District Bulk Water Supply Project Phase II intends to improve the service delivery and augment the existing water supply for the northern part of the SPCWD service areas. Financial limitations compel SPCWD to seek the participation of the private sector to develop and produce potable water and accelerate plan to strengthen or add public infrastructure/services that would not otherwise be available within existing budgets.

The Project and Its Components

In order to provide an adequate, reliable and sustainable supply of potable water, the SPCWD decided to develop the well field as an alternative water source. The San Pablo City Water District Bulk Water Supply Project Phase

II (the "Project") involves the finance, design, construction, operation, and maintenance of the bulk water facility except maintenance of the pipelines which shall be the responsibility of the SPCWD with the following components:

I. Source development

- a) Acquisition of access road and sites for production wells and reservoir
- b) Drilling of Production Wells or **Development of Surface Water** depending on the technical and financial viability of the source to be developed.
- c) Construction Bunkhouse and Control Rooms
- d) Construction and installation of filtration and chlorination facilities
- e) Supply and Installation of pumps, motors, and control panels including variable frequency device
- f) Installation of outlet pipes and fittings
- g) Installation of bulk metering facilities
- h) Site development
- i) Power Supply and back-up generator

II. Construction of ground reservoir with an impounding capacity of 3,000 cu.m. at the designated site as shown in Fig. 4.

III. Installation of transmission and distribution lines as shown in Fig. 3.

IV. Installation of flow measuring meter ("Flow Meter") at the Delivery Point to measure the Treated Bulk Water supplied to SPCWD.

V. The PSP is required to supply with a volume of 10,000 cu.m per day to SPCWD throughout the concession period.

4.0 COST OF THE JV ACTIVITY/PROJECT

The estimated cost of the JV activity/Project is Php 183,987,701 based on 2021 prices that represents the estimated capital expenditure of the Private Sector Proponent (PSP) while the contribution of SPCWD shall be derived from the results of the third party valuator of the well sites and Right of Ways for the project.

5.0 EXPECTED CONTRACT TERMS

The Project will be implemented pursuant to the 2013 NEDA JV Guidelines. The JV Agreement will have a term of 25 years and will define the rights, obligations, and responsibilities of the SPCWD and the winning PSP. Specifically, the JV Agreement will provide, among others, the following:

Private Sector Partner's Responsibilities:

- a. Secure access road and site for ground reservoir and production well as designated in the georesistivity as provided by SPCWD;
- b. Obtain all Relevant Consents required under applicable Legal Requirement to authorize the commencement of the Works, including building permit from Local Government of San Pablo City, Environmental Compliance Certificate (ECC) from the DENR, Excavation Permit from the DPWH; Permit to Drill (PTD), Certificate of Public Convenience (CPC), and water permit from the National Water Resources Board (NWRB);
- c. Design and Construct the Project facilities in accordance with the Minimum Performance Standards and Specifications (MPSS) and the Detailed Engineering Design (DED) approved by SPCWD;
- d. Finance the construction of the Project facilities; and
- e. Manage, operate and maintain the constructed facilities except maintenance of the pipelines in accordance with the MPSS.

SPCWD's Responsibilities

- a. Monitor and manage the Project;
- b. Grant the PSP the right to draw Raw Water from Water Source as set forth under the terms of the Deed of Usufruct over Water Rights;
- c. Deliver peaceful possession of the Project Site, Right-of-Way (ROW) and transmission water line along the Right-of-Way to the PSP;
- d. Maintenance of the Bulk Water supply transmission and distribution pipelines.;
- e. Issue Certificates of Completion and Acceptance of the Project;
- f. Regulate the Project, including the Bulk Water Charge, and the compliance by the PSP;
- g. Assist in liaising with local and national government agencies and relevant regulatory authorities; and
- h. Subject to confidentiality restriction, provide all information that the PSP may reasonably require for the Project.

The bid parameter being considered for the Project is the lowest initial bulk water fee that will be charged to SPCWD. The initial bulk water fee for SPCWD will be determined based on the winning bid. The collection of the bulk water fee shall be made in accordance with the JV Agreement.