

Chapter 3

**Innovation**

## 3 Innovation

### 3.1 Innovative solutions

Auckland Transport (AT) is committed to innovative transport solutions for a growing Auckland that support the Auckland Plan and the Integrated Transport Programme. To this end AT positively encourages suppliers to develop innovative and forward looking solutions in delivering win-win outcomes. AT supports the advancement of technology and improved ways of doing things where this can lead to better levels of service, amenity and efficiency. Clearly such innovations should be cost effective and achieved in a reasonable manner without introducing unnecessary risk or compromising safety.

There are several ways in which AT seeks to achieve this:

- By the ongoing development of appropriate new standards and best practice approaches;
- By providing a process for new products and technologies to be evaluated for inclusion in the Auckland Transport Product Approval Register (ATPAR);
- By allowing for exceptions from the normative, consistent region-wide standards in recognised heritage or environmentally sensitive areas as well as in the context of accepted special developments; and
- By providing a process for prudent departures from standards on a case-specific exception basis.

### 3.2 Ongoing development of appropriate standards and best practice

As ATCOP is a “living document” it can be updated quickly to respond to technological advancement and improved ways of doing things. Additionally, all chapters will be reviewed and updated on at least an annual basis. Feedback is welcomed towards the further future improvement of ATCOP as lessons are learned in applying the standards included in this Code of Practice.

### 3.3 Process for approving new products and technologies

ATPAR provides a process for suppliers and manufacturers to submit innovative products that may provide longer term benefits to Auckland Transport, both in direct cost or future maintenance costs. It also affords the opportunity to suppliers of new products and those whose products do not fit the current standards, but can achieve the same or better performance outcomes.

ATPAR enables Auckland Transport to promote sustainability through the inclusion of recycled products in the approved register.

ATPAR allows Auckland Transport to place restrictions on the use of products. This can result in effective road network performance with overall reduced construction costs to Auckland. Important issues such as the ease of future maintenance of the product or the security of supply to get a replacement component or product can also be addressed through this.

ATPAR is Auckland Transport’s system for introducing proprietary products that maintain the integrity of the transport system and associated infrastructure under the direct control of Auckland Transport

as well as that under the control of third parties contained within the road corridor, while allowing for the introduction of suitable new products/technologies.

Auckland Transport recognises that having a system in place to assess products for their suitability for use in the infrastructure it controls, means that the integrity of AT's network is afforded an additional quality assurance mechanism. At the same time it benefits product manufacturers and suppliers by providing a pathway for their products to be assessed and used within the AT network.

All approved ATPAR products have their details and specifications recorded in an individual ATPAR folder. Updates of all new products with ATPAR approval will be noted on Auckland Transport's website and sent regularly to all holders of the ATPAR folders.

### **3.3.1 ATPAR organisational approval structure**

The Auckland Transport Executive Leadership Team has approved the following organisational approval structure.

An internal Auckland Transport PAR Team, which is responsible for reviewing product applications for inclusion in the Auckland Transport Product Approval Register as well as for reviewing existing approved products. This team comprises AT staff with the appropriate technical experience and knowledge to evaluate the individual applications received and also to evaluate the performance of previously approved products. This team is made up of appointed representatives from relevant AT Departments.

An ATPAR Committee of selected representatives, which is responsible for evaluating recommendations on product applications and for providing a report on each application for final approval and sign off by the appropriate signing authority within Auckland Transport. This committee is made up of a range of representatives from relevant parties. A typical committee could comprise an AT Investigation and Design rep, AT Asset Management and Programming rep, AT Road Corridor Maintenance rep, Auckland Council Stormwater rep, AC Parks rep, AC Development Engineers/Consent rep, Auckland Council Urban Design rep, Watercare Services rep, independent consultant(s) (if/when required), utility service authorities representatives (if/when required), and developers' representatives (if/when required). It is not intended for the committee to be large, but it should include a good cross section of experienced practitioners so that all aspects of the product application can be robustly debated and the "whole of life" maintenance and replacement impacts can also be covered.

Final approval for a product to be included in, or removed from ATPAR rests with the Signing Authority (appointed AT Group and/or Group Managers) and does not necessarily need to agree with the recommendation of the ATPAR Committee.

### **3.3.2 ATPAR approval process**

The ATPAR approval process involves the following steps:

1. Complete and return the ATPAR Approval Application Form (see copy on page 4) with the deposit to:

Attention: ATPAR  
Auckland Transport  
Private Bag 92250  
AUCKLAND 1142

All of Auckland Transport's costs in providing product approval and ATPAR registration are to be borne by the applicant. This includes costs for all administration, research, processing and the approval documentation. For this reason a non-refundable deposit of \$1,000.00 (excluding GST) is required.

2. The application will be processed through the ATPAR Evaluation Committee. Dependent upon the nature and type of the application or product, other specialist input may be sought by Auckland Transport to assess the application.
3. Applicants should provide the following information (as a minimum) in support of their application:
  - A detailed history of the product, including current environments in which it is being widely used;
  - Manufacturing details;
  - Any specifications for the manufacture, supply and installation of the product (as appropriate);
  - Any drawings for the product;
  - Documentation to show compliance with relevant current industry standards, specifications or guidelines;
  - Any quality assurance testing that shows compliance with relevant current industry standards, specifications or guidelines;
  - Any quality assurance processes for manufacture, supply and installation (as appropriate);
  - The life expectancy of the products;
  - Any warranties or guarantees manufacture, supply and installation (as appropriate);
  - References from existing users of the product;
  - Anticipated retail price of the product per unit;
  - Any specific identification markings.
4. If a product does not specifically meet current industry standards, specifications or guidelines, but the applicant believes the product may serve a useful purpose, then they should state in their application the limitations on their product's expected use, or if it can be used as an alternative to other approved products.

Auckland Transport may return any application to the applicant if they believe it to be incomplete or they may seek additional information from the applicant to support the application.

5. Auckland Transport may request a meeting, or series of meetings, with the applicant to discuss the application or to seek clarification of any issues arising from the processing of the application.
6. If any testing requirements requested by Auckland Transport to satisfy their processing of the application cannot be supplied by the applicant, the necessary testing may be undertaken by Auckland Transport at the applicant's cost, or Auckland Transport may return the application as incomplete.
7. The product may be recommended for inclusion in the ATPAR and this recommendation will be internally circulated with draft drawing and specification for comments, prior to a formal

recommendation being presented to an approvals committee which meets bi-monthly for their consideration and endorsement. A letter of recommendation is not a final approval, but any approved product must have received an endorsement from the approvals committee.

8. The approvals committee can decline an application and/or recommendation at their sole discretion.
9. If the product application is approved and endorsed by the approvals committee, Auckland Transport will produce and maintain ownership of the final drawing for the product that will be published on the Auckland Transport website during the next update and will be freely available for downloading. No product should be used in any Auckland Transport works until it is ATPAR approved.
10. Auckland Transport reserves the right to review all approved products at any time at their sole discretion. The register will require regular updating and review. This is applicable to new applications and to reviewing the performance of previously approved products. This allows for the removal of products that may have become obsolete or those that may not have performed up to the expected level.
11. If relevant current industry standards, specifications or guidelines are made redundant or are superseded or in any other way significantly changed that may affect any current product approval, the applicant must inform Auckland Transport of any impacts on their approved product. Equally Auckland Transport may request a new application for a previously approved product due to any such change in industry standards, specifications or guidelines.

See next page for ATPAR Approval Application Form.



Application Number:.....

**APPLICATION FOR ATPAR APPROVAL**

Applicant:..... ..... .....	Phone:..... Fax:..... Email:..... Mobile:.....
Contact Person:.....	Date of Application:.....
Product for which ATPAR approval is requested: ..... ..... .....	

Please supply information on each of the following items (please tick):

		Information Supplied		
		By Applicant.	By AT	By AC or Legacy Councils
1	History of product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Manufacture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Specification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Drawings of Product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Compliance with relevant standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Installation requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Maintenance Requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Life expectancy of Products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Sample provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Quality Assurance			
	a. for manufacturing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. for installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	References from existing users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Price of Product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Field identification marking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All Auckland Transport costs incurred in providing product approval ATPAR registration are to be recovered from the applicant. This includes administration, processing and circulation of approval. For this reason a non-refundable deposit of \$1,000.00 is to accompany this application. Return completed application and above information with deposit to:

Attention: ATPAR  
Auckland Transport  
Private Bag 92250  
AUCKLAND 1142

\_\_\_\_\_  
Applicant's Signature

## 3.4 Areas with special design standards

Heritage plays an important role in defining the character of a city and of its inhabitancy. Many of Auckland's most diverse suburbs are those with heritage buildings, parks, memorials; areas where Aucklanders can remember the beginning of the city and the history of the region.

It is essential that any proposed works in an area that is considered to be 'Heritage', covered by an Act of parliament or having important heritage or cultural meaning, be in keeping with the surrounding environment, be sympathetic to the buildings and memorials, and if required continues to tell the story of the area.

Additionally, there are certain developments with special identities that have agreed special design standards, which take precedence over the consistent region-wide standards outlined in ATCOP.

### 3.4.1 Waitakere Ranges Heritage Area

The Waitakere Ranges Heritage Area (WRHA) is protected by the Waitakere Ranges Heritage Area Act 2008 and as such is subject to special consideration and treatment, which includes suitable infrastructure design standards. The 'WRHA Design Guide', which outlines these design standards, is currently under compilation. Upon completion it will be accessible via an embedded hyperlink to this paragraph.

It is essential that the '*WRHA Design Guide*' is used by all involved with design, construction and maintenance of transport infrastructure in the Waitakere Ranges Heritage Area.

### 3.4.2 Gulf Islands Area

The Gulf Islands Area in this context includes the areas covered by the Waiheke and Great Barrier Local Boards.

In recognition of the special nature of these environmentally sensitive areas the *Gulf Islands Design Guidelines*, which include information on suitable infrastructure design standards, are currently under compilation. Once completed, these Guidelines will be accessible via an embedded hyperlink.

It is essential that the Gulf Islands Design Guidelines are used by all involved with design, construction and maintenance of transport infrastructure in the Gulf Islands Area.

### 3.4.3 Special identity developments/areas

A link to the relevant schedule of special identity developments/areas will be provided to this section once this has been compiled pending the finalisation of the Auckland Unitary Plan. Some examples of potential special identity developments/areas are: Flat Bush, Stonefields and Hobsonville Point – each of which has its own specific agreed design guidelines.

## 3.5 Case specific departures from design standards

### Design Departures / Alternative Designs



The design standards contained within the various ATCOP chapters and sections are considered to be the 'first port of call' for minimum dimensions and details and should be adhered to at all times.

Where the minimum standards contained in this document cannot be attained due to restrictions, such as available width or space in a road reserve, a departure from the standard must be applied for – for the joint approval of AT's Manager Investigation & Design and Manager Strategic Asset Management & Systems.

Designs submitted to Auckland Transport that differ from the minimum requirements contained in ATCOP apply only to the particular project that requires the departure. If Auckland Transport grants approval for a departure from the standard, this does not confer general approval for this departure in future on the same or other projects.

A full explanation of the required departure or method must be submitted to Auckland Transport, along with any relevant drawings or supporting documentation, for approval in principle.

The departure will be considered on its merits by Auckland Transport and approval will only generally be granted if the submitted departure results in either an equivalent or superior performing outcome. Auckland Transport reserves the right to show discretion to these rules and may allow outcomes that are less than equivalent to the standard in exceptional cases.

Auckland Transport is of the opinion that sometimes alternative designs or methodologies can provide flexibility to innovate and to meet specific site requirements.

### **Approval of the submitted design departure / alternative design**

The final review of any submitted design will be carried out by the Auckland Transport Design Review Committee, which represents the vested interest of Auckland Transport.

When Auckland Transport is satisfied that a submitted design departure is of suitable quality, or in the case of any alternative designs or methodologies – that these meet the requirements laid out in ATCOP - Auckland Transport will notify the applicant that the design is approved and will endorse any plans, specifications and any other submitted documents. For the purpose of this approval, Auckland Transport may require the applicant to make changes to any submitted plan, specification or other documents and to submit further information as requested.