

## **PUBLIC CONTRACTS REVIEW BOARD**

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### **Case 1230 – CT 3065/2018 – Proposed Underpass at Santa Lucia/Tarxien Roundabout (Node SA 11) including upgrading and widening of Road (TM)**

The publication date of the call for tenders was the 31<sup>st</sup> March 2018 whilst the closing date of the call for tenders was 5<sup>th</sup> June 2018. The estimated value of the tender (exclusive of VAT) was € 23,298,542.30.

On the 18<sup>th</sup> October 2018, RM Construction Ltd filed an appeal against Infrastructure Malta as Contracting Authority objecting to being disqualified on the grounds that their offer was technically not compliant and the recommendation that the tender be cancelled. A deposit of € 50,000 was paid.

There were six (6) bidders.

On 13<sup>th</sup> November 2018 the Public Contracts Review Board composed of Dr Anthony Cassar as Chairman, Mr Carmel Esposito and Mr Lawrence Ancilleri as members convened a public hearing to discuss the objections.

The attendance for this public hearing was as follows:

#### **Appellants – RM Construction Ltd**

Dr Tonio Cachia	Legal Representative
Mr Alex Bonnici	Representative
Mr Emmanuel Bonnici	Representative
Arch Malcolm Gingell	Representative
Arch Sandra Magro	Representative
Ms Annalise Pace	Representative
Mr Edward Schembri	Representative
Dr Peter Tanner	Representative

#### **Contracting Authority – Infrastructure Malta**

Dr Joseph Camilleri	Legal Representative
Eng Robert Schembri	Chairman Evaluation Committee
Ms Roberta Ciangura	Secretary Evaluation Committee
Mr Henry Attard	Member Evaluation Committee
Arch Kylie Borg Marks	Member Evaluation Committee
Arch Corinne Dimech	Member Evaluation Committee

## Department of Contracts

Dr Franco Agius

Legal Representative

Dr Anthony Cassar, Chairman of the Public Contracts Review Board, welcomed the parties and reviewed the sequence of events in this tender – that is, how the evaluation committee accepted the submissions of RM Construction Ltd (RM) as technically, financially and administratively compliant and recommended the award of the tender to them and how the decision was subsequently overturned following the intervention of the Director of Contracts leading to the disqualification of RM and the cancellation of the tender.

Dr Franco Agius, Legal Representative of the Director of Contracts, stated that, to assist in the evaluation the Contracting Authority engaged a key expert, who identified certain shortcomings in the offer, which the evaluation committee had missed. The Director of Contracts picked up two shortcomings in the technical report – the grade of concrete and the construction of the central wall and referred the matter back to the evaluation committee. The award was withdrawn and the tender cancelled. The decision of the Director of Contracts is final.

Dr Tonio Cachia, Legal Representative for RM Construction Ltd, said that his clients' appeal was based on these two technical points and he therefore proposed that the key technical expert of the Contracting Authority should be the first to give evidence.

Dr Agius advised the Board that this witness was not available to which the Chairman replied that the Board must hear the witnesses at the same sitting and he insisted that the Director of Contracts produces this expert witness.

The sitting was at this stage suspended to enable the Director of Contracts to contact the witness.

On the resumption of the hearing the Chairman stated that a copy of the report drawn up by the expert witness in the evaluation of the tender had been handed to Appellants and he asked this expert to take the witness stand.

Architect Ivan Coleiro (75663M), called as a witness by the Director of Contracts, testified on oath that he was an Architect and Civil Engineer and had acted as a consultant to the evaluation committee.

The Chairman took the witness through the report prepared by him and the latter agreed that designs for the culvert and the underpass deck structure were acceptable, except that there was no evidence to show that the central wall had been designed to cater for traffic impact and that the concrete grade proposed fell short of the code requirements.

Witness continued by saying that at pre-contract stage he had asked for a lot of information as this was a complex project. There were no apparent calculations to support the design of the foundations. The design asked for a central wall to take the impact of traffic but the drawings submitted provided piers for support, and it appeared as if the bidder did not pick up the importance of the wall and the need to cater for traffic impact. For a durability period of 100 years the type of steel used would be the same but the concrete has to be of a higher grade and

thicker to give it the necessary durability and strength. The tender documents very clearly specified the grade of concrete to be used.

In reply to questions from Dr Cachia, witness referred him to page 89 of the tender documents which clearly specified the class and grade of concrete requested. According to witness RM offered concrete grade 25/40 where it was specified as 35/40 – in all instances bidders offered one grade lower than specified – this had financial implications as the higher the grade the costlier it is to produce. Witness confirmed that he had not referred to the Bill of Quantities – he had only worked on the tender specifications. The central wall had been interpreted by RM as a support wall only – their drawings showed only piers which were not designed to take the impact of vehicles and thus did not cater for what the tender had in mind. Witness was referred by Dr Cachia to the tender drawings which indicate a wall 1.2 metre high over and above the vehicle restrain system (VRS).

Dr Peter Tanner called as a witness by RM, made a solemn declaration and testified that he was a Civil Engineer, had a Masters degree from the Swiss Federal Institute and a Doctorate from the University of Madrid. He was a member of a research institute in Spain. He had been involved in the design of the Kappara flyover and in the case of the Santa Lucija project had produced the structural designs for RM. Witness tabled a lengthy document on the fulfilment of the performance requirements of the project with respect to the durability and vehicle impact. According to witness the concrete offered by RM fulfilled all the Euro codes to which he made reference and stated that in all cases, but one, RM had met the Euro requirements. In that one case (the precast walls) they had in fact exceeded the Euro code (C30/37 where C25/30 was asked for). He dealt with the different elements such as durability, density of concrete, environmental conditions and tabled further documents for the different elements indicating that the concrete in RM's offer was all in accordance with Euro standards, if not higher.

Witness continued by stating that there were different possibilities for the construction of the central wall – Appellants' designs had fulfilled the European codes even under the most conservative conditions, as a study of the many drawings submitted would show. This was a tender project not a construction project and it was therefore possible to submit only 6 out of the 56 drawings produced detailing the design of the underpass.

At this stage Architect Sandra Magro intervened to point out that extensive drawings and calculations were submitted in the Method Statements including the construction method of the central wall.

(Dr Agius could not confirm if Architect Coleiro had been given sight of the Method Statements when preparing his report).

Architect Kylie Borg Marks (183783M) called by the Department of Contracts, testified on oath, that she was a Senior Architect at Construction Malta and had both prepared and evaluated in the tender process including preparing drawings, specifications and special conditions. This was the starting point to enable tenderers to prepare their bids. Appendix 1 to 10 of the specifications detailed the grades of concrete required for overground and underground construction - these were minimum requirements. Lower grades do not give the same length of life and

serviceability, besides issues of safety and maintenance. There were financial implications related to the grade of concrete used.

In reply to a question from the Chairman, witness stated that the RM bid fell short of requirements due to the lower grade of concrete offered.

Asked by Dr Cachia how it was that the evaluation committee had first approved the tender, witness stated that it was only after vetting by the Director of Contract that the bid had been declined.

At the end of this testimony there was a lengthy discussion involving all parties why the evaluation committee decision had been overturned at a stage after the tender had been recommended for award, and which matter was a cause of concern to the PCRB.

Eng Robert Schembri (222960M) testified under oath that he was the Chairperson of the evaluation committee, and that Appellant had originally signed a form attesting that their offer was up to specifications. The committee then sent a clarification and it was again confirmed by bidder that their offer was up to specifications and they agreed to award the contract on the 27<sup>th</sup> September 2018. On the 5<sup>th</sup> October an email was received from the Director of Contracts stating that in the view of the structural engineer the offer was inferior. On the strength of this the evaluation committee submitted a further addendum that RM's offer was non-compliant and that the tender should be cancelled.

Questioned by Dr Cachia, witness confirmed that Appellants' BOQ shows a higher grade of concrete than specified.

After hearing all the witnesses, the Chairman said that the Board was still not clear whether the offer was compliant or not due to the divergence of views heard. They will therefore be appointing a structural engineer as an independent technical expert to examine the facts and give a final decision.

He then thanked all the parties for their submissions and declared the hearing closed.

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## **SECOND HEARING**

On the 29<sup>th</sup> January 2019 the Public Contracts Review Board composed of Dr Anthony Cassar as Chairman, Mr Carmel Esposito and Mr Lawrence Ancilleri as members convened a second hearing to consider the report of the structural engineer appointed as an independent technical expert.

The attendance for this public hearing was as follows:

## **Appellants – RM Construction Ltd**

Dr Antoine Cremona	Legal Representative
Dr Clement Mifsud Bonnici	Legal Representative
Mr Emanuel Bonnici	Representative
Arch Dr Pierre Farrugia	Representative
Arch Malcolm Gingell	Representative
Ms Annalise Pace	Representative
Mr Paul Magro	Representative

## **Contracting Authority – Infrastructure Malta**

Dr Joseph Camilleri	Legal Representative
Dr Anthea Galea	Legal Representative
Dr Rachel Powell	Legal Representative
Eng Robert Schembri	Chairperson Evaluation Committee
Mr Henry Attard	Member Evaluation Committee
Arch Kylie Borg Marks	Member Evaluation Committee
Arch Corinne Dimech	Member Evaluation Committee
Arch Ivan Coleiro	Representative

## **Department of Contracts**

Dr Franco Agius	Legal Representative
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Dr Anthony Cassar Chairman of the Public Contracts Review Board welcomed the parties and reminded them that the reason for this second hearing was to consider the report drawn up by the independent expert appointed by the Board.

Dr Joseph Camilleri Legal Representative of Infrastructure Malta raised a procedural point stating that the sole purpose of this hearing was to consider the expert's report. The Appellant had introduced a report drawn by their own expert without the Board's permission and he disagreed that this report should be introduced at the hearing. Both parties had the opportunity to present expert proof at the first hearing and it was not in order for this report to be introduced.

There followed a discussion between the Chairman and the Legal Representatives of both parties as to the admissibility of this report, and after a short adjournment the Chairman ruled that the report presented by Appellants had to be disregarded and removed from the records of the hearing. He then invited the expert witness, Professor Buhagiar, to testify.

Professor Spiridione Buhagiar (143958M) testified on oath that his remit was specifically to verify two statements– namely the type of concrete grade required to ensure a serviceability life of 100 years and the design of the vehicle impact restraint loading as set out in the specifications and to highlight why they were not compliant with the terms of the tender documents.

In reply to questions witness confirmed that he had taken concrete grade C 25/30 as the basis of his assessment. In completing his report he had access to the Bill of Quantities, the tender clarifications, RM Construction Ltd tender documents, the tender dossier and the Method Statement. This latter document made no reference to concrete grade but to the various components which made up the tunnel and the method of construction including details about the requirements for the construction of the retaining walls. He confirmed that concrete grade C 30/37 quoted by Appellant in the BOQ would be compliant with requirements.

Witness then explained the different properties of concrete types;

- XC where there was exposure to the atmosphere with no chemicals involved in the process;
- XD where there was the possibility of chloride attack from water, sea water and de-icing chemicals.

In the case of the retaining walls there was the possibility of chloride leaching from the soil which rested against the structure. In assessing the quality of concrete required one followed the tender specifications not one's own engineering judgement.

Witness re-confirmed that he had access to the BOQ, the Method Statement, drawings and tender documents. In his assessment, items 2.5 and 2.5a do not refer to the retaining walls but to the central wall. Retaining walls are specified in items 3, 4 and 5. He went on to explain that to him this tender was just one big jigsaw – from a technical point of view one would normally start from the structural calculations which stipulated cement grade C 25/30 but the BOQ states grade C 30/37 and is a question of deciding which one to take. With regard to the vehicle restraining system witness explained that EN 1317/2 is a standard set for a containment central wall in the tunnel. With regard to bridges EN 1991/2 is specific to forces in bridges and one has to design for a horizontal force of 1000 Kilonewtons at 1.25 metres above the road or 500 Kilonewtons perpendicular to columns.

In reply to a question from Dr Camilleri witness said grade XD is a class of concrete where one is looking at a chemical attack by chloride. A table for exposure class (table E 1 M) indicates that the minimum grade for XD3 is C 35/45 which is higher than C 30/37 offered. Protection of the retaining walls by a membrane is not practical because membrane does not have a life of 100 years and is therefore likely to fail.

Dr Mifsud Bonnici Legal Representative of RM Construction Ltd stated that there were 2 reasons given for the Appellants' disqualification. The preliminary reasons given were not sufficiently detailed to enable the bidder to decide if there were grounds for appeal. The proof of this insufficiency is that a technical expert had to be appointed apart from a full first hearing which in itself is enough to sustain this point.

The first reason for disqualification as explained by the witness was the requirement of complying with the various grades of concrete – namely XD, XC and XS and in this regard the Appellants offer was compliant and the price tendered was based on this. There was also a request for clarification and the Appellant confirmed that they offered the right grades for the different classes of concrete. Dealing with grade XD, according to BS 8500 this is to be used where corrosion induced by chloride, water containing chloride and de-icing salts are common. This requirement is not proportionate to its value as there is no risk of icing in Malta, and hence no prospect of de-icing salts being used. The technical specifications in Special Structure 1(SS 1) specifies basic design protection against temperature, wind and rain – there is no risk to exposure to de-icing salts and therefore the specifications are not proportionate to the risk and not necessary. Grades XC and XS are sufficient to meet the protection required in Malta. CJEU Case 413/17 - paras 37 and 39 - state that technical specifications should not be too detailed as they restrict competition and if they are not proportionate they should be discarded. The whole object of the exercise is to try and save the tender and not restrict competition.

With regard to the vehicle restraint system, SS1 (page 89 and 106) requires the structural calculations to be presented in the presentational structure calculations in the appendix. Nowhere in this section is the bidder requested to produce the vehicle impact design.

Dr Cremona Legal Representative of RM Construction Ltd stated that there are two specific reasons why he disagrees with Professor Buhagiar's report. It is his submission that witness had access to the report prepared by Appellants' and therefore could tailor his answers accordingly. It is generally understood in the construction industry that grade XD is used against corrosion from de-icing salts. Research shows that soil does not contain chloride. Procurement logic in tenders starts from the tender document and Professor Buhagiar's view is mistaken regarding Appellant's approach to the offer. The concrete grading shown in the BOQ is C 30/37 – this is the primary point of the tender and not the calculations, method statement etc as outlined by the witness. In any case the structural calculations were not asked for.

Dr Camilleri mentioned that the points being made by Appellants new legal representatives were arguments which should have been brought up in the first hearing. There was enough material in the letter of objection to enable Appellant to reply but moreover even if they felt that it was insufficient they had 15 days to contest it and there is no reason to accept this appeal. The requirement regarding concrete grade XD was a contra argument to the claim that it met the tender specifications. What is requested in the tender is what is expected to be delivered; otherwise there are grounds and remedies for contesting or claims against limiting competition.

Dr Franco Agius Legal Representative of the Director of Contracts said that despite the claim by Appellants that they were trying to save the tender there were still shortcomings in the concrete grades offered according to the witness. The structural calculations were indicated in the geometric constraints (pages 104 and 108) and it is clear that the structure must include the vehicle restraints. Page 2 of the technical offer states that the structural calculations in SS 1 are to include the support, roofing and foundations. The Appellant argued that the requirements were

not proportionate – if that is the case then the requirements are obviously wrong and a total re-evaluation and the cancellation of the tender would follow as the logical step.

Dr Cremona referred to Page 2 of the Technical offer which according to him dictates how it should be presented (Page 106 sub para p) but omits the calculations for accidental damage. The structural calculations in section 2.1.1 show a mathematical variable regarding accidental damage which was not asked for.

Dr Mifsud Bonnici said that a comment had been made as to why a pre-contractual remedy had not been used. No two tenders were the same and flexibility must be shown in complicated ones. Efforts must be made to save this tender as cancelling it would distort competition as all bidders' prices were now open to all.

The Chairman said that with all submissions having now been made the hearing was at a close.

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**This Board,**

**having noted this Objection filed by R M Construction Limited, (hereinafter also referred to as the Appellants) on 18 October 2018, refers to the contentions made by the latter with regards to the cancellation of Tender of Reference CT 3065/2018 listed as Case No 1230 in the records of the Public Contracts Review Board and issued by Infrastructure Malta.**

**Appearing for the Appellants:**            **Dr Tonio Cachia (First Hearing)**  
**Dr Antoine Cremona (Second Hearing)**  
**Dr C Mifsud Bonnici (Second Hearing)**

**Appearing for the Contracting Authority: Dr Joseph Camilleri**

**Appearing for the Department of Contracts: Dr Franco Agius**

**Whereby the Appellants contend that:**

- a) their first argument refers to the alleged reasons given by the Contracting Authority for the rejection of their offer, namely, that;**
- i) the type and concrete cover proposed for the underpass, (special structure), does not conform to the standards required for a serviceability life of 100 years;**
  - ii) the central wall forming part of the underpass, (special structure 1) is designed to withstand impact loading as set out in the technical specifications. In this regard, the Appellants insist that their offer satisfies the technical specifications as stipulated in the Tender Document.**
- b) their second contention is that, in view of the fact that their offer is compliant, there is no justifiable reason why the Contracting Authority should cancel the Tender**

**This Board has also noted the Contracting Authority’s “*Reasoned Letter of Reply*” dated 29 October 2018 and also its verbal submissions during the Public Hearings held on 13 November 2018 and 29 January 2019, in that:**

- a) Infrastructure Malta contends that the Appellants, in their offer, proposed concrete of a lower grade than that stipulated in the Tender Document. In this regard, both the concrete grade proposed and the cover considered, fall short of the code and standard requirements requested;**
  
- b) The Contracting Authority also maintains that the Appellants’ offer did not provide the central wall structure to absorb impact loading. In this regard, Infrastructure Malta had no other option but to deem R M Construction Limited’s offer as technically non-compliant;**
  
- c) Infrastructure Malta also maintains that since there were no compliant offers, the tender is to be cancelled.**

**This same Board has also noted the testimony of the following witnesses:**

- 1. Architect Ivan Coleiro duly summoned by the Department of Contracts;**

- 2. Dr Peter Tanner duly summoned by R M Construction Limited;**
- 3. Architect Kylie Borg Marks duly summoned by the Department of Contracts;**
- 4. Engineer Robert Schembri duly summoned by the Public Contracts Review Board;**
- 5. Professor Spiridione Busuttil duly summoned by the Public Contracts Review Board.**

**This same Board has also taken note of the following documents:**

- a) Report on the fulfilment of the performance requirements of Special Structure 1 with respect to durability and vehicle impact submitted by Dr Peter Tanner during his testimony;**
- b) E-Mail Correspondence between Infrastructure Malta and R M Construction Limited;**

**This Board, after having examined the relevant documentation to this Appeal and heard lengthy submissions made by the parties concerned, including the important testimony of the technical witnesses, opines that the issues which deserve due consideration are twofold namely,**

- 1. The grade of concrete offered by R M Construction Limited;**
- 2. The central wall structure.**

**Before considering the merits of this case, this Board acknowledges the fact, that, this appeal involves issues of a highly technical nature in civil engineering works and after having heard testimonies of technical witnesses during the Public Hearing held on 13 November 2018, this Board could not reach a decision which could determine whether the Appellants' offer was technically compliant. In view of such a circumstance, this Board had appointed an independent expert to report his findings and the resultant report was timely presented by the appointed expert namely Prof Spiridione Buhagiar. It should be also recorded that the expert's report was distributed to all interested parties and the latter were given the opportunity to question Prof Buhagiar on any of the reported issues, during the second Public Hearing held on 29 January 2019.**

## **1. The grade of concrete offered by R M Construction Limited**

**With regards to the Appellants' first contention, as stated above, this Board had to rely substantially on the submissions made by the technical experts, on top of whom, this Board appointed Prof Spiridione Buhagiar to guide them through the technicalities of this appeal and to give his expert opinion on the Tender requirements and the Appellants' offer.**

**This Board would, first and foremost, point out that technical specifications are not capriciously dictated in a Tender Document. They are stipulated in order to achieve the Contracting Authority's objectives in the most professional and efficient manner. At the same instance, it must also be pointed out that the technical specifications form the core of what the Contracting Authority is endeavouring to achieve.**

**In this particular case, the Tender Document dictated specific types of concrete to be used in the civil engineering works of the Tender and in this respect; each prospective Bidder had to abide by such specifications in his offer.**

The Tender Document stipulated that many of the structural design elements contained therein should have:

- a serviceability life of one hundred years;
- a concrete durability of up to one hundred years;
- have exposure classes for concrete-above ground: XC4, XD3 and XS1
- have exposure classes for concrete-below ground: XC2 and XA2

At this stage of consideration, this Board would list the requirements of the Tender and the Appellants' submission with regards to the type and grade of concrete, as follows:

<u>Exposure Class</u>	Tender Requirements	R M Construction Limited's Offer
XC 4	C 30/37	C 25/30
XD 3 (EN 1992)	C 35/45	C 30/37 (For Walls)
		C 30/37 (Others)
XS 1 (EN 1992)	C 30/37	C 25/30

From the above summary, it is apparent that the grades of concrete offered by R M Construction Limited do not conform to what was being

requested in the Tender Document and in this regard, this Board would respectfully refer to an extract from the testimony of the technical witness, highlighting the importance and impact of the selected types of concrete stipulated has, on the whole project as follows:

**“Avukat:** You are insisting that this is a minimum. So what are the implications if you go for a lower class?

**Xhud:** *We feel that having a lower class will therefore not give the intended design serviceability life because in terms of concrete or structure design, these things all go hand in hand. One cannot go without the other so basically having one which is of a lesser class means that the other one is also of a lesser class. This may result in two different issues then after consideration. These are safety issues of the road users to take into consideration. There are maintenance issues which are to be implemented then. This is like a ripple effect. We as a contracting authority wanted something because not we dreamt about it but because we studied the situation and it is required that these things are all taken into consideration.”*

**The same witness has also confirmed that the type of concrete offered by R M Construction Limited fell short of the requirements as follows:**

*“Avukat: Dan it-tip ta’ concrete x’ hemm deficient fih?”*

*“Xhud: As our technical advisor clearly stated before and clearly explained, the bid falls short of the requirements because the concrete exposure class and therefore the result in concrete grade are of a lower grade than that which is expected from a bid which would consider these exposure classes which are shown in page 89 of the technical specs.”*

**This Board has also considered the Evaluation Committee advisor’s report, who reported to the Committee that:**

*“Durability is of concern if some of the lower grades of concrete mentioned are used. The contractor refers to code EN 1992-1 as terms of reference for selection of concrete grade and cover.*

***Both the concrete grade proposed and cover considered fall short of the code requirements”***

**Apart from the technical submissions made during both hearings, this Board notes that from the appointed expert’s report, it has been clearly stated that R M Construction Limited’s grade type of concrete stated in their offer, does not conform with the specifications clearly stipulated in the Tender Dossier and in the expert report’s conclusion, it is stated that:**

*“(a) statement (i): The Tenderer’s submission does not comply with the technical requirements of the Tender Document, such that, in some instances the concrete compressive strength and concrete cover are not in accordance with EN 1992-1-1: 2004 and the Tender Technical Specifications.”*

**In view of the above, taking into consideration the technical submissions made by all interested parties and the appointed expert’s report, this Board is comfortably convinced that the grades and types of concrete, in the Appellants’ offer, do not conform with the dictated technical specifications and in this regard, this same Board does not uphold R M Construction Limited’s first contention.**

**2. The central wall structure**

With regards to the Appellants' second contention, this Board was made aware that the central wall, which has to be constructed, is designed to cater for impact from vehicles. The Tender Document also stipulated the submission of technical calculations and drawings and from the Appellants' submitted designs, the Evaluation Committee, through technical assistance, noted that R M Construction Limited's decision did not show the central wall but rather columns and in this regard, an extract from the testimony of Arch Ivan Coleiro, will illustrate what was requested by Infrastructure Malta and what had been submitted by the Appellants as follows:

*“Chairman: Ha mmorru ghal page 3. The central support. Again there is no evidence of calculation.*

*Khud: No in certain support there are calculations which were designed as piers. There were calculations for the central support as piers. Unfortunately the tender specifically asked for a wall and not piers. Piers are columns. This bridge could either be supported on a wall or a series of columns. The tender specifically asked for a wall and a wall had to be designed not just*

*to take the weight of the building but to take the accidental load of a car hitting it.*

*Chairman: Yet in the second paragraph imbaghad tghid illi the solution provided for this scale of project is acceptable.*

*Xhud: It is designed to cater for impact only. So my impression is that the contractor did not pick up the importance of the wall as opposed to columns. He provided a structure support without realising that the contracting committee asked for a wall specifically to contain accidental impact from cars. So it is satisfactory structurally but it does not satisfy the other requirement which he seems to have missed out.”*

**From the technical submissions made, this Board was made aware that, there were no calculations to support the design of the foundations and the drawings provided piers (columns) for support and not a central wall which would cater for the need of traffic impact. In this respect, an extract from the testimony of Arch Ivan Coleiro, described this issue, in a very simple explanation, as follows:**

**“Avukat:** *What is this issue?*

**Xhud:** *This issue was that a central wall is required because if cars sway from one lane to another lane, there is a central wall to contain that impact. With just columns four metres apart, the car can sway between them and will not contain it. They did not pick up that it was required to contain the impact of cars. And neither the columns were designed for the impact. So we cannot even judge.*

**Avukat:** *What do you mean that the columns were not designed for the impact?*

**Xhud:** *There are no calculations to show that they were designed, jigifieri one column every 4 metres, not what happens in between them. No calculations to support. So it is specifically stated, protection from impact from supporting structures, important, highlighted. The following structures shall be invariably protected from vehicular impact by a vehicle restraint system on the same level of containment as described in appendix.*

*Central wall and deck supports at a height of 1.2 metres.... Page 102. It says central deck support and wall for a height of 1.2 metres from pavement. Unfortunately, I could not find any reference to this item.”*

**From the above mentioned testimony, this Board is justifiably convinced that R M Construction Limited did not provide for a central wall, which was a mandatory feature of the project and instead they provided pillars which in the opinion of more than one technical expert confirms this fact and at the same instance, such pillars do not provide the necessary precaution and safety for vehicular impact.**

**For this reason, this Board would refer to the contents of Prof Spiridione Buhagiar’s report, which confirmed that:**

**“(b) statement (2):** *After a review of the Tenderer’s structural calculations it was noted that there was no structural calculation related taking into account accidental vehicular impact of the underpass supporting piers.”*

**Considering the above, this Board is comfortably convinced that R M Construction Limited's offer did not cater for the central wall, which formed an important safety feature of the project, and the alternative piers provided by the Appellants, did not cater for vehicular impact and in this regard, this Board does not uphold the latter's second contention.**

**In view of the above, this Board:**

**i) does not uphold the contentions made by R M Construction Limited;**

**ii) upholds Infrastructure Malta's decision in the cancellation of the Tender;**

**iii) directs that an amount of forty-four thousand euro (€ 44,000) from the deposit paid by the Appellants is to be refunded.**

Dr Anthony Cassar  
Chairman

Mr Carmel Esposito  
Member

Mr Richard A. Matrenza  
Member

*13<sup>th</sup> February 2019*