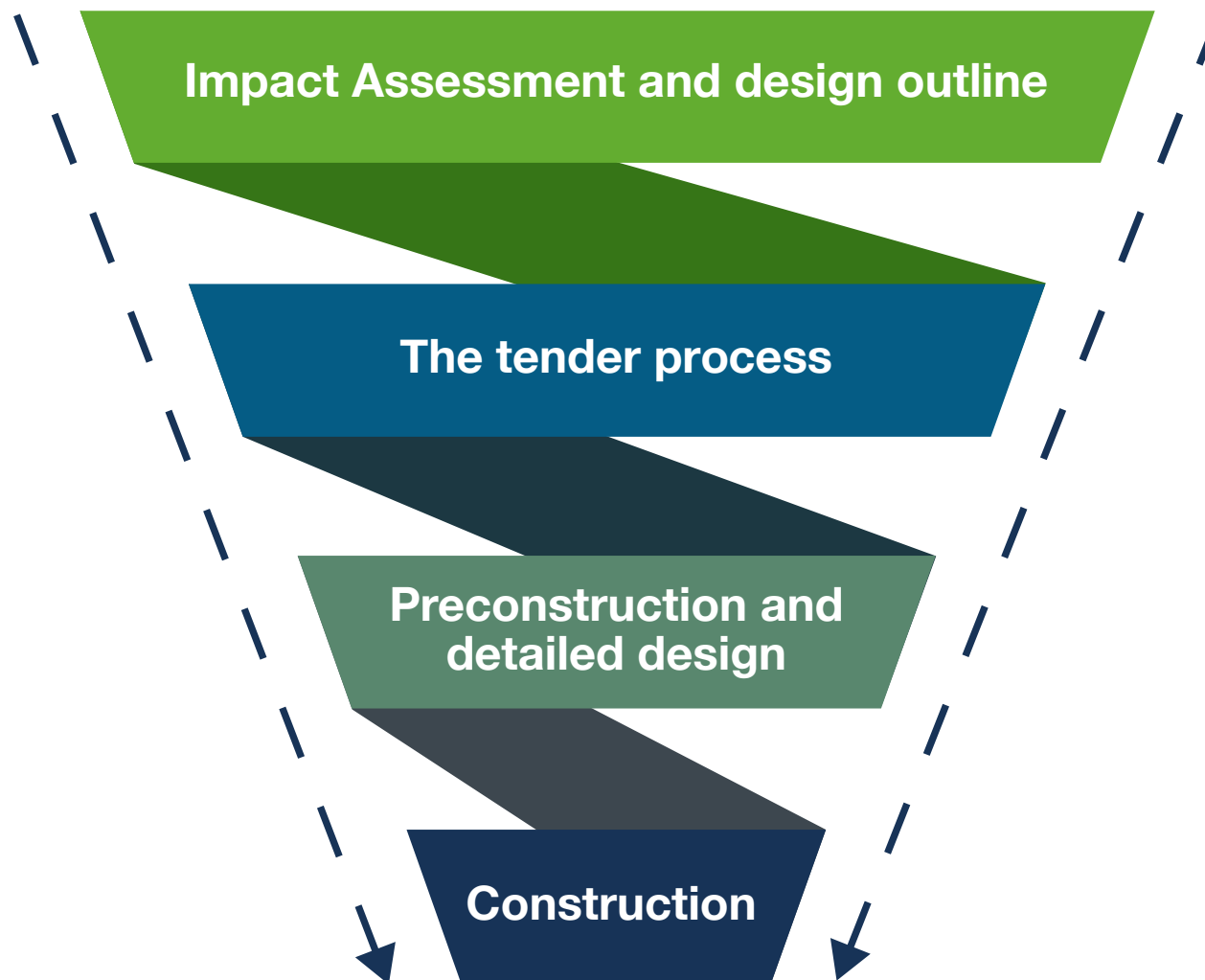


The opportunity to positively influence environmental outcomes and reduce impacts declines the closer you get to construction.



Impact Assessment and outline design

At this stage the projects proponent can decide where and generally how a project will be built / if it will be built at all, based on a comprehensive set of information over a relatively large time frame. Risks are identified, avoided, if possible, mitigation requirements are set, and thresholds for levels of significance established.

Pitfalls

- Open ended or woolly mitigation strategies that can't be transparently costed for or are subjective.
- The lack of an effective feedback casts doubts on whether a prescribed mitigation measure is effective on the ground.

Interventions

Engage with construction phase experienced personnel to review an impact assessment and the validity of the mitigation.

The tender process

The selected tenderers review the information gathered at the impact assessment stage and return a tender proposal that outlines the costs associated with their preferred delivery methodology and associated environmental management and mitigation methods. The project proponent then reviews the tender and assesses whether the methods, management and mitigation are sufficient to deliver the project in the engineering and environmentally required way.

Pitfalls

- All relevant environmental information is not provided to the tenderers.
- Tenderers are provided insufficient time to review relevant information or simply do not review the environmental information.
- Environmental factors are not an influencing factor in the bid teams decisions and are not costed or programmed for.
- “Standard” environmental mitigation is costed for with no appreciation of the site or methods needs.
- Insufficient resource to manage the unexpected.
- The projects proponent does not review the tenderers response to assess the viability of the proposal / does not provide sufficient weighting to the environmental review.

Interventions

Embed an environmental specialist into the bid team to review environmental requirements and collaborate with the technical teams to create a viable site-specific costed solution.

Identify risk items and include sufficient resource / time to manage them.

Environmental performance is a “Quality Item” and should be assessed as such.

Preconstruction and detailed design

The successful tenderer will then finalise the environmental management and mitigation measures relevant to the proposed delivery methods and transpose them in to construction phase management and design documents. The suite of Construction Environmental Management Plans will be reviewed by the project proponent and or a consenting body and accepted as being fit for purpose. These documents are used as a compliance tool and something to assess against.

Pitfalls

- Where CEMP's are a condition of consent, to avoid delays, the project proponent creates them with no input from the delivery partner. The CEMP does not reflect what the delivery partner intends to do or what they have costed for.
- CEMP's are generic and do not contain site and or method specific management or mitigation designs.
- Poor quality CEMPs lead to delays in approvals and projects commencing.

Interventions

Develop a well informed, site and method specific suite of management documents that include design, management, and monitoring regimes.

Present it in a way that allows effective communication to all users.

Construction

The successful tenderer will then deliver the project in an environmentally successful/compliant way using the appropriately resourced designs, management, mitigation methods. The success of these measures are monitored allowing for a feedback loop to be created and a defensible position attained.

Pitfalls

- There aren't enough resources to actively manage or implement the environmental mitigation requirements.
- Management and mitigation strategies are not site specific resulting in indecision/confusion as to what is actually required.
- There are insufficient resources or knowledge to manage unexpected environmental requirements.
- A lack of monitoring means the project isn't aware of whether it is meeting its requirements or not.

Interventions

Provide sufficient onsite environmental knowledge to advise on and manage the environmental elements of the project.

Communicate environmental requirements in an effective and engaging manner.

Monitor the environmental impacts and review mitigation strategy success.