SISAK WASTE WATER PROGRAMME

CONSTRUCTION OF WASTE WATER TREATMENT PLANT
EuropeAid/133000/D/WKS/HR

Questions and Answers No. 2

No:	Question:	Answer:
1.	Having examined the tender documents, awarded by the "Yellow FIDIC" we came to the conclusion that they are binding only on the input parameters of the inlet, the minimum sludge age, the maximum hydraulic load for secondary settlings tanks and output parameter requirements. Other parameters we consider as informative. Is that so?	Input parameters of the inlet, the minimum sludge age, the maximum hydraulic load for secondary settlings tanks, output parameter and other parameters defined in the Tender Dossier are required for the Bidder, as well as other parameters required within the Tender Dossier and especially the ones stated in the Volume 3 Employer's requirements Section 3 description of Works.
2.	To estimate the operating costs need to know what kind of load is to be calculated for introduction into trial operation. It is also necessary to know whether the discharge of waste water charges and, if so, how?	Designing parameters for the WWTP are available in the Volume 3 Item 3.3 Treatment of waste water of the city of Sisak on the Page 199. Other data, specified especially for the trial period is not available. The cost for the discharge of waste water is not part of the Contractor's obligation.
3.	Who should be responsible for the difference between inlet parameters? Who will bear the cost if will be the value of the influent wastewater different?	The Employer is responsible for the maximum inlet parameters. If higher values occur, it will be the responsibility of the Employer of and he will bear the costs. Also please refer to answer No. 21

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4.	The specification describes the parameters for the inflow and outflow. We consider these parameters together with the sludge age and hydraulic loads for secondary settling tanks as invariant. The proposed solution stormwater, cascading biological lines, secondary settling tanks and supernatant storage tank are not designed optimally. The combination of some parameters can not be guaranteed.The whole concept of the tender is awarded on the basis of "Yellow FIDIC". We understand well that where it is possible to design an economically and technically advantageous solution, the contractor guarantees while maintaining the outflow parameters use this solution?	Yes, the parameters for inflow, outflow, the sludge age and hydraulic loads for secondary settling tanks are invariant. Defined requirements in the Tender Dossier Volume 3 for the storm water, secondary settling tanks and supernatant storage are obligatory. Regarding the cascade biological unit please see Minutes of the Site Visit and Clarification Meeting Q&A No.35. It is desirable that the Bidder develops the best solution with compliance with all required conditions from Tender Dossier, however within the scope of the Employer's Requirements.
5.	The volume 3, in section 3.6.3.2 is required biological cascade unit. Contractor may use a different system which allows optimal operation by the fluctuations in temperature and pollution of the waste water in the inflow?	Please see Minutes of Site Visit and Clarification Meeting, Q&A No. 35.
6.	For biological line required minimum volume of 15,000 cubic meters. Contractor may, if satisfied outflow parameters to use the system with less volume?	Please see Questions and Answers - part 1, Q&A No. 2.
7.	For the requirements for secondary settlings tanks must be a minimum diameter of 28 M. Is possible in case of compliance hydraulic load for secondary settlings tanks to	No, it is not acceptable. According to Volume 3 Item 3.6.3.2.4. Secondary settling tank with the distribution shaft on the page 210, both secondary settling tanks have to be round with a

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	use a smaller diameter?	minimum diameter of 28 m.
8.	It is possible to use different solutions for stormwater?	The Bidder should follow the requirements in Volume 3, so it is not acceptable to use different solutions for storm water.
9.	Is it possible to include the concept of primary sedimentation tanks, including the solution for the primary sludge?	The Bidder should follow the requirements in Volume 3, and as no primary sedimentation tanks are required this concept is not acceptable.
10.	It is possible to remove the tank supernatant storage tank?	The Bidder should follow the requirements in Volume 3, so it is not acceptable to remove the supernatant storage tank.
11.	What are available the information on industrial pollution?	The industrial pollution is included in the calculations for Design parameters for the WWTP in the Volume 3 Item 3.3 Treatment of waste water of the city of Sisak on the Page 199. The contribution from industry in the WWTP Sisak is 15.000 PE.
12.	There is refinery located in the neighbourhood of the expected construction place. Is the soil contaminated at the expected construction place? If so, how?	Please see Minutes of Site Visit and Clarification Meeting, Q&A No. 15.
13.	What are the specific requirements for limits and measurement of the noise?	Requirements for limits and measurement of the noise have to fulfil the defined standard in the EIA and valid Croatian Regulations and Acts of Law. In the construction period all works have to be organised so that the maximum allowed noise levels do not exceeded 65 dB during daytime/ 50 dB during night time. In time of operation, the maximum level of noise at the boundary of the Plant (measured at any point along the WWTP fence): 65 DBA during day/50 DBA during night

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14.	What are the specific requirements for limits and measurement of the odour?	Requirements for limits and measurement of the odour have to fulfil the defined standard in the EIA and valid Croatian Regulations and Acts of Law. Air Quality: Limit Value of Air Quality: (measured at any point along the WWTP fence): Ammonia 100 ug/m3 (averaging period - 24 hours) Hydrogen-sulphide 5 ug/m3 (averaging period - 24 hours) Mercaptans 3 ug/m3 (averaging period - 24 hours)
15.	If is the Contractor comply with required parameters for flood protection could be solved in a smaller space?	The Contractor is obliged to respect the required dimensions and disposition of the dike, as well as the total surface of the WWTP as defined in the Tender dossier Volume 3 Section 3.6.3.10. Flood protection and in the Main Design-Geotechnical for the Protection of the flooding, E-068-10-04 v 1.0, Geokon d.o.o., 2010. It is not possible to reduce the total surface of the WWTP that will be protected by the dike or to change the dikes length or shape.
16.	Which parts of WWTP should be operated in the case of high water levels (flood)?	Wastewater line should operate continuously even in case of high waters. The discharge to the river Sava is through the high waters pumping station.
17.	Which part of the WWPT should be operated by diesel generator?	Wastewater line should be operated by diesel generator in case of power failure, together with high waters pumping station.
18.	Is required the disinfection of outflow(eg UV)?	Disinfection is not necessary.
19.	Is solved the relief of the waste water in the sewage system?	In Volume 3 Item 3.6.3.1.1. Connection to the Main Collector on the Page 204 the bottom of the last shaft RO1 Main inlet collector to the WWTP is defined at 93,06 m a.s.l. Also please

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		see answer No. 21.
20.	It is in the security and operation of wastewater treatment plants required camera system?	The WWTP shall be equipped with such a number of cameras to show the main entrance gate, vital equipment and processes. Videos must be stored on a video-recording device with an appropriate number of channels to connect all the cameras and the possibility of multiplexing the image. Furthermore, remote monitoring of image data over the phone line should be possible, as for the current image, as well as to review footage. In case of power failure, the video surveillance system must also be supported by the UPS system. Cameras must be type CCD, colour, resolution 640 * 480 or better. For outdoor installation, the cameras should be installed in equipped casing (IP67, heated, etc).
21.	The maximum inflow to the WWTP is declared to be 410 l/s in the Tender documents. Who is responsible that the given value will be not exceeded in the influent? Will be an appropriate facility developed on the sewerage outside the WWTP or an overflow to the value of 410 l/s has to be designed in the area of WWTP? In the case that relief will be before WWTP - what will be the maximum level in the sewer system (allowable backwater levels in drainage).	The Employer is responsible that the maximum flow of 421 l/s will not be exceeded. Overflows, retention basins and other necessary buildings are included in the future Contract for the construction of the waste water network (this is subject of a different Tender). The allowed maximum level of waste water in the Inlet shaft RO1 to the WWTP is 94,02 m a.s.l (80% of inlet pipe).
22.	A technological design of biological stage is specified in the Tender documents as a cascade aeration with the	Please see Minutes of Site Visit and Clarification Meeting, Q&A No. 35, and Questions and Answers - part 1, Q&A No. 2.

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	minimum volume of 15 000 m3. Is any other design of technological arrangement of aeration stage permissible to enable a reduction in volume of aeration tank when observing the required treatment effect and under guaranteed stability of treatment process?	
23.	Materials of sludge tanks and sludge water tanks specified in the Tender documents are of reinforced concrete. Is it possible to replace the material of casing by enamel steel placed on concrete bottom plate?	No, according to Vol. 3, Sec. 3, 3.6.3.4.2, page 215 the sludge storage tanks have to be made of reinforced concrete and all walls of the sludge storage tanks must be protected with epoxy coating.
24.	Is it possible to reduce the WWTP area determined by flood bank?	Please refer to answer No. 15.
25.	In the structure of the WWTP there is missing a gravel trap before coarse screens, is it not required or a gravel trapping is designed on influent, outside the WWTP?	The gravel trap is not required on the WWTP.
26.	Does a design of input pumping station with Archimedean screw pumps have to be kept or a variant with centrifugal pumps is permissible, e.g. Prerostal system of Hidrostal company?	No. Inlet pumping station has to be equipped with four (3+1) Archimedean screw pumps (Volume 3 Item 3.6.3.1.3. on the page 205). Also please see Minutes of Site Visit and Clarification Meeting Q&A No. 31.
27.	Does an electricity have to be used for heating the facility or a natural gas is supplied into the WWTP area?	Heating can be by means of natural gas (direct line or a reservoir), heating pump or other solutions, except for electricity. Electricity can not be used for the heating system.
28.	Is it possible to change the design of overhead objects (concrete x sandwich)	No, overhead objects shall be built according to defined requirements in the Volume 3.
29.	In Volume 1 (INSTRUCTIONS TO TENDERERS),C. TENDERS	Process designer is expert for the design of technology.

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	PREPARATIONS, 12. INFORMATION/DOCUMENTS TO BE SUPPLIED BY THE TENDERER · *The joint venture/consortium as a whole (all members together) and the lead member must satisfy the following minimum qualifying criteria:* o *6. PROCES DESIGNER – In term „PROCES DESIGNER" do you mean DESIGNER OF TECHNOLOGY (Projektant za tehnologiju) or DESIGNER OF COMPLETE PROJECT (TECHNOLOGICAL PART AND CONSTRUCTION PART – MANAGER DESIGNER*	
30.	Material of worm pump is not defined, do you agree that the pump are made from structural steel, adequately protected against corrosion?	Archimedean screw pumps can be made of structural steel, sandblasted and protected with epoxy coating.
31.	Has Bidder to calculate connection fee according to engaged power consumption of the plant (electricity consumption) and unit cost per kWh, or instead the BoQ in Volume 3 item 3.6.5.6.1. Power supply, has to be fully priced. In former case, pls. define a lump sum that would be obligatory to every bidder.	No, the Bidder does not have to calculate the connection fee according to engaged power consumption of the plant and unit cost per kWh, but according to listed works in 3.6.5.6.1. Please see Minutes of Site Visit and Clarification Meeting Q&A No. 39.
32.	Do we have to retain the positions of embankment protection as default in the tender or the position of the embankment can be customized to disposition of the facilities offered by the bidder (keep the required	Please refer to answer No. 15.

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	dimensions, but change the disposition of the embankment)	
33.	In the structure of the WWTP there is missing a gravel trap before coarse screens, is it not required or a gravel trapping is designed on influent, outside the WWTP?	Please refer to answer No. 25.
34.	Must be kept concept input pumping station with screw pumps (Archimedean screw pumps) or is permitted variant equipped pumps with centrifugal spiral impeller (Hidrostal prerotation pumping system – PREROSTAL)	Please refer to answer No. 26.
35.	It is requested ventilation of sludge and supernatant tanks, but not specified roofing construction system. Roof must be fixed, or it is possible to use the covering canvas roof.	According to Vol. 3, Sec. 3, 3.6.3.4.2, page 215 the sludge storage tanks and to Vol. 3, Sec. 3, 3.6.3.5, page 217 the Supernatant pumping station and supernatant storage tank have to be made of reinforced concrete and all walls must be protected with epoxy coating.The same requirement is valid for the roofs (reinforced concrete with epoxy coating) meaning the roof has to be fixed.
36.	It is reported that all ventilated spaces (input PS, screens, reception station fecal water, sludge a supernantant tanks, sludge dewatering) should be connected to the central biofilter. It is possible to use several smaller biofilters?	Yes, it is possible to use more several smaller biofilters or chemical filters for the treated of polluted air.
37.	In the assignment is required to use aerated sand trap. Is it possible to use mixed hydraulically sand trap.	No, according to Vol. 3, Sec. 3, 3.6.3.1.4., page 206 the Aerated grease and grit chamber shall be aerated.
38.	We would kindly ask you for the reply on the following question:	This proposal is acceptable in case the Tenderer is a Croatian company, and in this case this will not be the reason for disqualification of the Tenderer.

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	Instructions to tenderers - point 15. Tender guarantee In the Form 3.1. - Tender guarantee form, it is written: ''We, the undersigned, _____ _____[name and address of the financial institution], hereby irrevocably declare that we will guarantee, as primary obligor, and not merely as a surety on behalf of _____ [Tenderer's name and address], the payment to the Contracting Authority of _____ [amount of the tender guarantee], this amount representing the guarantee referred to in Article 11 of the Procurement Notice.....'' The offical currency in Croatian is kuna and not Euro. In case of payment upon this guarantee, the payment will be done in kunas. Therefore, our bank requires to add in the text following words: ''.. the payment to the Contracting Authority of EUR 250.000,00 (in Words: two hundred thousand euro) in Kuna equivalent at middle exchange rate of the Bank d.d.	

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	applied on payment day, this amount representing .... Please confirm that you accept this proposal and that this can not be the reason for disqualification of the Tenderer.	
39.	Does each member of the joint venture must either collect the tender documents, or it can just be a leader.	It is not a requirement that each member of joint venture buys the tender documentation.
40.	Whether it can be any member of joint venture give evidence in point 12.3. tender documents (technical and professional capacity) or it could just be a leader.	In case of joint venture, the selection criteria apply to the joint venture as a whole (all members including leading member), meaning that the technical and professional capacities are summarized.
41.	In the Idea project and in the tender documentation, the pipeline bypass is not provided. Since we consider that the bypass is necessary, do you want the bypass to be included in our offer?	No, the pipeline bypass is not required on the WWTP.
42.	In Volume 3, it. 3.6.5.6.1 is stated that diesel for substitute power supply must be 630 kVA. This is ment for the high water pump station, for all devices in S execution inside the Ex zone rooms (including ventilation) and primary waste water treatment (coarse screen, inlet PS, fine screens, grease and grease chamber). If the power consumption of the stated devices to be on substitute power supply is smaller than 630 kVA , can bidder offer smaller set with adequate power rating or he must quote 630 kVA.	No, according to Vol. 3, Sec. 3, 3.6.5.6.1., page 241 the substitute power supply shall be the capacity of diesel aggregate 630 kVA.

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43.	According to the tender conditions, which are defined in Volume 3, Section 3, Description of works, the project starts from „preparation of an amendment to the Preliminary Design, obtaining of positive approval of the Engineer and obtaining of the changes of and amendments to the existing Location permit“ Therefore, we conclude that other solutions in terms of the layout, size and distribution of the facilities of the plant are possible if applying the default treatment technology. The questions are: a) Is construction of a protection dike around WWTP and building site obligatory or we can propose alternative flood protection? b) Tender documents define application of Archimedean screw pump. Is it possible to use other screw pump if our project requires a different type of pumps considering the manometric lift height?	a) Please refer to answer No. 15. and see Minutes of Site Visit and Clarification Meeting Q&A No. 47. b) Please refer to answer No. 26.
44.	Can we construct protection dike around WWTP shorter then it is designed in tender document?	Please refer to answer No. 15.
45.	Can Tenderer offer Archimedean pumps which have larger or smaller capacity then 145 l / s (as it is defined in the tender)?	According to Vol. 3, Sec. 3, 3.6.3.1.3., page 205 the Inlet pumping station with fine screens, the maximum flow for each pump shall be 145 l/s and the minimal number of pumps (working+standby) 3+1. The Bidder can offer Archimedean pumps with smaller capacity

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		than 145 l / s but not with larger capacity, respecting the total inlet requirement of 421 l/s.
46.	Can number of pumps vary from the requested number in the tender documents?	The number of pumps has to satisfy the minimal required number of pumps 3+1 (working+standby), meaning there can be more, also refer to answer No. 45.
47.	Will Employer accept solution which would eliminate the existence of high waters pumping station?	No, according to Vol. 3, Sec. 3, 3.6.3.3., page 213 the High waters pumping station shall be installed.
48.	Is a different solution instead of centrifuges acceptable (for sludge dewatering)?	No, according to Vol. 3, Sec. 3., 3.6.4.3 page 216 the Sludge dewatering the centrifuges shall be installed.
49.	Is there a possibility that each of the partners in the Consortium receive direct payment from the Employer, without payment through the Lead partner?	No, it is not possible. Direct Payments from the Employer are made only to one account defined in the Financial Identification Form (form 4.5.a, Volume 1).
50.	Please clarify if „Supervising Engineer“ (Sub-Clause 1.1.6.11 of the Particular Conditions of Contract) is the same person as „Engineer“ (Sub-Clause 1.1.2.4. of the General Conditions of Contract) and in Employer’s Requirements and other parts of the Tender documents.	„Engineer“in the context of General Conditions of Contract, refers to the Engineer as a legal entity/company as well as physical person. The term „Supervising Engineer“ as used in these Particular Conditions of Contract only clarifies what qualification the Engineer/person needs to have according to Croatian law
51.	In Sub-Clause 8.3. of the Particular Conditions of Contract, point d) (i) when listing the time requirements for each stage of the design, it is stated:……“Design for Building Permit, based on the Preliminary Design provided by the Employer, enabling a Building permit to be obtained“..... However, in Volume 3 “Employer’s Requirements”, Section 3, Description of works, it is stated that Scope of work	We confirm that Volume 3 “Employer’s Requirements”, Section 3, Description of works has to be respected. As well as Minutes of Site Visit and Clarification Meeting Q&A No. 43. In that sense, regarding design requirements, in Point d) in Sub-Clause 8.3 of the Particular Conditions of Contract, Volume 2;

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	is:....."Preparation of an amendment to the Preliminary design, obtaining positive approval of the Engineer, and obtaining "the changes and amendments of the existing Location permit"…. Please make appropriate modifications in Sub-Clause 8.3. of the Particular Conditions of Contract, point d) (i), in accordance with Employer's Requirements".	*instead of*: (d) the time requirements set out in the Appendix to Tender for completing each stage of the Design as required by Croatian practice that are as follows: (i) Design for Building Permit, based on the Preliminary Design provided by the Employer, enabling a Building Permit to be obtained; (ii) Detailed Design. *please read*: (d) the time requirements set out in the Appendix to Tender Time for Design for obtaining all Permits, as required by Croatian practice that are as follows: (i) Preliminary Design, based on requirements from Volume 3 of Tender Dossier, Employer's requirements, enabling a Location Permit to be obtained; (ii) Main Design, based on the Preliminary Design provided by the Contractor, enabling a Building Permit to be obtained.
52.	As stated in Sub-Clause 3.1. of the Particular Conditions of Contract, point (b), actions for which Engineer must obtain prior approval of the Employer are, :…approving Contractor's Main Design (Design for Building Permit) of the WWTP….. However, in Volume 3 "Employer's Requirements" it is	We confirm that the Contractor must obtain approval by the Engineer for all stages of design, and the Employer approves only the Main Design based on the recommendation of the Engineer.

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	requested that Contractor obtains approval of the Engineer for each phase of the Design (Preliminary Design, Main Design, Detailed Design and as-Built Design). Does that mean that Employer has to approve only Main design, and Engineer does not have to obtain Employer's approval for other phases of the Design, or should Sub-Clause 3.1. of the Particular Conditions of Contract, be corrected accordingly.	
53.	As stated in Sub-Clause 5.2 Contractor's Documents "All Contractor's Documents, including the Design, which must be supplied to the Croatian public authorities must be made both in English and in Croatian". Please confirm that Operation and Maintenance Manuals (which have to be submitted to the Employer, not to the authorities) have to be made both in English and in Croatian, and correct this Sub-Clause if needed.	In accordance with section 2.1.12 of Volume 3 "Employer's Requirements", we confirm that the Operation and Maintenance Manuals have to be made both in English and in Croatian.
54.	As stated in Sub-Clause 13.8 of the General Conditions of Contract (Adjustments for Changes in Cost) if "table of adjustment data" is not included in the Appendix to Tender, this Sub-Clause shall not apply. The table of adjustment data is not included in the Appendix to Tender. Regarding the Time for Completion of the whole works,	We confirm that Sub-Clause 13.8 "Adjustments for Changes in Cost" is not applicable.

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	which is 930 days, please consider application of Sub-Clause 13.8 "Adjustments for Changes in Cost"	
55.	We propose the following formula for adjustment: $P_n = 0{,}10 + 0{,}10 \frac{E_n}{E_o} + 0{,}10 \frac{S_n}{S_o} + 0{,}22 \frac{M_n}{M_o} + 0{,}28 \frac{G_n}{G_o}$ where: Pn is the adjustment multiplier 0,10 is a fixed coefficient 0,10 Ln is Consumer price index-total 0,20 En is current cost index Manufacture of electrical equipment 0,10 Sn is current cost index Manufacture of machinery and equipment 0,10 Mn is current cost index Building material and complete units and structures 0,22 Gn is current cost index Liquid fuels and lubricants 0,28 Lo is Consumer price index-total Eo is base cost index Manufacture of electrical equipment So is base cost index Manufacture of machinery and equipment Mo is base cost index Building material and complete units and structures Go is base cost index Liquid fuels and lubricants	Please refer to answer No. 54.

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	Base month for calculation of price adjustment is February 2013 (base date is the date 11 days prior to the latest day for submission of the Tender) For price adjustment calculation indices from „Monthly Statistical Report“ issued by Croatian Bureau of Statistics are applied.	
56.	In Volume 3 EMPLOYER'S REQUIREMENTS is mentioned materials and details for each building in Treatment plant Sisak. Could we change construction in those buildings, for example we could construct precast building with thermally insulated facade precast panels with precast columns and main and secondary precast concrete beams, as the appearance of the roof (roof panes)?	No, the buildings shall be constructed with required materials.
57.	In Volume 3 EMPLOYER'S REQUIREMENTS – 3.6.3.7. GARAGE – Could we make and calculate precast construction (precast columns and main and secondary precast concrete beams, as the appearance of the roof - roof panes) instead of brick wall and pitched roof? – With precast construction we can keep insulations criteria.	According to Vol. 3, Sec. 3, 3.6.3.7., page 226 the Garage shall be constructed with reinforced concrete skeleton single level construction with pitched roof and brick walled.
58.	Who bears expenses of energy (electricity, water, costs of work of people) in trial operation period? Whether these	The Contractor bears all costs in the trial run except for the costs of salaries of the End Recipients employees and as such

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	expenses settles investor or bear them and they must be predicted in offered by the contractor?	must be calculated into his offer.
59.	In Volume 3, it. 3.6.3.4.3 is stated that communal containers, 3 pcs, for the dehydrated sludge should have storage capacity of 20 m3 each. In the same chapter pertaining table states that volume of each container should be 7m3 each. Please clarify which of that data is correct.	As stated in table 3.6.3.4.3: Technical data for the sludge dewatering, 3 containers of 7m3 are required, enough for initial requirements. At the same time, the storage place shall be big enough that it is possible to install 3 containers with capacity of 20m3 in the future (3 containers of 20 m3 are not the obligation of the Contractor).
60.	Please confirm whether the site organization can be arranged on parcels 2358/4 and 2358/3?	All site organization activities must be made on parcels of the WWTP no. 2370.
61.	In the Volume 1, Section 1: Instruction to Tenderers, item 16 Variant Solutions: “Variant solutions will not be taken into consideration” We understood during clarification meeting that it is allowed to design an alternative biological treatment and an anaerobic treatment in order to reduce the electrical consumption. Could you please confirm?	In the framework given by the Employer's Requirements in Volume 3. Alternative technologies that do not fulfil the Employer’s requirements are not acceptable. Tenderers may not submit a tender for a variant solution in addition to their tender for the works required in the tender dossier. Please see Minutes of Site Visit and Clarification Meeting, Q&A No. 35. Please see Minutes of Site Visit and Clarification Meeting, Q&A No. 7.
62.	In the Volume 3, Section 3: Descriptions of Works, item 3.1. Introduction – Scope of Work:	The drainage channel shall be constructed according to requirements to Vol. 3, Sec. 3, 3.6.3.11., page 229 the Wetlands

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	"1. Utilities design (access road, electric power, gas supply, water supply and drainage channel for wetlands drainage)." Could you please confirm that it is necessary to make the drainage channel as shown in "Technical study of surface drainage solutions for the construction of the WWTP Sisak, number E-138-11-01 v 1-0?	drainage. Data from the Technical study of surface drainage solutions for the construction of the WWTP Sisak, number E-138-11-01 v 1-0, March 2012 has been included in these requirements.
63.	In the Volume 3, Section 3: Descriptions of Works, item 3.1. Introduction – Scope of Work: "12. Sludge disposal in the Trial operation period will be done by Employer. The Tenderer must include inside his Tender price the costs for sludge disposal 50 €/t of the sludge – as delivered - which will be paid to the Employer." Could you please confirm that tenderers are request to include mentioned cost in of lump-sum price breakdown?	Yes, we confirm that the cost for the sludge disposal shall be included in the lump-sum price for the Test on Completion - Trial operation of the plant (volume 4- breakdown 3.12.)
64.	In the Volume 3, Section 3: Descriptions of Works, item 3.6.1. General: "The city of Sisak is preparing the construction of a central waste water treatment plant. The capacity of the waste water treatment plant, in accordance with the already adopted planning and design documents, is 60.000 PE with primary + secondary + tertiary treatment.". Is it necessary the tertiary treatment?	Yes, it is necessary to construct a WWTP with a tertiary treatment according to the Urban Waste Water Directive regarding the Danube catchment area designated as Sensitive.
65.	In the Volume 3, Section 3: Descriptions of Works, item 3.6.3. Special Requirements:	Yes, the frequency inverters should be installed in all pumps including the standby pumps as required in the Volume 3,

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	"All pumps should have frequency converters" Could you please confirm if is it necessary to install the frequency converters in the standby pumps?	section 3, Item 3.6.3.1.3. Inlet pumping station with fine screens.
66.	In the Volume 3, Section 3: Descriptions of Works, item 3.6.3. Special Requirements: "Odors must be treated in a central biofilter or chemical filter"Could you please consider the possibility to use another system to treat odors instead of biofilter or chemical filter?	No, it is possible to use only biological or chemical system for treatment of polluted air.
67.	In the Volume 3, Section 3: Descriptions of Works, item 3.6.3.1.5. Connection between the aerated grease and grit chamber and the biological unit and effluent measuring: "Discharge from the aerated grease and grit chamber should be measured in open channel (Parshall, Khafagi-Venturi…), supplied together with ultrasonic level probe and designed for the total flow."Could you please confirm that is it allowed using electromagnetic flow meter in pipe instead of open channel?	We do not confirm. According to Vol. 3, Sec. 3, 3.6.3.1.5., page 207 the Connection between the aerated grease and grit chamber and the biological unit and effluent measuring shall be installed in an open channel (Parshall, Khafagi-Venturi…), supplied together with an ultrasonic level probe and designed for the total flow.
68.	Could you please confirm the GPS latitude and longitude coordinates of electric power, gas supply and water supply connections?	The GPS latitude and longitude coordinates for the electric power, gas supply and water supply connections are not available. Necessary works for the Power supply are defined in the Vol. 3, Sec. 3, 3.6.5.6.1., page 236. Necessary works for the Gas installation are defined in the Vol. 3, Sec. 3, 3.6.5.7.1., page 243. Necessary works for the Water supply are defined in the Vol. 3,

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<table>
<tr><td></td><td>Is it strictly necessary to consider the maximal storm flow (421 l/s) for the design of Aerated grease and grit chamber, Biological treatment and secondary treatment or can we consider only the maximal dry weather flow (188 l/s)?</td><td>Sec. 3, 3.6.5.8., page 243.
Also please refer to Minutes of Site Visit and Clarification Meeting, Q&A No. 40.

Yes, it is strictly necessary to consider the maximal storm flow (421 l/s) for the design of Aerated grease and grit chamber, Biological treatment and secondary treatment.</td></tr>
<tr><td>69.</td><td>According to Volume 3, Section 3: Descriptions of Works and Volume 5 Drawings, in the preliminary design does not exist a by-pass/overflow after pretreatment. Could you please confirm that if is it necessary to install a by-pass/overflow after the pretreatment and connect it after effluent measuring?</td><td>Please refer to answer No. 26.</td></tr>
<tr><td>70.</td><td>In vol 3, Table 3.6.3.4.3.: Technical data for the sludge dewatering:
<table>
<tr><td>parameter</td><td>unit</td><td>value</td></tr>
<tr><td>daily sludge production</td><td>kg/d</td><td>4.100</td></tr>
<tr><td>mjg</td><td>h</td><td>7</td></tr>
<tr><td>weekly operation time</td><td>d</td><td>5</td></tr>
<tr><td>minimum number of centrifuges</td><td>/</td><td>1</td></tr>
<tr><td>flow of centrifuge</td><td>m3/h</td><td>25</td></tr>
<tr><td>maximal dry solid amount</td><td>kg/h</td><td>700</td></tr>
<tr><td>minimum final dry matter content (only with</td><td>%</td><td>25 %</td></tr>
</table></td><td></td></tr>
</table>

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	<table><tr><td>polyelectrolyte adding)</td><td></td><td></td></tr><tr><td>sludge feeding pump capacity</td><td>m3/h</td><td>5-25</td></tr><tr><td>minimum number of sludge feeding pumps</td><td>/</td><td>1+1</td></tr><tr><td>number of dewatered sludge containers</td><td>/</td><td>3</td></tr><tr><td>volume of the container</td><td>m3</td><td>7</td></tr></table> Could you please confirm that minimum employer requirements is a total flow of 25m3/h and no smaller flows will be allowed.	Yes, we confirm that required capacity (flow) of centrifuge shall be 25m3/h as stated in the table.
71.	In the tender documentation is requirement for insulation (with 10 cm). Could the contractor use a thicker layer of building material without insulation layers if they provide analogical features?	No, the buildings have to be isolated according to requirements in the Tender Dossier.
72.	This tender is based on conditions known as „Yelow FIDIC“. The contractor should therefor propose the economically and technically optimal solution that will be able operate in trial operation. In the tender documentation is required revision and additions of the concept. Also is required a verification and optimisation of hydraulic, compositions and locations of objects, technological design and design of machinery and equipment. On the other side is required a minimal area for every object.	

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	May the contractor use less area for objects or alternative arrangements of objects or other changes in design, if is necessary for the technological, hydraulic and the spatial design? If not, who is responsible for unsuitable arrangement or errors in design parameters in concept of treatment and possible problems in trial operation?	The Contractor can't use less area for the objects than what is defined in the Tender Dossier. Contractor can make alternative arrangements of objects or other changes in design, but must follow the requirements. The Contractor is responsible for the design, achieving the required parameters, and trial operation.
73.	Registration certificate is required on several places in the Tender. Can we put original of Registration certificate on one required place and on the other places unauthorized copies of Registration certificate and refer to the chapter in our offer, where the original is placed?	As stated in Volume 1, Section 1 Instructions to Tenderers, clause 17.sealing, marking and submission of tenders, Sub – clause 17.1.:"The complete tender must be submitted in one original, clearly marked "original" and 5 copies, also clearly marked "copy". Regarding registration certificate, it is sufficient to attach one original or one notarized copy within the "original" tender dossier (form 4.1. General information about the tenderer)
74.	Form 4.4. - Letter of intent Our bank informed us that they have standard text of Letter of intent, which is different from the Form from the Tender. Please inform do we have to strictly follow the Form from the Tender or deviations from the Form are allowed.	The given Form 4.4. Letter of intent has to be strictly followed.
75.	In the Volume 3, Section 2, item 2.2.15 Landscaping page 101 , Green Areas-Location:	Please read the text referring to Green Areas-Location as follows:

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	"The areas to be planted with grass shall be these covering an approximately 15 m wide strip all around the peripheral road to be built in the treatment plant." But there is a contradiction with Green Areas-Planting it says: "The areas to be planted shall be these covering a 5 m wide strip all around the peripheral road to be built in the treatment plant. Could you please clarify?	"The areas to be planted with grass shall be covering an approximately 5 m wide strip on each side of the peripheral road to be built in the treatment plant."
76.	In the Volume 3, Section 2, point 2.2.15 Landscaping page 101 a peripheral road is mention twice. Does it mean that a peripheral road must be planed? Please, could you confirm?	Yes, on the WWTP a peripheral road has to be planed as stated in 3.6.5.3.3. Site roads and car parking.
77.	In the Volume 3, Section 2, item 2.2.15 Landscaping page 102 Trees-Location says: " 2 (two) rows of trees shall be planted all around the Site: the first row shall be distant by 2,5 m from the fence and the second row by the same distance from the first row. The distance between 2 trees in a same row shall be 6 m. Trees along the 2 rows shall be staggered planted." We consider it mean the trees should be plant on the flood protection dike slope. Please could you confirm?	No, the trees can't be planted on the outside dike slope.
78.	In the Volume 3, Section 3, item 3.6.3.10 Flood protection (Data on flood protection):	Please refer to answer No. 15.

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	<table><tr><td>1</td><td>level of the top of the dike</td><td>100,65 m a. s. l.</td></tr><tr><td>2</td><td>width of the top of the dike</td><td>3,00 m</td></tr><tr><td>3</td><td>length of the top of the dike</td><td>588,75 m</td></tr><tr><td>4</td><td>volume of the dike</td><td>15.139,00 m^3</td></tr><tr><td>5</td><td>100 years high waters</td><td>99,42 m a. s. l.</td></tr><tr><td>6</td><td>pitch of downstream and upstream pitch</td><td>1:2,0</td></tr><tr><td>7</td><td>pitch of bentonite membrane</td><td>1:2,0</td></tr><tr><td>8</td><td>height of the dike</td><td>2,25 to 4,15 m</td></tr><tr><td>9</td><td>- area of the dike: - area of the access ramp:</td><td>8.538,50 m^2 740,00 m^2</td></tr></table> Could you please confirm if it is mandatory minimum requirement or can tenderers consider a reduction of area of the WWTP Site and reduction of dike length?	
79.	Volume 4, “Breakdown of the Overall Price”, Item No. 2.5 Distribution Shaft and Biological unit (Volume 3 – item 3.6.3.2.1). It is missing the sub-item Electrical Installation and equipment. Please clarify.	Electrical installation and equipment for the biological unit is included the item 2.6.9.
80.	According to our hydraulic calculation it is not possible to pump the design flow with screw pumps since the related pump head is over this capacity of this type of pump (already at their limit, considering Hidroplan preliminary design). May we provide different type of pumps? If not my we add a second stage of pumps in order to reach the calculated head?	Please refer to answer No. 26, 34, 43, 45, 46and also see Minutes of Site Visit and Clarification Meeting Q&A No. 31. The second stage of pumps on the inlet is not allowed.

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81.	Volume 3, Subclause 2.4.39 “Cable Tray Work”. It is stated that all cable must be provided in hot dip galvanized mild whereas in Volume 3 Employer’s Requirement the same cable tray are requested in AISI 304. Please clarify.	Cable trays shall be manufactured from AISI 304
82.	Volume 3, Subclause 3.6.5.6.1 “Power Supply” We understood that we have to provide only 1 transformer. Please confirm.	As per Volume 3. Sub clause 3.6.5.6.1 the Bidder has to quote for the new transformer station 10(20)/0,4 kV, 1 x 1000 kVA located at the Waste Water Treatment Plant, and for the material and works as per table “ Indicative specification of material and works for power supply cable”.
83.	Volume 3, Subclause 3.6.5.6.1 “High Voltage Low Voltage Cables”. It is stated that all underground cables shall be laid in cable conduit made of PE pipes. Please confirm.	Yes, we confirm.
84.	Volume 3, Subclause 2.4.34 “LV Cables”. It is stated that all LV power cables shall be Steel Wired Armoured. Please confirm.	Power cables laid in the cable tranches and into the PVC pipes do not have to be steel wired armored. This request refers only to the cables that might be exposed to the direct mechanical stress or damage, or to those laid directly in the ground.
85.	Is it possible to change the construction of facilities? Change masonry walls (bricked walls) in the "sandwich" thermally insulated facade prefabricated concrete panels and assembly of precast concrete beams and columns?	No, the construction of facilities shall be built according to defined requirements in the Volume 3.
86.	Is it possible to change the construction of the roof? The change would be made from pitched roof to a flat roof that would br show in the offer and so calculated in the total price in the offer?	No, the roof shall be constructed according to requirements.

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87.	Is it absolutely necessary to perform indoor facility over the object of coarse and fine rakes with controls of cleaning the air?	Yes, it is necessary and obligatory.
88.	What are the standards that the fence that must be installed on some buildings? Of what material is made fences and what is the height of the fence?	Requirements for the fence are defined in the Volume 3 Sec. 3, 3.6.5.3.2., page 231 Perimeter Fencing and Entrance Gates.
89.	Where are the limits of the obligations of the contractor to clean water drainage system (specifically the discharge of clean water) with the output (drainage) into the Sava River?	Requirements for the Outlet is defined in the Volume 3 Sec. 3, 3.6.3.2.5., page 210.
90.	Is the pipe drainage of clean water from the location of the plant to effusion into the Sava River part of Bidders obligations?	The outlet pipeline that ends in the Sava river is completely the Obligation of the Contractor.
91.	Inside the garage is mentioned storage place for fats, oils and etc. Where it is situated (placed) the storage space? Inside the garage or room must be separate from the garage because of the conditions of fire protection?	This is not defined in the Tender Dossier. The Bidder can use both possibilities, but in compliance with Croatian safety requirements.
92.	Also in the garage is mentioned service place. What is meant by the service place? What type of car service will be held?	Routine maintenance of sewerage suction/flushing vehicles will sometimes be done inside the garage, but in compliance with Croatian safety requirements.
93.	Who bears the costs of design and construction of high voltage installations to supply transformer station and transformer station costs (high voltage part)?	All these costs are the obligation of the Contractor.
94.	Does the investor has owned all the land which is urgently needed for the execution of high-voltage transformer	Yes, The Employer disposes with the land for the execution of high-voltage transformer station.

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	station supply? Who manages the transformer station?	The existing transformer station is managed by HEP (Hrvatska elektroprivreda).
95.	Is the supply of high voltage underground or overground system?	High voltage supply is an underground system.
96.	Who has the obligation to a water connection, electricity connection, gas connection, telephone connection? Who bears the cost of installing these connections investor or contractor?	The Contractor is obliged for the water connection, electricity connection, gas connection and telephone connection. The Contractor bears all these costs.
97.	For the purposes of WWTP SISAK an installation of one natural gas boiler must be made, which will service for heating of the building. Natural gas reservoir shall be placed near the boiler room, outdoors, on concrete floors?	Yes, we confirm, but in compliance with Croatian safety requirements.
98.	For the heating of the building in the winter period 55/40 hot water heating system with two pipes and a forced water circulation should be done?	Yes, we confirm.
99.	In the access pipe (supply of contaminated water in the plant) in the plant (connection to the main collector) how much is it total pipe length and diameter of the pipe which is designed for an access tube, and what is the tube material? Performance or exhibition that pipes is also in obligation by the Contractors or the supply of contaminated water in the starting point (let's call PRIKLJUČAK) plant performs Investor? On situations are stated only two manholes and display tubes, and no mention of the length of the pipe, which is very important	Requirements for the Connection to the Main Collector is defined in the Volume 3 Sec. 3, 3.6.3.1.1., page 204. Construction of the Main Collector including the shaft RO1 itself is subject to another Contract. The main collector that will have the diameter of 1200 mm.

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	for the calculations! Kindly ask for your correct answer, and the length of the connecting pipes?	
100.	In accordance from distinctive complexity of the project and your answer to an extremely sensitive and complex questions, whose answers are necessary for good calculation of offers We please for the prolongation of deadline for submission of tenders?	No prolongation of deadline for submission of tenders is envisaged. The date 12th February 2013, 12:00 hours is unchanged.
101.	Response from No.11 Questions and Answers No.1 "is inconsistent with the assignment, where the on-line measurement of P-PO4 is only required for the total outflow from the aeration tank, viz. Chap. 3.6.3.2.1. Please explain this discrepancy. Do we understand correctly that there has been an increase in the number of on-line analyzers compared to the Tender Documentation?	No, the number of on-line measurement of P-PO4 analyzers hasn't increase and stays the same as in the Tender Dossier defined. First P-PO4 analyzer is defined in the Volume 3 Sec. 3, 3.6.3.1.5., page 207 Connection between the aerated grease and grit chamber and the biological unit and effluent measuring Second P-PO4 analyzer is defined in the Volume 3 Sec. 3, 3.6.3.2.1., page 208 Distribution shaft and a biological unit. Third P-PO4 analyzer is defined in the Volume 3 Sec. 3, 3.6.3.2.5., page 210 Outlet and effluent measuring.
102.	In the Tender Documentation in several places (2 April 58, 3.6.3.4.1 (2x), 3.6.3.4.2., 3.6.5.4. and 3.6.5.5.12) there are quoted terms of primary sludge, although technological line of cleaning does not have primary sedimentation	Yes, you understand correctly that the WWTP Sisak is excess activated sludge only.

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	tanks. Do we understand correctly that excess activated sludge was meant? Please confirm or specify.	
103.	In accordance to Vol. 3, Sec. 3, 3.6.5.3.3, page 232, minimum 10 parking spaces (9 standard plus 1 for disabled persons) shall be provided close to the administration building. But the General Layout drawing contained in the Tender Documents shows only 6 parking spaces. Please clarify.	The General layout is indicative only. Minimum 10 parking spaces (9 standard plus 1 for disabled persons) are required.
104.	Please confirm that the administration building can be designed also with two floors (e.g. for enhancing the view over the plant from the control room) under condition that the room requirements shown within Vol. 3, Sec. 3, 3.6.3.6, page 218 are kept as defined in Volume 3 item 3.6.3.6.1.	Yes, we confirm.
105.	Please confirm that the dike around the parcel (as per tender design) has to remain unchanged in terms of its length and shape around the whole site boundary. Different siting of structures within WWTP layout, has no impact on the dike perimeter. Please confirm.	Please refer to answer No. 15.