

12 September 2023

Brett Phillips
Director
Lands Advisory Services Pty Ltd
PO Box 2317
Dangar NSW 2309

Project Name: Flood assessment - 3540 The Lakes Way, Charlotte Bay NSW
Project Number: E230984

Dear Brett,

1 Your project our value

EMM Consulting Pty Limited (EMM) appreciates the invitation to submit this fee proposal to provide a flood study for the proposed caravan park to be located at 3540 The Lakes Way, Charlotte Bay. We understand the applicant is submitting a development application (DA) to Mid Coast Council and a flood study will support the application as the site is subject to flooding.

EMM provided preliminary flooding and stormwater advice for the development site in 2018. This included the development of hydrologic and flood models for the proposed master plan which at the time included a residential subdivision. EMM will update the existing flood models to reflect the revised site layout to support the flood study for the development.

2 Our approach

2.1 Scope of works

The scope of works will be broken down onto two components:

1. **Preliminary flooding constraints analysis.** Tasks include:
 - Provide preliminary flood constraints mapping and characterisation based on the results produced in 2018. This will include preliminary advice on design implications and emergency access considerations.
 - An online meeting with Mid Coast Council's flooding and drainage engineer to confirm assessment requirements.

2. **Flood study.** Tasks include:

- Confirming key hydrologic and hydraulic assumptions. This would preferably be supported by a site inspection to identify key site features affecting flooding.
- Review and update of the existing flood models to reflect existing flooding conditions. This will include:
 - Fixing software bugs and updates to the model to be compatible with TUFLOW software updates since development of the model in 2018 version
 - Review of broadscale hydrologic assumptions.
 - Updates to the modelling following the confirmation of key hydraulic assumptions.
 - Update the TUFLOW model DEM using survey provided by LAS (including culvert invert levels and road crest levels).
- Undertake flood modelling for the existing landform, including:
 - The 5% AEP, 1% AEP and PMP events.
 - Depth, level and velocity of flooding and flood hazard
- Update the flood model for the proposed development by considering:
 - Changes to the landform (i.e. areas of filling) by applying a DEM or ArcGIS equivalent format provided by LAS.
 - Proposed changes to key hydraulic features.
 - Proposed increase to impervious areas.
- Undertake flood modelling for the proposed landform, including:
 - The 5% AEP, 1% AEP and PMP events.
 - Depth, level and velocity of flooding, flood hazard and for each AEP event.
 - Flood level difference mapping for each AEP event.
 - Sensitivity analysis for the 1% AEP event.
- Liaise with LAS to determine an appropriate emergency management approach for the site. This may include, for example:
 - Avoiding development in certain areas due to flood risk.
 - Providing continuously rising road access from development areas on flood prone land to flood refuge areas.
 - Refuge areas.

- The objectives of practical flood emergency response plan (but not the provision of such plans)
- Preparation of flood report to accompany the DA, including:
 - Description of site flooding.
 - Description of the impacts of the proposed development on flooding conditions.
 - Flood mapping, for the events and categories described above.
 - Description of the proposed emergency management approach for the site.

2.2 Deliverables

The proposed outputs for the scope of works are as follows:

- A flooding constraints analysis provided as a PowerPoint presentation.
- A draft flood study letter report.
- A final flood study letter report (addressing one set of consolidated comments from LAS).

2.3 Information Requirements

To undertake the described scope, EMM requires the following:

- Recent survey of the existing landform as DEM in GIS compatible format (e.g. ASCII). The survey also needs to include including culvert invert levels and road crest levels.
- Proposed changes to the landform (i.e. areas of filling) by applying a DEM or ArcGIS equivalent format.
- Proposed changes to land surfaces affecting runoff i.e. impervious areas.
- Details of proposed changes to hydraulic structures upstream or downstream of the site (culverts etc)

3 Our offer

3.1 Fee

EMM's fee is provided in Table 3.1, based on the proposed scope of work summarised in Section 2, with all fees quoted exclusive of GST.

Table 3.1 Fee estimate

Task	Fee estimate (excl. GST)
Flooding constraints analysis	\$5,020
Site inspection	\$4,341
Flood study	\$25,560
TOTAL	\$34,921

3.2 Assumptions

The assumptions provided with this scope and costing are:

- The outcomes from the preliminary constraints analysis are subject to change depending on the outcomes of confirming the key hydraulic assumptions. The purpose of this stage is to provide LAS an indication of flooding at the site in a timely manner.
- Meeting allowance includes a 1 hr inception meeting, 1hr meeting with Mid-Coast Council flooding engineer and 1 hr preliminary constraints presentation.
- No allowance is provided for meeting with Mid-Coast Council or works associated with addressing comments following submission of the DA.
- LAS will provide proposed alterations to the landform for the project as a DEM in a GIS suitable format.
- Our scope is based on the concept masterplan and briefing provided by LAS.
- The information contained within our proposal should be treated as Commercial in Confidence.

3.3 Terms and Conditions of engagement

To accept this proposal please complete the Contract Acceptance form (see Appendix A) and return to the EMM contact on this proposal. Our fee is valid for a period of 60 days.

Our conditions of engagement are provided in Appendix A and are deemed as accepted upon receipt of the completed Contract Acceptance form.

3.4 Time frames for delivery

EMM has capacity to undertake the work at the earliest convenience and our specialists are in a position to deliver the constraints analysis within 1 weeks from the date of project commission, and the draft flood study 5 weeks later.

4 Health, safety, environment and quality

EMM's Integrated Management System (IMS) incorporates the company's safety, environment and quality systems and processes into one framework with unified objectives. Our IMS has been assessed by an independent third party (QMS Certification Systems) and is certified to international standards ISO 9001:2015 Quality Management Systems; ISO 45001:2018 Safety Management Systems; and ISO 14001:2015 Environmental Management Systems.

Continual improvement and consistent results are principles embedded in EMM's culture and form the foundation of our service and delivery.

Copies of EMM's certificates of approval are available upon request.

5 Closing

Thank you for contacting EMM regarding this project. We look forward to your favourable consideration of our proposal.

Yours sincerely



Sally Callander

Associate Water Resources Engineer

scallander@emmconsulting.com.au

EMM have relied on the information that Lands Advisory Services Pty Ltd has supplied to us in preparing this proposal and we have based the scope, commercials and recommendations in our proposal on this information. We provide our proposal to Lands Advisory Services Pty Ltd on a confidential basis for Lands Advisory Services Pty Ltd's use only for the purpose of the aforementioned project. We take no responsibility for its use by other parties.

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Appendix A

Conditions of Engagement

CONDITIONS OF ENGAGEMENT

The general terms and conditions set out below apply to all commissions undertaken by EMM Consulting Pty Limited, ABN 28 141736558, (hereafter EMM).

Definitions

“Commission”: the scope of work to be undertaken and products to be prepared by EMM for a client as specified in an EMM Proposal or as otherwise agreed in writing with a client.

“EMM Proposal”: a document prepared by EMM for a prospective client normally describing a proposed scope of work, budget, time schedule, nominated personnel and other relevant information.

“Standard Rates”: EMM’s normal fee rates under which it charges clients for the provision of services.

“Subcontractor”: a person or company nominated by EMM in a Proposal to undertake part of a scope of work but who is not an employee of EMM or a related corporate entity.

Terms and Conditions

1. Role of EMM

- 1.1 EMM will act in all professional matters as a faithful advisor to their client. EMM will exercise reasonable skill, care and diligence in the provision of its professional services to the standard normally practised by town planning, environmental and acoustic consulting professionals.
- 1.2 If EMM becomes aware of any matter which will change or which has changed the scope of services to be provided or the anticipated time period for the provision of those services, EMM will notify the client of this within a reasonable time of the subject circumstances changing.
- 1.3 EMM will exercise normal reasonable care regarding the services provided by sub-consultants retained on behalf of a client, but the subcontractor will remain ultimately responsible for the services it provides.

- 1.4 EMM will rely on the accuracy and completeness of all documents and information provided to EMM by or on behalf of a client in connection with the services being provided; EMM will not necessarily undertake its own investigation as to the accuracy of such information. EMM shall not be liable to the client, its officers, employees and agents or to any other person, whether claiming by, through or under the client, for any claims, damages, costs or expenses which may arise in connection with EMM’s performance of the services as a result of such documents or information being inaccurate or incomplete.

2. Role of the Client

- 2.1 A client shall make available to EMM, as soon as practical after a commission has been awarded, all information, documents, maps and other particulars relevant to the subject commission.
- 2.2 A client shall nominate a person or persons as their representatives. A client will agree that the nominated person has authority to act on its behalf for all purposes regarding a commission. EMM will not be obliged to accept or respond to instructions given by any person other than the nominated person/s.
- 2.3 The client shall make appropriate arrangements to enable EMM to enter such lands and/or buildings as are necessary to enable EMM to perform the required services. Any increase in time spent as a result of EMM’s reasonable access being denied will result in an increase in the project costs that would be charged according to EMM’s Standard Rates.
- 2.4 A client shall cooperate with EMM in all reasonable ways regarding the conduct of a commission being undertaken on its behalf.

3. Scope of a Commission

- 3.1 EMM will undertake all work in accordance with the scope presented in EMM’s Proposal unless agreed otherwise by both parties in writing. If work is required outside this scope, it will first be agreed with the client and the budget will be modified accordingly.

- 3.2 Where applicable, the time schedule for completion of a commission will be as specified in EMM's proposal or as otherwise modified in writing and agreed to with the client. An extension to the time schedule may result in additional costs and these would be communicated to the client as set out in Clause 2.3.1 above.

4. Copyright

- 4.1 EMM shall retain ownership of the copyright to all reports, drawings, designs, displays and other work produced by EMM during the course of undertaking a commission. EMM shall licence the client to use such documents and materials for the purpose of the subject commission.
- 4.2 EMM may agree to assign copyright if this is required by a client or if such a requirement is contained in a client's brief. A client wanting assignment of copyright should request this in writing to EMM.

5. Payment for Services

- 5.1 In return for the provision of services specified in an EMM proposal, whether provided in stages or wholly, a client agrees to pay EMM the fees and expenses claimed in invoices submitted for the conduct of a commission within 21 days, provided such invoices accord with the Proposal.
- 5.2 A client agrees that if it fails to pay all monies claimed in a complying invoice within 21 days, that EMM will be entitled to additional payment on the monies outstanding. The additional payment will be interest (at an annual rate of 12%) charged on the outstanding monies commencing 22 days after the date of the subject invoice, plus any legal fees for the claim and associated administration time for EMM staff charged at EMM's Standard Rates.
- 5.3 In the event that a client fails to make payment of any monies due pursuant to an invoice by the due date for payment, EMM is entitled to suspend the provision of services until payment is made. The client will be responsible for any additional expenses incurred as a result of the interruption to the provision of services and EMM will not be responsible for any loss or damages caused by, or associated with, the suspension.

- 5.4 The charge rates quoted in any EMM proposal are based on salary levels prevailing at the date of the proposal and are subject to change. EMM may vary its charge rates if it decides that business conditions warrant this. If EMM changes any charge rates during the course of a commission it will inform the client of this and submit an amended fee proposal for the client's consideration.

5.5 EMM will charge clients for expenses as follows:

- a) Travel: vehicle hire, fuel, related toll, taxi and accommodation expenses including meals where relevant, will be charged at cost. Vehicle usage at a rate of \$0.95 per kilometre.
- b) Administration Fee: for any external services involved in undertaking a commission, including for subcontractor or other technicians. This fee will be 15% of the external service provider's total charges to EMM.
- c) Where field survey time is lost due to bad weather, vandalism of equipment or other circumstances beyond EMM's control, EMM will be entitled to charge clients for the time and costs incurred in carrying out the initial survey and for re-doing the survey.
- d) Where access to a monitoring or survey site is not possible due to circumstances beyond EMM's control, EMM will be reimbursed for time and costs incurred as a result of the delay including remobilisation costs.

6. Termination of Services

- 6.1 EMM may terminate a commission previously awarded to it because of a breach of any of the clauses contained in these Terms and Conditions or if EMM decides that completion of the commission is not in its interests. If such a termination occurs a client agrees to meet all reasonable expenses up to the date of the dispatch by EMM of a notice of termination.
- 6.2 A client may terminate a commission previously awarded to EMM provided notice of such termination is given in writing and a client agrees to meet all related expenses incurred by EMM up to the date of receipt of the subject notice.

7. EMM's Staff

- 7.1 A condition on which EMM undertakes to provide services is that a client will not, without EMM's prior consent in writing, offer to employ any EMM employee. A client agrees to abide by this condition for a period of one year after the completion of any commission on which the subject employee worked.
- 7.2 If a client wishes to make an employment offer to an EMM employee during the course of a commission or within one year of its completion, the client agrees to pay EMM a fee equivalent to 33% of the employee's total annual compensation applying at the date of the employment offer.

8. Settlement of Disputes

- 8.1 In the event of a client and EMM being unable to resolve a dispute it shall be referred by both parties to a mediator. If mediation is unsuccessful the client and EMM agree to refer the dispute to arbitration with the arbiter being either an appropriately qualified person agreed to by both EMM and the client, or if the parties cannot agree, an expert nominated by the Law Society of NSW. EMM and the client agree to be bound by the determination of any arbitration conducted in accordance with this clause which will include responsibility for mediation and arbitration expenses.

9. Limitation of Liability

- 9.1 EMM will act as a faithful advisor to a client whose interests shall be watched with normal skill and care. EMM shall only be liable to a client for the consequences of any negligent act, omission or statement on its part or on the part of its employees and then only to the extent and subject to the limitations referred to in Clause 9.2.
- 9.2 The loss and damage for which EMM is liable to any client and the maximum recompense to be made to a client for such liability stated in Clause 9.1, shall be \$50,000 or three times the value of the subject commission, whichever is the lesser amount.

- 9.3 EMM's liability shall cover only direct loss or damage in respect of works or other matters arising directly from the scope of its commission, and then only to the maximum monetary limit provided by Clause 9.2. All references herein to loss or damage shall exclude loss or damage sustained or sustainable by third parties.
- 9.4 EMM's liability to a client shall expire twelve months from the date of issue of the last invoice for the project, unless in the meantime a client has made claim in writing upon EMM, specifying an alleged negligent act, omission or statement said to have caused a loss or damage.
- 9.5 Notwithstanding Clauses 9.1 to 9.4 EMM shall not be liable for any loss or damage sustained or sustainable by a client in relation to:
- a) Errors occurring in plans, designs or specifications not prepared by EMM.
 - b) Errors occurring in the course of construction work which are not the responsibility of EMM.
 - c) Use by the client of any additional works, drawings, documents or other information or advice not provided by EMM.
 - d) Services provided by a subcontractor of EMM.
- 9.6 A client shall indemnify EMM for all loss or damage sustained or sustainable by EMM as a result of any breach of contract or negligent act, omission or statement on the part of the client or on the part of their agents or employees.
- 9.7 A client may independently retain the service of other consultants or contractors for a commission on which EMM is working. In such circumstances, the client agrees to be responsible for all expenses for those consultants or contractors, and to indemnify EMM for any loss, damage and other claims that may be made to EMM by the subject consultants or contractors.

CONTRACT ACCEPTANCE

This acceptance is to be completed by the billing client and signed by a person with delegated authority.

To	EMM Consulting Pty Limited
EMM contact	Sally Callander
Proposal name	Flood assessment - 3540 The Lakes Way, Charlotte Bay NSW
Project number	E230984

Proposal acceptance

I authorise for EMM to undertake the works described in this proposal. Terms of engagement will be based on EMM standard terms and conditions of engagement unless agreed otherwise.

I/we confirm that the contract details contained herein are correct and accepted.

Name	Blueys Estate Pty Ltd
Signature	
Position	
Company	
Purchase Order Number (if applicable)	
Date	

Please return the completed form to the nominated EMM contact above.