

## **BAGUIO WATER DISTRICT**

"Serving Mankind is Serving God"



## SUPPLEMENTAL BID BULLETIN NO. I

PhilGEPS Solicitation No. 9580700
Supply, Installation and Commissioning of Wireless Supervisory Control and Data Acquisition (SCADA) System at Different Baguio Water District (BWD)
Pumping Stations

This bulletin is issued to clarify and include the following additional information as a result of the queries raised by a prospective bidder during the pre-bid conference and through written requests for clarifications:

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC		
FOR AMPARO PUMPING STATION			
Probe Type Level Sensor as provision of alternative control.	The BWD has an existing probe type level sensor.		
<ul> <li>Is this going to be supplied in the bid?</li> </ul>			
What is the specification?			
<ul> <li>Will the bill of quantities be revised and include this device?</li> </ul>			
<ul> <li>What is the required control philosophy?</li> </ul>			
What are minimum provisions required by BWD to protect devices against moisture?	None required due to indoor set-up/installation of the equipment.		
Also, for enclosure panel to prevent damaging the electronic components such as PLC, HMI etc.?			
Valve with Electraulic Actuator	The term electraulic is to be replaced with electro-hydraulic.		
The TERM "ELECTRAULIC" is a trademark unique only to a specific brand named REXA. Although brand "REXA" is not mentioned in the bid document, the specification mentioned with the use of term "ELECTRAULIC" directly referenced and trademarked / owned to the Brand REXA itself.	,		
We would like to request from BWD to replace the term "ELECTRAULIC" into a common relevant characteristic / performance functionality for bidders to provide opportunity to propose an equivalent brand.			

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC		
FOR AMPARO PUMPING STATION			
Functionality as mentioned during prebid is "On / Off" or "Open / Close" for Valve actuator. We would like to clarify if the specification mentioning DEADBAND, RESOLUTION, REPEATABILITY, LINEARITY, and PUSH BUTTON CALIBRATION, are functions pertaining to VALVE/ACTUATOR?	Yes, the deadband, resolution, repeatability, linearity, and push button calibration pertain to valve/actuator controller.		
Will it need a separate controller/ module separate from the PLC? If it is indeed a separate device, we would like to request to specify the exact function.			
According to the web site "ELECTRAULIC" Function of REXA shows use of another CPU board and electrical component. What is the characteristic / function equivalent to the standard valve and actuator pertaining to the "ON/OFF" / "OPEN/CLOSE" Functions?	The term electraulic is to be replaced with electro-hydraulic. REXA is not mentioned in the TOR.		
Pressure Transmitter	Yes.		
As surveyed, no provisions for installation for Pressure transmitter instrument, is the bidder responsible for boring/ preparation and use of accessories such as isolation valve, etc. for the mounting of the sensor?  Can BWD confirm if the HART feature will	HART communication may be		
be or will not be integrated in the PLC for centralized remote access monitoring? This is because of the specified HART function available for Pressure Transmitter but did not mention any HART module for PLC?	proposed but is not required in the PLC.		
Outdoor installation of sensor: LCD display concern when exposed to sunlight will most likely damage the display. What is BWD's recommendation for bidders to follow?	Outdoor installation is not mentioned in the bid docs.		
Ultrasonic Level Monitor	Open channel flow function is for the possible transfer of asset.		
Open Channel Flow function			
Can BWD clarify as to where will the function be used in actual site? As surveyed, Amparo, Balsigan and BGH level monitoring is for Tank (ground reservoir application)			
5 SPDT Relay:  Can BWD specify the required functions for the relay? Also, if this will be wired and connected to the PLC?	For future expansion for motor controls. Yes, it will be wired and connected to the PLC.		

QUERIES FROM PROSPECTIVE	BWD-BAC		
BIDDERS			
FOR AMPARO PUMPING STATION			
Can BWD confirm if the (HART) diagnostic feature will be integrated in the PLC for centralized remote access monitoring/Diagnostic?  This is because of the specified HART function available for flow meter but did	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
not mention any HART module for PLC?	V		
Electromagnetic Flow meter	Yes.		
For the "Reduced Bore" terminology, is this pertaining to the reduction in bore section of the device for increased low flow Accuracy?			
Clarification on the 5 IO modules, is this pertaining to the PLC modules?	Yes, for future expansion of the motor control.		
If not, what are the functions of the 5 IO on the flow meter instrument?			
If yes, will the IO be connected to PLC?			
Can BWD confirm If the (HART) diagnostic feature will be integrated in the PLC for centralized remote access monitoring/Diagnostic? This is because of the specified HART function available for flow meter but did not mention any HART module for PLC?	HART communication may be proposed but is not required in the PLC.		
1,3 units 8" Flow meter (section C page 7), Can BWD advise the final Quantities for 8" size?	With typographical error. This should be: supply, installation, and commissioning of 3 units 8" Electromagnetic Flow Meter		
As surveyed in site, the 20m cable length is not sufficient for some areas where the flow meter sensor to transmitter, what new length of cable will BWD recommend for all bidders to follow?  PLC Components	20m is proposed on-site; however, cable length may vary depending on the actual installation requirements or as surveyed by the winning bidder.  Refer to Volume 2 of 2, VIII. Quality Assurance		
FAT (Factory Acceptance Testing) / Inspection:	Assurance		
What is BWD's minimum requirement for execution of FAT?			
Will this be applicable only for SCADA/PLC or also with the instrumentation (Electromagnetic Flow meter, Valve with Actuator, Pressure, Radio)? What is BWD's preference of location? This			
is so bidders can be aligned on the current standard of BWD.			

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC
FOR AMPARO PUM	PING STATION
32 Point IO (input) module	32 Point IO will be changed to 64-point IO (input).
Based on the IO calculation, depending on the response of BWD for Ultrasonic Level and Electromagnetic Flow meter the quantity might not be enough. Also consider the IO for motor control. Can BWD advise and adjust required IO?	
Can BWD confirm if the Motors will be integrated to the PLC? If yes, can BWD advise the total qty of IO will be prescribed?	No. This is for future expansion.
FOR BALSIGAN PUM	PING STATION
Probe Type Level Sensor as provision of alternative control.	The BWD has an existing probe type level sensor.
• Is this going to be supplied in the bid?	
What is the specification?	
<ul> <li>Will the bill of quantities be revised and include this device?</li> </ul>	
<ul> <li>What is the required control philosophy?</li> </ul>	
What are minimum provisions required by BWD to protect devices against moisture?	None required due to indoor set-up/installation of the equipment.
Also, for enclosure panel to prevent damaging the electronic components such as PLC, HMI etc.?	
FAT (Factory Acceptance Testing) / Inspection:	Refer to Volume 2 of 2, VIII. Quality Assurance
What is BWD's minimum requirement for execution of FAT?	
Will this be applicable only for SCADA/PLC or also with the instrumentation (Electromagnetic Flow meter, Valve with Actuator, Pressure, Radio)? What is BWD's preference of location? This is so bidders can be aligned on the current standard of BWD.	Wa
Pressure Transmitter	Yes.
As surveyed, no provisions for installation for Pressure transmitter instrument, is the bidder responsible for boring/ preparation and use of accessories such as isolation valve, etc. for the mounting of the sensor?	

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC		
FOR BALSIGAN PUMPING STATION			
Can BWD confirm If the (HART) diagnostic feature will be integrated in the PLC for centralized remote access monitoring/Diagnostic? This is because of the specified HART function available for flow meter but did not mention any HART module for PLC?	HART communication may be proposed but is not required in the PLC.		
Outdoor installation of sensor: LCD display concern when exposed to sunlight will most likely damage the display. What is BWD's recommendation for bidders to follow?	Outdoor installation is not mentioned in the bid docs.		
Open Channel Flow function	Open channel flow function is for the possible transfer of asset.		
Can BWD clarify as to where will the function be used in actual site? As surveyed, Amparo, Balsigan and BGH level monitoring is for Tank (ground reservoir application)			
5 SPDT Relay:  Can BWD specify the required functions for the relay? Also, if this will be wired and connected to the PLC?	For future expansion for motor controls. Yes, it will be wired and connected to the PLC.		
Can BWD confirm If the (HART) diagnostic feature will be integrated in the PLC for centralized remote access monitoring/Diagnostic? This is because of the specified HART function available for flow meter but did not mention any HART module for PLC?	HART communication may be proposed but is not required in the PLC.		
For the "Reduced Bore" terminology, is this pertaining to the reduction in bore section of the device for increased low flow Accuracy?	Yes.		
Clarification on the 5 IO modules, is this pertaining to the PLC modules?  If not, what are the functions of the 5 IO on the flow meter instrument?  If yes, will the IO be connected to PLC?	Yes, for the future expansion of the motor control.		

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC		
FOR BALSIGAN PUMPING STATION			
Can BWD confirm If the (HART) diagnostic feature will be integrated in the PLC for centralized remote access monitoring/Diagnostic? This is because of the specified HART function available for flow meter but did not mention any HART module for PLC?	HART communication may be proposed but is not required in the PLC.		
As surveyed in site, the 20m cable length is not sufficient for some areas where the flow meter sensor to transmitter, what new length of cable will BWD recommend for all bidders to follow?	20m is proposed on-site; however, cable length may vary depending on the actual installation requirements or as surveyed by the winning bidder.		
PLC Components	Refer to Volume 2 of 2, VIII. Quality Assurance		
FAT (Factory Acceptance Testing) / Inspection:  What is BWD's minimum requirement for execution of FAT?  Will this be applicable only for SCADA/PLC or also with the instrumentation (Electromagnetic Flow	Assurance		
meter, Valve with Actuator, Pressure, Radio)? What is BWD's preference of location? This is so bidders can be aligned on the current standard of BWD.			
32 Point IO (input) module	32 Point IO (input) module will suffice.		
Based on the IO calculation, depending on the response of BWD for Ultrasonic Level and Electromagnetic Flow meter the quantity might not be enough. Also consider the IO for motor control. Can BWD advise and adjust required IO?  Can BWD confirm if the Motors will be	No. This is for future expansion.		
integrated to the PLC? If yes, can BWD advise the total qty of IO will be prescribed?			

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC	
BGH TANK FACILITY		
Ultrasonic Level Monitor  Open Channel Flow function: Can BWD clarify as to where will the function be used in actual site? As surveyed, Amparo, Balsigan and BGH level monitoring is for Tank (ground reservoir application)	Open channel flow function is for the possible transfer of asset.	
5 SPDT Relay  Can BWD specify the required functions for the relay? Also if this will be wired and connected to the PLC?	For future expansion for motor controls. Yes, it will be wired and connected to the PLC.	
Can BWD confirm if the (HART) diagnostic feature will be integrated in the PLC for centralized remote access monitoring/Diagnostic? This is because of the specified HART function available for flow meter but did not mention any HART module for PLC?	HART communication may be proposed but is not required in the PLC.	
For the "Reduced Bore" terminology, is this pertaining to the reduction in bore section of the device for increased low flow Accuracy?	Yes.	
Clarification on the 5 IO modules, is this pertaining to the PLC modules?  If not, what are the functions of the 5 IO on the flow meter instrument?  If yes, will the IO be connected to PLC?	Yes, for the future expansion of the motor control.	
Can BWD confirm if the (HART) diagnostic feature will be integrated in the PLC for centralized remote access monitoring/Diagnostic?  This is because of the specified HART function available for flow meter but did not mention any HART module for	HART communication may be proposed but is not required in the PLC.	
PLC?  As surveyed in site, the 20m cable length is not sufficient for some areas where the flow meter sensor to transmitter, what new length of cable will BWD recommend for all bidders to follow?	20m is proposed on-site; however, cable length may vary depending on the actual installation requirements or as surveyed by the winning bidder.	

QUERIES FROM PROSPECTIVE	BWD-BAC		
BIDDERS			
BGH TANK FACILITY			
PLC Components  FAT (Factory Acceptance Testing) / Inspection:	Refer to Volume 2 of 2, VIII. Quality Assurance		
What is BWD's minimum requirement for execution of FAT?			
Will this be applicable only for SCADA/PLC or also with the instrumentation (Electromagnetic Flow meter, Valve with Actuator, Pressure, Radio)?			
What is BWD's preference of location?			
32 Point IO (input) module: Based on the IO calculation, depending on the response of BWD for Ultrasonic Level and Electromagnetic Flow meter the quantity might not be enough. Also consider the IO for motor control. Can	32 Point IO (input) module will suffice.		
BWD advise and adjust required IO?	No. This is for fortune		
Can BWD confirm if the Motors will be integrated to the PLC?	No. This is for future expansion.		
If yes, can BWD advise the total qty of IO will be prescribed			
WIRELESS INFRASTRUCTUR	E COMMUNICATION SYSTEM		
Wireless Design	Refer to Volume 2 of 2, IV-E Item 1.c		
As surveyed, can BWD confirm that no Tower and LA will be installed in the HQ site?			
As surveyed, there is no area available for Balsigan and BGH sites to construct guyed monopole tower of 80ft and 40ft respectively, what will be BWD's recommendation so all bidders will be aligned to follow on the structure?	BWD maximized the area available. Please refer to Volume 2 of 2, IV - E, Item No. 2: "may vary depending on the design and the technology used."		
5/7/10 pcs Wireless Radio: can BWD advise the meaning of the quantities mentioned?	Configurable channel bandwidth. Please refer to Volume 2 of 2, IV - E, Item No. 2: "may vary depending on the design and the technology used."		

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC		
WIRELESS INFRASTRUCTURE COMMUNICATION			
As mentioned in the bid that "radio hardware may vary depending on the design"	Yes. Please refer to Volume 2 of 2, IV - E, Item No. 2: "may vary depending on the design and the technology used."		
We would like to confirm if the existing design of "DUAL CHAIN" antenna can be replaced with bidder's recommended and open specification to comply with the existing weather conditions present on site while maintaining reliability and redundancy on the backbone structure.			
We would like to request BWD to specify and confirm the weight and wind velocity standard requirement for the Antenna Pole/Tower structure for Amparo, Balsigan, BGH and Cabuyao sites? This is so all bidders can have a common baseline on the design and structure that will be used in the project.	Please refer to Volume 2 of 2, IV - E, Item No. 2: "may vary depending on the design and the technology used."		
Kabuyao/Cabuyao Repeater  We would like to request to specify what scope of works will be required for rehabilitation works that will be done on the existing Antenna Pole?	Please refer to Volume 2 of 2, IV-E, Item 3: "Consumables - Guy wires, paint, and other materials deemed necessary"		
As surveyed, we would like to request what weight and wind capacity will be expected on the existing pole for the rehabilitation?	This is for the supplier/bidder to conduct inspection and assess the tower because no existing documentation is available for its design.		
Can BWD advise the extent of the rehabilitation of the existing pole for bidder to identify the materials needed to be done on the existing structure?  We would like to request the current structural analysis on the existing pole, this is for the bidder to know how much current weight the pole and wind	This is for the supplier/bidder to conduct inspection and assess the tower because no existing documentation is available for its design.  This is for the supplier/bidder to conduct inspection and assess the tower because no existing documentation is available for its design.		
survival it can withstand since the SAFETY and INTEGRITY of the backbone of the communication heavily depends on the structure.	The state of the s		

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC		
Amparo discharge water Flowmeter  Kindly confirm if 1 unit or 3 units of Supply, installation and commissioning of 8" Electromagnetic Flow Meter	With typographical error. This should be: supply, installation, and commissioning of 3 units 8" Electromagnetic Flow Meter		
BGH Tank Facility discharge water Flowmeter	Refer to Volume 2 of 2, IV-D, Item No. 4 - a "1 unit 6" (six inch) Electromagnetic Flowmeter"		
1 unit 6" Electro-Magnetic Flowmeter:			
Kindly confirm if 6" or 16" Electromagnetic Flow Meter.			
Financial Audited Statement if minimum of 2 years or 5 years is required.	The bidder's audited financial statements, showing, among others, the bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission.		
As to "2xRPSMA connectors ", can we propose it to be replaced as "2*N-type Connectors"? N-type connector has stronger ability of waterproof, anti-corrosion and transmission ability.	Yes. Please refer to Volume 2 of 2, IV - E, Item No. 2: "may vary depending on the design and the technology used".		
May we suggest adding a Long-Distance Communication Protocol into the Wireless system?	Yes. Please refer to Volume 2 of 2, IV - E, Item No. 2: "may vary depending on the design and the technology used".		
Will the equipment frequency up to 5.8Ghz be acceptable? higher frequency will provide wider bandwidth, and higher-speed data transmission	y E, Item No. 2: "may vary depending of		
Can we clarify what is the meaning of "Dual Chain"	This refers to 2.4Ghz or 5Ghz connection.		
PLC TRAINING			
What is your preferred training location? Outside the Philippines or in Metro Manila or On-site training only?			
ACTUATO	OR VALVE		
The Technical Specs of the Valve point out to only one specific brand. The word Electraulic is a trademark brand.	The term electraulic is to be replaced with electro-hydraulic.		

QUERIES FROM PROSPECTIVE BIDDERS	BWD-BAC		
REQUIRED I	OCUMEN	TS	
What is the required PCAB Category?	The bidder must have a PCAB license for government contracts		
An SLCC that is similar to the contract to be bid, and whose value, adjusted to current prices using the Philippine Statistics Authority (PSA) consumer price indices, must be at least fifty percent (50%) of the ABC. Provided, however, that contractors under Small A and Small B categories without similar experience on the contract to be bid may be allowed to bid if the cost of such contract is not more than the Allowable Range of Contract Cost (ARCC) of their registration based on the guidelines as prescribed by the PCAB, does this mean that if a bidder has a similar project, the category of PCAB will no longer matter?	numbered 2	201, series of	
Given the size and the scope of the project and upcoming Holidays, we think the time allotted for the bid preparation is tight. May we respectfully request for the extension of the deadline of the bid submission.			
The Interconnect of five (5) strategic	Facility	Latitude	Longitude
sites/areas Amparo pumping station, Balsigan pumping station, Baguio	BWD Main Office	16°24'20.97"N	120°36'13.63"E
General Hospital tank facility, Mount Kabuyao repeater facility, and the BWD Main Office (HQ) using free frequency	Mount Kabuyao Repeater Facility	16°21'47.69"N	120°33'28.43"E
mode Wall-mount wireless receiver antenna at BWD HQ	Amparo P.S.	16°23'18.37"N	
What are the coordinates of the sites?	Balsigan P.S.	16°23'50.01"N	
	BGH Tank	16°24'2.12"N	120°35'48.21"E
Requesting the IO list per site	Amparo P.S.	64 Point IO	
	Balsigan P.S.	32 Point IO	
	BGH Tank	32 Point IO	
EN	END		

All other terms, conditions and specifications indicated in the bid documents for this particular procurement shall remain valid, applicable and in force and effect.

Issued this 4th day of April 2023.

Bids and Awards Committee:

ATTY. MA LUISA C. TENEDERO

Chairperson

ENGR. FERNANDO A. PERIA Vice-Chairperson ENGR-REYNANT I. DE TORRES Member NGR. NORIEL C. CALPITO

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GEOVANI L. PIZA Member

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