

ADDENDUM NO. 2

Date: 24th January 2024

To: All Potential Bidders

1. With respect to the above-mentioned project, please find enclosed **Addendum No. 2** to the Bidding Documents, pursuant to Clause 11.2 of the Instructions to Bidders.
2. A soft copy of the BOQ in excel format is hereby availed to all Bidders as attached.
3. **Clarification No. 2** to queries from bidders is herewith enclosed (7 pages) and changes brought to the bidding documents have been detailed hereunder:

Volume 1 of 4 – Bidding Procedures

- Annex A** - Pages 51 and 259 have been replaced by Pages 51 and 259 with labelling “Addendum No. 2”
Annex B - Pages 100 and 246 have been replaced by Pages 100 and 246 with labelling “Addendum No. 2”
Annex C - Pages 32 and 55 have been replaced by Pages 32 and 55 with labelling “Addendum No. 2”
Annex D - Page 321 has been replaced by Page 321 with labelling “Addendum No. 2”
Annex H - Page 181 has been replaced by Page 181 with labelling “Addendum No. 2”
Annex I - Page 182 has been replaced by Page 182 with labelling “Addendum No. 2”
Annex K - Page 206 has been replaced by Page 206 with labelling “Addendum No. 2”
Annex L - Page 215 has been replaced by Page 215 with labelling “Addendum No. 2”
Annex P - Page 251 has been replaced by Page 251 with labelling “Addendum No. 2”
Annex Q - Page 188 has been replaced by Page 188 with labelling “Addendum No. 2”
Annex S - Page 250 has been replaced by Page 250 with labelling “Addendum No. 2”

Volume 2 of 4 – Technical Specifications

Annex T - Changes to Volume 2 of 4 are listed below:

- Page 21 – 368 has been replaced by page 21-368 with labelling “Addendum No. 2”
- Page 21 – 369 and Page 21 - 370 have been replaced by Page 21-369 and Page 21 -370 with labelling “Addendum No. 2”
- Page 21 – 367 has been replaced by page 21-367 with labelling “Addendum No. 2”

Volume 3 of 4 – Tender Drawings

- Annex B** - Drawing 23125-TD-3TP702 has been replaced by Drawing 23125-TD-3TP702 marked as “Addendum No. 2”.
- Annex E** - Drawing 23125-TD-1BR03 has been replaced by Drawing 23125-TD-1BR03 marked as “Addendum No. 2”
- Annex F** - Drawing 23125-TD-3TP214 has been replaced by Drawing 23125-TD-3TP214 marked as “Addendum No. 2”
- Annex G** - Drawing 23125-TD-2TP662 has been replaced by Drawing 23125-TD-2TP662 marked as “Addendum No. 2”
- Annex J** - New drawing labelled 23125-TD-3TP219 marked with “Addendum No. 2” forms part of Volume 3 of 4 the bidding document.
- Annex M** - Drawing 23125-TD-1BR02 has been replaced by Drawing 23125-TD-1BR02 marked as “Addendum No.2”

ADDENDUM NO. 2

Annex N - Drawing 23125-TD-3TP500 has been replaced by Drawing 23125-TD-3TP500 marked as “Addendum No. 2”

Annex O - New drawing labelled 23125-TD-3TP413 marked with “Addendum No. 2” forms part of Volume 3 of 4 the bidding document.

Annex R - New drawing labelled 23125-TD-3TP218 marked with “Addendum No. 2” forms part of Volume 3 of 4 the bidding document.

ADDENDUM NO. 2

CLARIFICATION NO. 2

LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

SN	ORIGINAL QUERIES BY BIDDERS	REPLY FROM EMPLOYER
1.	The earmark area and location for the Contractor's site establishment.	Reference is made to the Notes of Pre-Bid meeting whereby the Client indicated the potential for arrangements for the site establishment at Plot 10 within the proposed development.
2.	The tapping points for Power and potable water.	The successful Contractor shall be responsible for provision of power, water and other services as he may require for completion of the work as stated in Sub-Clause 4.19 of the Conditions of Contract. Reference is also made to Article 1.15 of Volume 2 of 4 – Technical Specifications, quoted below: <i>“It is the Contractor's responsibility to provide water and electricity for both construction purposes and also for the camps and offices. The Contractor's attention is drawn to the fact that no separate payment will be made for the provision of water and electricity and the Contractor shall be deemed to have included for these in his rates and prices.”</i>
3.	We wish to inquire if an expatriate Contractor's Representative/Contracts Manager with the relevant qualification and experience but who is not registered with the Council of Registered Professional Engineers Mauritius shall be accepted by the Employer.	Registration with equivalent accredited bodies will be accepted. It is hereby brought to the attention of bidders that Pages 51 and 259 of Volume 1 of 4 of the Bidding Documents have been replaced by Pages 51 and 259 with labelling “Addendum No. 2” as attached in Annex A . Eventual registration with the Council of Registered Professional Engineers Mauritius will be required in the event the bidder is successful.
4.	In which BOQ item should we price the precast slab 600x300 for the walkway & seating	Precast concrete slab 600x300 and heavy-duty paving blocks for the pedestrian walkway shall be priced under Item 609. It is hereby brought to the attention of bidders that Pages 100 and 246 of Volume 1 of 4 of the Bidding Documents have been replaced by Pages 100 and 246 with labelling “Addendum No. 2”. It is hereby brought to the attention of bidders that Drawing 23125-TD-3TP702 of Volume 3 of 4 of the Bidding Documents has been replaced by Drawing 23125-TD-3TP702 with labelling “Addendum No. 2”. The aforementioned changes to the bidding documents have been enclosed in Annex B .

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SN	ORIGINAL QUERIES BY BIDDERS	REPLY FROM EMPLOYER
5.	Item 1404F: Reinforcement hot rolled deformed high yield steel tensile bars of various diameters ranging from 12mm to 32mm for precast beam Can you confirm Quantity = 62T	The bidder shall quote as per the bidding documents.
6.	Item 1402F = In-Situ concrete, Designed Mix Grade 35/45 N/M2 Precast Beam Can you confirm Quantity = 1900m3	The bidder shall quote as per the bidding documents.
7.	Item 1304A = U3 steel float finish to columns and wall bases Can you give more details and localization of these works	The bidder shall quote as per the bidding documents.
8.	BOQ: Do we have to do leak test in Water Tanks and providing water ?	The Contractor shall allow in the rates and prices all required, materials, labour or equipment for the testing of the works as defined in the bidding documents. The water tanks shall be cleaned out, successfully tested and accepted as watertight by the Engineer and sterilised to the satisfaction of the Engineer and competent authority. (Article 20.14 of the Technical Specifications)
9.	We would be grateful if you could provide the loads at the bottom/top of the pile cap. It is required for our piling design.	Refer to Volume 3 of 4 -Tender Drawings – Drawing No. 23125-TD-1BR01 for pile reaction forces.
10.	Trapezoidal drains in Items no 601E, 601F and 601G: Is it possible to quote these specified items in concrete instead of masonry in our tender offer	Refer to Clause 14 of the Instruction to Bidders: <i>“Except as provided under ITB 14.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Documents must first price the Employer’s design as described in the Bidding Documents and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.”</i>

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11.	<p>Price Adjustment for change in Cost (C.O.C Clause 13.8)</p> <p>We noted that the Tender Documents does not make provision for Price Adjustment for change in cost. The time of completion for the present bid set for 450 days, we consider the introduction of Price adjustment provision will allow for a fair pricing from bidders, and likely more competitive bid for the Employer's financial benefit.</p> <p><u>In this line, could you please consider the possibility for reintroduction of Clause 13.8 of the General Conditions of Contract for a post duration of 12 months from Bid Submission Date in consideration that the Bid Validity Period set for 180 days?</u></p>	<p>The prices quoted by the bidder <u>shall not be</u> subject to adjustment during the performance of the Contract as stipulated in ITB 15.5 and Subclause 13.8 of the Particular Conditions of Contract. The bidder shall quote as per the bidding documents.</p> <p><u>The bid validity period has been revised from 150 days to 90 days as detailed in ITB 19.1 of the Bid Data Sheet.</u> It is hereby brought to the attention of bidders that Pages 32 and 55 of Volume 1 of 4 of the Bidding Documents have been replaced by Pages 32 and 55 with labelling "Addendum No. 2" as attached in Annex C.</p>
12.	<p>Margin of Preference (ITB 34)</p> <p>The Tender Document does not make provision for applicability of 'Margin of Preference'.</p> <p>Whilst it is the policy of the government to encourage the employment of local labour for National Interest, limiting the rate of unemployment of our Mauritian citizens, maximise local benefit, reduce currency leaks, and the main shareholder of the Employer being the State, we kindly request for the incorporation of said element within the evaluation criteria for Bid award.</p> <p><u>Kindly confirm the possibility of applicability of Margin of Preference to present Bid</u></p>	<p>Margin of preference shall not apply. The bidder shall quote as per the bidding documents.</p>
13.	<p>Technical Alternatives (Section III -Evaluation and Qualification Criteria)</p> <p>The bid documents cater consideration of Technical Alternative for ONLY the lowest bidder. We wish to highlight that it is indeed the Employer's having the best value for money.</p> <p>Nevertheless, following analysis, the acceptance of an alternative remains the Employer's prerogative.</p> <p><u>Accordingly, we kindly request for the Employer to consider amendment in the Bid document as would allow for consideration of Technical Alternative of ALL bidders, being we consider in the Employer's upmost financial interest</u></p>	<p>The bidder shall quote as per the bidding documents.</p>

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14.	<p>Property Damage Insurance (CoC Subclause 18.5) The CoC set for the Contractor shall subscribe to a Property Damage Insurance in favour of Employer for 10 years post the end of Defects Notification Period under applicable laws. We comment as follows:</p> <p>a) For the insurance suppliers in Mauritius, said insurance being referred as inherent Defects Insurance (IDI), can only be implemented subject to the appointment in parallel of a consultant by the Employer, under a Consultancy Contract for attending to External Control.</p> <p>b) The Design having been prepared by the Employer's personnel, likely it follows as more appropriate for the Employer to contract the IDI and Consultancy Contract for External Control, as addressed under applicable laws.</p> <p>c) The Contractor shall however provide a Single Project Professional Indemnity Insurance (SPPI) for all contractor's proposed alternatives.</p> <p><u>Accordingly, we kindly request for subscription to the Property Damage Insurance (IDI) be taken by the Employer, as called for under applicable laws.</u></p>	<p>The Contractor shall subscribe to a Property Damage Insurance as described in Sub Clause 18.5 of Particular Conditions of Contract of the bidding documents for the bridge component of the works. The bidding documents allow for third party design review of all the components of the bridgeworks.</p> <p>It is hereby brought to the attention of bidders that Page 321 of Volume 1 of 4 of the Bidding Documents has been replaced by Page 321 with labelling "Addendum No. 2" as attached in Annex D.</p>
15.	<p>Drawing No. 23125-TD-3TP101 We find that there are 600 x 300 mm precast slabs on the surface of the walkway & seating. However, this has not been catered in the BOQ. Please advise.</p>	<p>Refer to Reply to Query No. 4</p>
16.	<p>Due to the prevailing inclement weather in Mauritius, we wish to request an additional three weeks extension of time for the submission of the bid.</p>	<p>The bid submission deadline shall remain unchanged.</p>
17.	<p>Lot 1 Bill Item 601H Provide dimension and detail of drain</p>	<p>It is hereby brought to the attention of bidders that 23125-TD-1BR03 of Volume 3 of 4 has been replaced by 23125-TD-1BR03 marked as "Addendum No. 2" as attached in Annex E.</p>

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SN	ORIGINAL QUERIES BY BIDDERS	REPLY FROM EMPLOYER
18.	Lot 1 Bill Item 606A Provide drawing with dimensions	It is hereby brought to the attention of bidders that 23125-TD-3TP214 of Volume 3 of 4 has been replaced by 23125-TD-3TP214 marked as “Addendum No. 2” as attached in Annex F
19.	Lot 1 Bill Item 1213B & 1213C Provide detailed drawing with dimensions	The bidder shall quote as specified in the bill description. It is hereby brought to the attention of the bidders that 23125-TD-2TP662 of Volume 3 of 4 has been replaced by 23125-TD-2TP662 marked as “Addendum No. 2” in which the location of the screens is shown. Same is attached in Annex G
20.	Lot 1 Bill Item 1215A In the absence of “Bill Description” for this item, please advise what needs to be priced	Allow a provisional sum of MUR 1M (one million rupees) for this item and it has been modified in the bill of quantities. It is hereby brought to the attention of the bidders that Page 181 of Volume 1 of 4 has been replaced by Page 181 with labelling “Addendum No. 2” as attached in Annex H .
21.	Lot 1 Bill Item 1217H & 1213I Provide detailed drawing with dimensions.	Items 1217H and 1217I to be omitted from the bill of quantities. It is hereby brought to the attention of the bidders that Page 181 of Volume 1 of 4 has been replaced by Page 181 with labelling “Addendum No. 2” as attached in Annex H .
22.	Lot 1 Bill Item 1218A & 1218D BOQ Item 1218A & 1218D in Lot 1 seems repetitive. Please clarify.	Item 1218A to be omitted from the bill of quantities and Item 1218D – AISI 316 ladders and safety cages to be priced. It is hereby brought to the attention of the bidders that Page 182 of Volume 1 of 4 has been replaced by Page 182 with labelling “Addendum No. 2” as attached in Annex I .
23.	Lot 1 Bill Item 1310F Provide detailed drawing with dimensions.	It is hereby brought to the attention of the bidders that a new drawing labelled 23125-TD-3TP219 marked with “Addendum No. 2” forms part of Volume 3 of 4 the bidding document as attached in Annex J .
24.	Lot 1 Bill Item 1325A (pg 205) In the absence of “Bill Description” for this item, please advise what needs to be priced	Bill Item 1325A on Page 205 is not listed.
25.	Lot 1 Bill Item 1323A to 1323 D & 1323F (pg 206) Provide detailed drawing with dimensions	Kindly refer to drawing 23125-TD-3TP350, 23125-TD-3TP351, and 23125-TD-3TP352 of Volume 3 of 4.

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SN	ORIGINAL QUERIES BY BIDDERS	REPLY FROM EMPLOYER
26.	Lot 1 Bill Item 1323G (pg 206) This item is measured in Lot. Kindly provide detailed measurement since there is no drawing available.	Allow manholes as follows: 1) 2 nos. 600 x 600 2) 2 nos. 900 x 900 Changes has been brought to bill of quantities for this Item and it is hereby brought to the attention of the bidders that Page 206 of Volume 1 of 4 has been replaced by Page 206 with labelling “Addendum No. 2”as attached in Annex K .
27.	Lot 1 Bill Item 1324A (pg 206) Provide detailed drawing with dimensions	Kindly refer to drawings 23125-TD-3TP650 and 23125-TD-3TP652 of Volume 3 of 4 of the Bidding Document. The I-BEAM is shown and the hoist system is to be allowed for lifting any heavy equipment component from the basement through the removable cover to ground level.
28.	Lot 1 Bill Item 1332A (pg 215) Kindly provide layout to be able to measure length of sleeves	Allow for 100 Linear metre of sleeves (2x100m) for the Bill item. It is hereby brought to the attention of the bidders that Page 215 of Volume 1 of 4 has been replaced by Page 215 with labelling “Addendum No. 2”as attached in Annex L .
29.	Lot 1 Bill Item 1405D Kindly provide detailed drawing with dimensions	It is hereby brought to the attention of bidders that 23125-TD-1BR02 of Volume 3 of 4 has been replaced by 23125-TD-1BR02 marked as “Addendum No.2” as attached in Annex M .
30.	Lot 1 Bill Item 1405E Kindly provide detailed drawing with dimensions	Construction joint for the bridge deck slab shall follow the methodology of bidder, if this is required. Bidder is also requested to refer to Volume 2 of 4 Technical specifications for Construction joints.
31.	Lot 2 Bill Item 707D Please provide column foundation details for the 3.5m high pole	It is hereby brought to the attention of bidders that 23125-TD-3TP500 of Volume 3 of 4 has been replaced by 23125-TD-3TP500 marked as “Addendum No. 2” as attached in Annex N .

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32.	Lot 2 Bill Item 905D Kindly provide detailed drawing with dimensions.	It is hereby brought to the attention of the bidders that a new drawing labelled 23125-TD-3TP413 marked with “Addendum No. 2” forms part of Volume 3 of 4 the bidding document as attached in Annex O . Changes to the description of item 905D has been done to the BOQ and it is hereby brought to the attention of the bidders that page 251 of Volume 1 of 4 has been replaced by Page 251 with labelling “Addendum No. 2”as attached in Annex P .
33.	Item 606A: Desiltation Basin: We note that specific dimensions have not been provided in the tender drawings. Please provide same as well as the actual excavation volume with respect to the topography and L-profile at the location of the basin	Refer to Reply to Query No. 18
34.	Please advise the following in regards to loading of elastomeric bearings: <ol style="list-style-type: none"> 1. Confirm horizontal loading (1032kN is not typical of horizontal loading for elastomeric) 2. Dead load 3. Live load maximum and minimum 	Horizontal loading <ol style="list-style-type: none"> 1. Horizontal loading of 1032 kN is maintained. Vertical loading <ol style="list-style-type: none"> 2. Dead load: 515 kN 3. Live load <ol style="list-style-type: none"> (i) Live load maximum: 900 kN (ii) Live load minimum: 500 kN
35.	Lot 1 - Bill 1226 – ODOUR CONTROL SYSTEM – Please provide the duty point and pressure	Odour control system to be designed as a whole by specialist for a total drywell volume of 265 m ³ . Changes to the description of item 1226A has been done to the BOQ and it is hereby brought to the attention of the bidders that page 188 of Volume 1 of 4 has been replaced by Page 188 with labelling “Addendum No. 2”as attached in Annex Q
36.	Drawings for catchpit type 3 – item 604C	It is hereby brought to the attention of the bidders that a new drawing labelled 23125-TD-3TP218 marked with “Addendum no. 2” forms part of Volume 3 of 4 the bidding document as attached in Annex R .
37.	Items 815A, 815B, 815C: Please provide specific details what must be included in these 3 items.	It is hereby brought to the attention of bidders that Page 250 of Volume 1 of 4 of the Bidding Documents have been replaced by Page 250 with labelling “Addendum No. 2” as attached in Annex S .

LANDSCOPE (MAURITIUS) LTD
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ANNEX A

2.5 Personnel

The Bidder shall provide details of the proposed personnel and their experience records using Tender Schedule E – Key and Other Personnel included in Section IV, Bidding Forms. **Key and other Personnel shall be deployed EXCLUSIVELY for the Works and the Contract and shall not be deployed on any other project concurrently.**

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Experience (years)	In Similar Works Experience (years)	Specific Experience
1	Contracts Manager / Contractor's Representative possessing at least a degree in Civil Engineering from a recognized institution and registered with the Council of Registered Professional Engineers Mauritius or any other acceptable international body.	15	10	Has undertaken at least two (2) projects consisting of a single or dual carriageway road of length exceeding 1 km and of contract value exceeding MUR 200 Million, at least one reinforced concrete bridge with a minimum of 2 spans with a minimum span length of 10m and infrastructural works for services.
2	Site Manager possessing at least a Diploma in Civil Engineering from a recognized institution or an acceptable equivalent qualification.	10	5	Has undertaken at least one (1) project consisting of a single or dual carriageway road of length exceeding 1 km and of contract value exceeding MUR 200 Million, at least one reinforced concrete bridge with a minimum of 2 spans with a minimum span length of 10m and infrastructural works for services.
3	Topographical Surveyor	10	5	Has undertaken at least two (2) projects consisting of a single or dual carriageway road of length exceeding 1 km and infrastructural works for services.
4	Site Engineer (Roads)	10	5	Has undertaken at least two (2) projects consisting of a single or dual carriageway road of length exceeding 1 km and infrastructure works for services.
5	Site Engineer (Bridge)	10	5	Has undertaken at least one (1) reinforced concrete bridge having a minimum of 2 spans with a minimum span length of 15m and infrastructure works for services.
6	Site Engineer (Utilities)	10	5	Has undertaken at least two (2) projects consisting of a single carriageway road of length

TENDER SCHEDULE E – KEY PERSONNEL**PART 1 : KEY PERSONNEL**

Designation	Name of Nominee	Name of Alternate	Period of Involvement Start	Period of Involvement Finish
Contracts Manager/Contractor's Representative possessing at least a degree in Civil Engineering from a recognized institution and registered with the Council of Registered Professional Engineers Mauritius or or any other acceptable international body. *				
Site Manager possessing at least a diploma in Civil Engineering from a recognized institution or an acceptable equivalent qualification*				
Topographical Surveyor				
Site Engineer (Roads)*				
Site Engineer (Bridge)*				
Site Engineer (Utilities)*				
M&E Enigneer*				
Laboratory Technician				
Health and Safety Officer				
Environmental Manager				
Foreman (Earthworks)*				
Foreman (Asphalt)				
Foreman (Concrete Works)				
Foreman (Utilities)				

NOTES:

1. The *Contractor* shall list in this Schedule the key personnel as listed above by position (including first nominee and the second choice alternate) which he will employ from Head Office and from Site Office to direct and execute the Work, together with, inter alia, their qualifications, experience, positions held, their nationalities and linguistic ability. Curriculum vitae of the above noted persons are to be attached and shall be in the form in Part 2.
2. The first nominee or his alternate shall not be changed without the prior approval of the *Employer*.

The titles of the above designations may be altered to suit the organisation's structures.

Number of sheets, appended by the *Contractor*, comprising this Schedule (if nil, enter Nil).

DATE

SIGNATURE

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LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX B

l) STONE MASONRY WORKS MINIMUM (20cm TO 30 cm THICK)

This price includes the following:

- Excavation in any material
- Supply, cutting of sound dressed stone facing
- Setting, bedding, jointing, raking out, grouting, pointing, wetting and fair faced work including rough and fair cutting of existing embankment or drains to a warped plain to be detailed by contractor.
- Masonry and concrete as per typical drawing.
- Masonry to be a random joint, fair faced with clear joint finish.
- Ties, dowels, mortices.
- Cavity filling with concrete Class 16/20 between stone work.
- Building in pipes and weepholes and forming small openings.
- Backfilling to walls with excavated or imported material.
- Any special scaffolding required.
- Any miscellaneous costs arising

m) CONCRETE FOR FOOTPATH AND CYCLE TRACK AS PER DRAWINGS

This price includes the following:

- Supply of all materials and plants
- Cleaning, shaping and trimming
- Supply and transport to any distance of the graded crushed Stone of size 0-20mm (125mm thick) to the required areas including spreading out, watering, levelling and compacting as required in the technical specifications and levelling to the lines and levels shown on the drawings or as directed by the Engineer.
- Supply of class 20/25 concrete (125mm thick) and A252 mesh.
- Supports, formwork and fabric reinforcement at laps, and starter bars
- Expansion joint every 3m.
- Any miscellaneous costs arising.

But excludes the cost for the placing of cover slabs OR RC Formers and In-situ concrete on concrete drains

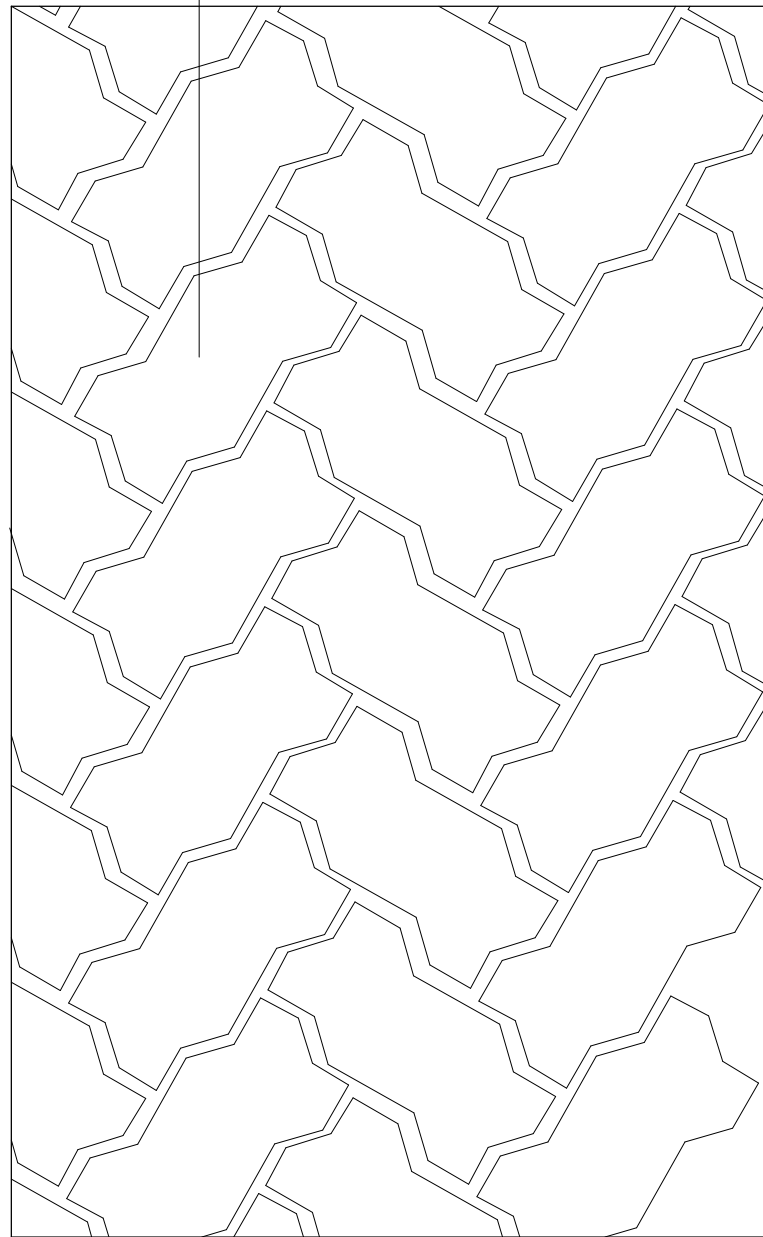
n) HEAVY DUTY PAVING BLOCKS AS PER DRAWINGS (80mm thick) AND PRECAST CONCRETE SLAB (60mm thick)

This price includes the following:

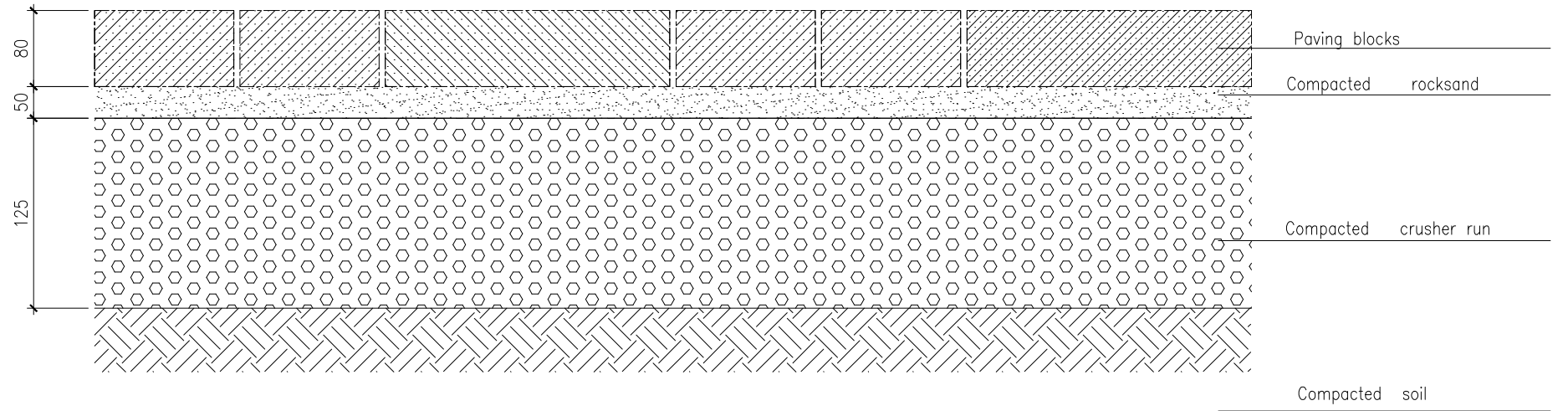
- Supply of all materials and plants.
- Excavation to the required level.
- Cleaning shaping and trimming of subgrade.
- Supply, level and compact 60mm of rocksand including vibration for filling of joints with rocksand or mortar.
- Supply, transport and laying of precast paving blocks as per Engineer's Drawings.
- Supply, transport and laying of precast concrete slabs (600x300 and 60mm thick) with chamfered edges as approved by the Engineer
- Lightly rough finish to surface as approved by Engineer.
- Filling of joint with rocksand including vibration.
- Any miscellaneous costs arising.

Item	Description	Unit	Qty	BF.	
608F	Stone masonry works minimum (20 to 30cm thick)	m ³	75		
608G	Downspouts (open channel chutes)	m	60		
608H	Supply and place geotextile membrane	m ²	300		
608I	Surface Impregnation of concrete buried faces	m ²	200		
608J	160 mm diameter PVC sleeves	m	300		
608K	Heavy Duty Galvanised Grating	m ²	225		
609	PAVING BLOCKS AND PRECAST CONCRETE SLABS	XXX			
609A	Heavy duty coloured Paving Blocks (80mm thick) for pedestrian walkway laid on rocksand	m ²	8,800		
609B	Precast concrete slab 600 x 300mm (60mm thick) for pedestrian walkway laid on rocksaid	m ²	6,800		
TOTAL FOR LOT 2 - BILL No 6 CARRIED TO LOT 2 - SUMMARY					

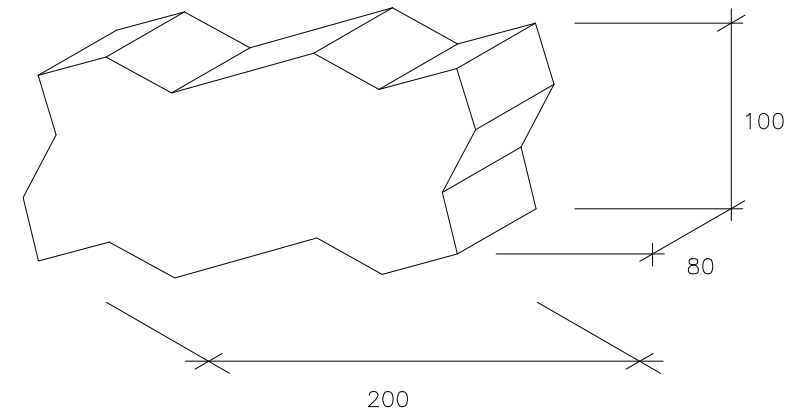
Light duty
Precast interblocks
(200x100x80mm)



PLAN



Section A-A



ADDENDUM No.2

©The copyright of this drawing is held by LUXCONSULT (MUSA) Ltd whose consent must be obtained before any use or reproduction in whole or in part can be made.

- Notes:-
1. Do not scale, use figured dimensions.
2. All dimensions to be checked before any work is put in hand.
3. Any discrepancy should be reported back.

Client:



Project:

INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:

TYPICAL DETAILS FOR PAVING BLOCKS FOR SIDEWALKS

Rev.	Date	Made by	Amendments	Issued	Date

Date

03.08.23

Scale

1:10

Drawn by

I.K

Design by

Y.D

Check by

K.G

Drawing number:

23125-TD-3TP702

Stage:

TENDER

File name and location no.

R:\2023-125\ETUDE_TD\DAO\2. TYPICAL DRAWINGS\23125-TD-3TP702.dwg

Consultant:



(MTIUS) LTD
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REF No.: LM/CD/OC23/35

ANNEX C

	<p>Tender Schedule J – Contract Programme</p> <p>Tender Schedule K – Durations of BOQ Portions of The Work</p> <p>Tender Schedule L – Materials</p> <p>Tender Schedule M – Miscellaneous Policy Statements</p> <p>Tender Schedule N – Laboratory Equipment</p> <p>Tender Schedule O – Breakdown of Major Rates</p> <p>Tender Schedule P – Certificate of Site Inspection</p> <p>Tender Schedule Q – Schedule for Payment for Plant and Materials</p> <p>(ii) CIDB Certificate, Forms EQU, ELI-1, ELI-2, CON-2, FIN-1, FIN-3, FIN-4, EXP 2(a) and EXP 2(b) as specified in Section III. Evaluation and Qualification Criteria</p>
ITB 12.1 (h)	<p>The Bidder shall submit with its bid the following additional documents: <i>Documentary evidence that he has access to the line of credits or liquid assets net of other contractual commitments specified.</i></p>
ITB 14.1	Alternative bids <i>shall not be</i> permitted.
ITB 14.2	<p>Alternative times for completion <i>shall not be</i> permitted.</p> <p>If alternative times for completion are permitted, the evaluation method will be as specified in Section III, Evaluation and Qualification Criteria.</p>
ITB 14.4	<p>Alternative technical solutions shall be permitted for the following parts of the Works: <i>Bridge, Service Reservoir and Pumping Station</i></p> <p>If alternative technical solutions are permitted, the evaluation method will be as specified in Section III, Evaluation and Qualification Criteria.</p> <p>Delete the phrase “<i>...Section V, Works Requirements.</i>” and replace by “<i>...Part 3, Employer’s Requirements</i>”.</p> <p>For any alternative technical solution proposed, the Contractor shall submit a Professional Indemnity Insurance.</p>
ITB 15.5	The prices quoted by the bidder shall not be subject to adjustment during the performance of the Contract
ITB 15.6	Not Applicable
ITB 16.1	The currency of the bid and currency of payment shall be in Mauritian Rupees
ITB 19.1	The bid validity period shall be Ninety (90) days, i.e. up till 05th May 2024, with the Bid Submission Date (06th February 2024) being counted as Day 1.
ITB 19.3 (a)	Not Applicable
ITB 19.3 (b)	Not Applicable
ITB 20.1	The Bidder shall furnish a Bid Security in the amount of MUR 4,000,000.00 (Mauritian Rupees Four Million Thousand Only) and shall be valid for a period of 120 days from the date of submission of bids, i.e. up till 04th June 2024.
ITB 20.3	The Bid Security shall be in the form of an unconditional bank guarantee only.
ITB 21.1	In addition to the original of the bid, the number of copies is: ONE (1) HARDCOPY & ONE (1) SOFTCOPY
ITB 21.2	This authorization shall consist of written confirmation and shall be attached to the bid. It may include a delegation of power by resolution of the Board of a company or from the CEO, himself holding power from the Board or through a Power of Attorney. The name and position held by each person signing the authorization must be typed or printed below the signature.

Bid Submission Form

**INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE
D'OR
REF NO.: LM/CD/OC23/35**

Date: _____

To: **THE CHIEF EXECUTIVE OFFICER
LANDSCOPE (MAURITIUS) LTD
WING A, 7TH FLOOR,
SHRI ATAL BIHARI VAJPAYEE TOWER,
EBENE CYBER CITY
EBENE**

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 9;
- (b) We offer to execute in conformity with the Bidding Document the following Works: _____

_____;
- (c) The total price of our Bid, excluding VAT and any discounts offered in item (d) below is: _____;
- (d) The discounts offered and the methodology for their application are: _____

_____;
- (e) Our bid shall be valid for a period of **ninety (90)** days from the date fixed for the bid submission deadline in accordance with the Bidding Document and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) We hereby confirm that we have read and understood the content of the Bid Securing Bid Security attached herewith and subscribe fully to the terms and conditions contained therein, if required. We understand that non-compliance to the conditions mentioned therein may lead to disqualification.
- (g) If our bid is accepted, we commit to obtain a Performance Security in accordance with the Bidding Document;
- (h) We, including any subcontractors or suppliers for any part of the contract, have or will have nationalities from eligible countries, in accordance with ITB 5.3;

LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX D

Delete the second paragraph of this Sub-Clause and replace with the following:

“The total liability of the Contractor to the Employer, under or in connection with the Contract shall not exceed one hundred percent (100%) of the Contract Price, other than in respect of any liability of the Contractor arising:

- i. under Sub-Clause 1.16 [*Corrupt and Fraudulent Practices*], Clause 8.7 [*Delay Damages*], Clause 11 [*Defects Liability*], Sub-Clause 17.1 [*Indemnities*] and Sub-Clause 17.5 [*Intellectual and Industrial Property Rights*];
- ii. as result of the Contractor’s abandonment of the Works; and
- iii. in respect of liabilities which are (or, but for a vitiating act or omission of the Contractor, should be) covered by proceeds received under the insurance policies required to be taken out and maintained under Clause 18 [*Insurance*].”

18. Insurance

Sub-Clause 18.1 Delete the third paragraph of this Sub-Clause in its entirety.

General Requirements for Insurances Delete Sub-Clause 18.1 (b) in its entirety and replace with the following:

“copies of the policies for the insurances described in the Clause 18 [*Insurances*].”

Delete the first and second sentences in the penultimate paragraph of this Sub-Clause and replace with the following:

“Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insures shall be borne by the Contractor in accordance with these obligations, liabilities or responsibilities.”

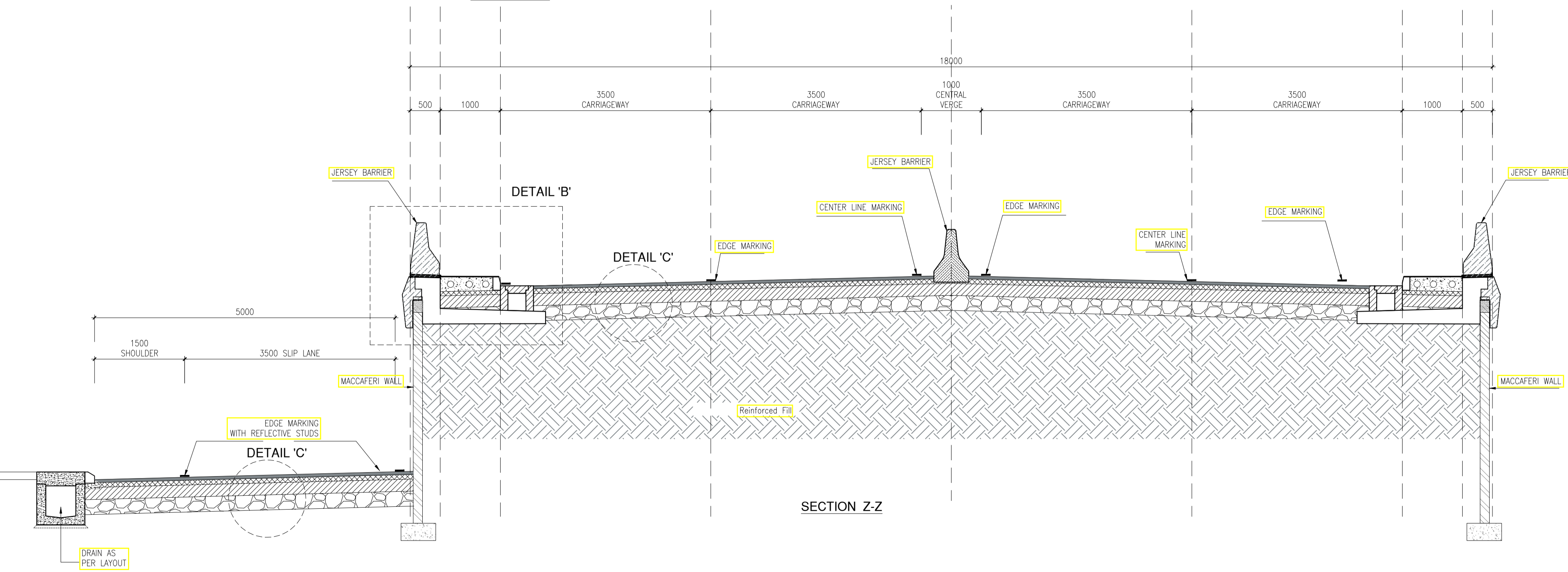
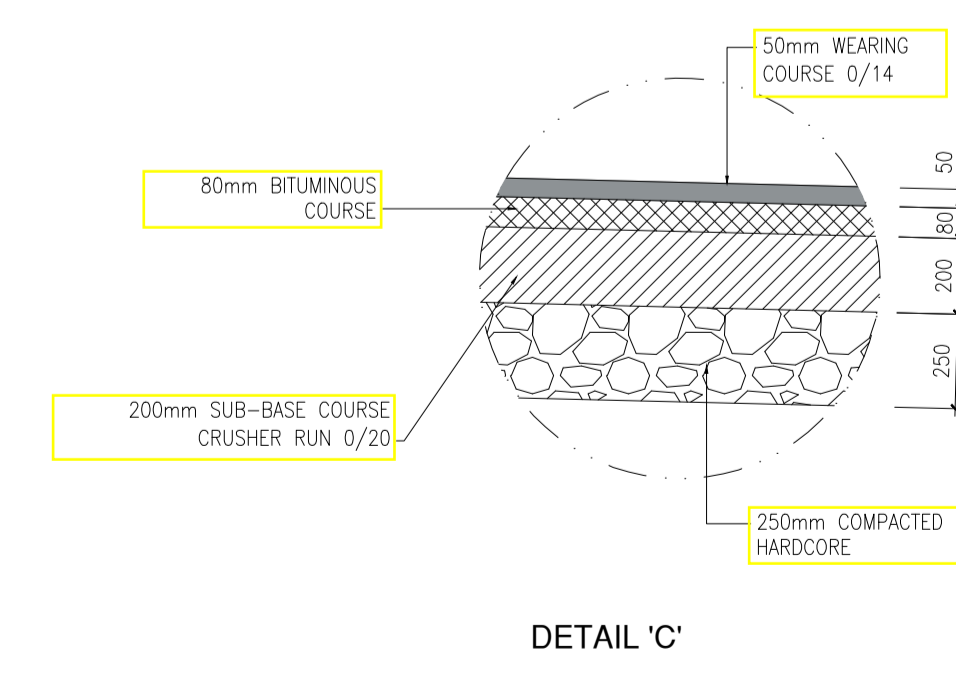
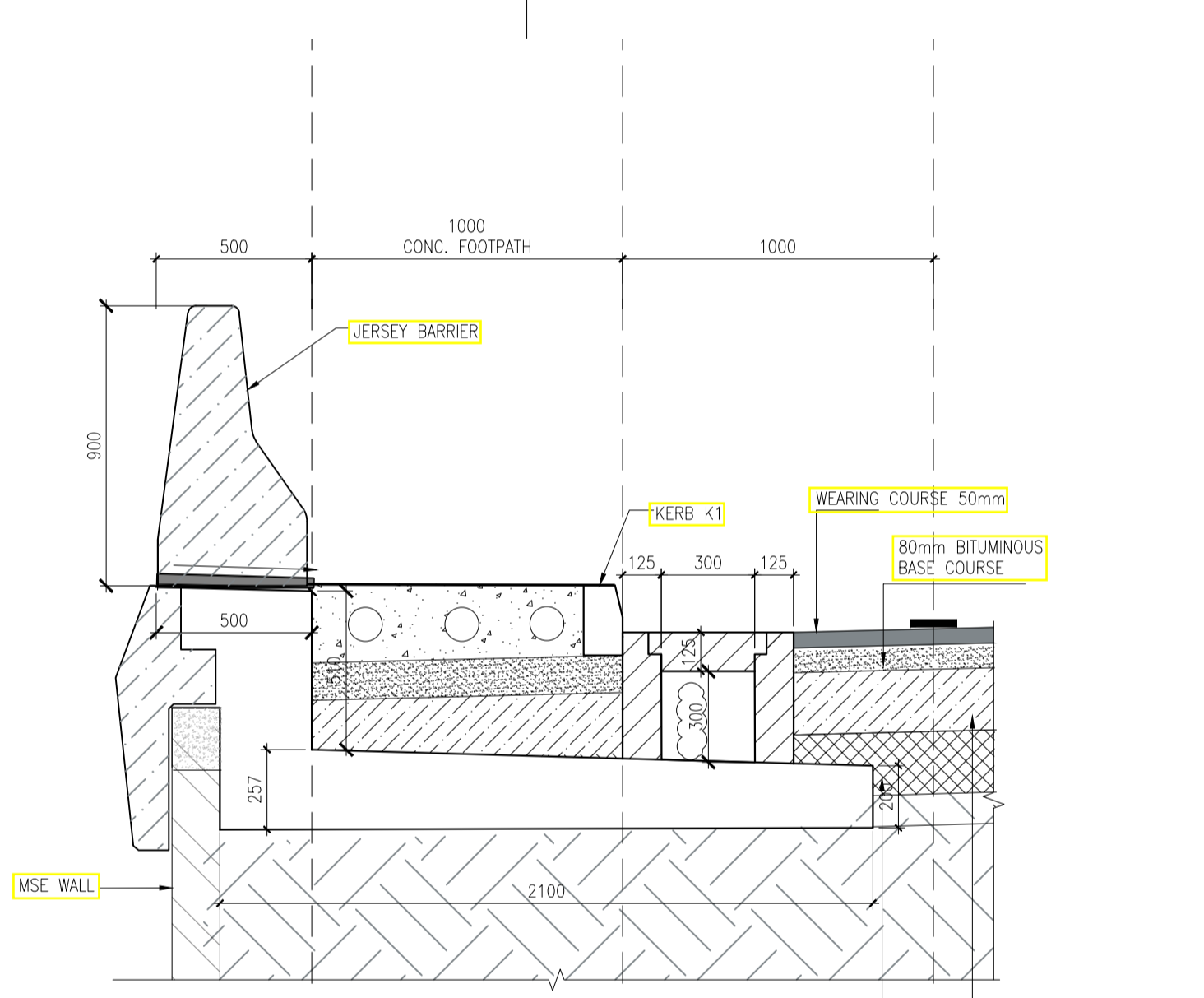
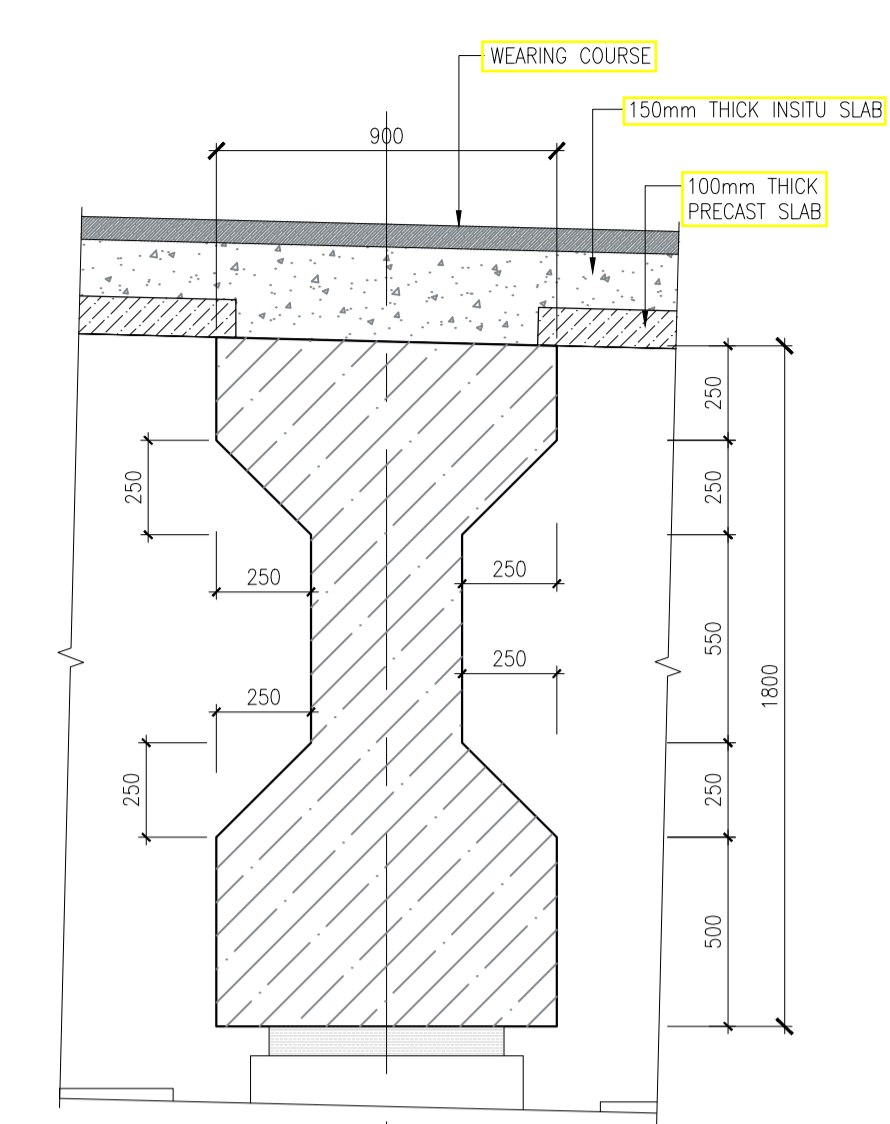
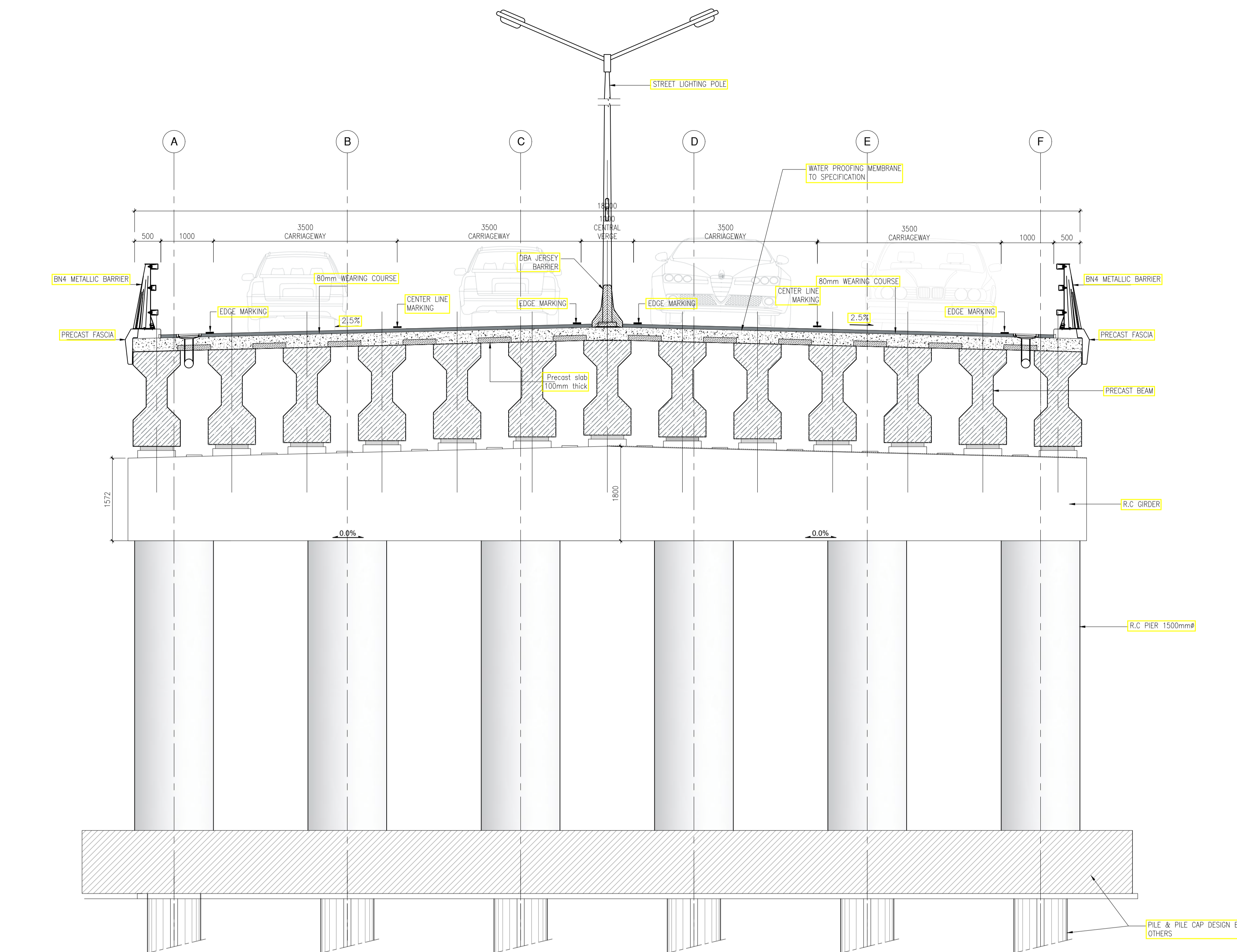
**Sub Clause 18.5
Property Damage
Insurance**

Add new Sub-Clause 18.5 as follows:

The Contractor shall subscribe, in relation to the Bridge Component of the Works, to a Property Damage Insurance in favour of the Employer, for a period of ten (10) years from the end of the Defects Notification Period under the applicable Law. The payment of compensation shall be applicable for any property damage caused to the constructed Works by faults or defects originating in or affecting the structural elements, including the foundations, supports, beams, framework, load-bearing walls or other structural elements, and which could directly jeopardise the structural soundness and stability of the Works.

LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX E



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 3. Any discrepancy should be reported back.

NOTE:

Client
LANDSCAPE MAURITIUS

CONSULTANT
LUXCONSULT
 CONSULTING ENGINEERS

7th Floor, The Docks, United Docks Business Park, Causton, Port Louis
 Business Registration No: C06008759
 VET No: 20095023
 TEL: (230) 427 6299 FAX: (230) 424 6291
 E: MIUS@luxconsult.mu Web: www.luxconsult.mu

Project
INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:
SECTION Y-Y & Z-Z

Stage:
TENDER DRAWING

Rev. Date	Made by	Amendments
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Scale	1:50, 1:20	
Drawn by	LE	
Designed by	VW	
Checked by	VW	

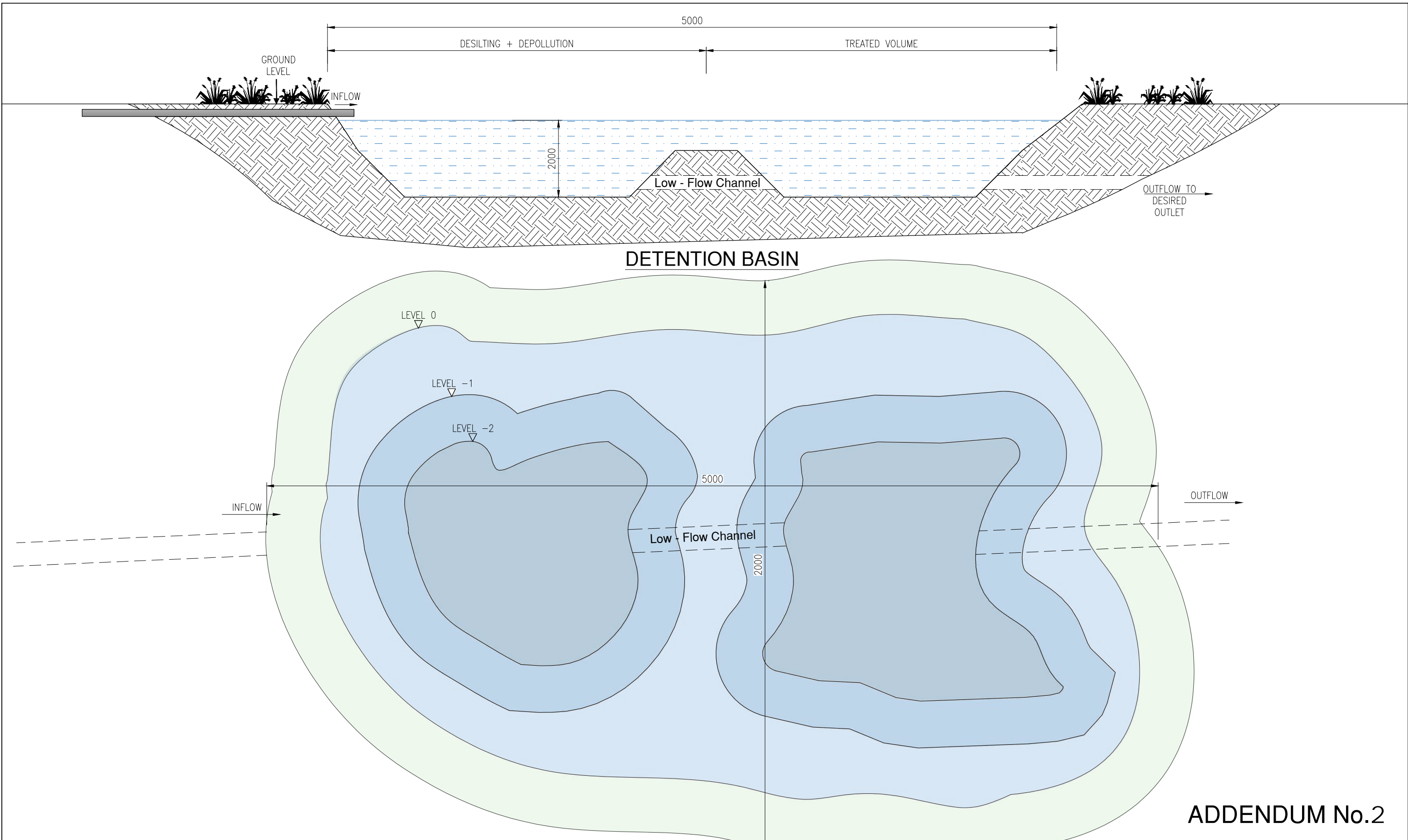
Drawing number
23125-TD-1BR03

File name and location no.
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ADDENDUM NO.2

LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX F



ADDENDUM No.2

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Project:
INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:
SEDIMENTATION BASIN

Rev.	Made by	Amendments	Issued	Date

Date	03.08.23
Scale	NTS
Drawn by	I.K
Designed by	A.K
Checked by	K.G

23125-TD-3TP214

TENDER

File name and location no. D:\EDUCATION HUB\Addendum\Addendum No. 3\Updated drawing Typical\23125-TD-3TP214.dwg



LUXCONSULT
 (MTU) LTD
 CONSULTING ENGINEERS

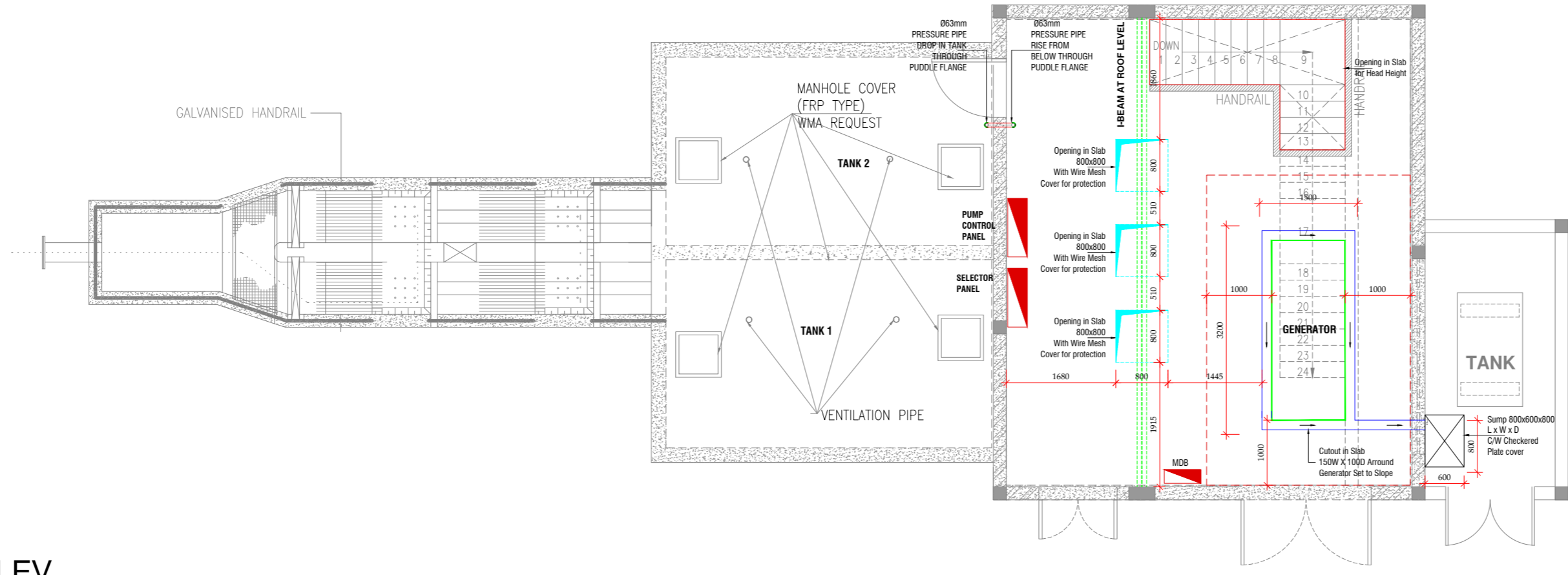
7th Floor, The Docks, United Docks Business Park, Caudan, Port Louis
 Business Registration No: C06008759
 VAT No: 20095023

TEL: (230) 427 6299
 FAX: (230) 424 6291
 E-MAIL: lcm@intnet.mu
 Web: www.luxconsult.mu

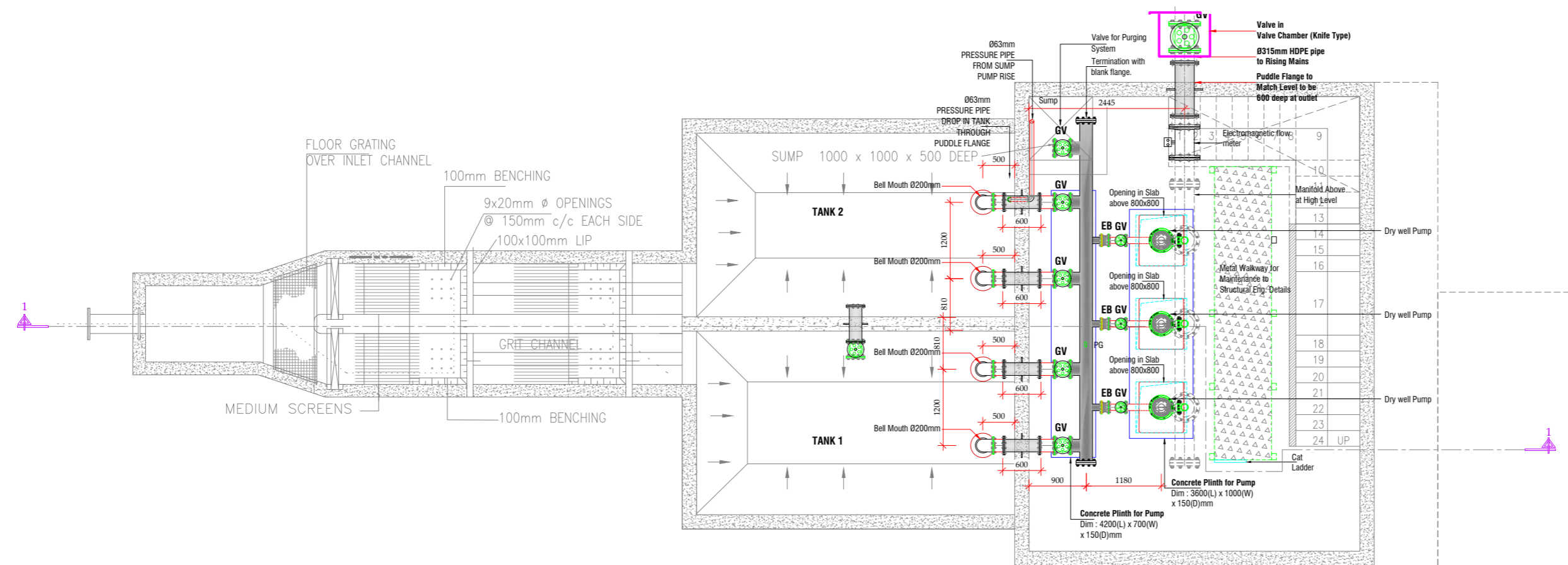


LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

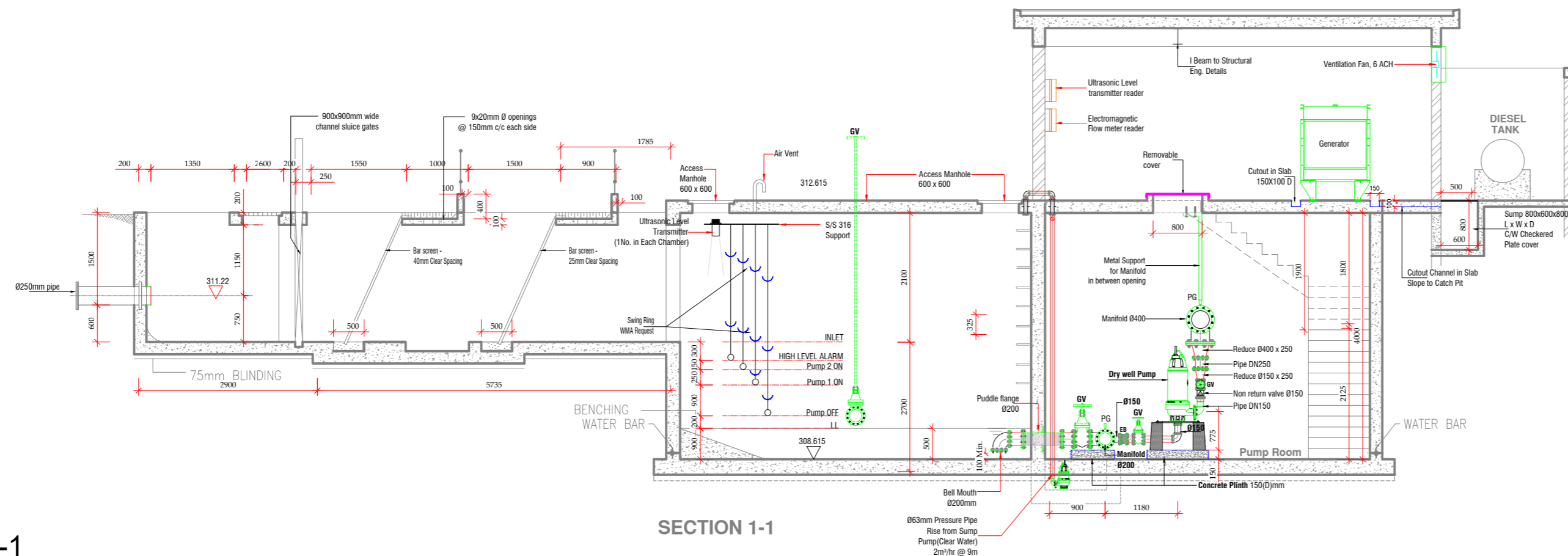
ANNEX G



PLAN AT UPPER LEV



PLAN AT LOWER LEV



SECTION 1-1

ADDENDUM No.2

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NOTE:

1. ALL PIPES TO BE DUCTILE IRON.
2. ALL STRUCTURAL DETAILS TO BE AS PER STRUCTURAL ENGINEER'S SPECIFICATIONS.
3. LOWER LEVEL FLOOR SCREENED SLOPE TO SUMP.
4. DISMANTLING JOINTS/ EXPANSION JOINTS BETWEEN GATE VALVE & NRV & MAIN DISCHARGE MANIFOLD.
5. ELECTRICAL HOIST TO BE PROVIDED AT I-BEAM.
6. SUMP EQUIPPED WITH DE-WATERING PUMP.
7. ULTRASONIC LEVEL TRANSMITTER & FLOAT SWITCH SET IN BOTH WETWELLS.
8. SELECTOR PANEL FOR TANK 1 & TANK 2/ EITHER PLACED AT PUMP CONTROL PANEL.
9. CSM MODULE FOR DATA RELAY TO BE INCLUDED @ PUMP CONTROL PANEL.
10. DETAILED ARRANGEMENT OF MANIFOLD REQUIRED.
11. PURGE VALVE TO BE PROVIDED ON PUMPS
12. MANOMETER WITH DIAPHRAGM SEALS TO BE PROVIDED ON MANIFOLD



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Project:
INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:
WMA LIFTING STATION DETAILS

Stage:
TENDER DRAWING

Rev	Date	Made by	Amendments

Drawing number
23125-TD-2TP662

File name and location no.
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INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX H

Item	Description	Unit	Qty	Unit Price (MUR)	Total Amount (MUR)
1215	Enabling Works for Off-Site Water Supplies	XXX		BF	
1215A	Allow for the provision of off-site potable water supplies. Rate to include for all civil works, connection charges, CWA deposits, & installation of meters by CWA.	P.Sum	1	1,000,000.00	1,000,000.00
1216	Drainage	XXX			
1216A	Allow for drainage facilities during construction period, in line with statutory requirements.	Lot	1		-
1217	INLET WORKS Ductile Iron gravity pipework (to BS EN 545:2010) and fittings within the inlet works with flanges to PN16 (as per BS EN 1092-2:1997), including all bends, metallic gaskets, gate valves, puddle/thrust flanges, dismantling joints, flange adaptors (VJ), HDG nuts, bolts & washers, grease, tape protection & final painting etc., all as specified and as shown on drawings.	XXX			
1217A	Flanged/spigot DI pipe	Lot	1		
1217B	DI tee	Lot	1		
1217C	DI pipe	Lot	1		
1217D	DI 90° bend	Lot	1		
1217E	DI dismantling joint	Lot	1		
1217F	DI puddle flanges	Lot	1		
1217G	DI sluice valves	Lot	1		
1217H	Grade 316 SS screen baskets 40x40mm aperture size c/w lifting eyes, SS guide rails, handles, lifting chains etc., all 316 SS as shown on drawings.	No.	0		
1217I	Grade 316 SS screen baskets 25x25mm aperture size c/w lifting eyes, SS guide rails, handles, lifting chains etc., all 316 SS as shown on drawings.	No.	0		
TOTAL FOR THIS BILL CARRIED FORWARD TO LOT 1 - BILL NO. 12					

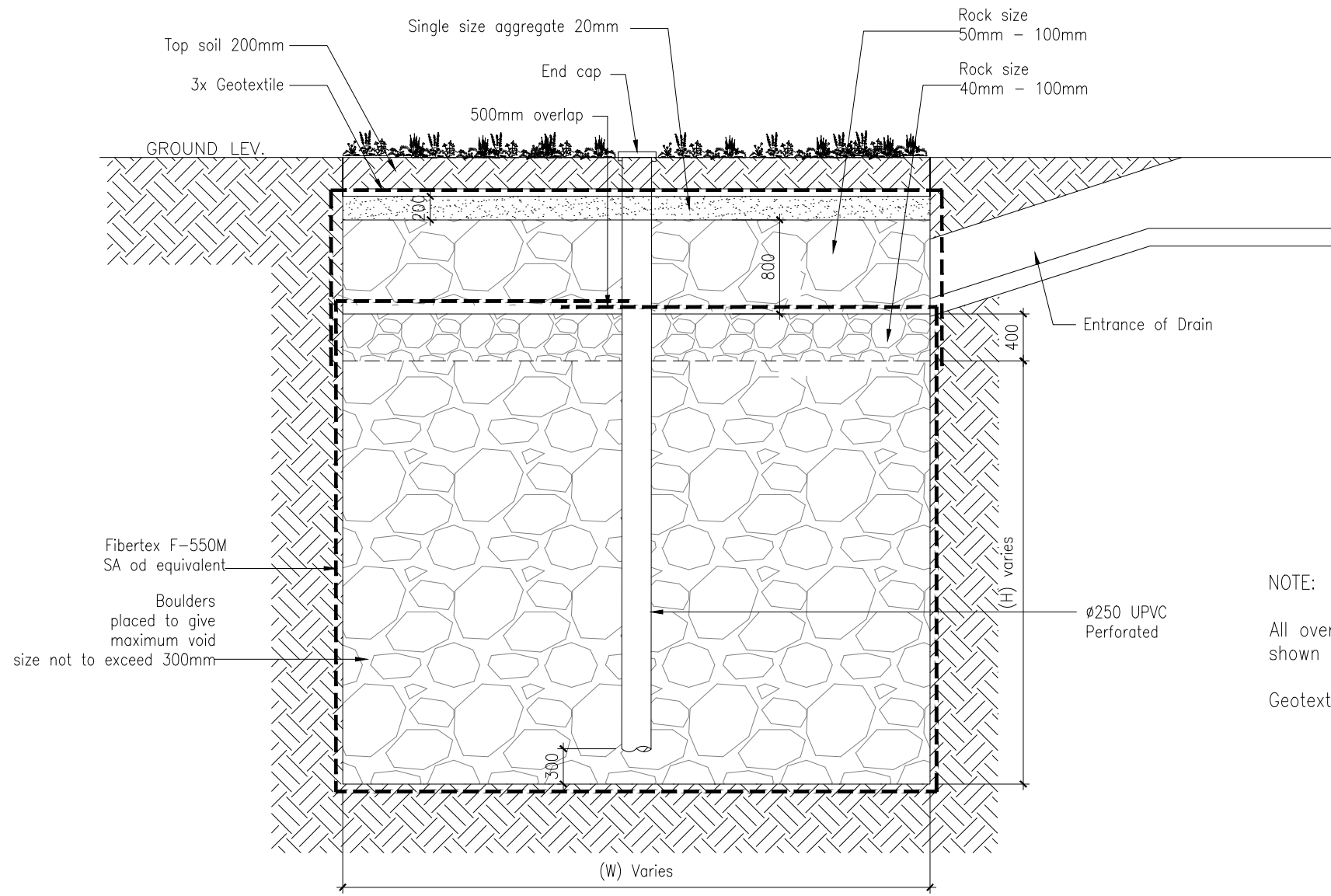
LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX I

Item	Description	Unit	Qty	Unit Price (MUR)	Total Amount (MUR)
1218	OTHER BUILDERS' ITEMS	XXX		BF	
1218A	SS ladders & SS safety cages grade AISI 304, platforms, stepirons, hand railing etc., to facilitate access to concrete wetwells & outlet valve chambers, etc. as per drawings. Rate to include all s/s nuts, anchor bolts & washers etc. where required. Contractor is required to check & Step irons 300mm wide approved plastic encapsulated	Lot	0		
1218B	stepirons to valve, all s/s nuts, anchor bolts & washers etc. where required.	Lot	1		
1218C	AISI SS grade 304 support structures for pipe & valve supports and supports for chequer plating platforms in wet wells & valve chambers at pumpstations	Lot	1		
1218D	SS316 ladders c/w safety cages for access to inlet and wetwell chambers including s/s supports, s/s fixing accessories, s/s nuts, bolts & washers etc as shown on the drawings. AISI 316 ladders and Safety Cages	Lot	1		
1218E	Allow for builders' works in relation to electrical power & control cables, sewerage inlet & outlets, odour control systems, vent pipes etc.	Set	1		
1218F	6mm thick aluminium chequer plating and support frames c/w bracing and lifting handles cut to suit to openings, sumps, wet wells etc. where shown on the drawings	Lot			
1218G	DI manhole covers with frame to BS EN 124, double sealed, C250, suitable for clear openings as per drawings - different dimensions	Lot	1		
TOTAL FOR THIS BILL CARRIED FORWARD TO LOT 1 - BILL NO. 12					

LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX J



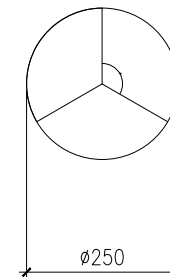
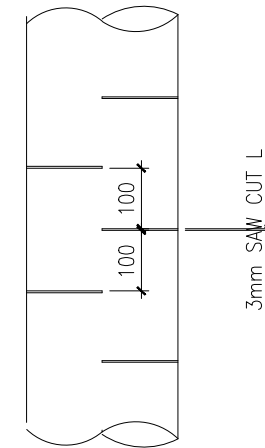
SOAKAWAY

DIMENSIONS			
TYPE	WIDTH (W)	LENGTH (L)	HEIGHT (H)
1	5.0m	5.0m	4.0m

NOTE:

All overlaps minimum 300mm unless shown

Geotextile membrane



ADDENDUM No.2

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Client:



Project:

INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:

TYPICAL DETAILS OF ABSORPTION PIT

Date: 23.01.24

Scale: 1:20

Drawn by: I.K

Designed by: Y.D

Checked by: N.G

File name and location no.

D:\EDUCATION HUB\Addendum\Addendum No. 3\Updated drawing Typical\23125-TD-3TP219.dwg

23125-TD-3TP219

TENDER



7th Floor, The Docks, United Docks Business Park, Caudan, Port Louis
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Rev.	Made by	Amendments	Issued	Date

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INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX K

Item	Description	Unit	Qty	Rate (MUR)	Total Amount (MUR)
				BF.	
1323A	SS ladders & SS safety cages grade AISI 304, platforms, stepirons, hand railing etc., to facilitate access to concrete wetwells & outlet valve chambers, washout chambers etc. as per drawings. Rate to include all s/s nuts, anchor bolts & washers etc. where required. Contractor is required to check & measure ladder & safety cage lengths on site after construction before fabrication.	Lot	1		
1323B	Step irons 300mm wide approved plastic encapsulated stepirons to valve &, washout chambers, all s/s nuts, anchor bolts & washers etc. where required. "Caswick" or similar equivalent	Lot	1		
1323C	AISI SS grade 304 support structures for pipe & valve supports and supports for chequer plating platforms in wet wells & valve chambers at pumpstations	Lot	1		
1323D	SS316 ladders c/w safety cages for access to inlet and water tanks including s/s supports, s/s fixing accessories, s/s nuts, bolts & washers etc as shown on the drawings	Lot	1		
1323E	Allow for builders' works in relation to electrical power & control cables, water inlet & outlets, vent pipes etc.	Set	1		
1323F	6mm thick aluminium chequer plating and support frames c/w bracing and lifting handles cut to suit to openings, sumps, valve chambers etc. where shown on the drawings	Lot	1		
1323G	DI manhole covers with frame to BS EN 124, double sealed, C250, suitable for clear openings as per drawings - Allow for: 2 Numbers 600 x 600 and 2 numbers 900 x 900	Lot	1		
1324	HOISTING EQUIPMENT	XXX			
1324A	Electric hoist with push trolley mounted on I-beam in indoor setup, c/w hook suspension, trailing cable and pendant controller. Paintwork to be suitable for a pumping station with chlorine usage / storage. Mounting height: 3-4m; Working load : up to 1000kg.	Set	1		
TOTAL FOR THIS BILL CARRIED FORWARD TO LOT 1 - BILL NO. 13					

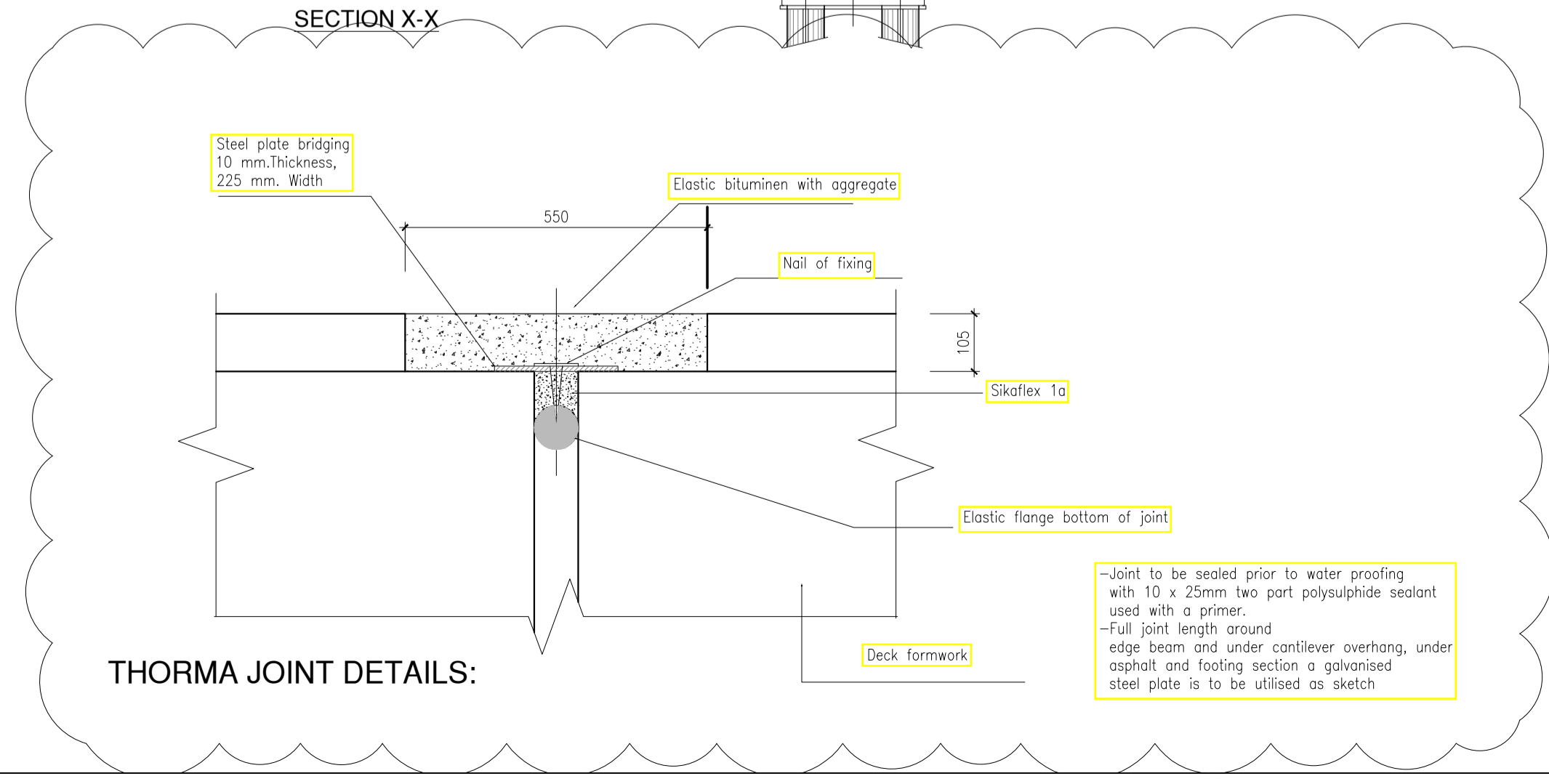
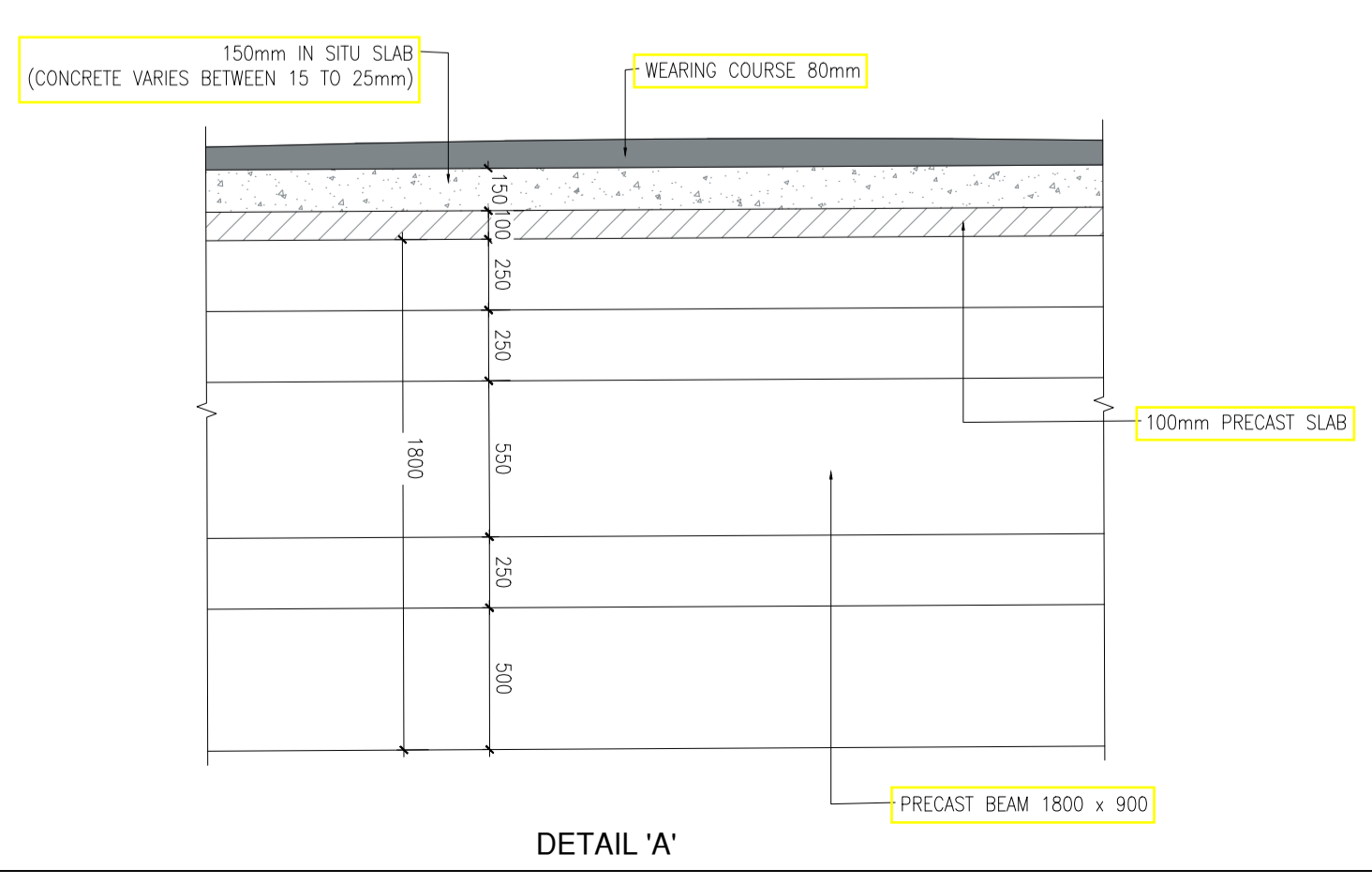
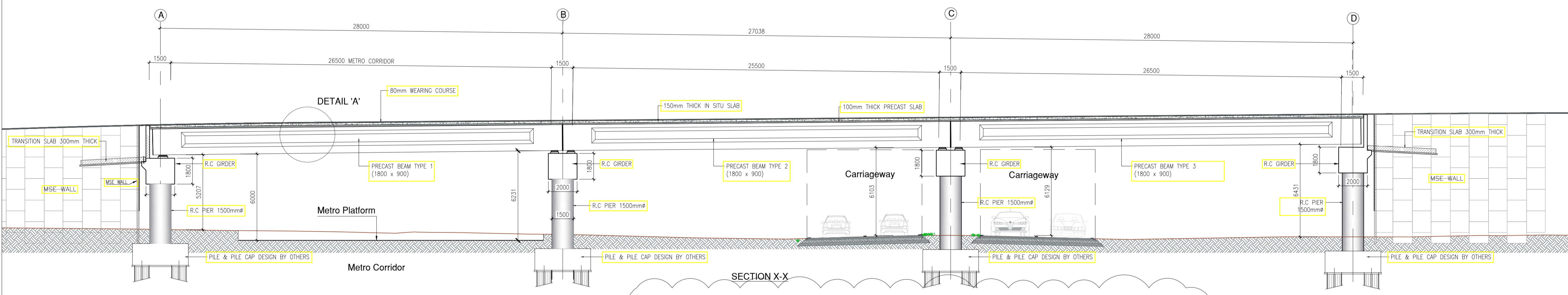
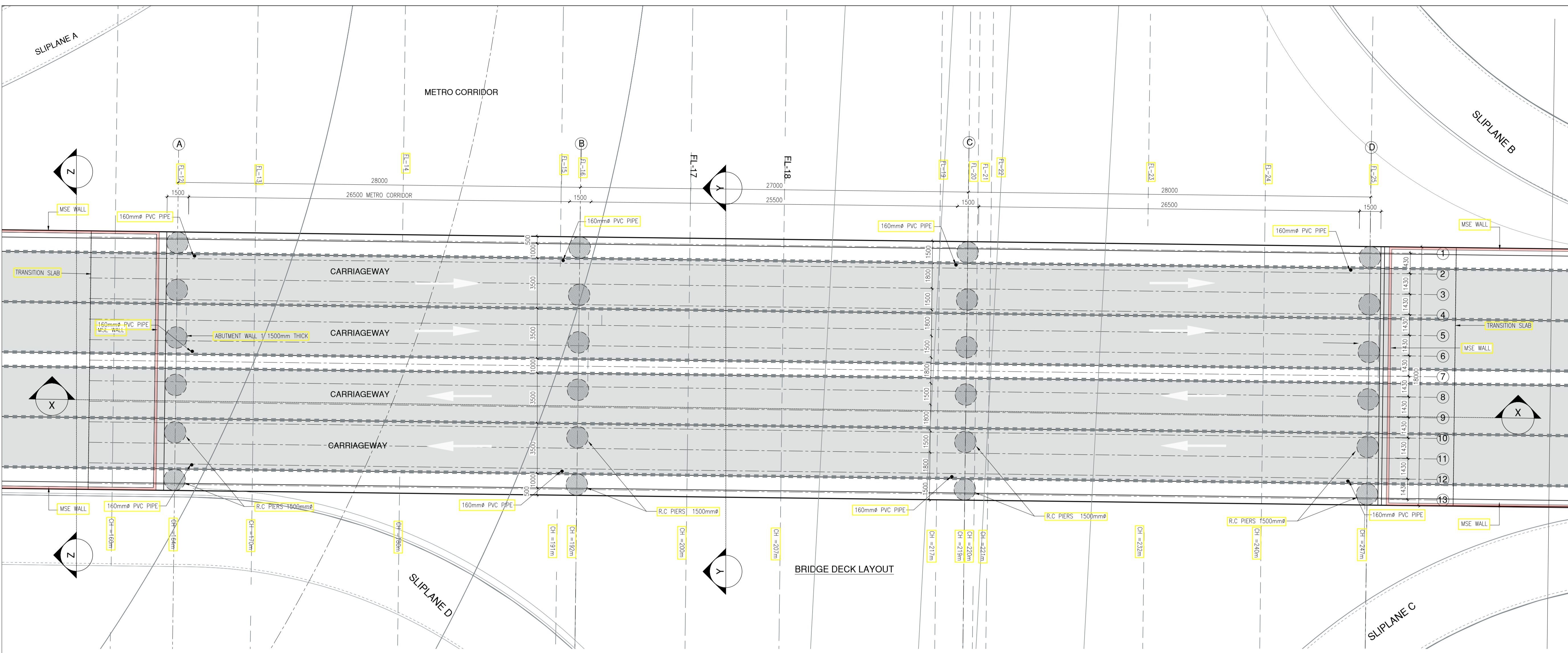
LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX L

Item	Description	Unit	Qty	Rate (MUR)	Total Amount (MUR)
1329B	Earthing station for main electrical earth. Terminate at an earth bar at MLVP. Include for an earth pit and test link. (Earth resistance < 3 Ω .)	Lot	1	BF.	
1330	POWER CABLES	XXX			
1330A	All power cables to be to BS Standards/colour coding with copper conductor. Allow for all cable glands, lugs, cable identification tags, etc. Allow for all cableways, underground PVC sleeves, builders works required for routing & laying of the cables, etc.				
1330B	From MLVP through automatic change over to MDB 4C x 25mm ² PVC/SWA/PVC + CPC 16mm ²	m	20		
1330C	From MDB to Control Panel for Pumps 4C x 25mm ² PVC/SWA/PVC + CPC 16mm ²	m	20		
1330D	From Control Panel for Pumps to Pump Set No. 1 5C x 6mm ² PVC/SWA/PVC	m	15		
1330E	From Control Panel for Pumps to Pump Set No. 2 5C x 6mm ² PVC/SWA/PVC	m	15		
1330F	From Control Panel for Pumps to Pump Set No. 3 5C x 6mm ² PVC/SWA/PVC	m	15		
	<i>N.B Lengths of all cables shall be subject to remeasurement</i>				
1331	WIREWAYS & WIRING	XXX			
	<i>Allow for:</i>				
	<i>(i) all wireways complete with proprietary accessories</i>				
	<i>(ii) flexible Cu/PVC/PVC cable complete with proprietary</i>				
	<i>(iii) terminations for the following points:</i>				
1331A	Light point	No.	3		
1331B	Emergency light point	No.	3		
1331C	One gang switch point	No.	3		
1331D	Socket point 1 gang, 3 pin, 13A, BS	No.	2		
1331E	Industrial socket point single phase, 16A	No.	1		
1332	SLEEVES	XXX			
1332A	Supply and install 2 nos. pressure type PVC pipes (110 mm dia) buried underground with warning slab and tape laid above according to standard practice.	m	200		
TOTAL FOR THIS BILL CARRIED FORWARD TO LOT 1 - BILL NO. 13					

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INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX M



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NOTE:

Client
LANDSCAPE MAURITIUS

CONSULTANT
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 Business Registration No: 036008759
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Project
INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:
BRIDGE DECK LAYOUT AND SECTION X-X

Stage:
TENDER DRAWING

Rev	Date	Mode	Amendments
1	29.06.23		

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 Drawn by: LX
 Designed by: VJW
 Checked by: VJW

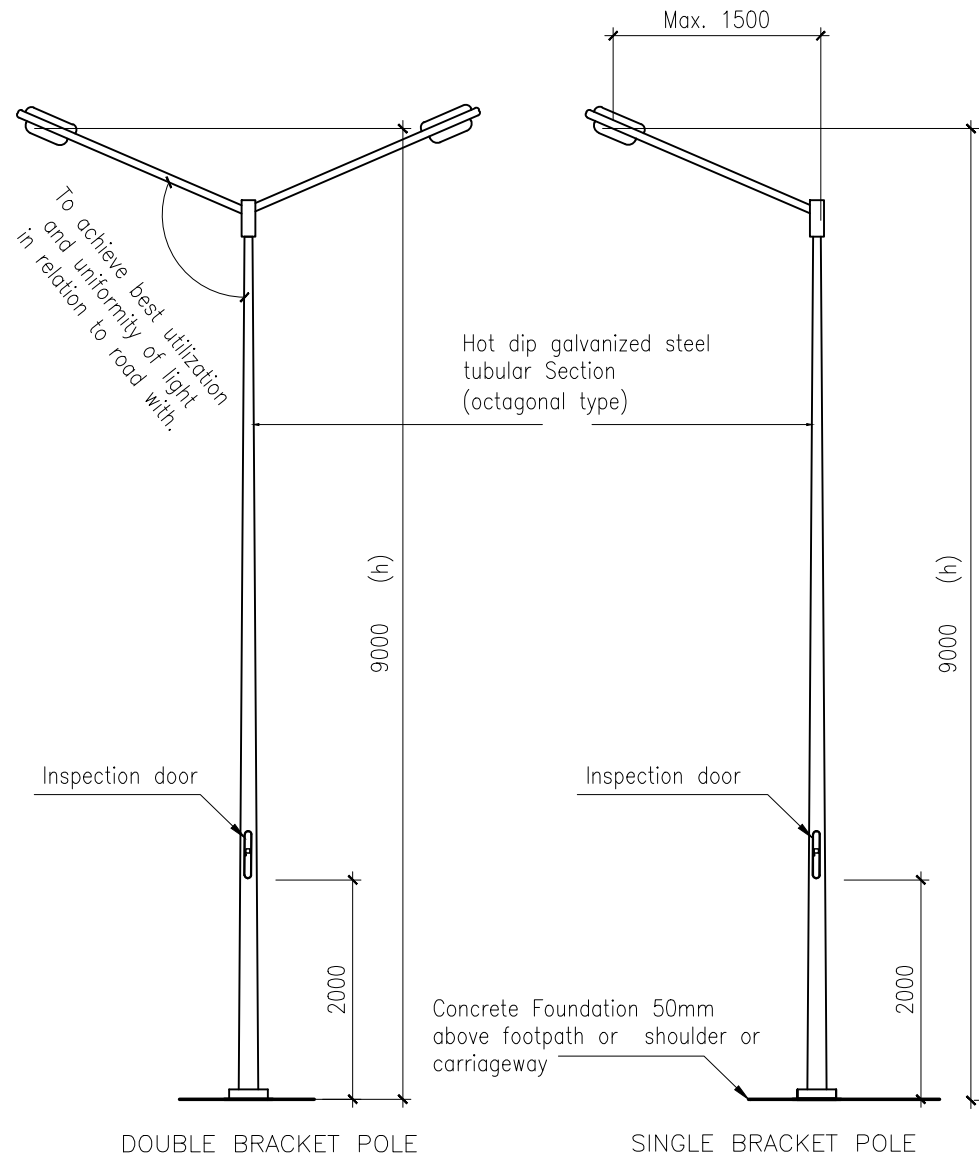
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23125-TD-1BR02
 File name and location no.
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ADDENDUM NO.2

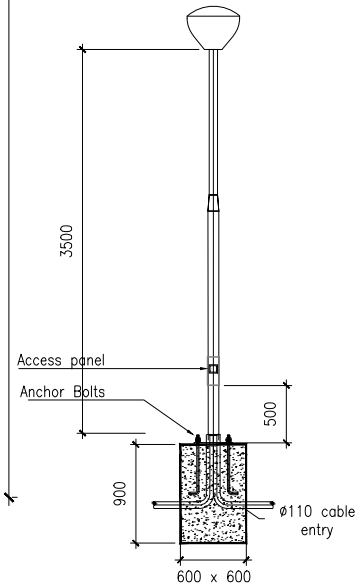
LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX N

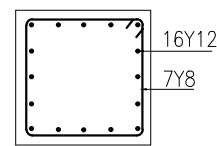
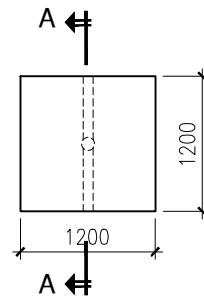
ADDENDUM No.2



STREET LIGHTING POLE 9.0m HIGH

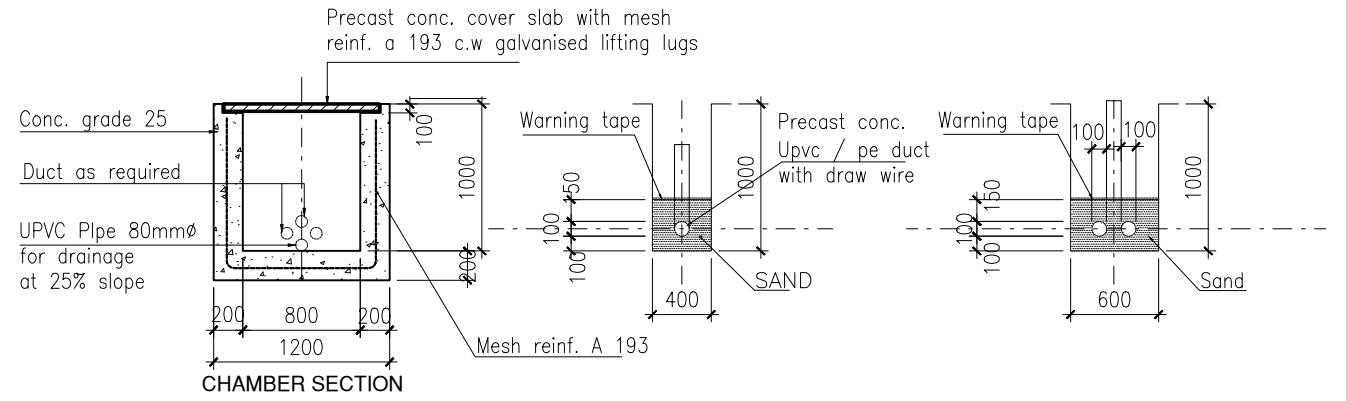


STREET LIGHTING POLE 3.5m HIGH



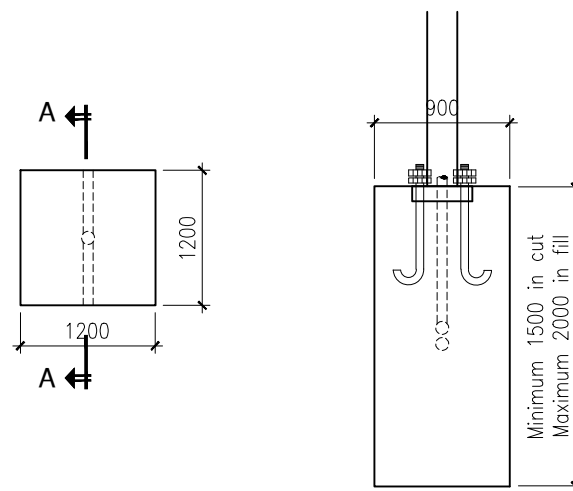
Concrete Class 25
Cover 40mm

STANDARD 9m STREET LIGHTING BASES

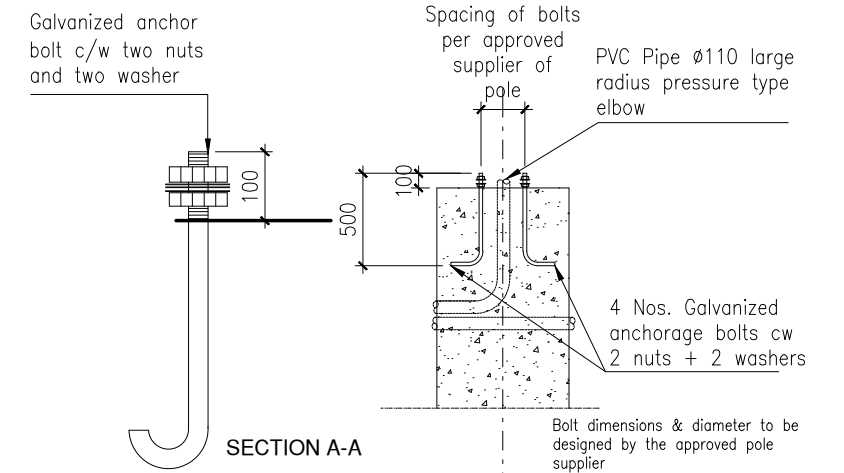


STREET LIGHTING TYPICAL DUCT TRENCH DETAILS OFF ROAD - SAND BEDDING AND SURROUND

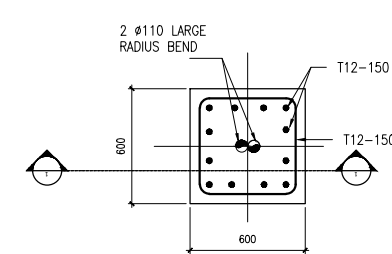
NOTES:
FOR ON ROAD - REPLACE SAND BEDDING AND SURROUND BY CONCRETE CLASS 15



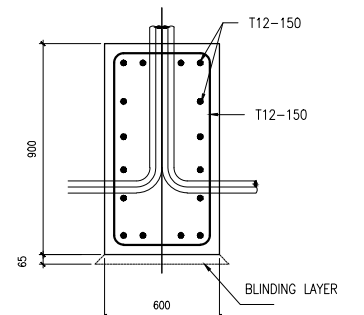
SECTION A-A



LIGHTING COLUMN ANCHORAGE DETAILS



CONCRETE BASE DETAIL



SECTION 1-1

STANDARD 3.5m STREET LIGHTING BASES

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Project: INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR
Drawing title: STREET LIGHTING POLE AND TRENCH DETAILS

Rev.	Date	Made by	Amendments	Issued	Date

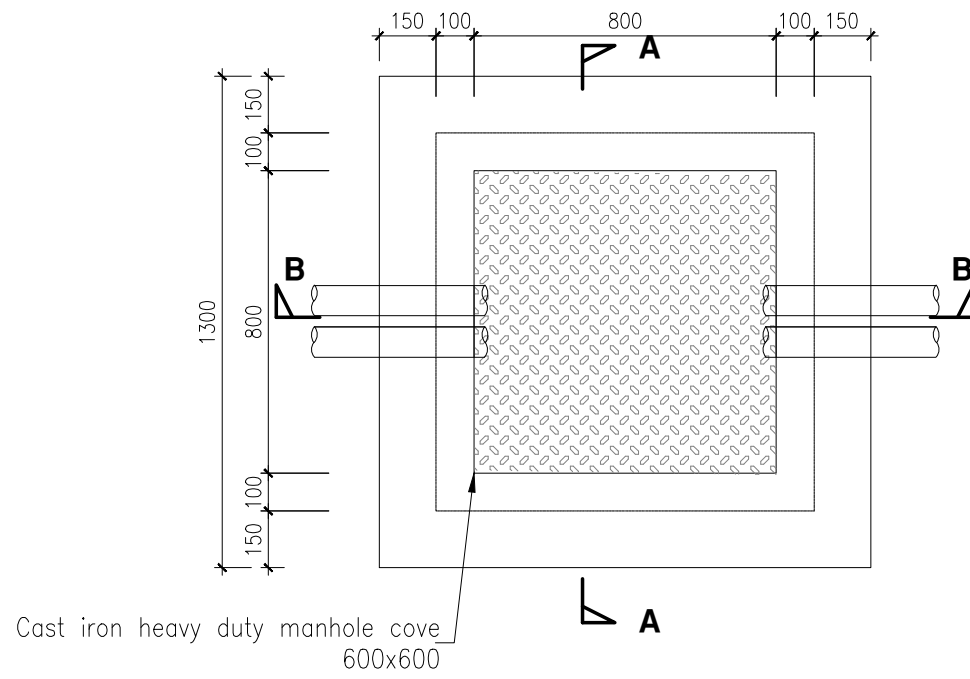
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Scale	NTS
Drawn by	I.K
Design by	Y.D
Check by	N.G

Drawing number: 23125-TD-3TP500.
Stage: TENDER
File name and location no. D:\EDUCATION HUB\Addendum\Addendum No. 3\Updated drawings\Typical\23125-TD-3TP500.dwg

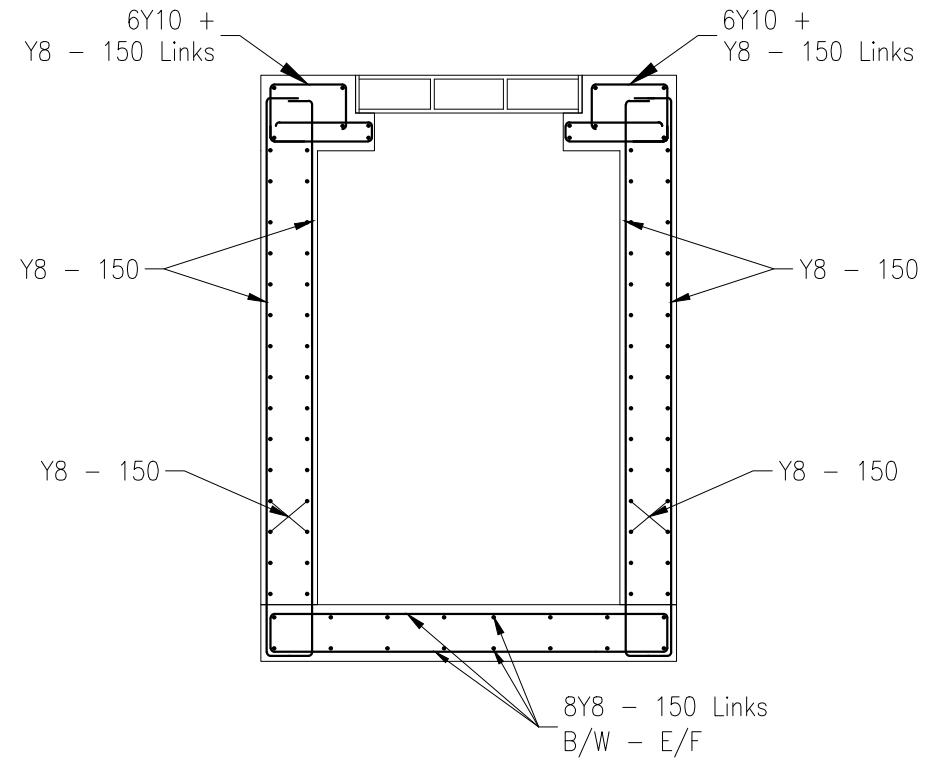
Consultant: **LUXCONSULT** (MIUS) LTD CONSULTING ENGINEERS
7th Floor, The Docks, United Docks Business Park, Caudan, Port Louis
Business Registration No: C06008759
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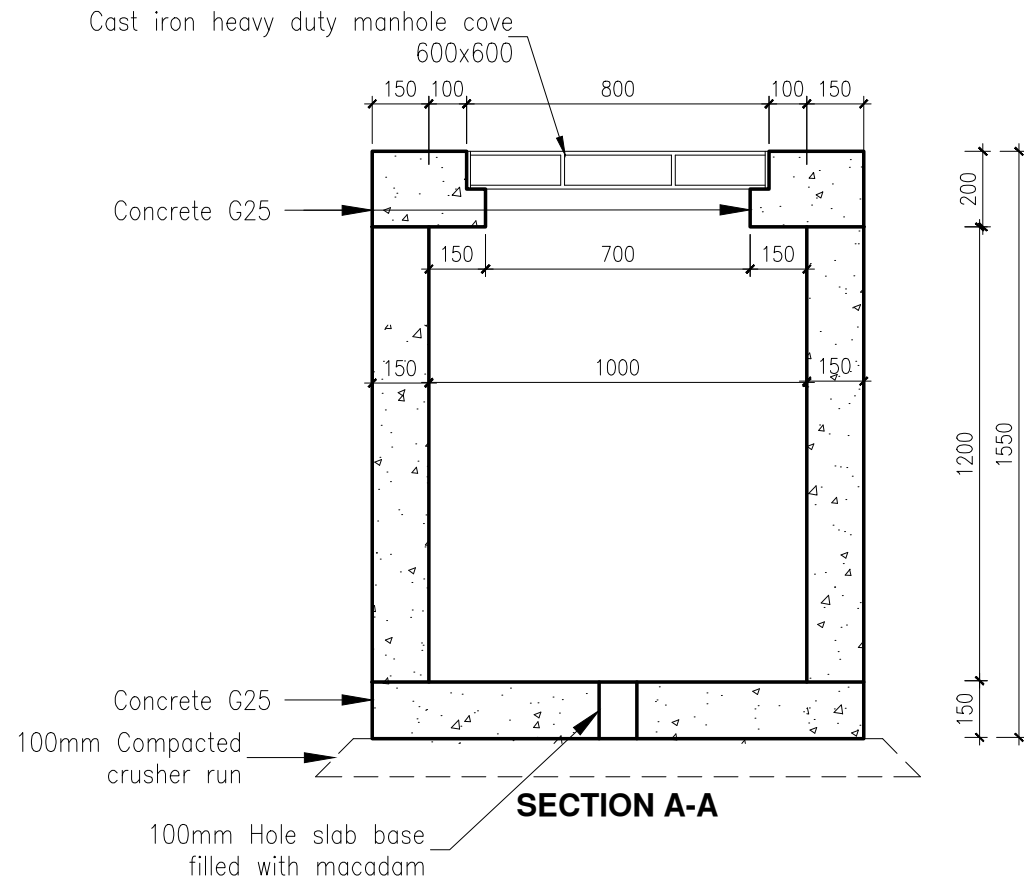
ANNEX O



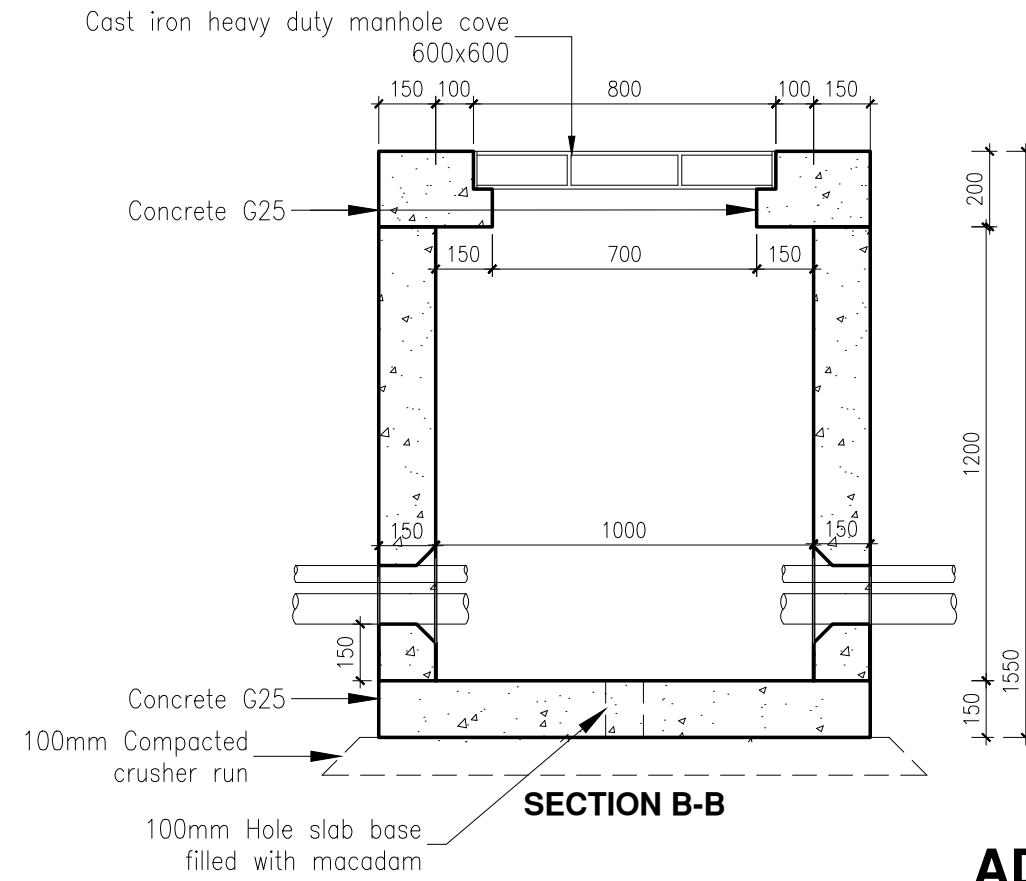
Cast iron heavy duty manhole cover
600x600
TOP VIEW



REINFORCEMENT DETAIL



Cast iron heavy duty manhole cover
600x600
Concrete G25
Concrete G25
100mm Compacted crusher run
100mm Hole slab base filled with macadam
SECTION A-A



Cast iron heavy duty manhole cover
600x600
Concrete G25
Concrete G25
100mm Compacted crusher run
100mm Hole slab base filled with macadam
SECTION B-B

ADDENDUM No.2

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INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:
TYPICAL EMTEL MANHOLE

Date	23.01.24
Scale	1:20
Drawn by	I.K
Designed by	A.K
Checked by	K.G
Rev. Made by	Amendments
Issued	Date

23125-TD-3TP413

TENDER

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LANDSCOPE (MAURITIUS) LTD
INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX P

Item	Description	Unit	Qty	Unit Price (MUR)	Total Amount (MUR)
	LOT 2 - BILL No. 9				
	<u>TELECOMMUNICATIONS NETWORK (EMTEL AND MAURITIUS TELECOM)</u>				
901	EXCAVATION	XXX			
901A	Excavate trench for depths less or equal to 2.0m for 4 dia. 45mm ducts	m	400		
901B	ditto but for depths greater than 2.0m for 4 dia. 45mm ducts	m	50		
901C	Excavate trench for depths less or equal to 2.0m for 3 dia. 60mm + 3 dia. 45mm ducts	m	2,000		
901D	ditto but for depths greater than 2.0m for 3 dia. 60mm + 3 dia. 45mm ducts	m	400		
901E	Excavate trench for depths less or equal to 2.0m for 2 dia. 60mm ducts	m	400		
901F	ditto but for depths greater than 2.0m for 2 dia. 60mm ducts	m	50		
901G	Excavate trench for depths less or equal to 2.0m for 2 dia. 80mm ducts	m	2,100		
901H	ditto but for depths greater than 2.0m for 2 dia. 80mm ducts	m	400		
902	DUCT / CABLE PROTECTION	XXX			
902A	Supply and place sand protection to ducts and cables below and above ducts for 4 dia.45mm ducts	m	450		
902B	Ditto but for 3 dia. 60mm + 3 dia. 45mm ducts	m	2,400		
902C	Ditto but for 2 dia. 60mm ducts	m	450		
902D	Ditto but for 2 dia. 80mm ducts	m	2,500		
902E	Bed and surround in concrete for ducts as per drawings	m ³	15		
903	SUPPLY, TRANSPORT, LAY AND JOINT PVC DUCTS	XXX			
903A	Supply, transport, lay and joint PVC ducts for 4 dia. 45 mm ducts	m	450		
903B	Ditto but for 3 dia. 60mm + 3 dia. 45mm ducts	m	2,450		
903C	Take delivery, transport, lay and joint PVC ducts for 2 dia. 60 mm ducts (Price to exclude supply. Materials to be supplied by Emtel)	m	450		
903D	Ditto but for 2 dia. 80mm ducts	m	2,500		
904	SUPPLY, TRANSPORT, LAY AND JOINT PVC BEND	XXX			
904A	PVC bend 45mm	No.	20		
904B	PVC bend 60mm	No.	30		
901C	PVC bend 80mm	No.	30		
905	CONSTRUCTION OF CHAMBERS	XXX			
905A	Chamber type M1C	No.	1		
905B	Chamber type K2C	No.	17		
905C	Manhole Type L0T	No.	36		
905D	Manhole for Emtel Network as per drawing	No.	18		
906	MT CABINET	XXX			
906A	Installation of Cabinet	No.	1		
	TOTAL FOR LOT 2 - BILL No 9 CARRIED TO LOT 2 - SUMMARY				

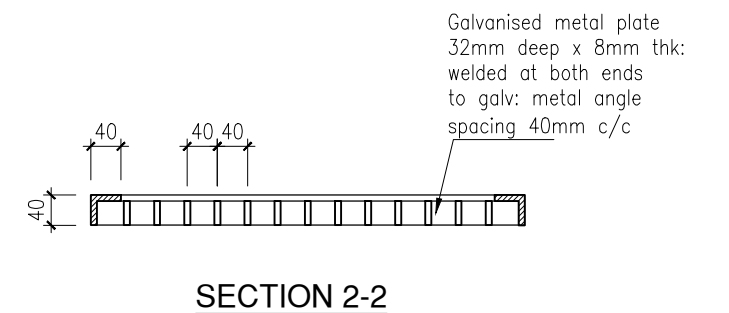
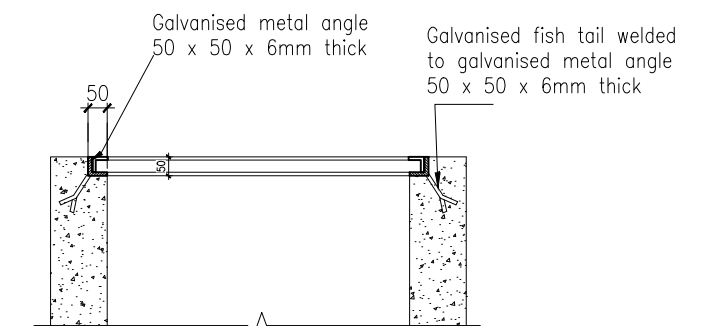
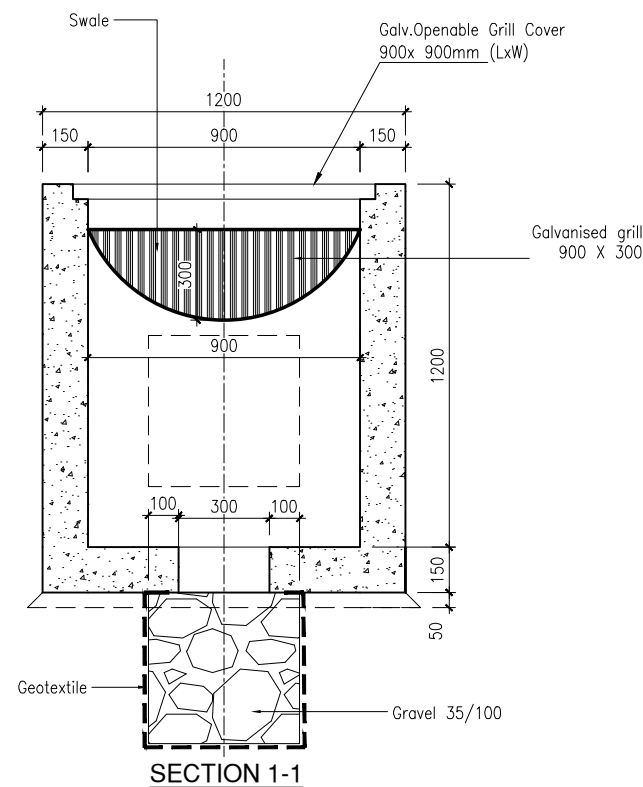
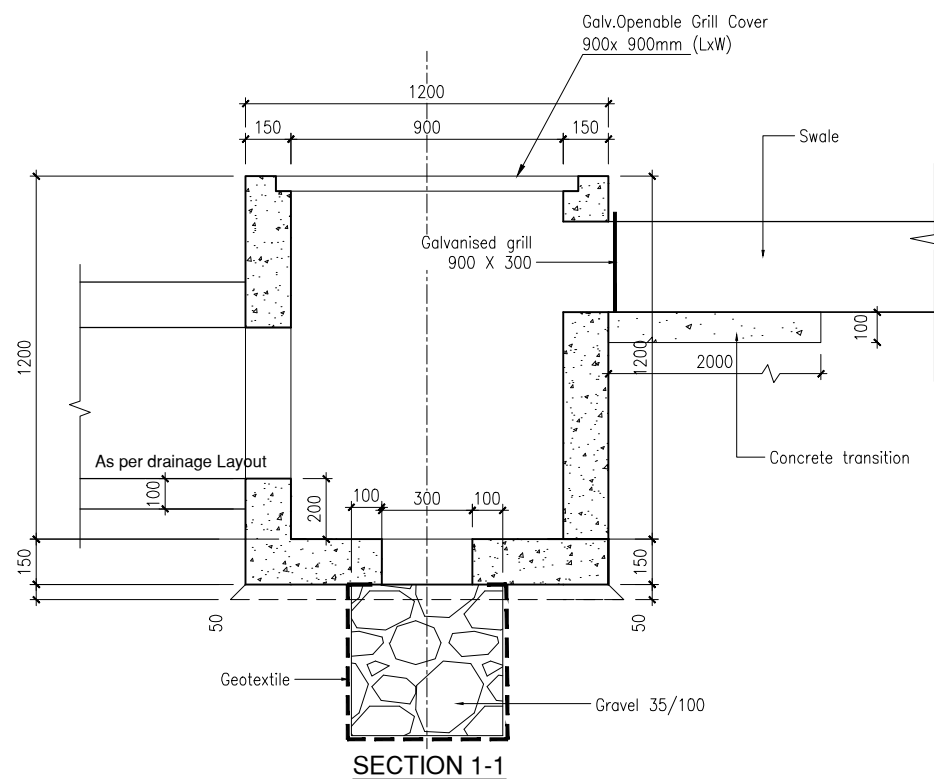
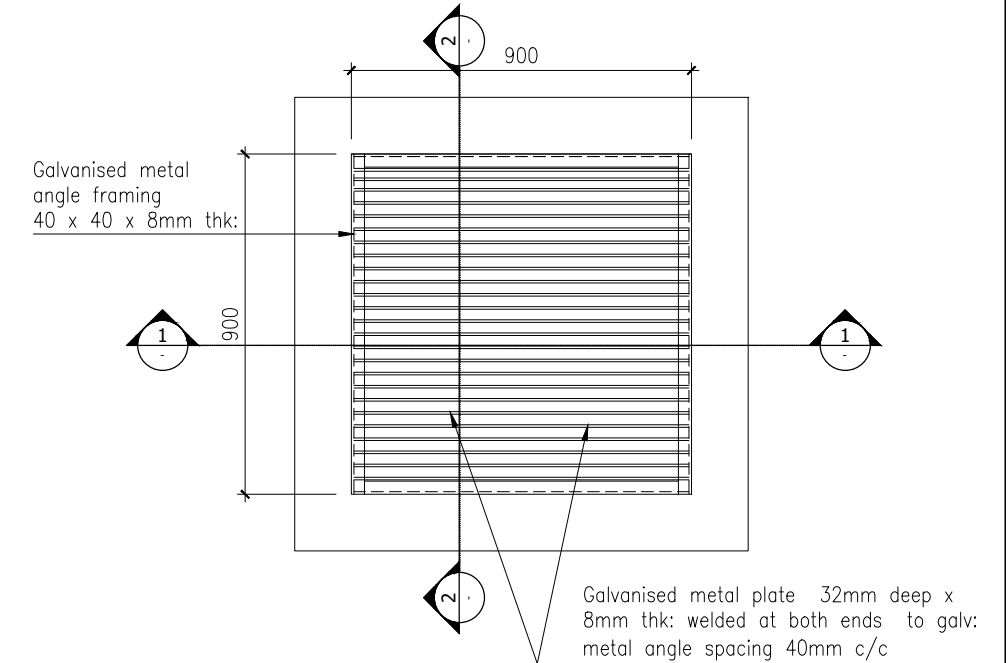
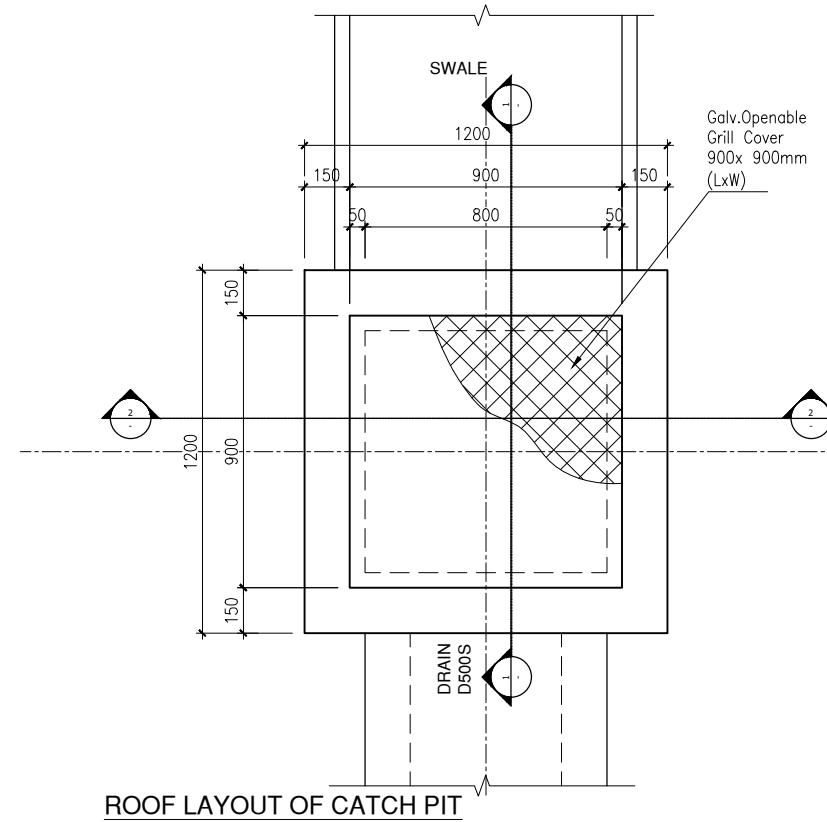
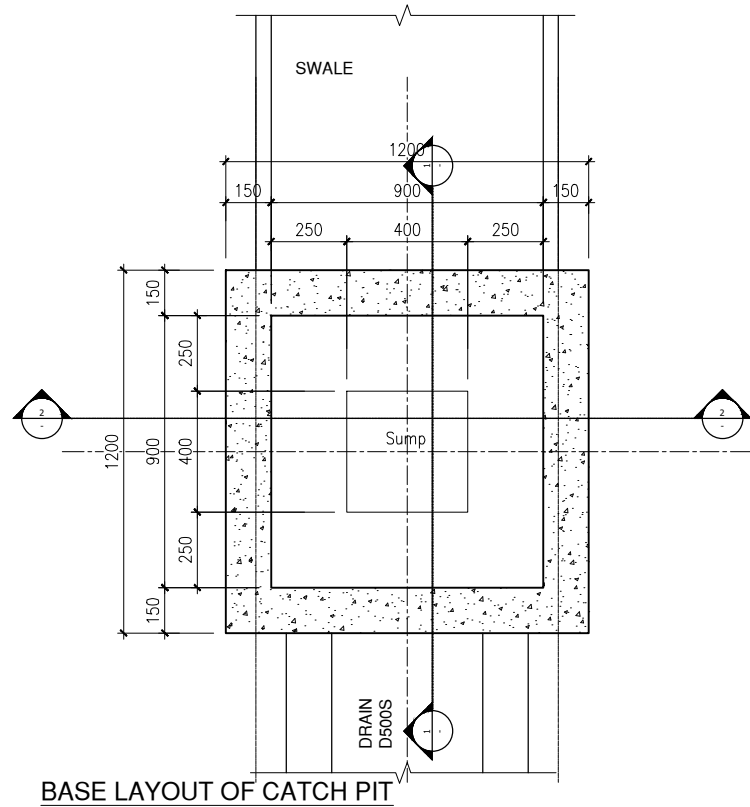
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INFRASTRUCTURE WORKS FOR EDUCATION AND HEALTH HUB AT COTE D'OR
REF No.: LM/CD/OC23/35

ANNEX Q

Item	Description	Unit	Qty	Unit Price (MUR)	Total Amount (MUR)
				BF	
1225B	Pump control panel for controlling individual pumps, LED graphics display for pump status (ON/OFF/FAULT), fault and alarm indicators.	Lot	1		
1225C	Emergency push buttons for each pump, deodorising unit and electric hoist, mounted near door	Lot	1		
1225D	Pump control panel to include GSM relays/modules for mobile alerts to designated mobile numbers and incorporate BMS-ready capabilities.	Lot	1		
1226	ODOUR CONTROL SYSTEM	XXX			
1226A	Supply & install weatherproof packaged activated carbon filter tower equipped with 2 Nos. in-line centrifugal fans (duty+standby), minimum 2.5sec contact time, designed for continuous operation c/w SS 304 ducting Ø100mm min. or as required, supports, flanged flexible bellow connections and fixing accessories to form an effective ventilation system:- <i>Capacity as per specialist (or minimum 12 ACH) to suit setup.</i> Odour control system to be designed as a whole by specialist for a total drywell volume of 265 m3.	Lot	1		
1227	FIRE SAFETY	XXX			
	FIRE EXTINGUISHERS				
	Portable fire extinguishers to EN3:				
1227A	ABC dry powder 5 kg	No.	1		
1227B	CO2 4 kg	No.	1		
1228	TOXIC GAS DETECTION	XXX			
1228A	Toxic multiple gas level detection meters/detectors (H2S, CO, CO2, CH4 etc.) c/w rechargeable battery packs, carrying cases, sensor heads and all necessary accessories, with full set of spare cartridges. Gas detector mounted at pump level and reader panel near plant room door	Set	1		
	TOTAL FOR THIS BILL CARRIED FORWARD TO LOT 1 - BILL NO. 12				

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ANNEX R



ADDENDUM No.2

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Client:

Project:
INFRASTRUCTURE WORKS FOR MEDICAL & EDUCATION HUB AT COTE D'OR

Drawing title:
TYPICAL DETAILS OF CATCH PIT TYPE 3 - (Height 1.20m)

Date	23.01.24
Scale	1:25
Drawn by	I.K
Designed by	A.K
Checked by	K.G
File name and location no.	D:\EDUCATION HUB\Addendum\Addendum No. 3\Updated drawing Typical\23125-TD-3TP218.dwg
Rev. Made by	Amendments
Issued	Date

23125-TD-3TP218

TENDER

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REF No.: LM/CD/OC23/35

ANNEX S

Item	Description	Unit	Qty	Rate	Total Amount
				BF.	
	Drain/Washout valves				
811F	Drain/washout valves on DI pipe DN 200 complete with all fittings as per arrangement shown in typical drawings	No.	2		
	Fire Hydrant Valves				
811H	Fire Hydrant DN 80 complete with all fittings as per arrangement shown in typical drawings	No.	7		
	812 CONCRETE WORKS				
812A	Construction of concrete thrust blocks, anchor blocks, pipe supports	No.	90		
812B	Construct complete air valve chamber as per Drawing	No.	2		
812C	Construct complete washout/Drain valve chamber as per Drawing	No.	2		
812D	Construct complete fire hydrant chamber as per Drawing	No.	7		
812E	Construct complete sluice/Gate valve chamber as per Drawing	No.	4		
	813 MARKER POSTS				
813A	Supply and fix marker posts with letter AV as per typical drawing	No.	2		
813B	Supply and fix marker posts with letter SV as per typical drawing	No.	4		
813C	Supply and fix marker posts with letter FH as per typical drawing	No.	7		
813D	Supply and fix marker post with letter WO as per typical drawing	No.	2		
	814 PLOT CONNECTION				
814A	Plot Connections for plots on same side of road of the Service main	No.	10		
814B	Plot Connections for plots on opposite side of road of the Service main	No.	5		
	815 MISCELLANEOUS				
815A	Allow for connection to service reservoir compound	P.Sum	1	100,000	100,000.00
815B	Allow for connection to lifting station compound	P.Sum	1	100,000	100,000.00
815C	Allow for connection to green spaces	P.Sum	1	100,000	100,000.00
TOTAL FOR LOT 2 - BILL NO. 8 CARRIED TO LOT 2 - SUMMARY					

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REF No.: LM/CD/OC23/35

ANNEX T

Article 21.6 Flow Meters

Flow meters shall be electromagnetic remote type or similar approved by the Engineer fit for working in a temperature range of -20 to 60 0C. Fluid velocity shall be up to 15 m/s, with a reading accuracy of ± 0.2 to ± 0.5 %.

Measurement parameters shall be instantaneous flow, velocity, positive and negative accumulative flow, with detection and alarm functions.

Communications shall include Modbus / GPRS / remote reading capabilities.

Minimum protection shall be IP68.

All meters shall be double flanged, the flanges being drilled to BS EN 1092-1:2002 and shall be provided with 7 days chart recorders actuated by mechanical drive.

Article 21.7 Pumpset General Specifications

Pump types	Vertically Mounted Close Coupled with cooling jacket suitable for installation in a dry well configuration (non-clog)
Pump impellers	Abrasion Resistant Material
Impeller free passage	Minimum 80mm

Mini & Main Pumpstations – General Requirements

Type	Prefabricated GRP/HDPE or Reinforced Concrete as indicated.
Benching	Pump manufacturer's recommended design

Electric Motors – General Specifications

Voltage	3 Phase 400V
Frequency	50Hz
Ingress Protection	IP 68
Pump Speed	1500 rpm (max)
Speed Control	Variable Speed Drive
Insulation	Class H
Cooling	Cooling Jacket

Pumps for Dry Well Installations

For pumpstations, the sewage pumps shall be vertical mounted close-coupled type, with cooling jackets suitable for installation in a dry well configuration.

The pump units to be provided shall be specifically designed for sewage applications and shall be standard catalogue products procured from a reputable manufacturer. They shall be compact systems, fully assembled and painted and ready for installation.

The pumps shall comprise a volute casing, discharge elbow, impeller, extended shaft, mechanical seals, VSD rated duty motor, safety devices and other necessary appurtenances. Pump impellers shall be abrasive resistant.

The volute casing shall be cast free from blowholes, sand holes, shrinkage cracks and other faults. The casings shall be cast iron. The suction inlets shall be designed to minimise

entrance losses and shall have a smooth interior surface to prevent harmful vortices from forming.

Liner rings shall be provided to ensure an optimum clearance between the casing interior surface and the impeller outside end surface to obtain the maximum efficiency of the pump. The liner ring shall be stainless steel and firmly fixed of the inner surface of the casing by flush fitting screws. The rings shall be replaceable.

The impeller shall be non-abrasive, non-clog mixed flow type, and shall be fastened to the shaft in such as manner as to be readily removable.

The pump shafts shall be a one-piece construction extending from the motor shaft and shall be of sufficient diameter and strength to transmit the required torque and distorting vibrations. The shafts shall be supported by two (2) sets of ball or roller bearings. Endurance time of the bearings shall be at least 50,000 hours.

The pumps shall be provided with cartridge type double mechanical rotating shaft seals, running in an oil bath having separate, constant hydro-dynamic lapped seal faces of silicon carbide. The lower seal separation, the pump sewage and the oil bath shall be made of silicon carbide. The upper seals shall be made of silicon carbide and shall seal the motor room from the oil bath.

Mechanical seals shall comprise one position drive rotating ring and one stationary ring with interfacial held constant by its own spring system enriched by external liquid pressure. The mechanical seals shall be capable of enduring a maximum operating pressure equivalent to twice the shut-off head of the pump.

The pump elbow shall be designed to support discharge pipes and the pumping unit with supporting legs anchored to floor. The pump elbow shall be cast iron. Bolts and nuts in pump wet well shall be stainless steel.

The VSD motors shall be 3-phase, 380V, 50 Hz, air filled type squirrel cage induction motors and water immersion IP68 type and shall be equipped with winding temperature detectors for each phase. The motors shall be designed for continuous operation at a maximum pump suction well temperature of 40°C and be capable of up to fifteen (15) starts per hour. Motor insulation shall be Class H and voltage and frequency fluctuation tolerances shall be a maximum 10% and 5% respectively.

The motors shall also include an integral cooling jacket system using pumping wastewater for cooling. Wastewater circulation through the jacket shall be achieved by discharging the pumped wastewater into the cooling jacket from the periphery and high pressure side of the impeller, and returning it into the low pressure side behind the impeller at the hub. The cooling water passageways shall be designed so that clogging does not occur.

Thermal detectors for the motors shall be provided to detect any abnormal motor temperature rising. A leakage detection chamber shall be provided between the shaft seal and the motor chamber to collect and stop an immersion of leaked water and oil to the motor chamber. Float type leakage detectors shall be provided to detect the leakage both water and oil.

Required power will be supplied from the pumpstation panel, by using the cabtyre (flexible) cables. The cabtyre (flexible cable) cables shall have sufficient capacity for not only maximum load current but also any short circuit fault current. At least three single core 600V flexible cables shall be required.

The cable connection system shall comprise primary, secondary and tertiary sealing methods. The primary seals shall be carried out by a cylindrical sealing elastomeric grommet made of NBR materials. Compression type subsequent sealing shall be of the type not requiring specific torque requirements.

Tertiary sealing shall be provided to prevent leakage into the motor housing in case of cable damage as this may cause capillary action through the insulation. The cable connection system shall be the same for both power and control cables. At least twenty (20No.) metres of power and control cable shall be furnished for connection between the motor and the terminal box.

Revolving parts shall be truly balanced both statically and dynamically so that when running at normal speeds and at any load up to the maximum, vibration does not exceed Class II, level B from ISO 10.816-1 standards, and the equipment shall operate with the least possible amount of noise.

The pumps shall be installed in a dry well configuration. 2 nos. dry wells shall be provided, each having 2 inlets with bellmouth and gate valve connecting to a common suction manifold. Pump inlets shall be connected individually to the latter and the outlets on to a common discharge manifold.

Variable speed driven (VSD) pump motors shall be totally enclosed and fit for use in a dry well condition. In the event of dry well flooding, the pumpsets shall remain operational.

1. Major pump material components shall be:-

Casing (Cast Iron)	Grade 250
Pump Elbow (Cast Iron)	Grade 250
Motor Cooling Jacket	S/S400
Impeller	Anti Abrasive
Shaft	S/S403
Liner Ring	SS304

2. Accessories to be included for each pump unit shall be:-

Cabletyre cables	1 set
Foundation bolts nuts and washers	1 set
Engaging device between pump and elbow	1 set
Diaphragm type pressure gauge with connection pipe & stopcock	1 set
Terminal box	1 set
Special tools (for all units)	1 set
Mechanical seals for each pump	1 set

General Pumpstation Requirements

A 3 phase 400V electricity supply from CEB will be required at each pumpstation. Items have been allowed for the cost of these connections in the Bill of Quantities. The Contractor will be required to liaise with CEB for providing, testing and energising the electrical supply including pole/ground mounted transformers, and metering cubicle at each location.

Screening of incoming wastewater flows shall generally be done by the use of vertical sieve screens. These units shall be provided at all the main reinforced concrete pumpstations as shown on the drawings.

Vertical sieve screens and their component parts shall be manufactured from grade AISI 316 SS. They shall be Johnson Screens – Vertical Sieve Screen MID/V or similar approved.

The Contractor will be required to submit full details of their proposals for these units for approval prior to installation and acceptance by the Engineer. The units shall be sized by the Contractor for the projected incoming wastewater flows accordingly.

As part of this tender, the Contractor will be required to submit shop drawings of all the above screening equipment for approval by the Engineer. The cost of such drawings is deemed to be included on the rates for the supply and installation of the items.

The Contractor shall also provide a mechanical or electrical lifting hoist mounted on a concrete base at each of the pumpstations. The hoist will be utilised to lift and lower pumps from and to the dry well.

The Contractor shall provide shop drawings of the lifting hoisting hoist and its supports for approval by the Engineer.

Exterior security lighting shall be provided as indicated on the drawings.

An external potable water point shall be provided at the positions shown at each pumpstation location.

An intruder alarm, fire alarm and CCTV camera shall be installed at each pumpstation.

All CEB, CWA and MT connections to each new pumpstation shall be registered by the Contractor in the name of the Wastewater Management Authority. All monthly fees shall be paid by the Contractor until the next monthly invoice following the issue of a Taking Over Certificate.

Article 21.8 Ultrasonic Level Sensors

Ultrasonic Level Sensors (if specified) shall be specially designed for sewage applications and shall be standard catalogue products from a reputable manufacturer. They shall be fully enclosed systems ready for installation. The level controllers shall be able to display continuous filling and emptying cycles with minimum lag. Location of the transducer on the wet well shall be such that the path of the ultrasonic beam is free from any obstacles.

The ultrasonic level sensors shall be supplied and prewired with approximately 50m of screened cable in order that a single cable free of connections can be made from the level transducer into the controller located in the MCC.

Transducers

The Table below sets out the required transducer functions and performance.

Transducer Functions and Performance	
Type	◆ Non –contact ultrasonic level transducer
Measuring Range	As per requirement
Temperature Range	–20 to 60 degrees C.