



We strive to be a trusted project partner for our clients by delivering value and innovative solutions drawing on inhouse project managers, engineering, trade teams, and specialist contractors.

Development today: Delivering in a construction industry perfect storm

Developers today face a perfect storm of inflationary pressure, tightening project finance, escalating supply costs, competition for skilled labour, increasing regulations, growing sustainability expectations, and historically high builder insolvencies and wage costs. At the same time, demand for housing has never been higher.

With potential for any one of these factors to impact project economics and delivery, commercial developers and the broader construction sector must draw on its creativity. It must innovate and collaborate to devise solutions, making every potential opportunity to reduce costs and risks worth considering.

One area where potential savings can be made and is frequently overlooked by developers, is in demolition and associated early or enabling works.

Enabling works, encompassing demolition, hazmat removal, remediation, and associated civil works, are commonly bundled together, in many cases as a single line item in the project budget; an approach which belies the often complex nature of this stage of construction.

Thinking about enabling works this way is short sighted, not only because of the inherent risks, but also because of the lost opportunities to optimise project budgets, schedules, sequencing of works, and even project financing.

Some developers – even experienced tier one companies – do not realise an enabling works contractor can help them avoid hidden project costs that impact project outcomes.

This is why a different approach is needed.



Now is the time for a different approach

Typically, a developer engages a builder and / or a project manager, who in turn brings on their subcontractors and suppliers. Under this model, the builder manages the enabling works, contractor, and like the developer, often does not appreciate the nuances and specialisation required for demolition, asbestos/hazmat removal, remediation, and associated civil works.

Instead of drawing on the expertise of an enabling works contractor who can double as principal contractor for front end enabling works, and identify value engineering opportunities in their area of expertise, developers, project managers, and builders make common avoidable mistakes. Here are just a few of them.

Limited preparation time

In some cases, developers often do not allow contractors sufficient time to prepare tenders, or expect tenders to be prepared without a site visit. This results in a differing understanding of scope and a wide range of estimates from contractors and prevents pricing from be assessed on a like for like basis.

Hazmat underestimated

The extent of contamination from asbestos and hazardous materials, or the amount of site remediation required to make safe according to regulations, is another area that is frequently underestimated. Without an accurate, detailed destructive HAZMAT report, developers opt for cheaper solutions, which may not be safe or effective. This will often result in extensive variations at contract stage, where contractors discover additional asbestos and other hazardous materials.

Unsafe demolition method

Often the extent of a structure's dilapidation is not fully understood, meaning developers fail to allow for a specialised technical demolition strategy that is safe, effective, and compliant with regulations. This may include no allowance for safe control measures, such as demolition containment scaffolding.

No analysis of opportunities

Time is lost and opportunities missed when project enabling works are not considered for potential efficiencies, commercial value, schedule acceleration, and sequencing of works. In a case of not knowing what they do not know, developers leave opportunities that impact the project bottom line on the table. By selecting a competent contractor, who can undertake multiple services (hazmat removal, demolition and civil) works can be sequenced effectively, rather than having multiple contractors on site.

As a result of these oversights, developers receive requests for variations, such as material management and regulatory requirements impose unexpected challenges and costs.

Approaching a project this way is false economy that results in false starts, safety issues, expensive delays, rework, and distrust. Failing to understand the risks and opportunities means efficiencies, which could be gained through options analysis, are missed or discounted

ECI with an enabling works contractor

The good news is these issues are avoidable making it possible to face industry headwinds and tackle the challenges with confidence. One model proving beneficial for developers is early contractor involvement with a contractor who is engaged to undertake the enabling works for a development. Early contractor involvement – or ECI – allows for a transparent approach to pricing and delivery of a project's front end enabling works and demolition. Under an ECI arrangement, a developer directly engages the contractor, rather than the contractor being engaged by the builder or third party project manager. The transparency this arrangement provides developers results in a more accurate assessment of early stage delivery options, as well as costs and risks.

CURRENT DELIVERY MODEL RISKS

One option
Inaccurate hazmat assessment
Inaccurate scope, budget and program
Unsafe demolition method
Regulatory non-compliance
Unexpected delays
Excessive disposal costs
No/limited resource management

ENABLING WORKS ECI BENEFITS

Multiple options
Value engineering
Accurate scope, budget, and program
Safe, compliant demolition method
Optimised sequencing
Secure financing
Few/no delays
Sustainable resource management



What can developers expect under an ECI arrangement?

A well-managed ECI contract combining services across early works, demolition, and remediation offers benefits in terms of coordinated service delivery, capacity to respond to challenges, and environmental considerations. Estimates can be prepared for multiple options that factor in different methods, sequencing and timing of works to optimise these for funding and builder handover. Potential cost savings can be made by eliminating builder overhead on the enabling works demolition contractor.

ECI allows the project to be viewed holistically, rather than elements completed in discrete packages of work. It is an open book approach that builds trust between developer and contractor, and even the builder, allowing full transparency on budgets, costs, risks, and opportunities, creating a solid foundation for the project.

Improved forecasting

More accurate planning means improved forecasting, which can ultimately lead to better financing options. Works can be condensed and there is less risk of compounded delays.

Fewer administrative headaches

Service disconnections tasks, such as sewer diversions, can be completed more smoothly as the ECI contractor deals with relevant authorities and trades on behalf of the developer, ultimately saving time and aggravation.

More accurate estimates

Destructive HAZMAT audits can be completed to quantify costs and risks to project, which are frequently underestimated.

Fewer transitions

Under an ECI arrangement, developers can expect a smoother transition between stages and works, as a result of the ECI contractor's familiarity with client's requirements and systems, as well as reduced machinery and people movements and mobilisations, reduced fuel costs and emissions from the project.

Sustainable resource management

Smart resource management on the project can result in better sustainability outcomes through onsite crushing and reuse of demolition and civil materials, as well as materials disposal based on circular economy principles.

Transparent collaboration

ECI does not only involve the developer and specialist demolition contractor. The chosen builder, or tendering builders, can be brought in for collaboration too, with discussions centred around when construction works commence and how a site is left post demolition and associated civil works. This means a more seamless builder handover can occur, with opportunities identified to bring works forward.



ECI is not new to the construction industry, but it is a different approach for enabling works, so naturally, there are a few objections.

Naturally, developers do not want to double handle by engaging multiple contractors. A demolition contractor can act as principal contractor, which reduces the need for the builder to manage the enabling works.

Developers can use ECI as a vehicle for taking greater agency over their projects. ather than rely solely on the builder, developers can take the management back into their own hands, and in doing so gain skills, knowledge, and experience, as well as a better understanding of opportunities for realising value.

Developer/ECI contractor collaboration has the potential to forge a trusted working relationship that allows the client and contractor team to work together effectively rather than become adversaries in a challenging environment.

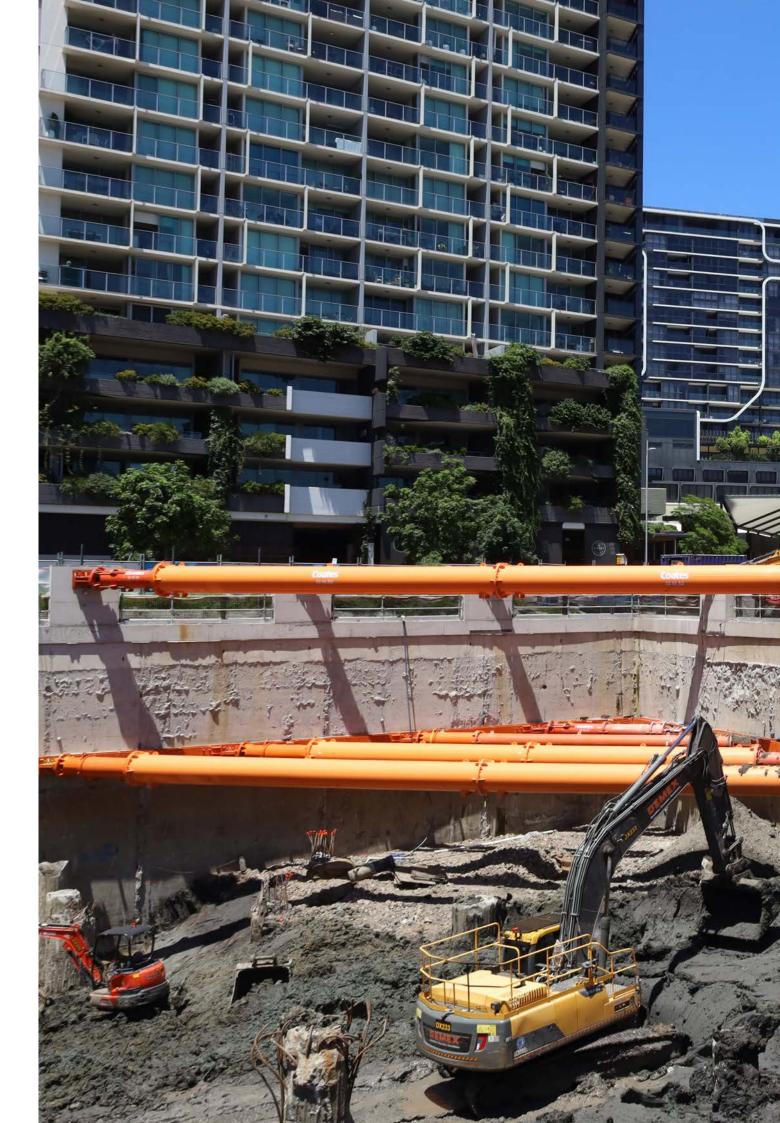


Is ECI with an enabling works contractor the answer?

The construction industry is changing and demolition methods, machinery, and technology are changing with it. Regardless of the project, the approach taken at the early stage does impact outcomes.

While enabling works contractors are not at the shiny end of projects when construction is complete, they are very much on the critical pathway. In many ways, they are a pivotal conduit between sales agents, developers, builders, project managers, cost consultants, financiers, and subcontractors. If the current market can teach anything, it is that nothing stays the same. Survival demands the construction industry continue innovating and finding new ways to deliver much needed projects.

Collaboration between the various project stakeholders is frequently cited as a meaningful solution to the current construction industry issues. The challenge for the industry is to deliver on it.





CASE STUDY

Demolition ECI delivers optimal work sequencing and program

- 15 storey building Soft strip, demolition, and hazmat removal.
- Principal Contractor Managing 20 30 subcontractors
- Detailed engineering for propping and scaffolding, i
- Vibration management minimised disturbance
- Value \$2.8M



DEMEX commenced this project – demolition of an eight storey highrise using a top down method - approximately one month prior to signing a contract under an ECI agreement. At this point, ECI was implemented solely around methodology for demolition works.

The tender was submitted on the basis of a high reach demolition methodology to allow the development's display suite to continue operating. This meant it was necessary to manipulate a cantilevered scaffold onto the site located on the Gold Coast beachfront.

A full intrusive hazmat audit of the building and surrounding areas was also conducted to identify any chemicals and hazardous materials for removal, allowing accurate pricing for these works to be finalised. This approach, which was priced as a lump sum with few conditions, saved time and resulted in a better calculation of the building demolition costs. Importantly, it also satisfied the client's preference that the display suite remain open for an additional three months

CASE STUDY

Value engineering delivers \$5M to project bottom line

- 18 hectare light industrial development site
- Principal contractor
- Decommissioning, demolition, bulk earthworks
- Recycled 99% of all project materials
- \$14.2 M



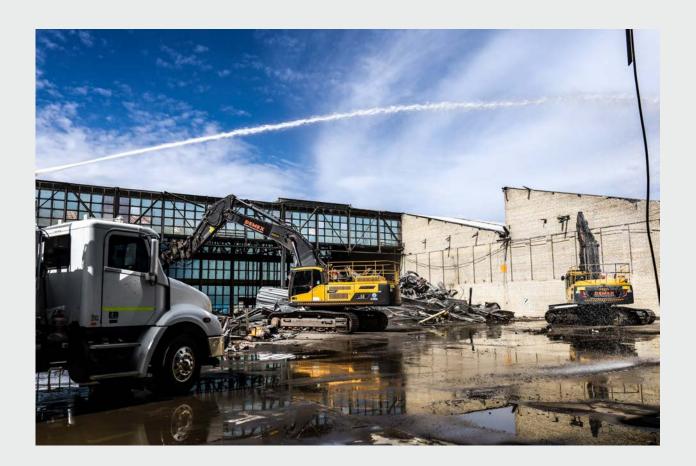
The client requested early contractor involvement on the demolition associated civil work for this project. In consultation with a specialist geotechnical engineer, DEMEX undertook a baseline test across the site to establish the conditions of materials. It was evident that a graduated build up was needed to meet the site construction requirements and that suitable material must be sourced to construct a wearing course to bulk earthworks level for handover to the builder.

DEMEX worked closely with a key supplier to source the required material. Through a value engineering exercise, DEMEX was able to capitalise on the fortuitous availability of tunnel boring material from the Cross River Rail project in Brisbane to deliver significant cost savings for the client. Early engagement of DEMEX by the developer allowed us to negotiate the price for the material as well as the logistics of material haulage to site, which resulted in the client saving an estimated \$5M.



Experience delivers program efficiencies safely

- 17 hectare light industrial development site
 - Principal contractor
 - Hazmat, demolition, remediation, and civil construction
- \$5.5 M



On this project, DEMEX took on the risk of sourcing a hygienist's report to assess hazmat removal requirements at this light industrial brownfield development site, although the client had sourced a third party hygienist to conduct isolated testing for the client's report. This report stated the entire shed required a horizontal clean down of both lead and asbestos fibres.

Experience of similar sites, however, suggested a more efficient and cost effective method of hazmat removal could be achieved without compromising safety or delaying the project. Working closely with the hygienist, it was possible to identify that only specific areas required a wipe down in keeping with regulatory requirements. This restricted the amount of work required, saving the client both time and cost for this element of the project.



ECI identifies solution and saves time, cost and risk

- ECI contractor arrangement
- Two Gold Coast beachfront multi storey walk ups
- Asbestos removal, demolition, and civil



A redevelopment site on prime Gold Coast beachfront, this project involved the demolition of two multi storey apartment blocks. DEMEX was engaged by the developer directly while the process of builder selection was ongoing. The benefit of this early involvement meant that enabling works for the site could commence while builder selection continued.

A key challenge of the site was the location of the sewer line, which was close to the site boundary. The location of the sewer had impacted design of the new development's basement, which was originally scoped to five levels. By being involved early in the process and assessing various options for the sewer relocation, the optimal solution was identified, and then implemented by DEMEX. Ultimately the selected approach prevented substantial delays and resulted in a more economically viable four level basement design with lower construction costs.

