

<b>Metro Manila Subway Project Phase 1 Package CP106: E&amp;M Systems and Track Works</b>			
<b>ITEM NO.</b>	<b>REFERENCE/CLAUSE/ SECTION</b>	<b>QUERIES</b>	<b>RESPONSE</b>
<i>General Bid Bulletin</i>			
1.	<p>GBB 17 Annex "B", Item No.14, New Requirement of Integrated Control and Supervisory System / with Facility SCADA</p>	<p>This ICSS/FSCADA requirement should have the provision to monitor the statuses of subsystems at different levels, such as Signalling, Telecommunication, AFC, PSD, Depot Equipment and Rolling Stock, however, it states that this will be developed at detail design.</p> <p>Without more information of the type of monitoring and equipment type, number of assets etc, we cannot evaluate the necessary interface equipment which may be needed for those systems, the number location and types of input/output points we would require, etc to be able to price for this system. We suggest either more information is provided or a provisional sum given for this system until suitable detail is available.</p>	<p>Bidders proposal is accepted.</p> <p>The ICSS/FSCADA is moved to Provisional Sum. Refer to Annex B.</p>

<b>Metro Manila Subway Project Phase 1 Package CP106: E&amp;M Systems and Track Works</b>			
<b>ITEM NO.</b>	<b>REFERENCE/CLAUSE/ SECTION</b>	<b>QUERIES</b>	<b>RESPONSE</b>
2.	GBB 17, Annex "B", Item No.17 New Requirement of Public Event Show at East Valenzuela Station	Although we shall be required to install several systems or pieces of equipment at East Valenzuela Station and at PRI for the public event show on March 2022 (or May 2022), this will cause us to reproduce the overall programme/schedule of supply, installation and testing for the necessary subsystems. Also, considering the access date to East Valenzuela Station and PRI based on GBB 1, it seems impossible to meet the timeline on the above, which require us to make additional clarifications with you.	The government planning to hold the event on May 2020. The Contractor and the Engineer with the Employer will discuss the schedule of activities to do the best to achieve the planned event at EVS & PRI.  This event was published to ensure all the Bidders are fully aware of this event for their preparation.
3.	GBB 17, Annex "B", Item No.13 and Annex "C" New Requirement of Building Information Modelling (BIM) System	The introduction of BIM introduces a whole different process and interface into the design which impacts the programme, the organisation structure as well as the costing. We are also aware that BIM systems currently suggested are not practical for track, in tunnel sections, with curves, as the 3D element is not capable of working with this scenario. We therefore have to introduce other systems to superimpose/interface with the BIM system and also to integrate with the system the Civils contractors will use, as presumably they will have similar issues with the curves. We need time to understand which system is suitable for this and how we integrate that into BIM,	Bidders assumption is correct.  The BIM now moved to Provisional Sum. Refer to Annex B. The Contractor could propose an alternative BIM authoring software for the Engineer and Employer to reviewed and approved. The selected software to be shown in the Contractors proposed BIM Execution Plan (BEP).

<b>Metro Manila Subway Project Phase 1 Package CP106: E&amp;M Systems and Track Works</b>			
<b>ITEM NO.</b>	<b>REFERENCE/CLAUSE/ SECTION</b>	<b>QUERIES</b>	<b>RESPONSE</b>
		<p>which will take some time to research and develop with suppliers. As an assumption we are assuming the BIM process is started by Civils and they will develop the BIM model which we will then take over and add the E&amp;M systems. If the model is to be developed by CP106 we need to be aware so we can factor this into our programme and cost.</p>	<p>For the Civil Packages, the Engineer is building the BIM models to LOD 300 then issue to the Civil contractors for updated to LOD 500.</p> <p>The Civil BIM LOD 300 Models will be shared with other Contractors to assist with their designing the models.</p>
4.	<p>General, Outstanding technical clarifications</p>	<p>As we mentioned in the aforementioned letter, some of our queries submitted since May still have been outstanding, which have a huge impact on the price and/or methodology. The major unanswered clarifications are as follows;</p> <ul style="list-style-type: none"> <li>✓ Confirmation that the required ergonomic studies such as rolling stock cab layout, depot accessibility, rolling stock passenger area, CBTC onboard cab are outside CP106 scope.</li> </ul>	<ul style="list-style-type: none"> <li>✓ For reference, the requirement for this Ergonomic study is specified in the Volume II, Part 2, b) General Requirements (ERG), Clause 12.3. These ergonomic studies for the Man-Machine interface in the Driver Cab are a fundamental element of the design requirement. All Bidder should be fully aware of these compliances, an estimation of cost and manhours for the 30 numbers of trains supplied by the CP 107</li> </ul>

<b>Metro Manila Subway Project Phase 1 Package CP106: E&amp;M Systems and Track Works</b>			
<b>ITEM NO.</b>	<b>REFERENCE/CLAUSE/ SECTION</b>	<b>QUERIES</b>	<b>RESPONSE</b>
		<ul style="list-style-type: none"> <li>✓ Confirmation if we can propose alternative MTTR targets that are compliant with the standard maintainability requirements.</li>   <li>✓ Confirmation of the extent and detailed scope under CP106 for manual and documents requirement and training requirement.</li> </ul>	<p>should efficiently be completed.</p> <ul style="list-style-type: none"> <li>✓ The MTTR is a key calculation to measure the average time needed to determine the cause of a failure and repair or replace equipments to fix the failure;</li> </ul> <p>The equipment reliability, availability maintainability (RAM) evaluation is conducted during the detailed design stage. The Contractor may propose MTTR at the detailed design for the Engineer review and the Employer approval.</p> <ul style="list-style-type: none"> <li>✓ According to our records, we have not received a clarification for this item. We would expect Bidder to note their letter reference on this clarification.</li> </ul>

<b>Metro Manila Subway Project Phase 1 Package CP106: E&amp;M Systems and Track Works</b>			
<b>ITEM NO.</b>	<b>REFERENCE/CLAUSE/ SECTION</b>	<b>QUERIES</b>	<b>RESPONSE</b>
		<p>✓ Confirmation if the temporary services in ERG-Appendix 12 are actually provided by the Civils contractor and remain after completion of their work as CP106 scope.</p>	<p>✓ The Bidder's understanding is correct. However, the Contractor is responsible for the temporary facilities that was stipulated in the Volume II, Part 2, b) General Requirements (ERG), under Clause 4. Close coordination with Civil and other parties ensuring the CP 106 temporary requirements are available.</p>