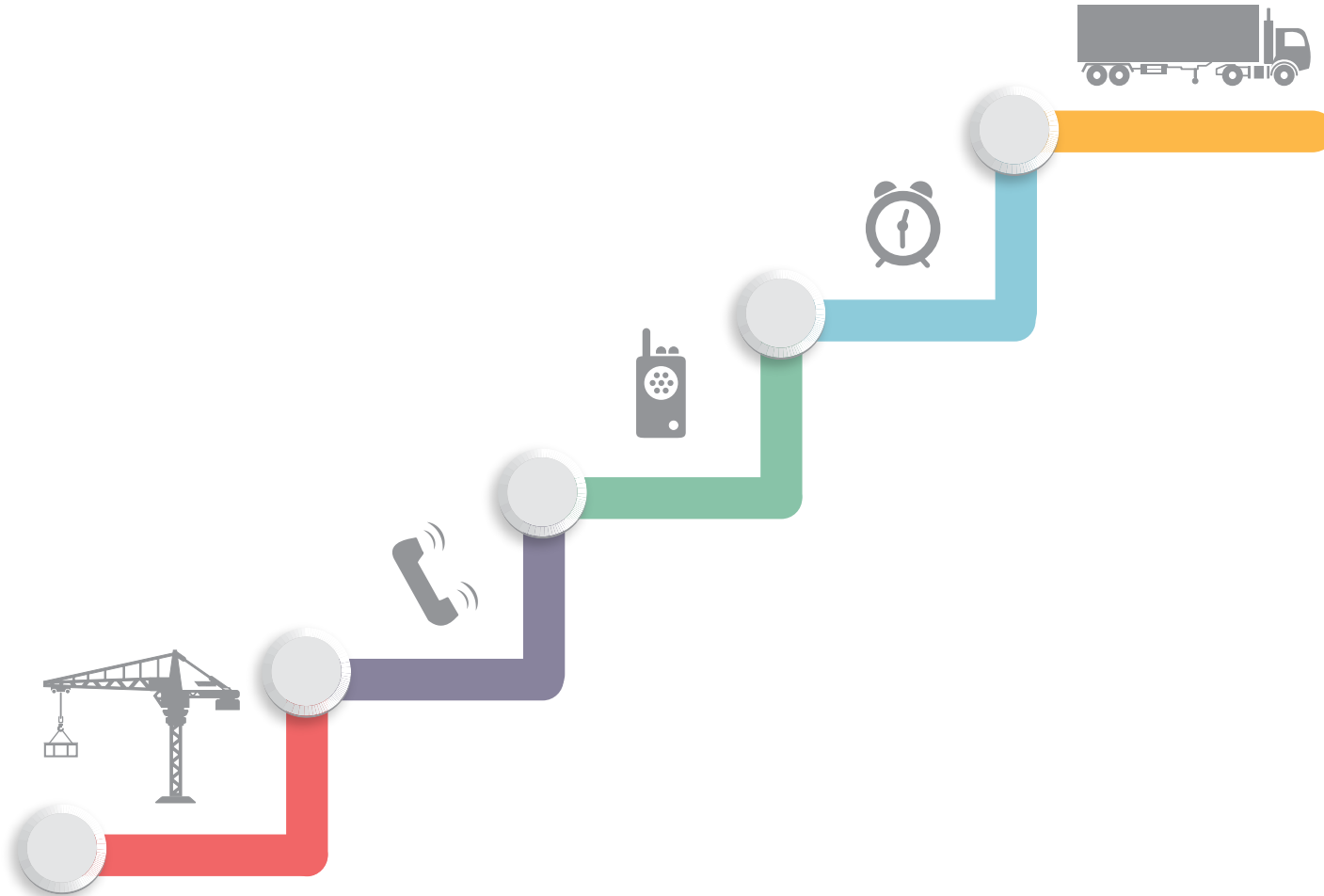


# LA TROBE TOWER

## AFTER HOURS CONSTRUCTION

### Community Relations Plan

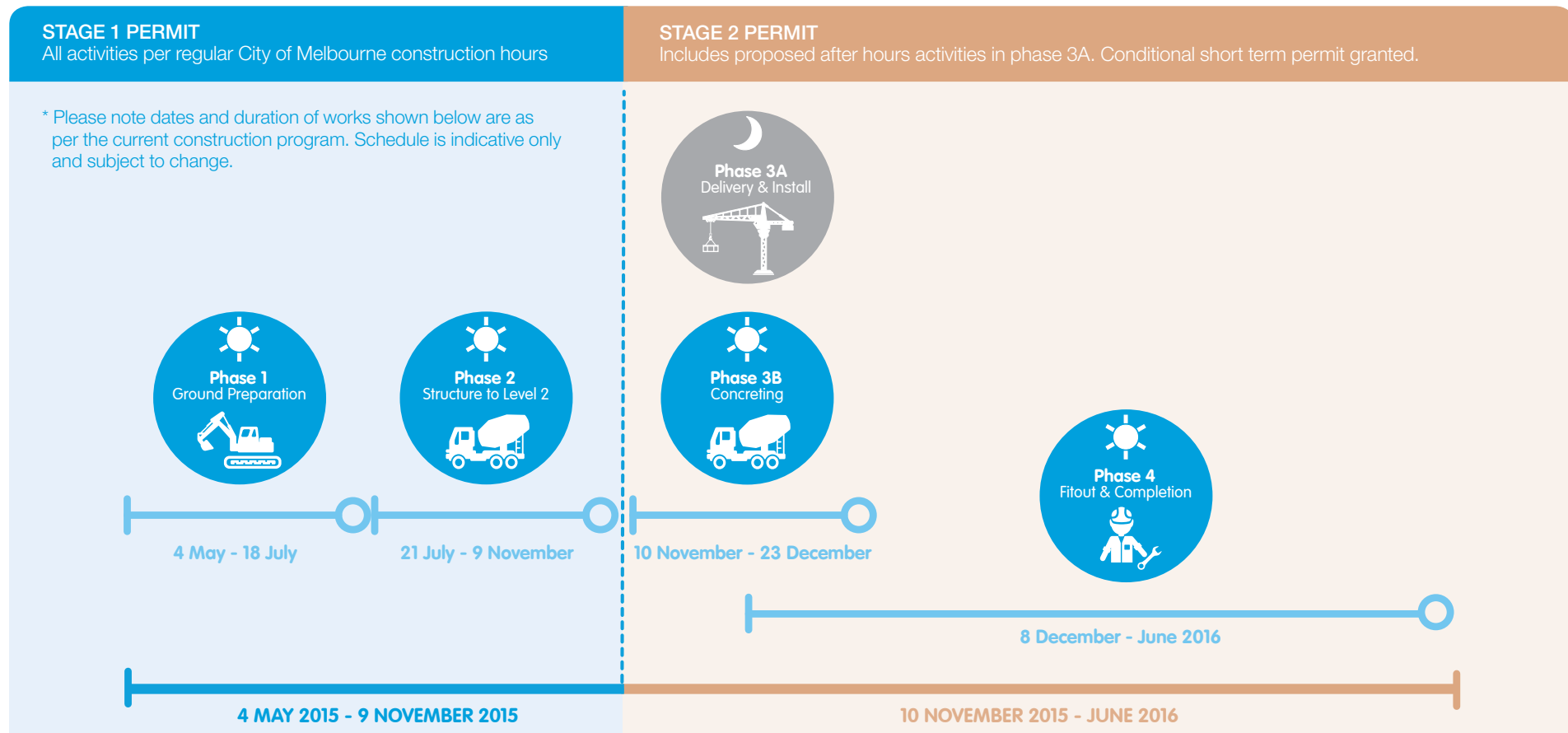


## Construction Timeline.

Hickory's method of construction for 323 La Trobe Street will enable the building to be completed in approximately 12 – 19 months, roughly 50% faster than using conventional methods. As parts of the structure will be prefabricated offsite whilst onsite works progress, Hickory are able to build major sections of the building in parallel, a method that is not possible with traditional sequential building methods.

The planned approach to the construction methodology is as follows:

- **Stage 1** Ground preparation and base building to Level 2 using conventional construction methods. All activities to take place during Melbourne City Council regular permitted hours for construction work.
- **Stage 2** Delivery and Installation of Level 3 – 42, followed by final fit out and commissioning of the building. It is intended that quiet works during the Delivery and Installation phase will take place outside of regular permitted construction hours. A conditional permit to trial this extended hours activity over a short 2 week period has been granted. The nature of these works is detailed in the following pages.



## After Hours Construction Activity.

Hickory has undergone an extensive consultation process with Melbourne City Council, Traffic Management Consultants, Acoustic Engineers, Yarra Trams, Vic Roads and Bicycles Victoria to investigate the implications of delivering and installing our structural building modules at night, when trams and neighbouring construction sites have ceased their daily operations on La Trobe Street.

This consultation process has enabled us to model an after hours construction solution involving light activity that we are confident can comply with the existing ambient acoustic environment and not create any undue noise or disruption to neighbors.

The revised approach to proposed after hours construction activity involves performing the installation and delivery portion of the construction program, currently scheduled to commence in mid November 2015, during the following amended hours:

- Monday – Wednesday            7pm – 12.30am
- Thursday                            10pm – 12.30am
- Friday                                10pm – 1.30am
- Saturday & Sunday            **No after hours works**



Following a consultation process with members of the neighboring residential community, Hickory have been granted a conditional permit to carry out specific low impact activities for a short 2 week trial period only.

An interim review is to be conducted after the first week of the trial period between Hickory, Council and key stakeholders based on trial period observations before any further work proceeds.

### Works to be performed during extended hours

Hickory has undertaken an extensive planning process to assess the viability and resulting community impact of planned after hours activity, and through this process have significantly adjusted the construction methodology to ensure that the acoustic environment and noise impact of planned after hours works can comply with Melbourne City Council requirements.

In order to mitigate disruption to the local community, Hickory has developed a Construction and Traffic Management Plan (CTMP) to ensure only quiet work will be carried out during night works.

The works to be performed during each evening shift are described in detail overpage.

## Acoustic Impact of After Hours Activity.

Of the planned after hours activity, Hickory has determined which activities are the highest risk in terms of noise impact, and through internal, external and community consultation have employed noise mitigation techniques to reduce impact wherever possible.



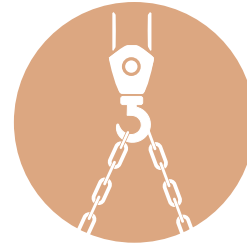
ALIMAKS



DELIVERIES



CRANE OPERATION



CHAINS



BOLTING



STAFF COMMUNICATING

High-risk activities and mitigants are as outlined below:

ACTIVITY	NOISE IMPACT(S)	MITIGANT
Transportation of workers (maximum of 10 people on site each night) to the appropriate level of the building at the beginning of each shift and back down the building at the conclusion of work	Alimak (external builders lift) is noisy, both during operation and when opening and closing the doors	<p>After consultation with neighbours Hickory have revised the construction methodology in relation to the Alimak, this includes:</p> <ul style="list-style-type: none"> <li>The construction design has been altered to enable the Alimak to be located internally, rather than on the outside of the building – this will significantly reduce noise associated with its use (both after hours and during the day)</li> <li>During after hours works the Alimak will only be used until 10pm to transport workers and material to the appropriate levels</li> <li>Amenities (toilets and break rooms) will be placed across the building at several levels to ensure these can be accessed via stairs and workers do not need to use the lift after 10pm</li> <li>Workers will be provided catered meals to ensure they do not need to use the alimak for dinner breaks during after hours works</li> <li>The Alimak will only be used after 10pm in the case of medical emergencies</li> <li>At the conclusion of the shift each evening, all but 2 workers (the crane driver and dogman) will be safely transported down the building via the crane in a specially procured man box, rather than using the alimak</li> <li>The remaining 2 workers will then walk down the building together (using a buddy system for safety) after the other workers have been safely transported to the lower levels using the crane</li> </ul>

ACTIVITY	NOISE IMPACT(S)	MITIGANT
Transportation of prefabricated structural units and precast panels to the building site	<p>Trucks delivering materials will create noise from:</p> <ul style="list-style-type: none"> <li>Engines</li> <li>Reversing beepers</li> <li>Air brakes</li> <li>Chains unlashing</li> </ul>	<p>Generally only one level of the building will be delivered per after hours shift, equating to 9-10 trucks per evening.</p> <p>The following noise mitigants will be in place for truck deliveries:</p> <ul style="list-style-type: none"> <li>Trucks will bank up along the La Trobe Street tram tracks, then pull up directly in front of the site to unload, negating the need to reverse</li> <li>In case for any unforeseen reason or human error trucks are required to reverse, beepers will be removed from truckers and traffic management personnel will ensure trucks are safely reversed</li> <li>All truck drivers will be direct Hickory employees that have completed a full community relations and noise impact induction, drivers will be instructed to conduct all communication with site via CB radio rather than talking loudly or yelling out to other staff</li> <li>Whilst the sound of engines is unavoidable to a large extent, truck drivers will be instructed to turn off engines rather than idle whilst waiting for their turn to pull up in front of the site to unload</li> <li>To mitigate the sound of metal chains unlashing and metal being thrown onto metal once a delivery is unload, all chains will be padded and rubber padding will be placed on the tray of the truck</li> </ul> <p>After consultation with neighbours Hickory have revised the methodology to also include the following mitigants:</p> <ul style="list-style-type: none"> <li>To alleviate noise from air-brakes, it has been determined that trucks can safely and legally park without using noisy air parking brakes by implementing the following procedure: <ul style="list-style-type: none"> <li>On arrival the truck driver will stay in gear when they come to a stop</li> <li>Traffic management staff will place wedges under the truck wheels, locking the truck in place</li> <li>The driver will keep the truck in gear prior to turning engine off and taking the key out, safely parking the truck without needing to apply the noisy air park brake</li> <li>This is a safe and legal method for parking trucks in high-density areas where noise is a concern</li> </ul> </li> </ul>
Installation of prefabricated structural units and precast panels by crane	<p>Crane engine noise</p> <p>Crane Slew (turning)</p> <p>Crane winching (lifting items up and down)</p>	<p>An electric crane will be used rather than a diesel generator crane, resulting in a significant reduction in noise emissions.</p> <p>This crane makes very little noise whilst in general operation, as unlike a diesel powered crane the engine does not idle.</p>
Chains hooking onto material lifting frames	Noise emissions of metal hitting metal as chains are hooked and unhooked	Hooks will be padded with carpet or rubber to ensure the noise of metal on metal is eliminated
Bolting materials into place	Rattle gun used to bolt structural elements together, omitting a consistent rattling sound	<ul style="list-style-type: none"> <li>The Rattle gun will only be required to be used at short intervals (60 seconds max) between 6pm – 8pm</li> <li>After 8pm an electrically powered hydraulic torque wrench will be used</li> <li>This wrench will be contained in a specially designed acoustic enclosure to further dampen noise emissions</li> <li>Minimal bolts are to be tightened in the evening</li> <li>Remaining bolts will be tightened during the following day</li> </ul>
Workers communicating with each other on site and carrying out duties	<p>Potential noise from:</p> <p>Workers yelling out to each other</p> <p>Workers playing music or radios</p>	<p>Whilst communication is an essential tool for staff and a key part of managing safety, all staff on site will be inducted into the La Trobe Tower Community Relations Plan, which will ensure:</p> <ul style="list-style-type: none"> <li>All communications on site and with truck drivers to be via CB radio – no yelling or loud talking</li> <li>No music/radios to be played on site during after hours works</li> <li>Strict disciplinary action will be taken for any workers that breach these requirements, including removal from site / dismissal of repeat offenders</li> </ul>

## Acoustic Assessment of Extended Hours Work.

Hickory has commissioned an independent acoustic assessment of the planned extended construction work from acoustic consultants Acoustic Logic (ALC). Studies were undertaken to determine the levels of noise emission that will impact noise sensitive premises in close proximity to the site.

A critical component of this report was the formulation of noise control strategies for all the different construction processes. These strategies include the formulation of site management procedures, whether they can be operational or time based.

The objective of the study in all cases is to minimise noise emissions from the construction process.

In the report construction noise criteria was formulated based on the following factors;

- The sensitivity of the various receiver locations,
- City of Melbourne Noise and Vibration – For Demolition, Excavation and Construction Sites.
- A consideration of the procedures and requirements set out Australian Standard 2436-2010 “Guide to Noise Control on Construction, Maintenance and Demolition Sites”.
- The requirements to control noise emissions from the construction site to levels, which does not cause undue disturbance to the identified receiver locations.
- The noise mitigation measures available.

Noise impacts were assessed using SoundPlan™ noise modeling software, which provides a detailed assessment model for evaluating noise associated with the extended hours construction works. SoundPlan™ is certified in accordance with International Standards (ISO9613-3:1996), and therefore bound into a rigorous quality management process. The Australian Standard 2436-2010 is informed by ISO9613-3:1996, and AS 2436-2010 is referenced in the City of Melbourne’s “Guide to Noise Control on Construction, Maintenance and Demolition Sites” as providing the technical framework for estimating noise emissions from construction sites.

After collecting data on the existing background sound and comparing this reading with a sound model of the actual tools and processes to be used by Hickory in the planned after hours works, ALC has confirmed that noise impacts during the extended construction hours period can comply with the City of Melbourne construction noise criteria.

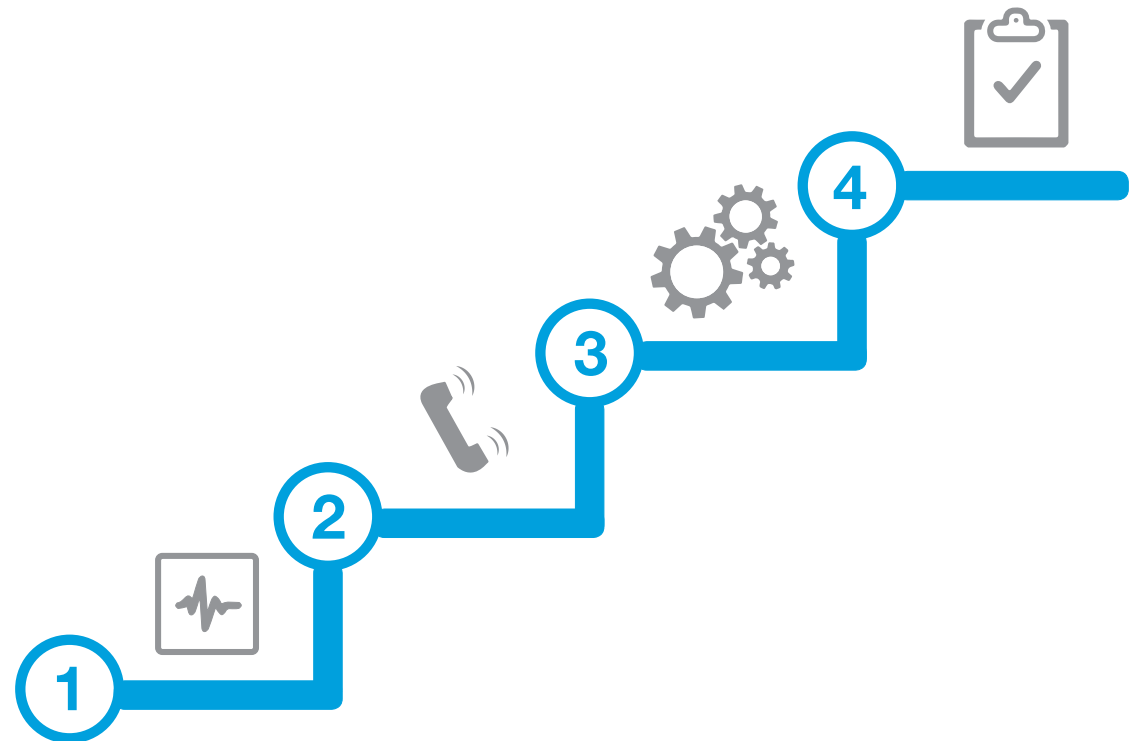


The full acoustic assessment report can be found on the Hickory [La Trobe Updates website](#) under the Important Notices tab. If you have any questions or concerns in relation to the Acoustic Report, or would like further explanation as to how it works, please contact the La Trobe Tower project team.

## Complaint Management Process.

Hickory's strategy to ensure after hours works comply with the noise and light objectives are as follows:

- 1 Continually monitor and assess works on an ongoing basis to ensure the report criteria is met
- 2 Provide a contact point for neighbours to speak with a member of the project team whenever they believe a breach has occurred
- 3 Implement an impact management process to ensure adequate measures are taken to address noise complaints and action changes
- 4 Revise the construction methodology completely if it becomes evident that the planned works can not comply with the noise or light objectives



# 1

## Continual Monitoring, Assessment and Improvement

Hickory will ensure that noise objectives are met by continually monitoring the noise emissions of after hours works throughout the construction process. This will involve placing a number of noise monitors at various locations to record sound during every shift.



The location and number of monitors for ongoing noise monitoring will be developed in consultation with Melbourne City Council to ensure that the sound impact at all neighbouring properties are represented in the reporting.

This proactive approach to noise monitoring will ensure that Hickory can assess any spikes in activity that may occur and adjust subsequent activities accordingly. Monitoring reports detailing recorded noise levels will be made available to neighbours on a regular basis via the La Trobe updates website, from the Project Site Office and via email upon request.

# 2

## Contact Point for Noise Complaints

Neighbours will have several points of contact to communicate with the Hickory project team should they believe a breach has occurred.

Avenues for contact are:



Call the Project Hotline on **9420 2707**. This phone number will be directed to the Manager on Duty during all after hours works and will be answered throughout the evening



Email the Hickory team via the **latrobetower@hickory.com.au** email address



Lodge a complaint via the project website **www.hickory.com.au/latrobeupdates**



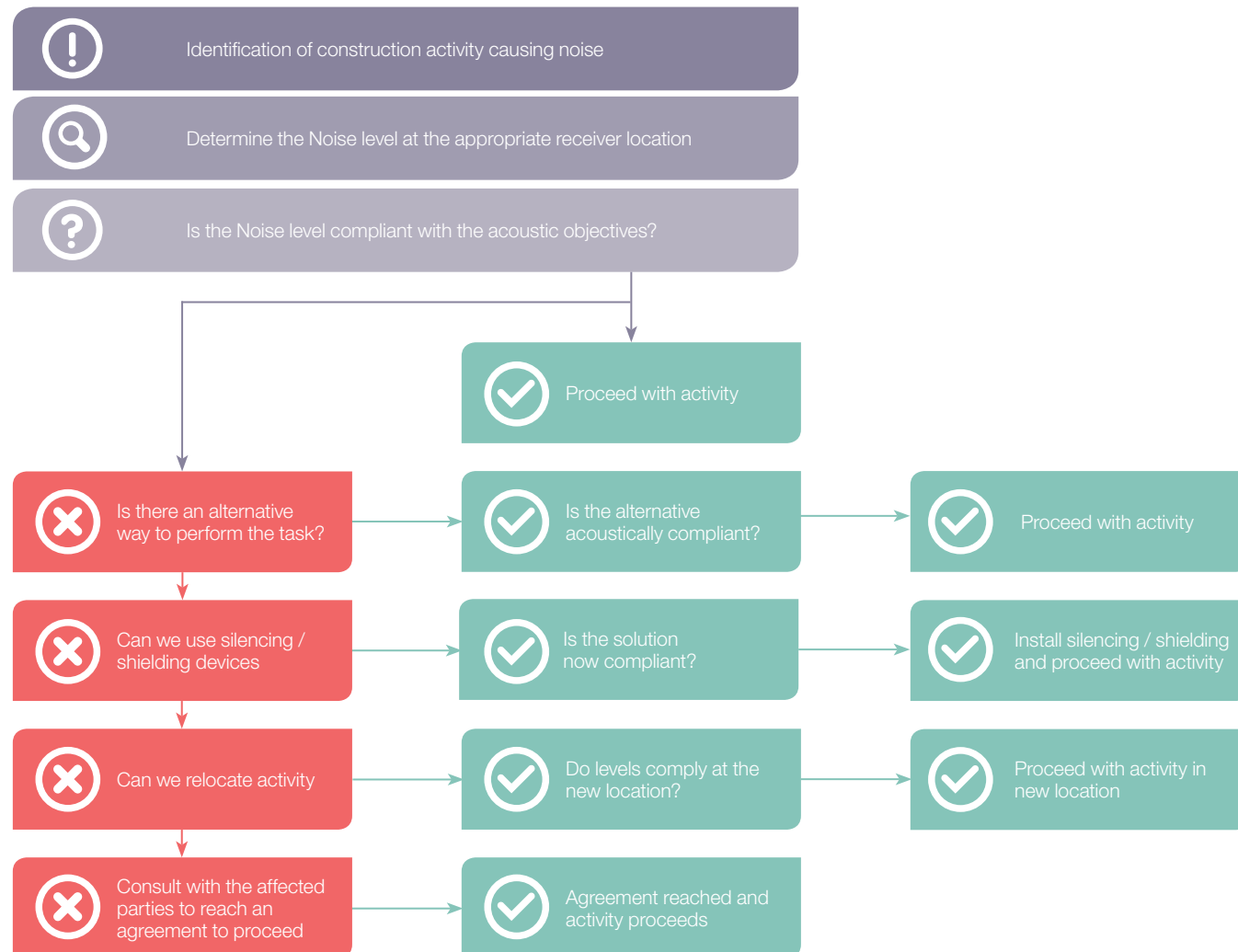
Speak to a member of the Hickory team in person at the project site office, which is located adjacent to the construction site at 301-303 La Trobe Street.



## Noise complaint management process

To ensure appropriate protocols are in place to handle any noise complaints, a community contact register has been set up by the project team, with concerns reported back to council on a weekly basis. During after hours works the project hotline will divert directly to the mobile of the Manager on Duty, who will be directly responsible for stopping works or actioning changes if necessary.

The following steps will be undertaken to ensure appropriate handling of all noise complaints:





## Contingency Construction Plan if Compliance is Unachievable

Hickory have taken all possible steps ahead of commencing construction works to ensure after hours activities can comply with the acoustic objectives and that disruption to the community is kept to a minimum wherever possible.

The permit granted for after hours activity covers the specific delivery and installation activities detailed in this document only, for a 2 week trial period. An interim review is to be conducted after the first week of the trial period between Hickory, Council and key stakeholders based on trial period observations before any further work proceeds.

