Republic of Serbia

MINISTRY OF FINANCE

Department for Contracting and Financing of EU Funded Programmes (CFCU)

Belgrade, 8 October 2021

CONTRACTING AUTHORITY'S CLARIFICATIONS No. 2

Construction of wastewater treatment plants and (re)construction of wastewater collection networks in the cities of Brus and Blace

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Disclaimer: All requests for additional information must be made in writing through the TED eTendering website accessible from the F&T portal at https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home ; and in line with other provisions for submission of the request for additional information specified in the Additional information about the Contract Notice. Contracting authority shall not accept any responsibility or liability in case of requests for additional information which are not submitted fully in line with applicable provisions for submission of the request for additional information.

No.	Question	Answer
1.	In the tender document: Volume 4.2 - Financial offer templates, for LOT1, in Schedule 7: Schedule of dayworks, quantity for position 7.3.7 –Reinforcement B500/550 is set as 100t. Please confirm that this is a correct quantity.	Confirmed.
2.	Please confirm that Financial statements with related reports of the independent auditor can be submitted in the tender as supporting documents in Serbian language for the tenderers registered in the Republic of Serbia.	Translation of the supporting documents into English language has to be submitted in the tender. Please refer to ITT section 10.1 "The tender and all correspondence and documents related to the tender exchanged by the tenderer and the contracting authority must be written in the language of the procedure, which is English" and ITT section 10.2. 10.2. „If supporting documents are not written in one of the official languages of the European Union, a translation

		into the language of the call for tender must be attached."
3.	Question 1. In the BoQ for Brus > Sheet ''Route 2 Separator'' Sheet ''Route 7 Separator'' Sheet ''Route 11 Separator'' Sheet ''Route 12 Separator'' Sheet ''Route 14 Separator'' Sheet ''Route 23 Separator'' All those sheets are missing in the final RECAP. Please clarify whether they must be included in the final RECAP, and if so, then please clarify Contingencies 7% in recapitulation of each of these sheets, because there is already Contingencies 10% in the final RECAP. Question 2. In the BoQ for Brus > Route 14 - Rasinska street - newly designed storm water network > HYDROTECHNICAL WORK > 4. Installation works > Pos. 4-7, 4-8, 4-9 (Excel row No. 116,117,118) Separators are not given per pcs as in all other streets. Please clarify how many of each must be calculated in this lump sum. Question 3. We have notice that the routs in BoQ are named ascending from 1-23, but Route 21 is missing. Just to check if it is numbering error or you should add missing route.	1. All mentions sheets were used only as a calculation tool for each separator. Each separator position is given in the respective sheet (newly designed storm water network – section 4 – Installation works) for the assigned route as a lump sum, without a specific cost breakdown for works. Therefore, mentioned sheets should not be included in the final recap. E.g. "Route 12 Separator sheet" is covered in the sheet "Route 12" – Newly designed storm water network – 4 Installation works – pos 4-7.) 2. Three separators are required, with defined capacities given in positions 4-7, 4-8, and 4-9 in the BoQ for route 14 3. Route 21 has been excluded from this tender dossier
4.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.5, effluent requirements, "implementation of the WWTP is foreseen in two Phases as follows." but there is no description of phases. Please clarify.	Please refer to the chapter 4.6 Design and Construction Phases. The capacity of 10,500 P.E. is final capacity of the WWTP and subsequent phases are not foreseen.
5.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.7, it is characterised significantly by industrial sewerage (33 %), please state clearly the type of discharging industry and if this industry is equipped with proper pre-treatment according to the state of the art prior to discharge into public sewer network. Please confirm that there are not as much nitrification and carbon inhibitions contained in wastewater that biological activity and biological degradability of wastewater are disturbed significant.	Discharge of industrial effluents is regulated by the Law on Waters and its by-laws. The Contractor shall not be responsible for failure to achieve effluent requirements in case of confirmed substantial deviation in influent loads. Confirmed substantial deviation means frequent occurrence of pollution concentrations over permitted values in sewerage systems measured in daily composite samples in on-site laboratory during a month, or frequent occurrence of shock loads, registered by conductivity peaks and corresponding 2-h samples, that are toxic to bacteria in activated sludge tanks.

6.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.9.1, please state clearly the distance between future connection chamber/inlet chamber for feeding sewers DN400 & DN250 related to the site limit.	Please refer to Lot 2, Volume 5, BL 00 01 drawing BL-KM-PZI-3.0-01 and BL 02B drawings BL-KM-PZI-3.0-02-T12 and BL-KM-PZI-3.0-02-T6
7.	Within Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.10.5, it is stated that rail systems or container carriers shall be used for containers of pre-treatment. But containers for pre-treatment are defined to have a volume of 1,1 m³ which means that this type of container is equipped with wheels, anywhere. Therefore, there is no use for container rail system resp. container carriers. Please confirm that no rail system/carrier system for containers is required in case that containers are equipped with wheels.	Confirmed. For containers of 1.1 m^3 volume rail system is not required.
8.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.10.6, influent and waste water quality measurement, please confirm that only pH, conductivity and temperature measurements are required to be online and that monitoring of BOD_5, COD, TSS, NH_4-N, TKN, Total P, NO_3, TN is done at site laboratory via sample analyses from 24 h-flow-proportional sampling.	Confirmed.
9.	Referring to Employer`s Requirements, Vol. 3.2.1, Particular Technical Requirements WWTP Brus, clause 3.10, design of biological stage has to be done in accordance to design standard DWA A-131 (single stage activated sludge plants) resp. to design standard DWA M210 (SBR-plants). Please state clearly, if design standards DWA A 131 resp. M 210 are obligatory for design of biological stage or if different design principles (not complying to DWA) are applicable.	Activated sludge process should be designed in accordance with DWA-A 131 or equivalent internationally recognized design methodology such as IWA-ASM or Metcalf & Eddy or equal.
10.	Referring to Employer`s Requirements, Vol. 3.2.2, Particular Technical Requirements WWTP Blace, clause 4.10 & 4.11, design of biological stage has to be done in accordance to design	Please refer to answer no. 9

	standard DWA A-131 (single stage activated sludge plants) resp. to design standard DWA M210 (SBR-plants). Please state clearly, if design standards DWA A 131 resp. M 210 are obligatory for design of biological stage or if different design principles (not complying to DWA) are applicable.	
11.	Referring to Employer`s Requirements, Vol. 3.2.2, Particular Technical Requirements WWTP Blace, clause 4.10, biological stage, please confirm that back-flows and back-loads from sludge line and from effluent filter have to be considered additionally to influent loads (i.e. 10.500 PE) for the design of the biological stage. It is pointed that according to DWA and according to experience in operation of WWTPs, minimum back-loads of single parameters stated within table 19 are not applicable resp. realistic related to process stages resp. design defined by Employer`s Requirements. Please clarify for both plants (WWTPs Bruce & Blace).	Supernatant backflow loads are subject to Tenderer's offer (design).
12.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.11.4, equalisation tank for SBR, please confirm that the Bidder/Contractor is free to implement resp. not to implement an equalisation tank in accordance to the Bidder`s/Contractor`s design (all according to DWA M210 if design standard DWA M 210 is defined to be obligatory).	The Tenderer shall secure buffer capacity of a minimum 100 m^3 either as a separate tank or integrated with SBR.
13.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.11.5, phosphorous removal, please consider that in case of implementation of SBR, design standard DWA M210 is explicitly calling for provision of additional volume for biological P-removal within SBR tanks but not as separate tanks. Please confirm that design has to be done in accordance to DWA M 210 in case that SBR is implemented (if design standard DWA M 210 is defined to be obligatory).	Separate anaerobic tank for enhanced biological P-removal is required in case of conventional configuration of ASTs. If SBR is proposed, P removal shall take place within the SBR tank.

14.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.11.6, aeration system, please confirm that the Bidder/Contractor is free to use disc or tube membrane aerators.	Tenderers are required to use disc membrane aerators (Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.11.6, Table 27).
15.	Within Vol. 3.2.2, Particular Technical Requirements WWTP Blace, table 8, effluent criteria, effluent limits are defined i.a. for TSS = 35 mg/l. Table 29 is calling for effluent limit for SS = 10 mg/l. Please clarify the contradiction.	Please refer to the answer no. 17 in Contracting Authority's clarification no. 1 issued on 7 September 2021.
16.	Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.11.10, effluent measurement, table 27 (wrong numbering), is defining max. flow as 152 m^3/h. Within narratives, a minimum capacity of flow measurement of 3.300 m^3/h is required. Please clarify the contradiction.	The effluent flow measurement device shall have a capacity of not less than 152 m3/hour, as presented in Vol. 3.2.2, chapter 3.10.10, Table 27: Design Criteria for Effluent Flow Measurement. Please disregard greater value in the second paragraph below the table.
17.	Within Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.11.10, effluent and waste water quality measurement, please confirm that only pH, conductivity and temperature measurements are required to be online and that monitoring of BOD_5, COD, TSS, NH_4-N, TKN, Total P, NO_3, TN is done at site laboratory via sample analyses from 24 h-flow-proportional samples.	Confirmed.
18.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.13.1 & 4.13.3, pre- and post-thickener, please confirm that all thickening is to be performed obligatory by gravity thickening. It is pointed that Employer`s Requirements for biological stage and for air treatment are mentioning "mechanical" sludge thickening.	Please refer to the answer no.20 in Contracting Authority's clarification no. 1 issued on 7 September 2021
19.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.15, air treatment, please state clearly if sources of odour only shall be treated or if whole volume of room of "inlet building" and "of sludge	Besides the requirements of conducting odorous air and ensuring air exchange cycles in the various plant structures, in order to optimize size of the odour treatment facility Tenderers shall undertake all necessary and appropriate efforts to contain odorous gases arising from channels, pits, screens, grit

	treatment building" shall be treated by air treatment.	chamber, thickener, sludge dewatering, containers, etc. in order to prevent their emission into working environment. Contained gases shall be evacuated and treated in the odour treatment facilities. In addition, inlet and sludge treatment Buildings should be provided with standard ventilation, for safety reasons.
20.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.15, air treatment, please state clearly which type(s) of chemical washing shall be implemented.	The technical solution of biofilter including dosing of chemicals is subject to Tenderer's offer (design), in accordance with Vol. 3.2.2, chapter 4.15.
21.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 4.15, air treatment, please state clearly which maximum surface load of biofilter is applicable. "150 m^3/m^2" does not include time related unit.	Please consider "maximum surface load of the filter bed shall not exceed 150 $m^3/ (m^2 x h)$".
22.	Please confirm that the Bidder/Contractor is free to join or split process buildings in accordance to the Bidder`s/Contractor`s design.	Confirmed. Tenderers are allowed to arrange buildings in accordance with their design as long as it is in line with the Employer's requirements.
23.	Please confirm that the Bidder/Contractor is free to join or split MCCs in accordance to the Bidder`s/Contractor`s design considering that MCCs are positioned in separated rooms with access from outside.	Confirmed.
24.	Within Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 5.2.3, it is stated that control of blowers for aerated grit & grease removal shall be manual. Please confirm that control of blowers for aerated grit & grease chamber shall be automatic via SCADA.	Please consider that there is no control value measured; therefore; control should be manual.
25.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 6.3, emergency power supply, please confirm that the number of Diesel Generators is minimum one unit.	Confirmed.
26.	Referring to Vol. 3.2.1, Particular Technical Requirements WWTP Brus, chapter 8.2, it is required to provide the following Contractor`s	a) According to the requirement mentioned in Chapter 8.2 it is up to Contractor to decide either to secure mentioned key staff for both WWTPs or separately for each of the WWTPs.

	personal during DNP: Supervision/Plant Operator full time Process Engineer 4 man months Mechanists or Mechanical Engineer 6 man months Electrical/SCADA Engineer and instrumentation operators 6 man months Laboratory Chemist 6 man months Please confirm that these requirements have to be considered for WWTP Brus separately (resp. solely) but not together with WWTP Blace. In addition, it is stated that "The Contractor shall submit to the Engineer a CVs of the proposed key personnel…" but minimum criteria for CVs are not defined. Please state clearly which minimum criteria for each position are required.	These minimum mentioned in the chapter 8.2 requirements shall be fullfilled cumulative for both Lots. b) In accordance with the chapter 8.2 proposed key staff should have the appropriate experience and qualifications to perform the assistance. There is no fixed, predefined minimum criteria. However, nominated key personnel should have previous experience in start-up and operation of the communal WWTP with similar size and complexity on the respective positions mentioned in the chapter 8.2.
27.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Blace, chapter 10.2, it is required to provide the following Contractor`s personal during DNP: Supervision/Plant Operator full time Process Engineer 4 man months Mechanists or Mechanical Engineer 6 man months Electrical/SCADA Engineer and instrumentation operators 6 man months Laboratory Chemist 6 man months Please confirm that these requirements have to be considered for WWTP Blace separately (resp. solely) but not together with WWTP Blace. In addition, it is stated that "The Contractor shall submit to the Engineer a CVs of the proposed key personnel…" but minimum criteria for CVs are not defined. Please state clearly which minimum criteria for each position are required.	Please refer to answer no. 26
28.	Referring to Vol. 3.2.2, Particular Technical Requirements WWTP Brus, chapter 4.11.6, aeration system, table 27, it is pointed that DWA is applicable for water temperature of max. 20 °C whereas table 27 is calling for 25 °C of wastewater temperature. Therefore, please confirm that design of aeration system has to be done for 20 °C of wastewater temperature.	Aeration system shall be designed for wastewater temperature of 25 °C as the maximum load case (Vol. 3.2.2 Particular Technical Requirements WWTP Blace, chapter 4.11.6, table 27). Tenderers are also required to refer to Vol. 3.2.2, chapter 4.3.1 "Standards to be used for Process Design".

29.	Please note that Employer`s Requirements for WWTP Blace were published late, a time extension for Tender Submission is requested accordingly.	There will be no extension of time for submission of Tenders
30.	Dear Sir/Madam, We would appreciate if you could clarify the following: In Volume 1, Section 1, in article 12.2.1. regarding the Technical and Professional capacity (Lot 1) of the tenderer, the following are referred: "Tenderer must have completed at least two contracts, where each of them include process design, construction and commissioning of municipal waste water treatment plant with capacity of at least 10,000 PE, comprising tertiary treatment of wastewater implemented under design-built or turnkey Contract Condition. The works contracts must have been completed at any moment during the period of the past five (5) years from the date of submission of tenders." … "Tertiary treatment" means waste water treatment process where the discharge corresponds with the values given in the Urban waste water directive 91/271/EEC Annex 1, Table 1 and Table 2" In volume 1, section 4.6, in Form 4.6.4 the list of contracts of similar nature and scale performed during the past 8 years is requested. 1. Please confirm that a design-build project of municipal WWTP, with capacity >10.000 P.E. and tertiary treatment with nutrient removal (Nitrogen removal), is acceptable. 2. Please confirm that a design-build project of municipal WWTP completed at any moment during the period of the past eight (8) years from the date of submission of tenders, is acceptable as listed in Vol1, section 4.6 and the provided form 4.6.4 related with the list of contracts of similar nature and scale performed. We remain at your disposal for any further clarification.	1. Design-build project of municipal WWTP, with capacity >10.000 P.E. and tertiary treatment with nutrient removal is acceptable if <u>both nitrogen and phosphorous removal were included.</u> 2. The information given in the form 4.6.4 is omission. The correct one is given in the ITT 12.2.1 b) where it is stated that the works contracts must have been completed at any moment during the period of the past five (5) years from the date of submission of tenders.