




**“Designing to deliver facilities in
environmentally sensitive &
remote locations”**




DM2 Architecture



Design involves the **inquiry** and **questioning** to **understand constraints around a project** and to also reveal the **opportunities** that present themselves to make the most out of those identified challenges.





Design for remote area works is influenced by three key areas:

- The environment
- Construction
- Lifecycle





THE ENVIRONMENT

- Location & Accessibility
- Flora & Fauna
- Weather
- Statutory overlays
- Infrastructure

CONSTRUCTION

- Logistics
- Materials
- Technologies
- Resourcing
- Procurement method

LIFECYCLE

- Maintainability & upkeep
- Material and Equipment Selection
- Servicing



Heron Island Research Station













“a couple of chippies and their tools”













DM2 Architecture











DM2 Architecture



Design outcomes

- Heron Island used raised lightweight construction to mitigate the environmental effect of migratory birds.
- It meant services were readily accessible and minimized the need for in ground works.
- It minimised the number of trades required for the build.
- Framing was manageable with limited resources
- Claddings and linings could be flat packed for transportation and were easily moved around the site.
- Rationalising structural member sizing and structural detailing as well as architectural detailing not only assisted in simplifying the construction process and expediting the initial construction programme,
It also simplifies the future maintenance.



Binna Burra Skylodges





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14/10/2011



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04/11/2011



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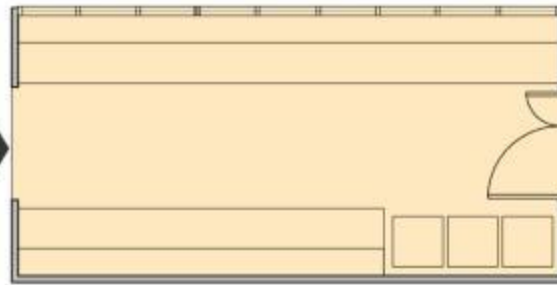
Design outcomes

- Collaborative process with the contractor through design
- The use of topography to control building scale whilst also taking advantage of the sites beauty.
- Mass construction to anchor the building into the side of the ridge, to address statutory requirements and enhancing the ambiance
- Harnessing the sites micro climate
- Opportunity to repurpose landscape elements from site back into the project

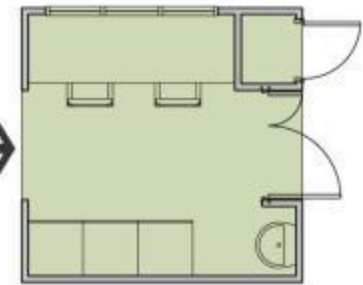




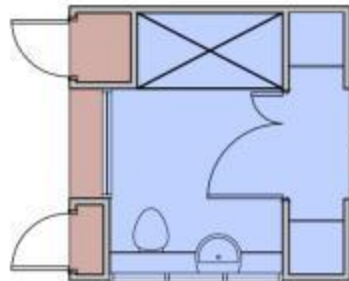
FUME MODULE



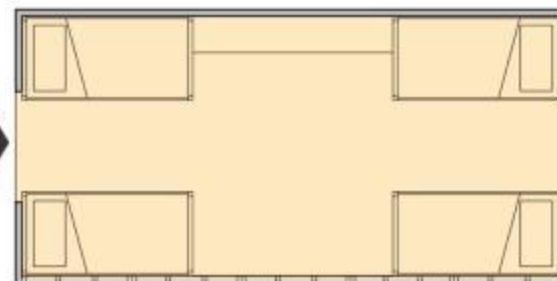
LABRATORY MODULE



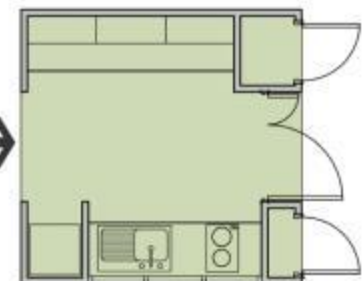
OFFICE MODULE



BATH MODULE

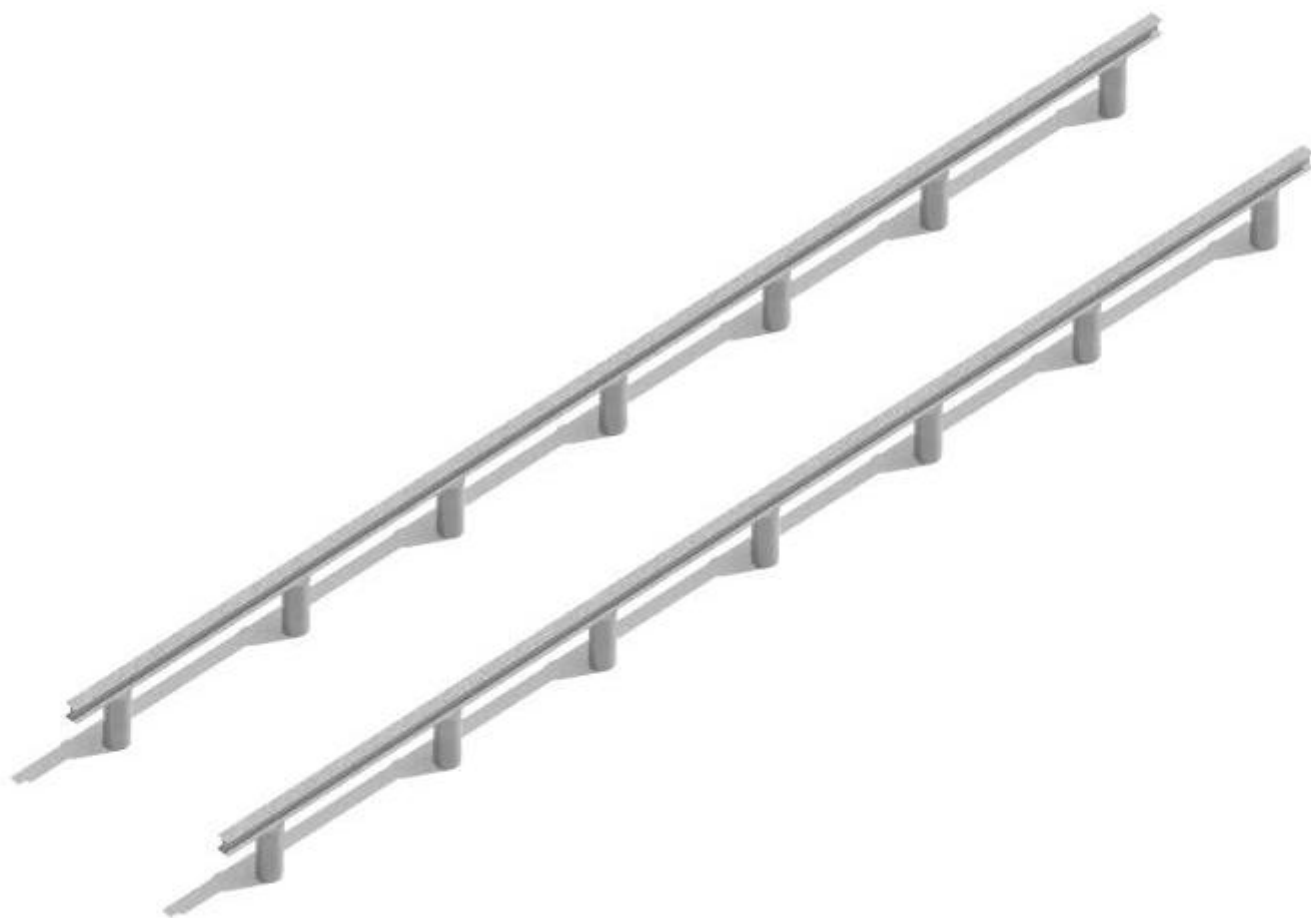


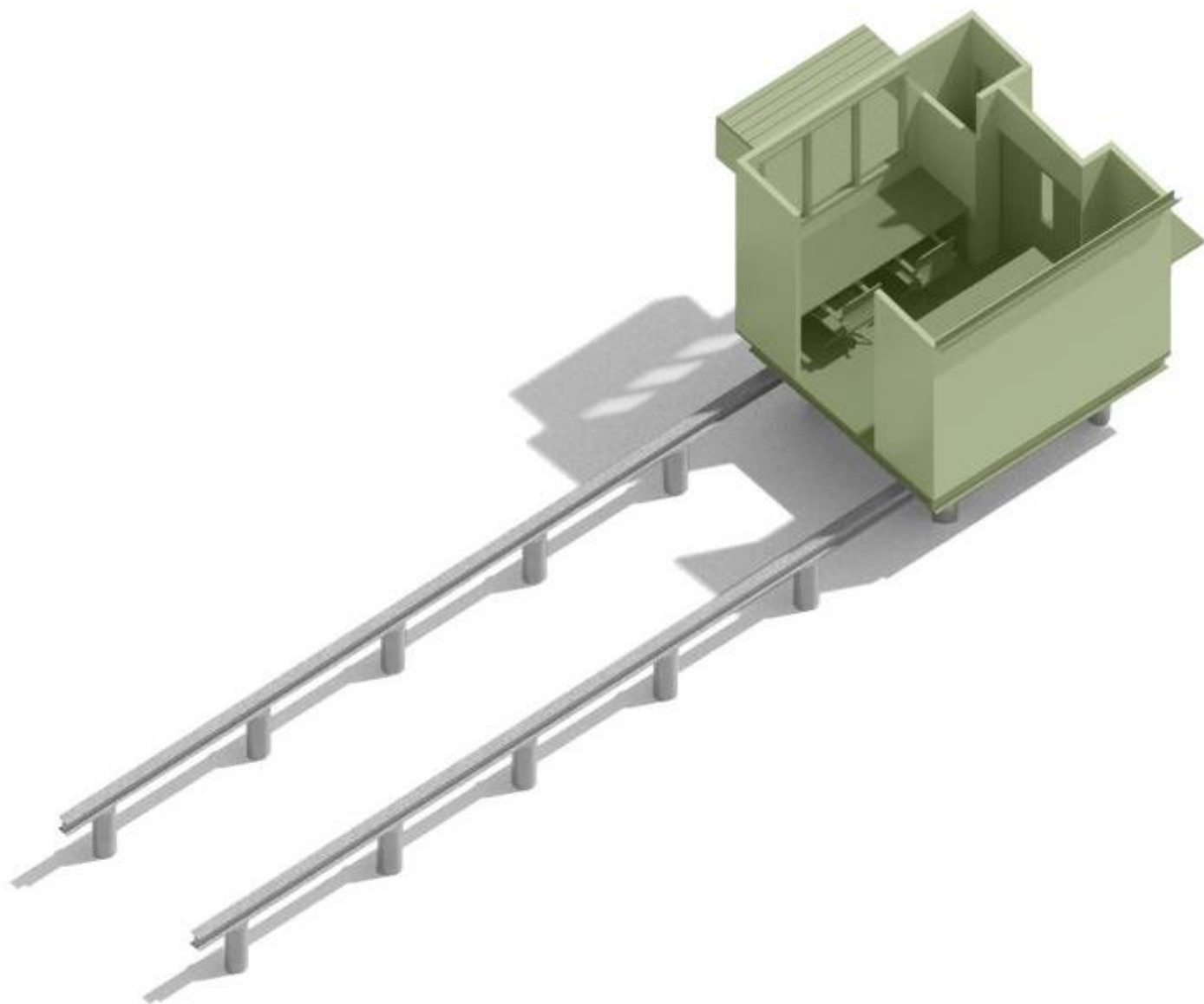
BEDROOM MODULE

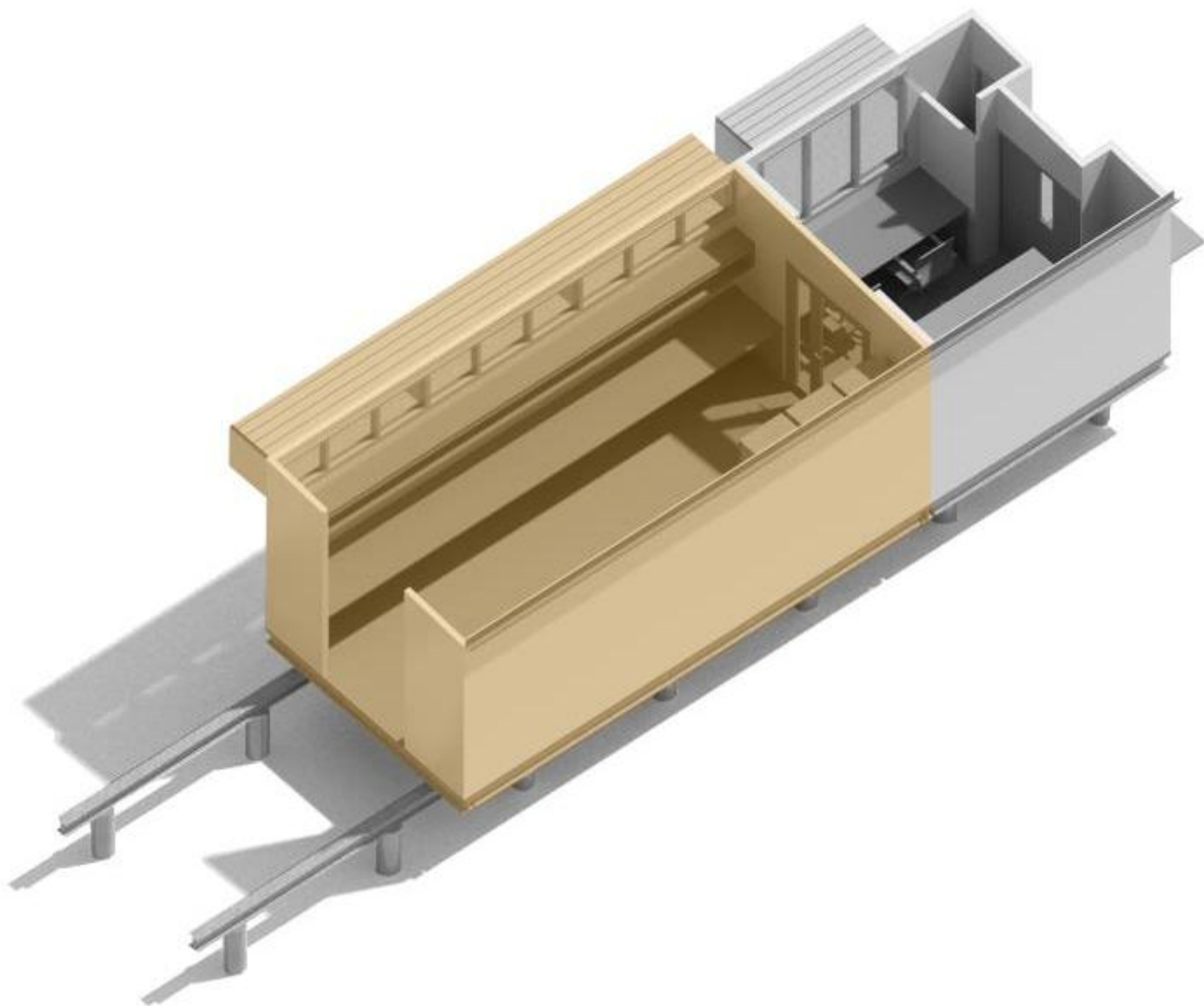


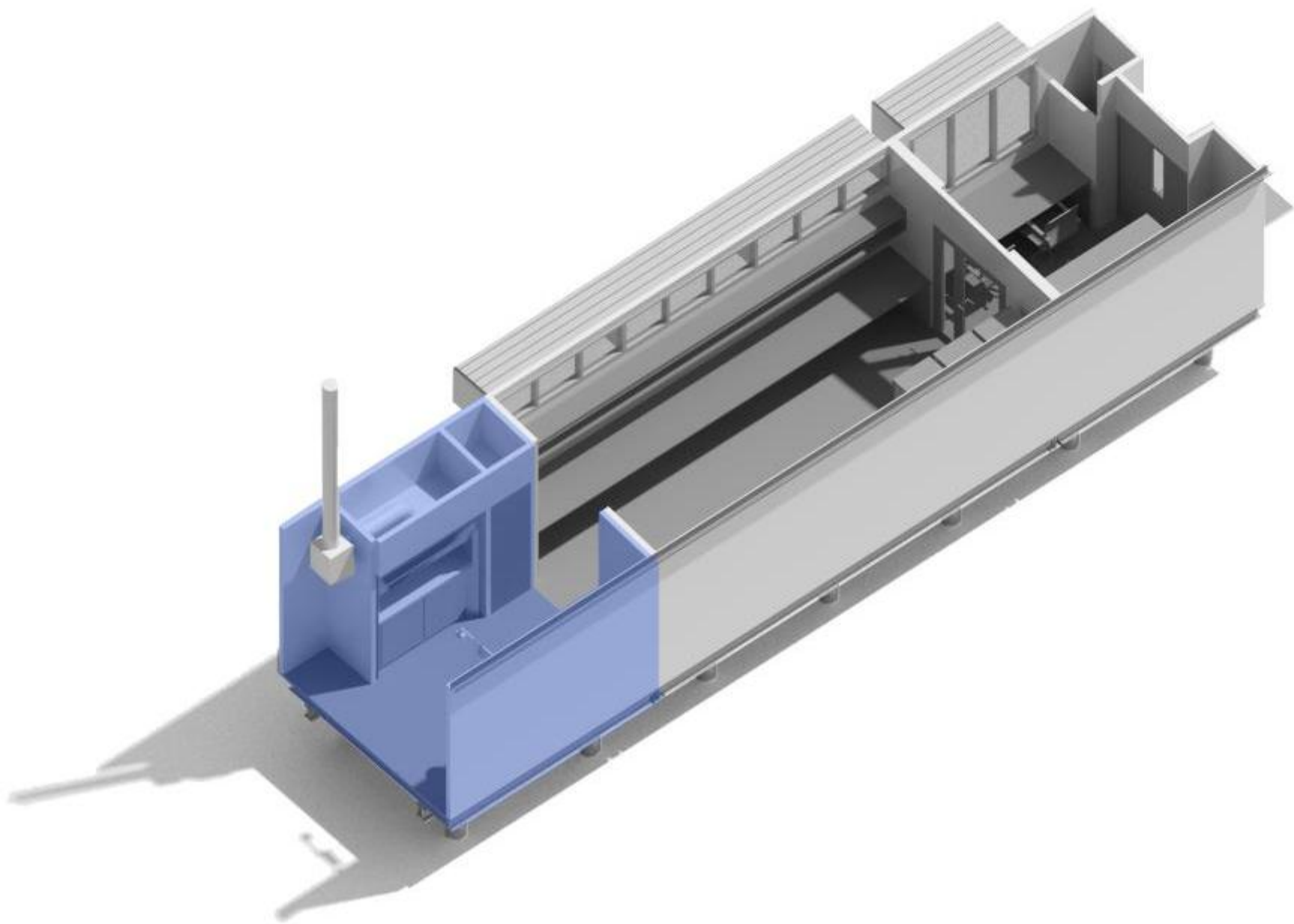
KITCHEN MODULE

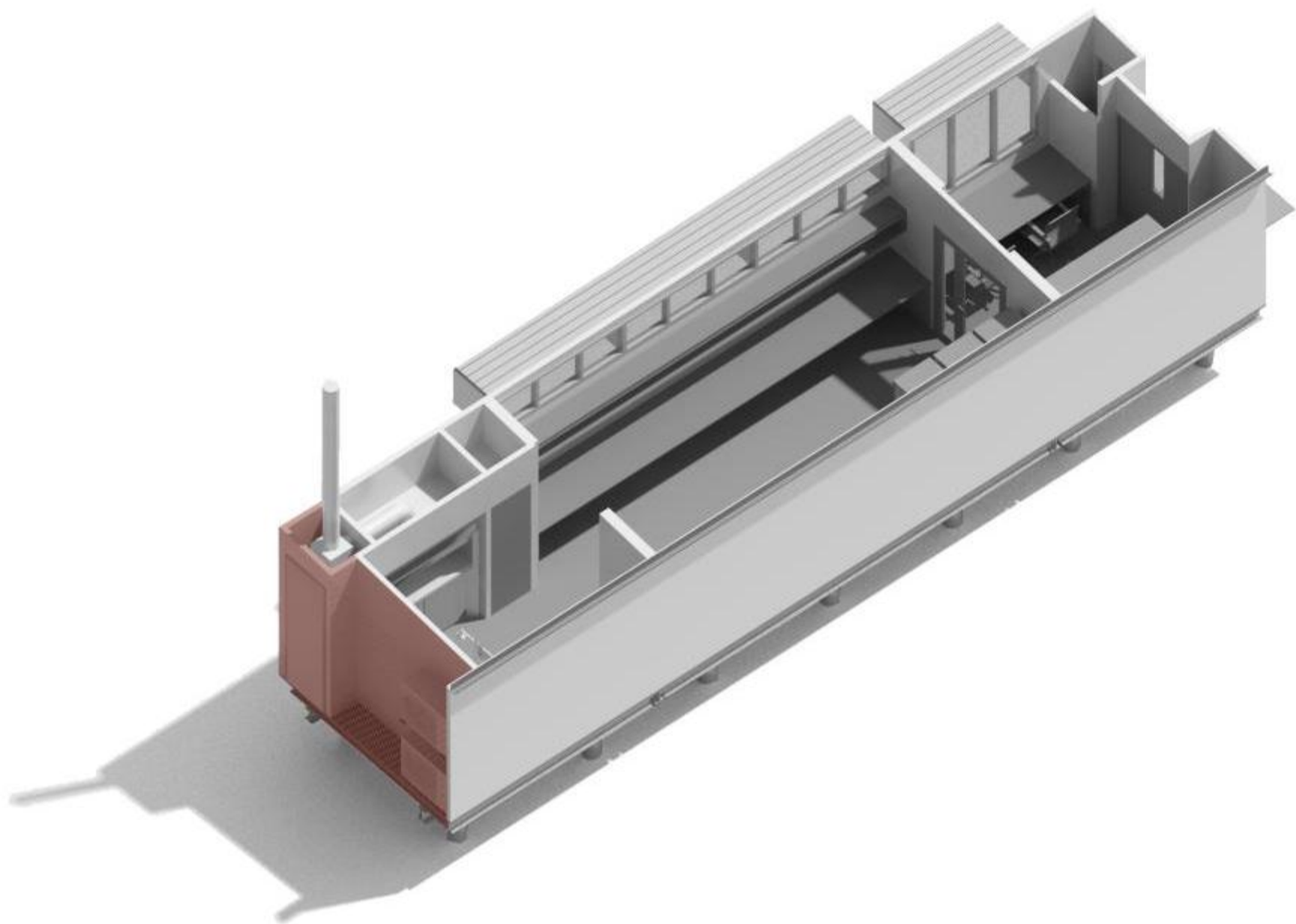
Prefab Laboratories











Design outcomes

- Minimise trades on site and consequential disruption through prefabrication
- Speed of erection once on site
- Allows prototyping and review before delivery to site
- Allows technical areas and details to be constructed in a controlled environment.
- Positions Plant to the exterior for ease of access.
- Detailing and materials minimises future maintenance.



Design for remote area works is influenced by:

- The environment
- Construction
- Lifecycle

So ensure you:

- Allow adequate time in the design phase
- Carefully review procurement methods
- Choose consultants and builder wisely
- You cant underestimate experience



Questions ?



**Purpose
Driven
Creativity**