PRE-BID QUERIES AND REPLIES

ADANI

| Concessionare | | Sr. No. | Clause No. | Document | Details | Query | Clarification/Amendment if any |
|---------------|-----|---------|--|--|--|--|--|
| Adani | 162 | 1 | | General and Schedule R | rate of fee [Karnatak Road User Fee (Determination of Rates and Collection) Rules, 2014) | We request the Authority to clarify whether our understanding is correct: since the base year in Clause 5.1 is referred to as 1st April 2008, therefore for Clause 5.3 Variation on account of WPI, the base year for WPI B should also be April 2008, i.e., the week ending on 6 January 2007 (208.7), same as per the National Highways Fee (Determination of Rates and Collection) Rules, 2008. | The base year for WPI B will also be April 2008, i.e., the week ending on 6 January 2007 (208.7), same as per the National Highways Fee (Determination of Rates and Collection) Rules, 2008. Additionally, given that this is a standalone urban tunnel, the length will be multiplied by a factor of ten for determining the toll |
| | | | | | effect 5.3. "The formulaWPIB means the wholesale price index for the month of December of the year preceding year of immediate preceding year." | | rate. |
| Adani | 1&2 | 2 | | General and Schedule R | rate of fee [Karnatak Road User Fee (Determination of Rates and Collection) Rules, | We request the Authority to clarify which linking factor should be considered for Toll Fee calculation due to the change of base year of WPI from 2004-05 to 2011-12, i.e., whether it should be 1.561 as released by Office of the Economic Adviser or 1.641, as per the NHAI | The linking factor will be 1.641 as per the old NHAI Toll User Fee Notification. |
| Adani | 1&2 | 3 | | | 2014) Extension of time | Toll User Fee Notification. Request for extension of bid submission date | Refer Corrigendum 7 |
| Adani | 182 | 4 | Draft concession agreement: Article 27 and Article 48 | | As per the Karnataka User Fee Rules 2013, The concessionaire must upon request provide a pass for multiple journeys to cross a toll plaza within the | The Karnataka User Fee Rules 2013 states that Clause 9.3 - A non-commercial local pass @150 per Calander month (2007-08 base rates) should be provided | As per the Draft Concession Agreement (DCA), Clause 27.5.2, which typically provides monthly passes for frequent users, has been explicitly deleted. |
| | | | | | l: | Clause 9.4- A Commercial (local-district) ticket at 50% discount should be provided. Kindly clarify if these discounted passes should be provided or not? | The Concessionaire is not contractually obligated to offer annual/monthly passes or discounted local passes for the Projects (package I & II). Further, this clarification supersedes the clarification made as per |
| | | | | | | | Addendum uploaded on 03-10-2025 titled "Bid Queries batch 2", Sr. No. 3 on Page 3. |
| Adani | 1&2 | 5 | Draft concession agreement: Article 27 and Article 48 | | Fee Rules 2013, The concessionaire must upon request provide a pass for multiple journeys to | As per The Karnataka User Fee Rules 2013, Clause 10 pertains to the Permission to collect Overload Fee from the overloaded vehicles. Similarly Clause 11 pertains to the Exempt vehicle categories including GoI, GoK and Private vehicles engaged on government duty and other categories. Kindly clarify if these clauses would be applicable to the Twin Tunnel project or not? | These clauses will not apply to the twin tunnel project as per RFP for Design and Construction of 3-Lane Underground Twin Tunnel Road from Hebbal Esteem Mall junction (Km.0+000) to Silk Board KSRP Junction (Km.16+745) along with 3-lane/2-lane entry & exit ramps including operation and maintenance in Bengaluru City (North South Corridor) - on MODIFIED BOOT MODE |
| Adani | 1&2 | 6 | General | | | We understand that in case of Government of Karnataka is planning to implement Bangalore Congestion Tax from passenger commuters travelling alone in Car for Tunnel road in future? Kindly request to clarify on compensation mechanism for impact of congestion tax on Tunnel road. | Tender conditions prevail |
| Adani | 1&2 | 7 | | | Surety Bonds | Request for acceptance of surety bonds as performance security in line with NHAI, MORTH | Yes. Surety bonds will be accepted as performance security. Refer Sl. No. 12 of Corrigendum 2 pertaining to Clause 2.20.1 of the RFP |
| Adani | 1 | 1 | · | Volume II B | | Volume-II B, as mentioned in the DPR, is missing. Kindly provide the same. | Refer Volume II B Structure Design Report uploaded on KPP portal |
| Adani | 1 | 2 | General | Land Plan Drawings | | Request Authority to share the Land Plan Drawings | Since the Land Acquisition Plan (LAP) is the responsibility of the Authority, LAP will be shared only with the successful bidder |
| Adani | 1 | 3 | General | Dilapidation report | | Request Authority to provide the dilapidation report | Dilapidation report survey is to be assessed by the concessionaire independently |
| Adani | 1 | 4 | Cl 3.11.7 Schedule-D Vol 3A | The cover mentioned for design is 40 mm. | | Kindly confirm whether this cover is valid for all faces of elements or this needs to be changed for soil face. Also please confirm whether the same cover needs to be taken for strength and serviceability check or there shall be different cover for ULS and SLS cases. | Tender conditions prevail |
| Adani | 1 | 5 | Tender Drawings | Shaft drawing | | It is understood that there should be various services in the shaft like power supply rooms, etc. Kindly provide the plan drawing of service level in the shaft and also specify the loading to be considered for each type of room to be taken in design. | The concessionare has to independently develop GAD of Services and shaft drawings as per relevant standards. |
| Adani | 1 | 6 | Schedule D, Vol 3A | | | Kindly provide the seismic(racking) loads to be considered in the design of underground structures | Seismic design and analysis of underground structures shall be followed as per Hashash reference paper |
| Adani | 1 | 7 | Tender Drawings | | | Kindly confirm the area to be covered under bus stand, auto/taxi stand for construction. Also request the Authority to provide structural drawings for the same. | The concessionare has to independently develop GADs, structural drawings for bus stand, auto/ taxi stand as per relevant standards. |
| Adani | 1 | 8 | General | | | Kindly confirm that there is any provision of muck processing facilities to re-use the muck that is not directly in usable form. | No, there is no provision in the current tender for muck processing facilities |
| Adani | 1 | 9 | General | | | Kindly provide the detailed load combinations to be considered in design or it can be considered as per IS-456. Request the Authority to kindly confirm. | The load combinations are to be taken as per relevant standards as applicable. |
| Adani | 1 | 10 | Tender Drawings | Structural Dimensions | | Kindly confirm whether the structural dimensions shown are indicative and can be modified as per contractor's design, maintaining the internal clearances as mentioned in the tender drawing. | Tender conditions prevail |

| Process Section coming some of empressed plant man as on MEDIC Process Section process | | | | | | | | |
|--|-------|---|----|---------------------------------|------------------------|--|--|---|
| Section 2.1 GR Systematic B Control 1 GR Systematic B Control 2 GR Sys | Adani | 1 | 11 | General | Wetland Clearance | Clearance sec been obtained the scope of t | ction. Kindly clarify the status of wetland clearance of these sections. Has this d during DPR Stage or is it the scope of the Concessionaire to get it. If it is in the Concessionaire, will the Concessionaire be eligible for an Extension of | l ' |
| Medial 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Adani | 1 | 12 | General | Land for Muck Disposal | however if lar clarify whether | nd is available, it shall be provided on lease basis to the contractor. Kindly er the cost has been added in the estimate if in case no land is provided by | Tender conditions prevail |
| The Edition controllands that the Experimental of the Edition controlland in the Experimental Processor of the Controlland in Processor of the Controlland in Processor of the Controlland in Controlland | Adani | 1 | 13 | GIR Appendix-B | | 1 ** | | · · · · · · · · · · · · · · · · · · · |
| Security of the property of | Adani | 1 | 14 | General | Tree Cutting | The Bidder understands that the permission for tree cutting as per Karnataka Preservation of Trees Act, 1976 has to be obtained by the Concessionaire. Kindly clarify if the tree counting has been conducted by the Authority. In addition, please clarify if the compensatory afforestation Land of the each tree cut has been identified or not. In 2017, the NGT mandated that for every single tree proposed to be felled in Karnataka, 10 saplings must be planted before the tree could be cut. Please clarify if the Authority undertakes the cost for compensatory afforestation. Is the Concessionaire eligible for Extension of Time if there are delays during this process that are not attributable to the | | |
| Addrei 1 77 Gill Page 14th Authority to provide the feet graphs related to graph registery again reg, Atterberg gather packed by gain producting the cancersorance shall conduct the visib pressure meter tests. Addrei 1 19 Page 452 of Technical Schedules Addrei 1 10 Page 452 of Technical Sc | Adani | 1 | 15 | Section 2.2.1 -GIR | | encountered i | it is changed to NX size (76mm). Whereas the test result shows NX size core | The statement in GIR is correct |
| Addreil 1 19 GIR Secretary of Secretary Control of | Adani | 1 | 16 | GIR | | | , | |
| Admit 1 19 OR Increased the Company of the Company | Adani | 1 | 17 | GIR | | | | · · · · · · · · · · · · · · · · · · · |
| stock fire mains shall not exceed 28 bars. Request the Authority to confirm the conformation of pump houses. Also request the Authority to confirm the requirement for Gas suppression systems of pump houses. Also requests the Authority to confirm the requirement for Gas suppression systems for electrical substations as the schedule doesn't substantial to schedule doesn't substanti | Adani | 1 | 18 | GIR | | Spacing for Ar | rray C in cut & cover instruments seems to be on lower side. It can be | GIR is provided for reference; the concessionare shall conduct the |
| tume. As per our understanding, the whole tume is ventilated by fully transverse ventilation, and the ramp sections shall be eventilated on grain may section shall be wentilated on grain may section shall be wentilated on grain may wentilated in some of what lungth one have been considered even if mily transverse system was specified in the refund we chasta ducts are on the size of 25 mily transverse system was specified in the refund we chasta ducts are of the size of 25 mily transverse system was specified in the refund we chasta did not a considered on the refundation philosophy; technical defalls of axial farm or decision of any ventilation sectors being comidered during PFR phase. Request the Authority to provide the deralls. Authority to provide the deralls. Adami 1 21 General 33 KV cable There are no specifications mentioned anywhere for 33 KV cables in the documents, but as per the disagrain of the sector and other block exchanges the air with another shalf connected to other end of the sector. The action of the size of 25 mily shall be considered on the sector and other block exchanges the air with another shalf connected to other end of the sector. The action of the sector and other block exchanges the air with another shalf connected to other end of the sector. The action of the sector and other block exchanges the air with another shalf connected to other end of the sector. The action of the sector and other block exchanges the air with another shalf connected to other end of the sector. The action of the sector and other block exchanges the air with another shalf connected to other end of the sector and other block exchanges the air with another shalf connected to other end of the sector. The action of the sector and other block exchanges the air with another shalf connected to other | Adani | 1 | 19 | Page 482 of Technical Schedules | | inside fire ma confirm the lo requirement f | ains shall not exceed 28 bars. Request the Authority to clarify the same and ocation of pump houses. Also request the Authority to confirm the for Gas suppression systems for electrical substations as the schedule doesn't | |
| per the Single Line Diagram (SLD), the 33 kV cables are aluminum conductor type. Therefore, the bidder is considering 33 kV cables as per the drawings only. Kindly confirm. KPP Portal under the head HT cables. The cables have been specified as XLPE insulated, Aluminium conductor, flat armored with flame proof insulation. Kindly confirm the scope of incoming 33 KV cable from SEB to the portal substations. Is this scope lies with the client or cable length is to be considered by the Bidder. Adani 1 23 clause 7.1.4 (f) The grade of stainless steel mentioned in the tender documents is according to BS standards. Can the bidder provide the equivalent Indian Standard grade steel. Request the | Adani | 1 | 20 | Page 146 -Drawings | Ventilation | tunnel. As per ventilation, and shown jet fand confirm. Pleas any and providength each has stage. The bid or details of a | or our understanding, the whole tunnel is ventilated by fully transverse and the ramp sections shall be ventilated longitudinally using jet fans. The inside ventilation ducts act as booster fans. Request the Authority to kindly use confirm locations of ventilation plant rooms or vertical ventilation shafts if ide GAD of the same and confirm how many ventilation sectors and of what have been considered even if fully transverse system was specified in DPR in the details of axial fans any ventilation sectors being considered during DPR phase. Request the provide the details. | transverse ventilation, and the ramp sections shall be ventilated longitudinally using jet fans. The jet fans act as a booster to maintain the uniform flow inside the whole section. The ventilation fresh air entry and exhaust ducts are located in each shafts in opposite sides. The fresh air ducts are of the size of 25 m² while exhaust air ducts are of the size of 30 m². Please refer page numbers from 130 to 132 from the document "05. Volume 4 Drawings Package 1" for their schematic and positioning details. For the transverse ventilation system design, four main sectors are considerd, each between two shafts. They are of length of 3.6 km, 3.6 km, 3.8 km and 3.3 km, from hebbal to silk board direction. Each sector is divided into two equidistance blocks. Hence, there are total 8 blocks considered in ventilation design calculations. For a given sector, one block exchanges the air flow with shaft connected to the one end of the sector and other block exchanges the air with another shaft connected to other end of the sector. The axial fans with capacity 180 cms & 2000 Pa ESP shall be considered (Operating voltage 415 |
| scope lies with the client or cable length is to be considered by the Bidder. Adani 1 23 clause 7.1.4 (f) The grade of stainless steel mentioned in the tender documents is according to BS standards. Can the bidder provide the equivalent Indian Standard grade steel. Request the | Adani | 1 | 21 | General | 33 KV cable | per the Single | e Line Diagram (SLD), the 33 kV cables are aluminum conductor type. | KPP Portal under the head HT cables. The cables have been specified as XLPE insulated, Aluminium conductor, flat armored |
| standards. Can the bidder provide the equivalent Indian Standard grade steel. Request the | Adani | 1 | 22 | General | 33 KV cable | | | Cable length to be considered by the bidder |
| | Adani | 1 | 23 | clause 7.1.4 (f) | | standards. Ca | an the bidder provide the equivalent Indian Standard grade steel. Request the | Technical specifications to be followed. |

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|--------|----|----|--------------------------------|---------------------------------------|--|---|
| Adani | 1 | 24 | Clause 7.2.5 | (4.a. HT power cable) | The tender documents mention both PVC and XLPE insulation for 11 kV cables and 1.1 kV | XLPE insulation to be considered |
| | | | | & (5.a. LT power | cables; however, under the general construction section, only XLPE insulated cables are | |
| | | | | cable) | specified. Request the Authority to clarify this deviation and confirm that the cables to be supplied should strictly have XLPE insulation or pvc insulation. | |
| Adani | | 25 | V-1 24 70 | UPS - 30 min backup | | Version diseased DLC / CCADA southern and find thousand southing LUDC |
| Adam | | 25 | Volume 3A - pg-79 | capacity for SCADA | Request the Authority to confirm that indicated PLC / SCADA system are fed through critical UPS power as per Cl. 7.2.10 of the document. | Yes, indicated PLC/ SCADA system are fed through critical UPS power as pwer Clause 7.2.10 of the document |
| | | | | system | critical of 5 power as per cl. 7.2.10 of the document. | power as pwer clause 7.2.10 or the document |
| Adani | 1 | 26 | Volume 3A - pg-263 | 11 KV GIS panel (For | Following configuration of DG panel does not match with the Main Electrical Schematic in | SLD to be considered for panel configuration |
| 7.00 | | | , stame 57. pg 200 | DG System) | Volume 4. Request the Authority to confirm whether the bidder shall be considering the | and to be considered for pariet configuration. |
| | | | | | SLD for panel configurations. | |
| Adani | 1 | 27 | Volume 3A - pg-284 | 33/11 KV Transformer - | Boltless core design is specifically for one OEM. Request the Authority to remove this | Tender conditions prevail |
| | | | | b. Core | stringent condition. | |
| Adani | 1 | 28 | Volume 3A - Table 6 | Datasheet of 33/11 KV | Transformers with Natural Ester Oil have KNAN type cooling. Request the Authority to | Tender conditions prevail |
| | | | | Transformer - Cooling | modify ONAN to KNAN. | |
| | | | | ONAN | | |
| Adani | 1 | 29 | Clause 7.2.10 - UPS Emergency | Lighting UPS for 120 | Kindly confirm if Lighting UPS supplies power to only lighting circuits or to safety critical | Lighting UPS supplies power to only lighting circuits |
| | | | power Supply | minutes and Critical power UPS for 30 | systems like TICS, SCADA & communications system. The Bidder requests the Authority to clarify the load and equipment connected with the Critical power UPS at portal. | |
| | | | | minutes | ctarry the toad and equipment connected with the critical power or 3 at portal. | |
| Adani | 1 | 30 | Clause 7.2.10 | 3. Inverter Battery | Request the Authority to clarify on the battery backup required. It is 120 mins and 30 | Consider as per part-2 |
| Addill | Ι' | 30 | ctause 7.2.10 | Bank - battery capacity | minutes as indicated in part 2 and 60 minutes as indicated in part-3. | Consider as per part 2 |
| | | | | for at least 60 minutes | Timetes as included in part 2 and 65 minutes as included in part 57 | |
| | | | | | | |
| Adani | 1 | 31 | Clause 7.2.12 | j. Wiring - a single | Request the Authority to clarify if 144 core (12x12) fiber optic cable is used for all the | Concessionaire may optimise as per their design |
| | | | | mode fiber cable (A- | systems (CCTV, PA, emergency phone, TICS, traffic management system) within the tunne | · · · · · · · · · · · · · · · · · · · |
| | | | | DF(ZN)2Y 12x12 | This will have multiple terminations of each core which leads to attenuation of the signal. | |
| | | | | E9/125) | Recommendation of using separate optical fiber cable (of lower fiber count) for SCADA | |
| | | | | | system and communication system. | |
| Adani | 1 | 32 | Clause 7.2.16 | 4. Emergency call | Request the Authority to kindly clarify the difference as both these units consist of similar | There is no difference between the emergency call station and |
| | | | | station 5. Emergency | configurations, i.e. microphone, speaker and punch button to initiate call. | emergency telephone |
| | | | | telephone | | |
| Adani | 1 | 33 | General | | As per the DPR design, an intersection connecting east-west roads with the road tunnels a | |
| | | | | | Palace Ground via in total 4 ramps (Entry Ramp-04, Exit Ramp-06, Exit Ramp-05, and Entry Ramp-03) is proposed leading to a complex underground structure. Preliminary | Corrigendum 6. |
| | | | | | investigations show that at this location very unfavourable underground conditions (mainly | The GIR report along with borehole details are provided to bidders |
| | | | | | silty sand or sandy silt) are to be expected to depths below road tunnel. In this regard, it | , , , |
| | | | | | noted that the information provided along with the RFP (DPR, etc) is completely silent on | assessment. |
| | | | | | the underground conditions in the area of palace ground, the extents / area of this very | |
| | | | | | unfavourable underground feature or on potential construction methods. In particular, but | |
| | | | | | not limited to, sections where ramps excavated in conventional method approach the mai | |
| | | | | | tunnels excavated in continuous method very slim "pillars" remain between the tunnels | |
| | | | | | which will require pre-treatment / strengthening. In this regard, the tender documents or DPR are also completely silent about suitable methods of pre-treatment strengthening, e. | |
| | | | | | lab and field test (e.g. ability to successfully grout the silt / sand matrix). The overall | · |
| | | | | | critical situation at this location is further aggravated by very limited Right of Way and | |
| | | | | | existing structures / buildings on the ground surface, i.e. severe risk of damage due to | |
| | | | | | settlements in case of non-strengthening of ground. The structures and limited Right Of | |
| | | | | | Way also do not allow pre-treatment / strengthening from above ground. It is noted that | |
| | | | | | due to the unavailability of a comprehensive Geological Reference Model and Geological L | • |
| | | | | | section of the tunnel alignments as required by IRC standards, in the limited timeframe of | |
| | | | | | construction bid preparation, it is not possible for potential Concessionaires to carry out a full ground investigation in the extent required to assess the extents and nature of critical | |
| | | | | | underground conditions for such an underground intersection in an urban environment, in | |
| | | | | | particular under the light of Clause 8.1.1 of the Concession Agreement. At least minimum | |
| | | | | | information on indicative extent of the critical area, potential construction methods / pre | |
| | | | | | treatment methods and sufficient Right of Way must be provided as part of the DPR. The | |
| | | | | | layout of the intersection as per the DPR appears not constructible, at least with | |
| Adani | 1 | 34 | Clause 7.2.16 | 8. Desktop call stations | Request the Authority to kindly clarify the difference as both these units are located at | There is no difference between the desktop call stations and the |
| | | | | 10. Main Telephone | control centers / operator and indicate similar functionality. | main telephone apparatus (Ip telephones) |
| | | | | Apparatus (Ip | | |
| | | | | Telephones) | | |
| Adani | 2 | 1 | Cl 8.3.1 Vol 5 DPR Main Report | Volume II B | Volume-II B, as mentioned in the DPR, is missing. Kindly provide the same. | Refer Volume II B Structure Design Report uploaded on KPP portal |
| | | | | | | increi votuine ii b structure besign report uptoaueu on ree portat |
| Adani | 2 | 2 | General | Land Plan Drawings | Request Authority to share the Land Plan Drawings | Since the Land Acquisition Plan (LAP) is the responsibility of the |
| | | | | | | Authority, LAP will be shared only with the successful bidder |
| Adami | 2 | 12 | Company | Diland III | | , |
| Adani | 2 | 3 | General | Dilapidation report | Request Authority to provide the dilapidation report | Dilapidation report survey is to be assessed by the concessionaire |
| 1 | 1 | 1 | 1 | 1 | I control of the cont | independently |

| 12 | 1.4 | | | | |
|----|---------------------------------------|--|--|---|--|
| 2 | 4 | Cl 3.11.7 Schedule-D Vol 3A | The cover mentioned for design is 40mm. | Kindly confirm whether this cover is valid for all faces of elementsor this needs to be changed for soil face. Also please confirmwhether the same cover needs to be taken for strength andserviceability check or there shall be different cover for ULS and SLS cases. | Tender conditions prevail |
| 2 | 5 | Tender Drawings | Shaft drawing | It is understood that there should be various services in the shaft like power supply rooms, etc. Kindly provide the plan drawing ofservice level in the shaft and also specify the loading to beconsidered for each type of room to be taken in design. | The concessionare has to independently develop GAD of Services and shaft drawings as per relevant standards. |
| 2 | 6 | Schedule D, Vol 3A | | Kindly provide the seismic(racking) loads to be considered in thedesign of underground structures | Seismic design and analysis of underground structures shall be followed as per Hashash reference paper |
| 2 | 7 | Tender Drawings | | Kindly confirm the area to be covered under bus stand, auto/taxistand for construction. Also request the Authority to providestructural drawings for the same. | The concessionare has to independently develop GADs, structural drawings for bus stand, auto/ taxi stand as per relevant standards. |
| 2 | 8 | General | | Kindly confirm that there is any provision of muck processing facilities to re-use the muck that is not directly in usable form. | No, there is no provision in the current tender for muck processing facilities |
| 2 | 9 | General | | Kindly provide the detailed load combinations to be considered indesign or it can be considered as per IS-456.Request the Authority to kindly confirm. | The load combinations are to be taken as per relevant standards |
| 2 | 10 | Tender Drawings | Structural Dimensions | Kindly confirm whether the structural dimensions shown are indicative and can be modified as per contractor's design, maintaining the internal clearances as mentioned in the tender drawing. | Tender conditions prevail |
| 2 | 11 | Cl 1.6.1 Vol 5 DPR Main Report | Double Decker Flyover | The under-construction flyover seems to be very far away from the silk board shaft and the project termination point. Kindly provide the exact coordinates of the flyover to check the ambiguity as it ismentioned in the tender document that there is infringement with the double decker flyover. | Tender conditions prevail |
| 2 | 12 | General | Land for Muck Disposal | It is understood that no land shall be provided by the governmentfor muck disposal, however if land is available, it shall be providedon lease basis to the contractor. Kindly clarify whether the cost has been added in the estimate if in case no land is provided bythe employer and the contractor has to make arrangements on itsown. | Tender conditions prevail |
| 2 | 13 | GIR Appendix-B | | Types of tests performed for shear strength parameters of soilshall be mentioned along with developed graphs (if any). Request the Authority to provide the same. | GIR is provided for reference; the concessionare shall conduct the assessment independently |
| 2 | 14 | GIR | Bore hole Report | Modulus of elasticity values presented for rock are specified athigher depth i.e. near termination of boreholes only. These can befurnished at intermediate depths as well. Currently, bore hole -BH 03 is only representing it.Request the Authority to furnish the same at intermediate depthsas well. | GIR is provided for reference; the concessionare shall conduct the assessment independently |
| 2 | 15 | Section 2.2.1 -GIR | | Borehole excavation diameter for soil is mentioned as 100mm and wherever rock strata is encountered it is changed to NX size (76mm). Whereas the test result shows NX size core for both soil & rock. Request the Authority to kindly check and clarify the same. | The statement in GIR is correct |
| 2 | 16 | GIR | Bore hole Report | GIR is provided for 2 parts, first investigation is done for 10 BH's & Part B details about investigation of 8 no. of BH's. The mentioned chainages do not match as per Borehole numbering. Request the Authority to kindly provide borehole elevations also in tables related to BH details. | GIR is provided for reference; the concessionare shall conduct the assessment independently |
| 2 | 17 | GIR | Borehole Location Plan | Borehole location plan (Figure-2 is not readable) and geological section is not available. Request the Authority to kindly furnish the details along with AutoCAD file (If available). | All relevant details including geological sections are provided with the GIR as annexure |
| 2 | 18 | GIR | Bore hole Report | Point load index testing is shown for only 2 boreholes and correlated value of UCS is far lower than values mentioned from testing of mentioned boreholes. Request the Authority to check and kindly confirm. | GIR is provided for reference; the concessionare shall conduct the assessment independently |
| 2 | | | | details along with graphs for shear strength parameters of rock. | GIR is provided for reference; the concessionare shall conduct the assessment independently |
| 2 | | | | with pressure meter tests. | GIR is provided for reference; the concessionare shall conduct the assessment independently |
| 2 | 21 | GIR | | Spacing for Array C in cut & cover instruments seems to be on lower side. It can be increased to 500m instead of 300m. Request the Authority to confirm. | GIR is provided for reference; the concessionare shall conduct the assessment independently |
| 2 | 22 | Page 482 of Technical Schedules | | As per document, fire pump head is around 35 bars, but as per NFPA 14 maximum head inside fire mains shall not exceed 28 bars. Request the Authority to clarify the same and confirm the location of pump houses. Also request the Authority to confirm the requirement for Gas suppression systems for electrical substations as the schedule doesn't talk about the same. | The fire pump are rated with 35 bar pressure capacity, however, the operating pressure is considered as 28 bar maximum as mentioned in the NFPA 14. The pump room of the size of 2m X 2m X 2m is proposed in the design. It is located inside the shaft and below the water tank, close to the tunnel entry locations. Please refer the drawings from the page number 129-132 from documeunt "05. Volume 4 Drawings Package 1 Signed" for pump room positioning details. In the present design, the ABC powder fire extinguishers are proposed for tunnel sections and electrical substations. Gas suppression system is not considered as the substation equipments are less in number. |
| | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 2 7 2 8 2 9 2 10 2 11 2 11 2 12 2 13 2 14 2 15 2 16 2 17 2 18 2 19 2 20 2 21 | 2 6 Schedule D, Vol 3A 2 7 Tender Drawings 2 8 General 2 9 General 2 10 Tender Drawings 2 11 CL 1.6.1 Vol 5 DPR Main Report 2 12 General 2 13 GIR Appendix-B 2 14 GIR 2 15 Section 2.2.1 -GIR 2 16 GIR 2 17 GIR 2 18 GIR 2 19 GIR 2 19 GIR 2 19 GIR 2 19 GIR | 2 5 Tender Drawings Shaft drawing | Stephan and environments of the control of the cont |

| Adani | 2 | 23 | Page 146 -Drawings | Ventilation | stage. The bidder is not able to find ventilation philosophy; technical details of axial fans or details of any ventilation sectors being considered during DPR phase. Request the | Yes, as mentioned, the whole tunnel is ventilated by fully transverse ventilation, and the ramp sections shall be ventilated longitudinally using jet fans. The jet fans act as a booster to maintain the uniform flow inside the whole section. The ventilation fresh air entry and exhaust ducts are located in each shafts in opposite sides. The fresh air ducts are of the size of 25 m² while exhaust air ducts are of the size of 30 m². Please refer page numbers from 130 to 132 from the document "05. Volume 4 Drawings Package 1" for their schematic and positioning details. For the transverse ventilation system design, four main sectors are considerd, each between two shafts. They are of length of 3.6 km, 3.6 km, 3.8 km and 3.3 km, from hebbal to silk board direction. Each sector is divided into two equidistance blocks. Hence, there are total 8 blocks considered in ventilation design calculations. For a given sector, one block exchanges the air flow with shaft connected to the one end of the sector and other block exchanges the air with another shaft connected to other end of the sector. The axial fans with capacity 180 cms & 2000 Pa ESP shall be considered (Operating voltage 415 V, 3-phase 50Hz rating, 8 fans per shaft). |
|-------|---|----|---|--|---|--|
| Adani | 2 | 24 | General | 33 KV cable | There are no specifications mentioned anywhere for 33 KV cables in the documents, but as per the Single Line Diagram (SLD), the 33 kV cables are aluminum conductor type. Therefore, the bidder is considering 33 kV cables as per the drawings only. Kindly confirm. | The cables have been specified as XLPE insulated, Aluminium conductor, flat armored with flame proof insulation |
| Adani | 2 | 25 | General | 33 KV cable | Kindly confirm the scope of incoming 33 KV cable from SEB to the portal substations. Is this scope lies with the client or cable length is to be considered by the Bidder. | Cable length to be considered by the bidder |
| Adani | 2 | 26 | clause 7.1.4 (f) | | The grade of stainless steel mentioned in the tender documents is according to BS standards. Can the bidder provide the equivalent Indian Standard grade steel. Request the Authority to kindly confirm. | Technical specifications to be followed |
| Adani | 2 | 27 | Clause 7.2.5 | (4.a. HT power cable) & (5.a. LT power cable) | The tender documents mention both PVC and XLPE insulation for 11 kV cables and 1.1 kV cables; however, under the general construction section, only XLPE insulated cables are specified. Request the Authority to clarify this deviation and confirm that the cables to be supplied should strictly have XLPE insulation or pvc insulation. | XLPE insulation to be considered |
| Adani | 2 | 28 | Volume 3A - pg-79 | UPS - 30 min backup capacity for SCADA system | Request the Authority to confirm that indicated PLC / SCADA system are fed through critical UPS power as per Cl. 7.2.10 of the document. | Yes, indicated PLC/ SCADA system are fed through critical UPS power as pwer Clause 7.2.10 of the document |
| Adani | 2 | 29 | Volume 3A - pg-263 | 11 KV GIS panel (For DG System) | Following configuration of DG panel does not match with the Main Electrical Schematic in Volume 4. Request the Authority to confirm whether the bidder shall be considering the SLD for panel configurations. | SLD to be considered for panel configuration |
| Adani | 2 | 30 | Volume 3A - pg-284 | 33/11 KV Transformer - b. Core | Boltless core design is specifically for one OEM. Request the Authority to remove this stringent condition. | Tender conditions prevail |
| Adani | 2 | 31 | Volume 3A - Table 6 | Datasheet of 33/11 KV Transformer - Cooling ONAN | Transformers with Natural Ester Oil have KNAN type cooling. Request the Authority to modify ONAN to KNAN. | Tender conditions prevail |
| Adani | 2 | 32 | Clause 7.2.10 - UPS Emergency power Supply | Lighting UPS for 120 minutes and Critical power UPS for 30 minutes | Kindly confirm if Lighting UPS supplies power to only lighting circuits or to safety critical systems like TICS, SCADA & communications system. The Bidder requests the Authority to clarify the load and equipment connected with the Critical power UPS at portal. | Lighting UPS supplies power to only lighting circuits |
| Adani | 2 | 33 | Clause 7.2.10 | 3. Inverter Battery Bank - battery capacity for at least 60 minutes | Request the Authority to clarify on the battery backup required. It is 120 mins and 30 minutes as indicated in part 2 and 60 minutes as indicated in part-3. | Consider as per part-2 |
| Adani | 2 | 34 | Clause 7.2.12 | j. Wiring - a single mode fiber cable (A- DF(ZN)2Y 12x12 E9/125) | Request the Authority to clarify if 144 core (12x12) fiber optic cable is used for all the systems (CCTV, PA, emergency phone, TICS, traffic management system) within the tunnel. This will have multiple terminations of each core which leads to attenuation of the signal. Recommendation of using separate optical fiber cable (of lower fiber count) for SCADA system and communication system. | Concessionaire may optimise as per their design |
| Adani | 2 | 35 | Clause 7.2.16 | 4. Emergency call station 5. Emergency telephone | Request the Authority to kindly clarify the difference as both these units consist of similar configurations, i.e. microphone, speaker and punch button to initiate call. | There is no difference between the emergency call station and emergency telephone |
| Adani | 2 | 36 | Clause 7.2.16 | 8. Desktop call stations 10. Main Telephone Apparatus (Ip Telephones) | Request the Authority to kindly clarify the difference as both these units are located at control centers / operator and indicate similar functionality. | There is no difference between the desktop call stations and the main telephone apparatus (Ip telephones) |

L&T

| Concessionare | Package | Sr. No. | Clause No. | Document | Details | Query Degreest for extension of hid submission data | Clarification/Amendment if any |
|-----------------------|---------|---------|---------------------------------------|---|------------------|---|--|
| <u>L&T</u> L&T | 1&2 | 1 | | Volume-4 Drawings Appendix-B-IV | <u> </u> | Request for extension of bid submission date Referring to the tendor drawings, Type-1 and Type-2 DGs are indicated within the ventilation | Refer Corrigendum 7 |
| Lai | ' | | | Mechanical Electrical & Plumbing | - | shaft area of the substation. The bidder, understands that DG sets are located in ground floor | res, the bidder's dilderstanding is correct |
| | | | | Engineering / | | of the intermodal hub area for safe operation. Kindly confirm Bidder's understanding. | |
| | | | | DG Building Type-1/BBMP-FM-013 | | of the intermodal hab area for saire operation. Mindly commit bladers anderstanding. | |
| L&T | 1 | 2 | | Appendix-B-I | - | As per the drawing and equipment list, item Sl. No. 18 specifies that the 150mm cable tray is | 33KV cables are also routed through the utility duct. |
| | | | | Typical Cross section Package-1 (TBM | | designated for 33kV system cables within the tunnel and utility box. However, according to | Refer to Electrical design report clause no 2.4.3.3 |
| | | | | Tunnel) | | the tender design, 33kV cables are not routed through the tunnel or utility box—only 11kV | under the head of Cables inside the tunnels |
| | | | | RC/1640/HO/HBT/TU/DWG/TCS/01/R0 | | cables are routed via the tunnel. | |
| | | | | | | Kindly confirm whether this cable tray space can be considered spare for future use or | |
| | | | | | | allocated for the 11kV system | |
| L&T | 1 | 3 | 1.1 The significant parameters of the | Technical Schedules to concession | Pg. 51 of 505 | As per the project specifications, a total of 10 Nos. Cross Passage Electrical Substations are | For actual numbers, please refer table no. 6 and |
| | | | l e | Agreement (Schedules A to D) | 3, 0, 0, 0, 0, 0 | mentioned. However, this quantity is not clearly reflected in the BBMP Alignment Layout | figure 4 of the electrical design report for cross |
| | | | | Volume -3A | | with S/Sn (Drawing No. BBMP-EM-001-Rev-A). | passage electrical substation location and chainages |
| | | | | | | We request you to kindly confirm the actual quantity and locations of Electrical Substations | |
| | | | | | | to be considered | |
| L&T | 1 | 4 | l e | Volume-4 Drawings Appendix-B-IV | | , , , | Refer Table-1 of the electrical design report for the |
| | | | | Mechanical Electrical & Plumbing | | electrical loads related to Fire Fighting, Tunnel Drainage, Axial fans and Fuel Transfer | load break up. All these needs to be considered by |
| | | | | Engineering | | | bidders. For water mist seperate distribution |
| | | | | | | yes, please confirm whether a separate transformer is required to be provided for these | transformers to be considered by bidders. |
| | | | | | | loads, or increase the qtys/capacity of the teansformer and to be fed from the substation | |
| | | | | | | infrastructure. | |
| L&T | 1 | 5 | 3.5.3 Fire Survival Cables/Control | Volume-II C Electrical Design Report | Pg. 121 of 258 | As per the Electrical Design Report, EPR-insulated cables have been specified for 1. kV grade | Please refer to the details as per RFP |
| | | | Cables. | | | applications. Typically, EPR insulation is used in environments requiring high heat resistance, | |
| | | | Table 16: Technical Particulars of | | | flexibility, chemical resistance, mechanical durability, and radiation tolerance. However, | |
| | | | Fire Survival Cable | | | XLPE-insulated cables offer superior performance in terms of electrical, mechanical, and | |
| | | | | | | thermal properties, and are fully capable of meeting the functional requirements of the | |
| | | | | | | project. | |
| | | | | | | Accordingly, the Bidder considering use of XLPE-insulated cables for the tunnel application. | |
| | | | | | | Kindly confirm acceptance. | |
| L&T | 1 | 6 | Electrical Schematic for substation | Volume-4 Drawings Appendix-B-IV | | As per the provided drawing (BBMP-EM-012), the 33kV substation building is shown to be | All grid stations are located at the ground floor level |
| | | | l e | Mechanical Electrical & Plumbing | | located on the ventilation substation 1,2,3,4,5. Kindly confirm on which floor level the | of the ventilation stations |
| | | | | Engineering | | 33/11kV, 5, 8, 10 MVA oil-type transformer will be installed within the ventilation substation | |
| | | | | | | structure. Considering the safety, local statutory guidelines and approval it is recommended | |
| | | | | | | to keep the 33kv substation in the above ground. Kindly confirm. | |
| LCT | 4 | 7 | | Values V sais Depart with assessmen | | | This is a want of the detailed desire and will be want |
| L&T | 1 | ′ | | Volume - V main Report with annexure | | Upon reviewing the tender drawings, we have noted that there is no specification and detailed information provided for the EV (Electric Vehicle) station. Kindly provide the EV | This is a part of the detailed design and will be part of the bidder's scope |
| | | | | | | station requirements/specifications to enable us to proceed with the necessary design, BOM | of the blader's scope |
| | | | | | | Prenaration. | |
| L&T | 1 | 8 | BBMP-EM-015 | Volume - 4 Drawings Package 1 Signed | - | As per tender specification, Bidder understand that the Control Rooms (VS2 & VS4) in | The bidders of the respective packages will need to |
| | | | Tunnel Automation System SCADA | | | Packages 1 & 2 are to be integrated. Kindly confirm which package contractor is responsible | work in close coordination |
| | | | System Architecture | | | for this integration. | |
| L&T | 1 | 9 | a. Global Positioning System (GPS) / | Volume 3A | 84/505 | We understand that the Toll Management System is a standalone system applicable to both | Each Concessionare has to provide own tolling |
| | | | Global Navigation Satellite System | Annexure - I, (Schedule-C) | | packages. Kindly confirm which package contractor is responsible for the design, supply, | arrangements and toll fee shall be charged on |
| | | | (GNSS)-Based Tolling | PROJECT FACILITIES | | installation, testing, commissioning, and integration of the Toll Collection and Management | distance travelled basis. However, the concessionare |
| | | | | | | System. | shall interface with each other. |
| L&T | 1 | 10 | 8.2.6 Sprinkler system | Volume 3A | 470/505 | As per the referred clause, the specified fixed fire suppression system for the tunnel is the | Yes, as mentioned in the referred clause, the |
| | | | | BBMP-EM-002 - Main Electrical Schematic | | | traditional sprinkler system is proposed for fire |
| | | | | | | system. | suppression. The referenced line diagram is also |
| | | | | | | | detailed based on the piping network requirement |
| | | | | | | Kindly clarify the type of fixed fire suppression system (i.e., Sprinkler/High Pressure Water | and sprinkler bulb positioning. We agree to the point |
| | | | | | | Mist System/ Low Pressure water mist system) to be envisaged for the tunnel. | that, the same arrangement is usually used in the |
| | | | | | | | mist system. However, the water release mechanism |
| | | | | | | | and equipments are different. |
| | | | | | | | |
| L&T | 1 | 11 | - | BBMP-EM-013 DG.BUILDING TYPE- 1&2 | - | Bidder understands that the diesel generators and bulk storage tank will be located at ground | |
| | | | | VENTILATION SUB-STATIONLAYOUT - | | | will be located at the ground level of VSS-1,2 |
| | | | | 1,2,3,4 & 5 | | | buildings |
| | | | | | | | |
| L&T | 1 | 12 | 8.1.5. Ventilation system types - 9. | VOLUME -3 A | 467 | It is mentioned by Employer that "Traditional jet fans shall be positioned at every 115 m." | Yes, it is confirmed that the traditional jet fans shall |
| | | | Upleaded Allignment as per 1977 | | | As per Bidder understanding, 90000 cmh and 500 Pa ESP will be placed every 115 m | be positioned at every 115 m distance throughout the |
| | | | Modified Alignment (as per Addendum | Section 8 | | throughout the length of Ramps C&C and NATM inlet & exit ramps. | length of Ramps C&C and NATM inlet & exit ramps. |
| | | l | | | | | |
| | | | | TUNNEL VENTILATION AND FIRE | | | |
| | | | | TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | | Employer to confirm | |

| L&T | 1 | 13 | Fp | VOLUME -3 A Section 8 TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | 468 | There is no mention of TVS Axial Supply & Smoke Exhaust Fans. Since it is fully Transverse ventilation system, bidder understands that; 1. Axial Fans are present inside the shafts 2. Each shaft has 8 nos of Axial Fans (180 cms & 2000 Pa ESP each) (all working) Employer to please confirm | For the transverse ventilation 1.Yes, axial Fans are present inside the shafts 2. Each shaft has 8 nos of Axial Fans (180 cms & 2000 Pa ESP each) . However, 6 are required to be in working mode and 2 can be considered for backup. The maximum fresh air requirement will be around 400 cms (out of all the sections) and exhust rate will be around 500 cms. |
|-----|---|----|---|--|---------------------------------|---|---|
| L&T | 1 | 14 | General | VOLUME -3 A Section 8 TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | #VALUE! | Kindly confirm the Bidder's understanding of ventilation and smoke extractions cases in tunnel. If fire occurs at any Ramps, Jet Fan will push the fire towards portal or towards main tunnel depending on the traffic direction. The goal is not to push smoke upstream of the traffic. The TVF in shaft will provide necessary flow required. Case 1: Fire in Entry Ramp 2 2# of TVF on LHS of shaft 1 (connecting red tube) will exhaust the smoke. Jet Fans in Entry ramp will assist the smoke to reach main TBM from where the TVS in shaft will take over. Case 2: Fire in Exit Ramp 7 2# of TVF on LHS of shaft 1 (connecting blue tube) will be in Supply mode to provide enough air at the ramp to TBM junction. Jet Fans in Exit ramp will assist the smoke to exit through portal. | The traffic direction is not considered for deciding the strategy on ventilation and smoke extraction for the inlet and exit ramps. The smoke will be extracted either from the main TBM or from the open end of the ramps, based on the location of the fire. The smoke will be directed to the closest possible location amongst the above mentioned one. The traffic direction will be taken care only for the main tunnel sections for smoke extraction. Kindly refer section 1.10 of the document Volume II D: Ventilation design report for more details. |
| L&T | 1 | 15 | 8.3. Safe evacuation during emergency operation | VOLUME -3 A Section 8 TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | 473 | It is mentioned that "The Cross passages shall be placed at every 500 m for the safe evacuation of the passengers in the emergency event". However the ramps are not having any safe egress. Below ramps are the highest length in both packages. Entry Ramp 4 - 1945 m - Package 1 Entry Ramp 6 - 1783 m - Package 2 Bidder suggests to have an Evacuation shaft every 500 m along the length of the Ramps for safe egress. Employer to please confirm on the placement of evacuation shaft every 500 m along the length of the ramp. | The ventilation section lengths of the Entry Ramp 4 and 6 are around 1.6 km. The one end of these are open while other is connected to the main tunnel section. The maximum distance required to be recahed during evacuation is around 800 m, therefore safe egress is not considered for these ramps . Additionally, these ramps allow PCUs only with two lanes and are very well equiped with the FFS. These conditions are expected to be sufficient for the safe evacuations and no safe egress are required. |
| L&T | 1 | 16 | #VALUE! | Plan and Profile Drawings - Shaft at Hebbal | RC/1640/HO/HBT/TU/DWG/P&P/01/R0 | The proposed TBM tunnel alignment may interfere with the piles for the ongoing elevated metro project piers before hebbal shaft. Please clarify | Alignment has been modified post the consideration of metro piers |
| L&T | 1 | 17 | #VALUE! | Plan and Profile Drawings - Shaft at Hebbal | RC/1640/HO/HBT/TU/DWG/P&P/01/R0 | As per addendum-3, alignment before hebbal shaft is modified with additional nala diversion. Please provide new nala diversion structure details. | The nala diversion design shall be done by the concessionare independently keeping the cross-sectional elements the same as upstream and down stream nala specifications |
| L&T | 1 | 18 | Operated Alignment as per 1979 | Plan and Profile Drawings - Shaft at Hebbal | RC/1640/HO/HBT/TU/DWG/P&P/01/R0 | As per addendum-3, please confirm whether it is mandatory to follow the modified alignment shown in the addendum-3 or it is just an alternative option. | Yes, it is mandatory to follow the modified alignment |
| L&T | 2 | 1 | What Report to an Albania | Appendix-B-IV Mechanical Electrical & Plumbing Engineering/ DG Building Type-1/BBMP-EM-013 | - | Referring to the tendor drawings, Type-1 and Type-2 DGs are indicated within the ventilation shaft area of the substation. The bidder, understands that DG sets are located in ground floor of the intermodal hub area for safe operation. Kindly confirm Bidder's understanding. | |
| L&T | 2 | 2 | | Appendix-B-I Typical Cross section Package-1 (TBM Tunnel) RC/1640/HO/HBT/TU/DWG/TCS/01/R0 | - | As per the drawing and equipment list, item Sl. No. 18 specifies that the 150mm cable tray is designated for 33kV system cables within the tunnel and utility box. However, according to the tender design, 33kV cables are not routed through the tunnel or utility box—only 11kV cables are routed via the tunnel. Kindly confirm whether this cable tray space can be considered spare for future use or allocated for the 11kV system | 33KV cables are also routed through the utility duct. Refer to Electrical design report clause no 2.4.3.3 under the head of Cables inside the tunnels. |
| L&T | 2 | 3 | 1.1 The significant parameters of the scope of the work | Technical Schedules to concession Agreement (Schedules A to D) Volume -3A | Pg. 51 of 505 | As per the project specifications, a total of 8 Nos. Cross Passage Electrical Substations are mentioned. However, this quantity is not clearly reflected in the BBMP Alignment Layout with S/Sn (Drawing No. BBMP-EM-001-Rev-A). We request you to kindly confirm the actual quantity and locations of Electrical Substations to be considered. | Refer to table 6 and fig 4 of the electrical design report for cross passage electrical substation location and chainages. |
| L&T | 2 | 4 | Electrical Schematic for substation | Volume-4 Drawings Appendix-B-IV Mechanical Electrical & Plumbing Engineering | | The provided schematic (Drawing No. BBMP-EM-002 to 009-Rev-A) does not include the electrical loads related to Fire Fighting, Tunnel Drainage, Axial fans and Fuel Transfer Pumps. the power supplies to these systems within the Contractor's scope of work or not. if yes, please confirm whether a separate transformer is required to be provided for these loads, or increase the qtys/capacity of the teansformer and to be fed from the substation infrastructure. | Refer to Table-1 of the electrical design report for the load break up. All these needs to be considered by bidders. For water mist seperate distribution transformers to be considered by bidders. |

| L&T | 2 | 5 | 3.5.3 Fire Survival Cables/Control Cables. Table 16: Technical Particulars of Fire Survival Cable | Volume-II C Electrical Design Report | Pg. 121 of 258 | As per the Electrical Design Report, EPR-insulated cables have been specified for 1. kV grade applications. Typically, EPR insulation is used in environments requiring high heat resistance, flexibility, chemical resistance, mechanical durability, and radiation tolerance. However, XLPE-insulated cables offer superior performance in terms of electrical, mechanical, and thermal properties, and are fully capable of meeting the functional requirements of the project. Accordingly, the Bidder considering use of XLPE-insulated cables for the tunnel application. Kindly confirm acceptance. | Please refer to the details as per RFP |
|-----|---|----|--|---|----------------|---|---|
| L&T | 2 | 6 | Electrical Schematic for substation | Volume-4 Drawings Appendix-B-IV Mechanical Electrical & Plumbing Engineering | | As per the provided drawing (BBMP-EM-012), the 33kV substation building is shown to be located on the ventilation substation 1,2,3,4,5. Kindly confirm on which floor level the 33/11kV, 5, 8, 10 MVA oil-type transformer will be installed within the ventilation substation structure. Considering the safety, local statutory guidelines and approval it is recommended to keep the 33kv substation in the above ground. Kindly confirm. | All grid stations are located at ground floor level of the ventilation stations |
| L&T | 2 | 7 | | Volume - V main Report with annexure | | Upon reviewing the tender drawings, we have noted that there is no specification and detailed information provided for the EV (Electric Vehicle) station. Kindly provide the EV station requirements/specifications to enable us to proceed with the necessary design, BOM Preparation. | This is part of detailed design and will be part of the bidder's scope |
| L&T | | 8 | BBMP-EM-015 Tunnel Automation System SCADA System Architecture | Volume - 4 Drawings Package 2 Signed | - | As per tender specification, Bidder understand that the Control Rooms (VS2 & VS4) in Packages 1 & 2 are to be integrated. Kindly confirm which package contractor is responsible for this integration. | The bidders of the respective packages will need to work in close coordination |
| L&T | 2 | 9 | Global Positioning System (GPS) / Global Navigation Satellite System (GNSS)-Based Tolling | Volume 3A Annexure - I, (Schedule-C) PROJECT FACILITIES | 77/518 | packages. Kindly confirm which package contractor is responsible for the design, supply, | Each Concessionare has to provide own tolling arrangements and toll fee shall be charged on distance travelled basis. However, concessionare shall interface with each other. |
| L&T | 2 | 10 | 8.2.6 Sprinkler System | Volume 3A BBMP-EM-002 Main Electrical Schematic | 481/518 | system. | Yes, as mentioned in the referred clause, the traditional sprinkler system is proposed for fire suppression. The referenced line diagram is also detailed based on the piping network requirement and sprinkler bulb positioning. We agree to the point that, the same arrangement is usually used in mist system. However, the water release mechanism and equipments are different. |
| L&T | | 11 | - | BBMP-EM-013 DG.BUILDING TYPE- 1&2 VENTILATION SUB-STATIONLAYOUT - 1,2,3,4 & 5 | - | Bidder understands that the diesel generators and bulk storage tank will be located at ground level of VSS-3,4,5 buildings. Kindly confirm our understanding. | Yes, both the diesel generators and bulk storage tank will be located at the ground level of VSS-1,2 buildings |
| L&T | 2 | 12 | 8.1.5. Ventilation system types - 9. Fan positioning | VOLUME -3 A Section 8 TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | 477 | It is mentioned by Employer that "Traditional jet fans shall be positioned at every 115 m." As per Bidder understanding, 90000 cmh and 500 Pa ESP will be placed every 115 m throughout the tunnel length of C&C and NATM inlet & exit ramps. Employer to please confirm | Yes, it is confirmed that the traditional jet fans shall be positioned at every 115 m distance throughout the length of Ramps C&C and NATM inlet & exit ramps. |
| L&T | 2 | 13 | Figure 8.4: Duct sizing and positioning at the portals | VOLUME -3 A Section 8 TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | 468 | · · | For the transverse ventilation 1.Yes, axial Fans are present inside the shafts 2. Each shaft has 8 nos of Axial Fans (180 cms & 2000 Pa ESP each) . However, 6 are required to be in working mode and 2 can be considered for backup. The maximum fresh air requirement will be around 400 cms (out of all the sections) and exhust rate will be around 500 cms. |
| L&T | 2 | 14 | General | VOLUME -3 A Section 8 TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | #VALUE! | tunnel. If fire occurs at any Ramps, Jet Fan will push the fire towards portal or towards main tunnel depending on the traffic direction. The goal is not to push smoke upstream of the traffic. The TVF in shaft will provide necessary flow required. Case 1: Fire in Entry Ramp 2 2# of TVF on LHS of shaft 1 (connecting red tube) will exhaust the smoke. Jet Fans in Entry ramp will assist the smoke to reach main TBM from where the TVS in shaft will take over. | The traffic direction is not considered for deciding the strategy on ventilation and smoke extraction for the inlet and exit ramps. The smoke will be extracted either from the main TBM or from the open end of the ramps, based on the location of the fire. The smoke will be directed to the closest possible location amongst the above mentioned one. The traffic direction will be taken care only for the main tunnel sections for smoke extraction. Kindly refer section 1.10 of the document Volume II D: Ventilation design report for more details. |

| L&T | 2 | 15 | 8.3. Safe evacuation during emergency operation | VOLUME -3 A Section 8 TUNNEL VENTILATION AND FIRE FIGHTING SYSTEMS - Design Criteria | 473 | It is mentioned that "The Cross passages shall be placed at every 500 m for the safe evacuation of the passengers in the emergency event". However the ramps are not having any safe egress. Below ramps are the highest length in both packages. Entry Ramp 4 - 1945 m - Package 1 Entry Ramp 6 - 1783 m - Package 2 Bidder suggests to have an Evacuation shaft every 500 m along the length of the Ramps for safe egress. Employer to please confirm on the placement of evacuation shaft every 500 m along the length of the ramp. | The ventilation section lengths of the Entry Ramp 4 and 6 are around 1.6 km. The one end of these are open while other is connected to the main tunnel section. The maximum distance required to be recahed during evacuation is around 800 m, therefore safe egress is not considered for these ramps . Additionally, these ramps allow PCUs only with two lanes and are very well equiped with the FFS. These conditions are expected to be sufficient for the safe evacuations and no safe egress are required. |
|-----|-----|----|---|---|-----|---|--|
| L&T | 1&2 | 1 | | General | | Our understanding is that start and end chainages of the main tunnels and entry / exits remain as per tender documents including all addenda and corrigenda. Bidders to absorb any change in tunnel length between these defined chainages from design / functional point of view. Please confirm. | |
| L&T | 1&2 | 2 | | Corrigendum - 6 | | Kindly provide the typical cross-sectional configuration for Ramp-6A, including lane details and structural components. | The Ramp 6 A shall be intermediate lane. Refer TCS and TCS Schedule as Addendum uploaded on KPP Portal |
| L&T | 162 | 3 | | Corrigendum - 6 | | Please clarify the bifurcated length of Ramp-6A, specifying the extent of each construction method Open Ramp, Cut & Cover (C&C), and NATM. Additionally, please share any borehole data obtained during the survey conducted for the newly added Ramp-6A alignment. | The details regarding the extent of each construction method is elaborated and enclosed in Addendum and is self-explanatory |

VISHWA SAMUDRA

| | Package | Sr. No. | Clause No. | Document | Description | Query | Clarification/Amendment if any |
|----------------|---------|---------|---|----------|--|---|---|
| Vishwa Samudra | 1 | 1 | Volume3A , Schedule -B, PDF Page No-51 & Volume-4 PDF Page No: 83 | #VALUE! | 1.1 The significant parameters of the scope of the work involved in the contract. Cross Passage: 10 Nos. (for electrical sub stations). General plan for Electrical Cross Passages. IMAGE | substations has been indicated, while there is no such mention in the Plan & profile regarding Electrical Cross Passages. As Normal Practice in various tunnel projects, the Electrical installations are kept at the Tunnel Portals. Moreover, for a 8.5 Kms tunnel 10 Nos of Substations i.e. @ 850m seems to be very high. As such our Electrical Consultant have recommended placing the Substations | Kindly refer to the electrical design report uploaded on KPP Portal. The placement of substations at cross passages and niches have been strategically proposed based on jet fan requirements. Moreover the total nos of CP-E comprehended by the bidders is wrong. Please refer to table no. 6 and figure 4 of the electrical design report which provides the chainage/location of substations. Kindly note the total nos of CP-E evaluated for 16Km stretch is 9 nos i.e 4 nos in Package-1 and 5 nos in Package-2. |
| Vishwa Samudra | 1 | 2 | Volume-4 PDF Page No: 8 | #VALUE! | Tender Drawing Title: General Arrangement Drawings for Electrical Cross Passage. Location Details CPE:- IMAGE | electrical cross passages in package - 1, (i.e., 4X2 = 8 Nos, General plan of Electrical Cross Passages) mentioned in table. Whereas 10 No's specified in the Schedule - B of 1.1 clause. Hence, the Authority is requested to clarify the contradiction between the schedule - Band volume -4 regarding the Nos of electrical cross passages to be provided. Please Clarify. | It is to clarify, one substation is housed in 2 same size cross passage placed back to back. Also the size of electrical CP is maintained same as vehicular CP to optimize the construction efforts. So substation is 4 in nos. in package-1. Similarly in package-2 it is to clarify that the number of CP-E are 5 nos in back to back configuration as per DPR design (I.e 5x2=10 nos). Concessionaire may optimize the numbers as per their MEP design |
| Vishwa Samudra | 2 | 1 | Volume3A , Schedule -B, PDF Page No-50 & Volume-4 PDF Page No: 77 | #VALUE! | 1.1 The significant parameters of the scope of the work involved in the contract. Cross Passage: 8 Nos. (for electrical sub stations). General plan for Electrical Cross Passages. IMAGE | As Normal Practice in various tunnel projects, the Electrical installations are kept at the Tunnel Portals. Moreover, for a 8 Kms tunnel 8 Nos of Substations i.e. C 1 Km seems to be very high. As such our Electrical Consultant have recommended placing the Substations at Ground level at Intermodal Hubs and 3 Substations are considered Sufficient. The Bidder understands that there is no separate requirement for dedicated electrical cross | Kindly refer to the electrical design report uploaded on KPP Portal. The placement of substations at cross passages and niches have been strategically proposed based on jet fan requirements. Moreover the total nos of CP-E comprehended by the bidders is wrong. Please refer to table no 6 and figure 4 of the electrical design report which provides the chainage/location of substations. Kindly note the total nos of CP-E evaluated for 16Km stretch is 9 nos i.e 4 nos for Package-1 and 5 nos for Package-2. |
| Vishwa Samudra | 2 | 2 | Volume-4 PDF Page No: 77 | #VALUE! | Tender Drawing Title: General Arrangement Drawings for Electrical Cross Passage. Location Details CPE:- IMAGE | The details mentioned at table of location details for CP-E specifies 5 Locations of electrical cross passages in package - 2, 4!e., 5X2 =10 Nos, General plan of Electrical Cross Passages) mentioned in table. Whereas 8 No's specified in the Schedule - B of 1.1 clause | It is to clarify, one substation is housed in 2 same size cross passage placed back to back. Also the size of electrical CP is maintained same as vehicular CP to optimize the construction efforts. So substation is 4 in nos. in package-1. Similarly in package-2 it is to clarify that the number of CP-E are 5 nos in back to back configuration as per DPR design (I.e 5x2=10 nos). Concessionaire may optimize the numbers as per their MEP design |
| Vishwa Samudra | 162 | 1 | 2.2 Eligibility and qualification requirements of the bidder 2.2.3 - EPC contractor with tunneling experience Page 22/ 72 | RFP | 2.2.3 In case a Bidder does not have tunnelling experience, they may produce an MOU with their EPC Contractor to with the requisite credentials to fulfil this condition, which shall certify that if the Bidder is selected, they shall contract the said EPC contractor for the tunnelling works. It is clarified that one EPC contractor shall be allowed to sign an MOU with multiple Bidders and be considered for their tunnelling credentials. Furthermore, in case of any unavoidable reasons if the Selected Bidder wants to change their' EPC Contractor after they are awarded the contract, they must get an approval regarding the same from the Authority, and the credentials of the proposed new EPC contractor satisfy or exceed the requirements set forth in 2.2.2. (AAA). This provision of utilization of the credentials of an EPC contractor (who is not part of the Consortium or JV) on production of an MOU to employ them is limited to Clause 2.2.2 (AAA). O&M Experience: The Bidder shall engage an experienced O&M contractor or hire qualified and trained personnel for operation and maintenance of the Project in conformity with the provisions of the Concession Agreement. | The bidder Meeting the Tunnel experience with an EPC Contractor, is a welcoming step by the Authority to increase participation. However, this is to intimate that, the Subject project alignment passes beneath the city, approx. 40 m below the ground level in hard Rock, under water, and the excavation of the main tunnel is to be done using TBM, Cross passages and approaches using NATM, dedicated Ventilation shaft etc. The work is akin to underwater Marine tunnel projects, and its success depends on he extra ordinary Skill of the EPC Contractor. Keeping in view the above complexities and high importance of the Project, it is understood that, 1. The EPC contractor shall also fulfil all other tender conditions and eligibility criteria as stated in the tender document similar to the bidder, including it's Associate's work experience to fulfil the requirements set forth in 2.2.2. (AAA) 2. The Safety clause brought out vide the Addendum No 1, SI No - 1, Cl. 2.2.1 (g) regarding History of Collapse for the bidders, shall also be applicable for selection of the EPC Contractor. Please consider and confirm | Tender conditions prevail |

| Vishwa Samudra | 1&2 | 2 | Point no. 15, Sl. No. 19 | Amendment Corrigendum 2 | 15. Dumping Sites Undertake extraction, transport & disposal ofmuck, soil, earth. However, the material obtained from tunnel Excavation, if suitable, It may be used by the Concessionaire for refilling and restoration purposes within the Project Tunnel. The excavated material must not be used by the Concessionaire for commercial purposes. | The Bidder understood that the use of excavated material from the Tunnel/ ROW shall not attract any Royalty/ Taxes being a state government project. Please confirm | Tender conditions prevail |
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| Vishwa Samudra | 162 | 1 | Cl. 3. 1. l (A) d PDF Pg. No. 13 | CA Article 3 Grant of Concession | bid Total Concession Value (TCV), the Concession Period shall be extended in increments of one year until the actual toll revenues reaches 90% of the bid TCV. Once the discounted value of actual toll revenues reaches 90% of the bid TCV, the review frequency shall shift to monthly. As soon as the bid TCV is met, the Concession Period shall be terminated immediately. | Traffic during the concession period. Moreover, the TCV will also depend on the O&M expenses of the Tunnel. Hence, it is requested to clarify the Following: 1. The O&M cost to be considered for calculating the TCV by the bidder, since minimum concession period is not mentioned and it is Dynamic. 2. The provision for realizing the additional O&M Charges to the Concessionaire, during the I O years Extended Period 3. In Case still the TCV is not realized in the extended period, then how the Concessionaire will be Compensated the balance unrealized TCV. | Tender conditions prevail |

RVNL

| Concessionare | Package | Sr. No. | Query | Clarification/Amendment if any |
|---------------|---------|---------|--|--------------------------------|
| RVNL | 1&2 | 1 | Request for extension of bid submission date | Refer Corrigendum 7 |

IRB

| Concessionare | Package | Sr.No. | Query | Clarification/Amendment if any |
|---------------|---------|--------|-------|--------------------------------|
| | 1&2 | | | Refer Corrigendum 7 |