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TIPES

Supplement for Applicants
Coloured Surface Treatments
for Department of Transport
and Main Roads



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INTRODUCTION

The Transport Infrastructure Product Evaluation Scheme (TIPES) is administered by ARRB. Applications are subject to the terms and conditions set out in the TIPES 'Guide for Applicants and Terms and Conditions' (the Guide) and in this Supplement.

ARRB reserves the right to amend the terms and conditions from time to time as it sees fit.

Intending Applicants should read the terms to familiarise themselves with the requirements and procedures before making an Application.

FURTHER INFORMATION CAN BE OBTAINED FROM:

ARRB Group Limited

TIPES@arrb.com.au

www.arrb.com.au/TIPES

BACKGROUND TO THE SUPPLEMENT

The TIPES Guide for Applicants and Terms and Conditions (the Guide) provides an overview of the general scheme, technical assessment process and documentation requirements.

This Supplement to the Guide has been developed specifically for the Queensland Department of Transport and Main Roads (TMR) to formalise the evaluation of proprietary Coloured Surfacing Treatments (CSTs) in meeting end user defined functional performance requirements when used for a specific Application.

Specifically, this Supplement is intended to:

- Provide prospective Applicants with greater detail on the assessment process.
- Document specific requirements of each assessment phase, above or replacing those established in the Guide.
- Provide an estimate of assessment durations and costs.

COLOURED SURFACE TREATMENTS

CSTs are used to delineate different parts of the road surface using a coloured binder and fine, uniformly graded aggregate.

They are typically used in the following applications:

- a) cycleways / bike lanes
- b) bus lanes
- c) threshold treatments for school zones
- d) threshold treatments for wildlife conservation areas, and
- e) township entry treatments.

CSTs (and their components) are required to have the following properties:

- a) able to withstand the action of traffic (e.g. acceleration, braking, turning and scrubbing forces) without damage
- b) resistant to fuel and oil spills from traffic
- c) non-flammable after placement and curing
- d) free from offensive odours after placement and curing
- e) able to be swept using a mechanical broom and cleaned with high pressure water without damage
- f) free from any environmental contaminants such as lead and other heavy metals, and
- g) chemically stable when subjected to prolonged ultraviolet radiation exposure

These are proprietary products and there are no generic specifications for the materials.

CSTs are expected to provide at least 5 years of satisfactory performance in service.

ARRB maintains on its website a register of CSTs products that have been successfully evaluated for use on TMR's road network. The information contained on the register is based on information submitted to ARRB.

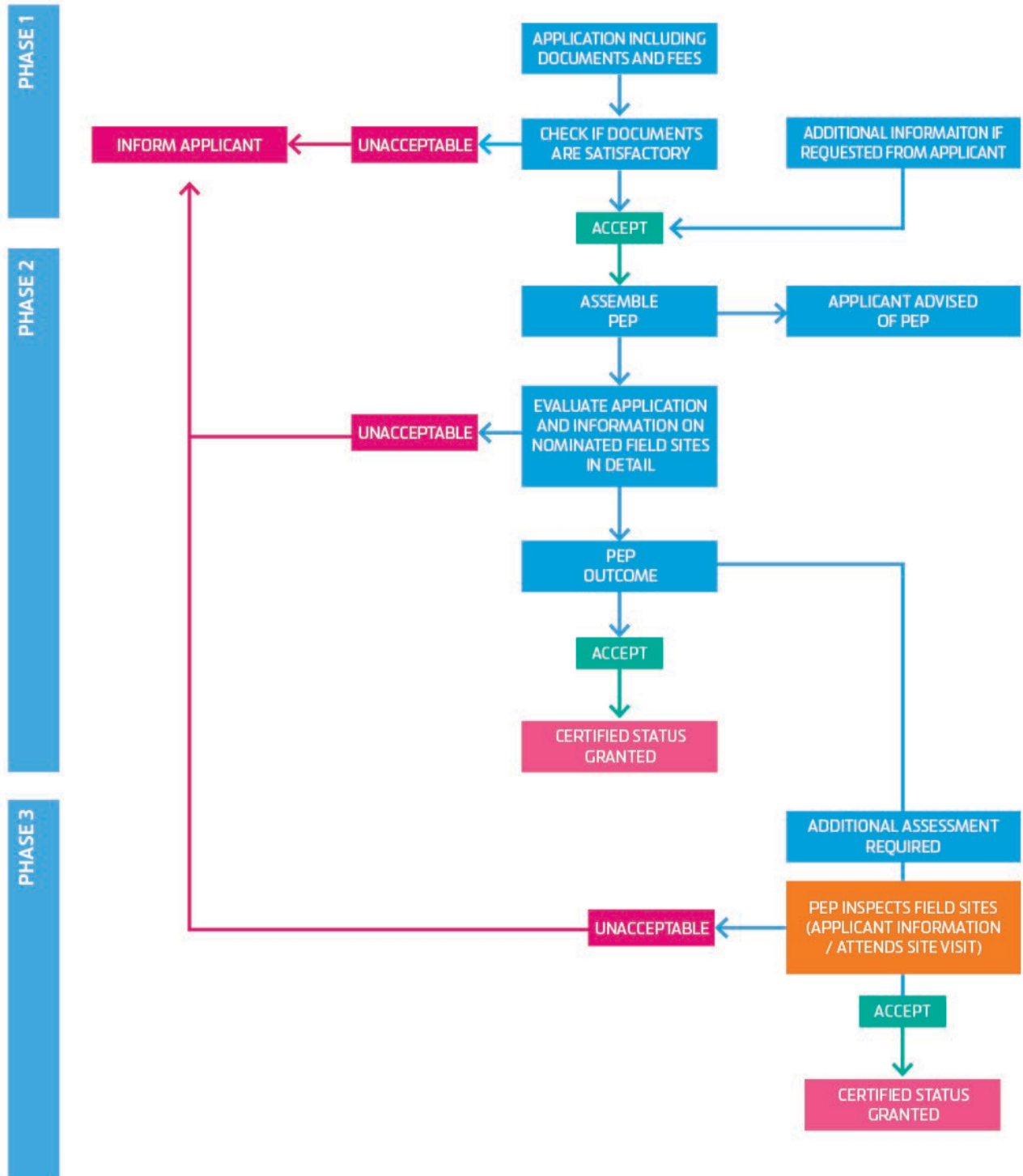
SPECIFIC TERMS & CONDITIONS OF THIS SUPPLEMENT

The following variations to the process described in the Guide will apply to the process of evaluation/assessment of CSTs under this Supplement:

- Figure 1 (the process flow chart) of the Guide is replaced by Figure 1 of this Supplement
- The 3 phases within the Guide are retained, but specific technical requirements commensurate with the material type being assessed have been introduced within this Supplement with respect to Application Level Classifications (Phase 1, Table 1), Mandatory and Optional Test Results (Phase 2, Table 2), Field Assessment Requirements (Table 3 and Appendices B and C), and Technical Opinion (Phase 2 or 3).
- Attachment A of the Guide (Application Form and Supporting Information List) is replaced by Appendix A of this Supplement.
- Attachment B of the Guide (Schedule of Fees) is replaced by Appendix D of this Supplement.

FIGURE 1

Flowchart of evaluation process for CSTs under this Supplement



PHASES OF THE APPLICATION

An Application under this Supplement is considered in three phases:

- Phase 1: Review of Application
- Phase 2: Product Evaluation Panel Assessment
- Phase 3: Inspection of Nominated Field Site/s (as applicable)

PHASE 1: REVIEW OF APPLICATION

An Application consists of a completed TIPES Product Application Form and sufficient documentation to address the items of the Supporting Information, as presented in Appendix A of this Supplement.

Application elements requiring particular emphasis include the product description, specific applications, quality control/assurance system, placement practices and product management.

The following sections provide further guidance on the subsequent items in the Application checklist.

DETAILS ON APPLICATION LEVEL SOUGHT

Products are assessed on the basis of the period of time that satisfactory performance can be demonstrated and the traffic loading that has been applied during that time period.

The Applicant is required to nominate the maximum Application Level from Table 1 for which the product is deemed suitable, noting that Applications for Level 2 are suitable for both Levels 1 and 2, and those for Level 3 are suitable for all levels.

TABLE 1

Application Level Classifications

APPLICATION LEVEL	INDICATIVE DESCRIPTION OF LEVEL REQUIREMENTS
3 (Full)	Based on Applicant's information and a minimum of 5 years satisfactory field performance under heavy traffic loading conditions
2 (Interim)	Based on Applicant's information and a minimum of 2 years satisfactory field performance under heavy traffic loading conditions
1 (Trials)	Based on Applicant's information and less than 2 years satisfactory field performance under heavy traffic loading conditions

PHASE 2: PRODUCT EVALUATION PANEL ASSESSMENT

Historical performance data supporting the Application is assessed through a desktop study. The Product Evaluation Panel (PEP) will provide a written opinion as to whether the product satisfies the technical requirements set out in the Application.

The PEP will be comprised of persons having expert technical training, experience and knowledge in the relevant fields as determined by ARRB.

As a guide, the PEP will typically included one representative of:

- Potential users of the product (within TMR)
- ARRB Experts in the field of practice

The Applicant will be notified of the composition of the PEP prior to the Phase 2 assessment.

The PEP:

- will require a representative sample (minimum size of 300mm x 300mm) of the CST finished product to be provided.
- will require information on the underlaying road surface to which this product will successfully adhere and the construction procedures to be used.
- will require information about the site conditions (including details of the underlying road surface) for existing field sites.

Further information on supporting conditions that the product requires, is to be submitted with the test results as this may have a significant bearing on the performance of the product.

TEST RESULTS

Mandatory and optional material test results for the assessment are listed in Table 2. The test results must be representative of the material used for the demonstration projects submitted for assessment. Test results for materials currently being used must also be included as part of the submission. All test results provided will be considered as part of the Application.

Requirements for demonstration sites are based on the Application Level in Table 1.

SUBMISSION OF RESULTS

All laboratory and field-testing results must be from NATA (National Association of Testing Authorities, Australia) accredited laboratories (except where not specifically required) or overseas laboratories that have accreditation with a body that has mutual recognition with NATA Equivalent standard test methods from alternative authorities will be considered at the discretion of the PEP.

Test results shall only be considered valid if they relate to tests undertaken within 5 years of the date of the Application.

Where data supplied with the Application does not sufficiently address the requirements of the Application, the PEP will notify the Applicant and any additional data requirements met.

All information submitted with the Application is treated as commercial-in-confidence.

ASSESSMENT OUTCOME

The PEP will reach a decision as to whether a Phase 3 is required (physical visit to a nominated field site/s), or whether a Certificate can be issued after the Phase 2 evaluation.

TABLE 2

Mandatory and Optional test results to be considered during Phase 2

	PROPERTY	STANDARD ¹	DESCRIPTION
Mandatory	Polished aggregate friction value (PAFV for aggregate)	Q203	≥ 55
	Particle size distribution for aggregate	AS 1141.11.1	Report
Optional ²	Scuffing	TRL176	Initially: texture depth ≥ 1.4mm After 500-wheel passes: Texture depth (mm) ≥ 1.2 mm; Erosion index ≤ 3 After heat ageing for 112 days at (70 ± 3) °C and 500-wheel passes: Texture depth (mm) ≥ 1.2 mm; Erosion index ≤ 5
	Wear	TRL176	Initially: texture depth ≥ 1.4mm; BPN ≥ 65 After 100,000-wheel passes: Texture depth ≥ 1.1 mm; Erosion index ≤ 3; BPN ≥ 65
	Tensile Adhesion	TRL176	Stress at (–10 ± 2) °C: ³ 1.0 N/mm ² Stress at (+20 ± 2) °C: ³ 0.5 N/mm ²

Notes:

¹ An equivalent test method acceptable to the Product Evaluation Panel may also be used² For Optional Tests the project size / number of sites may be reduced, at the discretion of the Product Evaluation Panel

ASSESSMENT OF EXISTING FIELD SITES

The Applicant must submit field performance reports for at least 3 sites as part of their Application. The report must include test results and photographic evidence of the condition of the site over time and demonstrate compliance with the requirements in Table 3.

The PEP will require detailed information about the site conditions (including details of the underlying road surface) for existing field sites.

Further information on supporting conditions that the product requires, is to be submitted with the test results as this may have a significant bearing on the performance of the product.

The finished surface properties, as detailed in Table 3, will be the basis for the PEP to recommend the issue of a TIPES Certificate. Where the PEP believes that a physical visit is required to one or more of the nominated field sites, this will constitute Phase 3 of the process - visual inspection of existing sites - which must have been laid in Australia and preferably in Queensland.

The PEP will take into account the age, underlying pavement conditions, traffic loading and any other external factors.

TABLE 3

Requirements for the assessment of nominated field sites

PROPERTY	STANDARD ¹	REQUIREMENT ²
Skid resistance (British pendulum number)	AS 4663 (wet method)	≥ 55 immediately after installation and at the end of the performance period
Surface texture	AGPT/T2502	≥ 0.6mm immediately after installation and at the end of the performance period
Colour	AS 1580.601.1	Colour match ³ (rating 3 approximate match or better) immediately after installation and at the end of the performance period ⁴ .
Delamination	Not applicable	Area of CST that has delaminated from underlying road surface at the end of the performance period a) ≤ 1% in any square metre, and b) ≤ 0.1% of the total area of work.
Stripping or ravelling	Not applicable	Area of CST that has delaminated from underlying road surface at the end of the performance period a) ≤ 1% in any square metre, and b) ≤ 0.1% of the total area of work.

Notes:

¹ An equivalent test method acceptable to the TIPES Evaluation Panel may also be used ² No performance period applies for Certification Level 1, a performance period of 2 years applies for Certification Level 2 and a performance period of 5 years applies for Certification Level 3 ³ Match to colour specified. ⁴ Testing shall be undertaken under daylight conditions only

TECHNICAL OPINION

Drafting, review and publication of the assessment outcomes will be conducted at the end of Phase 2 or Phase 3 as applicable, in accordance with the Guide and this Supplement.

Assessment outcomes will be submitted for review to all participating representatives from the TMR.

When the assessment is completed and successful, the PEP will produce a draft report, which will include:

1. Contact information for the Applicant and the manufacturer or originator of the product, as applicable
2. Product summary including description, characteristics, details or specifications for use, handling, storage
3. Utilisation precautions, in addition to intellectual and/or licensing rights, as applicable
4. Objective technical evaluation based on laboratory and field measurements and/or tests relating to the performance of the product provided by the Applicant (and any additional visual field assessment conducted)

OUTCOMES AND PROVISION OF CERTIFICATE

If successful, the product can be listed on the Register on the ARRB website, clearly showing the Application Level achieved.

A copy of the evaluation documents (technical opinion and certificate) is issued to the Applicant and TMR's registrar for CST.

If a product is unsuccessful in meeting the applicable technical requirements, ARRB will notify the Applicant and distribution of the PEP opinion will be to the Applicant only.

Certificates issued are valid for 5 years from the date of issue, except where deregistration is warranted as per the Guide.

SCHEDULE, BUDGET & PAYMENT

An estimate of duration and costs for an evaluation will be provided at the start of the process.

Appendix D provides important information regarding the payment of fees.



APPENDIX A - APPLICATION FORM

Coloured Surface Treatments (CST) (replaces Attachment A of the TIPES Guide)

PRODUCT NAME		
APPLICANTS LEGAL ENTITY NAME		
APPLICANTS ACN/ABN		
BUSINESS ADDRESS		
	STATE	POSTCODE
CONTACT PERSON	PHONE	EMAIL
MANUFACTURER'S NAME		
	ADDRESS	
	STATE	POSTCODE
	EMAIL	
	PHONE	
APPLICATION LEVEL	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
SUPPORTING INFORMATION INCLUDED IN APPLICATION	<input type="checkbox"/>	Item 1: Details of intellectual property ownership
	<input type="checkbox"/>	Item 2: If not the intellectual property owner, details of rights/entitlements
	<input type="checkbox"/>	Item 3: Current Australian Materials Safety Data Sheet (MSDS)
	<input type="checkbox"/>	Item 4: Product description (see additional note below)
	<input type="checkbox"/>	Item 5: Intended purpose and use (see additional note below)
	<input type="checkbox"/>	Item 6: Transportation, storage, placement and maintenance (see additional note below)
	<input type="checkbox"/>	Item 7: Specific Applications (see additional note below)
	<input type="checkbox"/>	Item 8: Details on Application Level sought (as outlined in Table 1)
	<input type="checkbox"/>	Item 9: Details on environmental conditions (see additional note below)
	<input type="checkbox"/>	Item 10: Provided schedule listing all documentation in Application, including field site locations and test data (see additional note below)
	<input type="checkbox"/>	Item 11: Provided electronic copies of all supporting documentation
	<input type="checkbox"/>	Item 12: Quality Assurance systems (see additional note below)

ADDITIONAL NOTES

ITEM 4: PRODUCT DESCRIPTION

This must provide the PEP with an overview summary of the CST, typically including (but not restricted to):

- A typical range of suitable applications
- The binder type, characteristics, and colours available
- Suitable aggregate properties (e.g. geology, polished aggregate friction value and particle size distribution)
- Related ancillary products critical to the system (e.g. tack coating, specialised equipment)
- The placement processes
- Finished product properties

ITEM 5: INTENDED PURPOSE AND USE

The Application must provide the PEP with an understanding of the traffic conditions and environments where the product is successfully used. The Application must also identify specific situations where the product should not be used.

The Application should provide a clear intended purpose for the product, which would assist TMR in ensuring the product's use is limited to appropriate applications.

ITEM 6: TRANSPORTATION, STORAGE, PLACEMENT AND MAINTENANCE

The Application must provide information for the following:

- Preparation of the existing surface or substrate
- Treatment options where pavement repair or levelling is required before installing the system
- Storage and handling of materials
- On-site quality control procedures
- All construction procedures / practices and associated documentation (this information must also be available to TMR contract administration staff (including Contractors and Consultants) upon request).
- Any placement and on-site audit processes

ITEM 7: SPECIFIC APPLICATIONS

Pavement configuration

The Application shall nominate the range of underlying and existing pavements where treatments would be considered suitable. The Applicant must state the minimum requirements on the underlying pavement/ surface conditions that the product can be placed and provide satisfactory long-term performance.

The Applicant must nominate if it was placed on:

- Asphalt (dense graded)
- Asphalt (Stone Mastic)
- Asphalt (other)
- Concrete
- Sprayed seal
- Other (specify).

Technical information and benefits

The technical information is the primary basis by which the product will be assessed by the PEP and should include the noted benefits of the product.

ITEM 9: DETAILS ON ENVIRONMENTAL CONDITIONS

Significant variations or extremes in temperature, humidity and moisture conditions can impact on the performance of CST. If applicable, the suitable climatic ranges required for effective Application, placement and performance of the product should be included as part of the Application, along with specific environmental conditions under which the product will not be effective or performance may be diminished.

ITEM 10: PROVIDED SCHEDULE LISTING ALL DOCUMENTATION IN APPLICATION, INCLUDING FIELD SITE LOCATIONS AND TEST DATA

Information about successful installations is required for the Phase 2 assessment, and Phase 3 inspection, as required. The information shall include location, date of placement, conditions of the site, evidence of performance of the CST with time (test results and photos), referee (e.g. Contract Administrator) including name and contact details.

ITEM 12: QUALITY ASSURANCE SYSTEMS

Evidence shall be provided that an accredited quality system (such as ISO 9001) is in place, which covers the design, manufacture, storage, transport and placement of the product.

THE FOLLOWING INFORMATION MUST ALSO BE PROVIDED BY THE APPLICANT ON OR ATTACHED TO THE APPLICATION:

- a. the Applicant's legal entity name including Australian Company Number and/or Australian Business Number, as appropriate, the number of years in business operation and the name of a contact person, the Applicant's business address and full contact details, telephone, fax and email
- b. the Product name and any other name(s) commonly used to refer to it
- c. full details of the ownership of all Intellectual Property in the Product including, if applicable, details of patent, trademark, or design registrations
- d. if the Applicant is not the owner of any intellectual property in the Product, details of the right/entitlement of the Applicant to use the Product, including licences or sub-licences
- e. the name and address of the manufacturer or supplier of the Product and the location(s) where the Product is produced/manufactured
- f. a current valid Australian Materials Safety Data Sheet (MSDS) issued for the Product (where applicable). If the product or components of the product are imported, the applicant is responsible to ensure that the MSDS of the imported product complies with Australian MSDS requirements. If an overseas SDS is not compliant, the applicant must prepare one in accordance with the relevant Australian regulations, such as: the Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals
- g. a full description of the Product, including details of the composition and/or components, properties and tolerances, and process details as applicable
- h. the intended purpose and use for the Product
- i. details of the use of the Product and where appropriate, suggested instructions or conditions for its transportation, use and maintenance
- j. specific Applications of the Product in respect of which registration is sought and which are to be evaluated. Claimed performance of the product is to be substantiated with evidence from laboratory testing and/or field trials
- k. details on the range of traffic and environmental conditions (e.g. traffic, loading and/or environmental) for which the Product is deemed suitable and in respect of which registration is sought
- l. copies of all original test results identified by author and date in evidence of the claimed performance of the Product
- m. copies of all original data on past performance of the Product in Australia and/or overseas identified by author and date
- n. an original signed statement by the author of any supporting documentation prepared for or used in connection with the Application by an expert adviser, verifying the information supplied and providing full particulars of the qualifications and experience to qualify that person as an expert
- o. a description of the design/implementation process to enable the suitability of the product for specific design/implementation situations to be assessed and to customise/optimize the Application of the Product for site-specific parameters
- p. a business case the economic or socio-economic benefits of the Product compared to conventional alternatives are not considered under this Supplement
- q. a schedule listing all documentation supplied with the Application
- r. additional copies in electronic media of all supporting documentation including specification and data sheets for the Product
- s. the level of quality assurance in place for the manufacture and installation of the Product being either:
 - Level A Quality Assurance – where the Applicant supplies a Certificate of Audit of Quality Assurance from a Joint Accreditation System – Australia and New Zealand (JAS-ANZ) accredited Quality System Auditor, which confirms that an appropriate and effective Quality Assurance System as detailed in the ISO 9000 series standards was and is in place during the manufacture and installation of the Product.
 - Level B Quality Assurance – where the Applicant presents documented and other evidence to the satisfaction of ARRB that an acceptable unaudited quality system or procedure was and is in place during the manufacture and installation of the Product. As a guideline, such a Quality Assurance System should meet the requirements for ISO 9000 series certification, or equivalent scheme.

**BY EXECUTING THIS APPLICATION,
THE APPLICANT WARRANTS,
AGREES AND ACKNOWLEDGES:**

1. The person signing this Application Form on behalf of the Applicant is fully authorised to do so by the Applicant and that the Applicant will thereby become bound by the terms and conditions, requirements and procedures contained in the TIPES Guide for Applicant and Terms and Conditions (and its Attachments) to which this form of Application is attached as Attachment A
2. Each of the statements in this Application and each of the statements contained in the supporting documentation supplied with this Application are true.
3. That, except as set out in this agreement ARRB has not made any and excludes all warranties, terms, conditions or undertakings, whether express or implied, written or oral, statutory or otherwise including any implied warranty or merchantability or of fitness for a particular purpose in respect of the Product. To the full extent permitted by the laws of the Commonwealth of Australia or of any State or Territory of Australia having jurisdiction, any conditions or warranties imposed by such legislation are hereby excluded. In so far as liability under or pursuant to legislation may not be excluded, such liability is limited at ARRBs exclusive option to resupply of services or the cost of such reapply.
4. Without limiting the generality of Clause 3. to the full extent permitted by the laws of the Commonwealth of Australia and any State or Territory of Australia having jurisdiction, ARRB will not be liable for any special, indirect or consequential damages arising under or pursuant of this agreement.
5. This agreement constitutes the entire agreement between the parties in connection with its subject matter and supersedes all previous agreements or understandings between the parties in connection with its subject matter.
6. All Intellectual Property in the Product is owned by the Applicant or is otherwise duly licensed and authorised by or through the true the owner thereof to use and apply same in the Product and for the purposes of the Application.
7. The Applicant must satisfy itself through its own enquiries that the product and commercialisation of the Product will not infringe any third party's Intellectual Property rights.
8. The Applicant grants to ARRB a non-exclusive, irrevocable, royalty free, perpetual licence to use all intellectual property in the Product for the purposes of TIPES evaluation and certification of the Product.
9. All Intellectual Property in the evaluation and certification of the Product is owned by ARRB.
10. The Applicant agrees to the content of Attachment D.

This Application form is to signed by a Principal or a Director of a corporate applicant and who warrants he has full authority to execute this Application form and by such signature it shall become binding upon the Applicant.

AUTHORISED PERSON		WITNESS	
Signature		Signature	
Name		Name	
Position		Position	
Organisation		Organisation	
Date		Date	

APPENDIX B – ASSESSMENT OF NOMINATED FIELD SITES

This Appendix provides the basis for the assessment of the nominated field sites under both Phases 2 and 3, as required.

DEFINITIONS

The following definitions apply:

- A site is defined as a length of road open to regular traffic on which one or more surfacing products has been placed.
- A section is defined as a designated length of a site on which a specific surfacing has been placed and subject to similar conditions (e.g. traffic environment, underlying pavement surface). A site may comprise multiple sections, with the same or different products.

RESPONSIBILITIES AND PERSONNEL

The PEP is responsible for arranging all details of any on-site inspections required as part of an additional assessment under Phase 3, which will require consultation with the Applicant.

In such cases, agreement must be reached between the Applicant and the PEP regarding the provision of, and remuneration for, access to the site(s), which includes arranging for any necessary road closures, traffic control and other safety precautions.

ASSESSMENT

The standard assessment method is set out in Appendix C.

The PEP may make amendments to the marking guide (Table C2) to account for factors specific to the product(s) being assessed, but must communicate these to the applicant with justification given.

Sites and sections will be assessed based on serviceability regardless of the age of the installation.

Damage to the pavement that appears to have been caused by chemical actions (e.g. fuel spill), vehicle impact, or other mechanical actions can be noted during the inspections, but will not adversely affect the outcome of the assessment.

Any faults identified during the inspection of each section will be noted using the items listed in Table C1.

Following the assessment of each section, an affected area is to be assigned per distress type to each section based on the assessment, as shown in Table C2.

REPORTING

Each assessment is to be documented in the format of an inspection report. This report will include all the information listed in Appendix C.

APPENDIX C - REPORT FORM

PRODUCT NAME		
APPLICANT		
SITE LOCATION		
PANEL MEMBER NAME		
DATE OF INSPECTION		
INSPECTION		
AGE OF SECTION:		
NUMBER OF SECTIONS TO ASSESS		
WEATHER AND ROAD CONDITIONS		
ASSESSMENT OF SECTIONS		
SECTION/CHAINAGE	NOTATION OF CONDITION (TABLE C1)	MARK/SCORE (TABLE C2)
1.		
2.		
3.		
4.		

TABLE C1

Modes of
Pavement
Distress

MODES OF PAVEMENT DISTRESS
Colour
Cracking
Delamination
Patches
Polishing (reduction in Skid Resistance / friction)
Ravelling
Requires remedial treatment
Stripping or Loss of Aggregate
Loss of Surface Texture

TABLE C2

Marking Guide

Area Affected	DESCRIPTION
0%	No discernible pavement distress
<5%	No significant faults
<20%	Some minor faults
>20%	Several faults
>50%	Seriously faulted
	Requires remedial treatment
	Requires immediate remedial treatment

APPENDIX D - SCHEDULE OF FEES

The estimated fixed fees for TIPES assessment are shown in Table D1. All fees shown exclude GST.

GST will be included in a tax invoice for fees and other costs must be paid on the same date and in the same manner as the fee or cost.

Work on each of phase of the assessment will only commence once all fees associated with the phase have been paid, and have been received by ARRB in cleared funds.

All fees and costs must be paid by direct deposit into the bank account of ARRB specified in this Attachment (unless a prior arrangement is made with ARRB for another method of payment)

ARRB GROUP BANKING DETAILS:

Bank	ANZ Ltd 2 Kingsway Glen Waverley VIC 3150
Account name	ARRB Group Ltd
BSB	013 326
Account Number	836 563 129

TABLE D1

Estimated fixed fees for TIPES assessment.

PHASE	ASSESSMENT STEP	ESTIMATED FEE (\$AUD)
Phase 1 ¹	Application fee and assessment of Application	\$2,000 + GST
Phase 2	Desktop evaluation by PEP – considering test results and undertaking office-based assessment of nominated field sites. NB. excludes costs of any additional testing required	\$ 4,000 + GST
Phase 3	Additional on-site assessment of a nominated field site/s, as requested by PEP	\$TBA (location and site characteristic specific)
On Issue of Certificate	Publication and Registration Fee	\$500 + GST

¹The non-refundable Application fee is to be direct deposited into the ARRB nominated bank account. A copy of the remittance advice, together with the completed Application form and required accompanying documentation is to be e-mailed to tipes@arrb.com.au
An additional Application fee may be charged and will be payable by the Applicant to cover additional administrative costs for ARRB, occasioned by any deficiency in the completion of the Application, as noted above.

SHAPING THE TRANSPORT FUTURE WITH ARRB

The Australian Road Research Board (ARRB) is the source of independent expert transport knowledge, advising key decision makers on our nation's most important challenges. ARRB prides itself on providing a total service to our clients, both in Australia and overseas. Our mission is firmly focussed on creating knowledge for tomorrow's transport challenges and solutions for today.

We achieve this through our core values

TRANSFORMATIVE

Change enlivens us; we are continuously looking to improve the world around us, moving forward and innovating. The mobility solutions of the future will require adaptable skills, technologies and ideas.

COLLABORATIVE

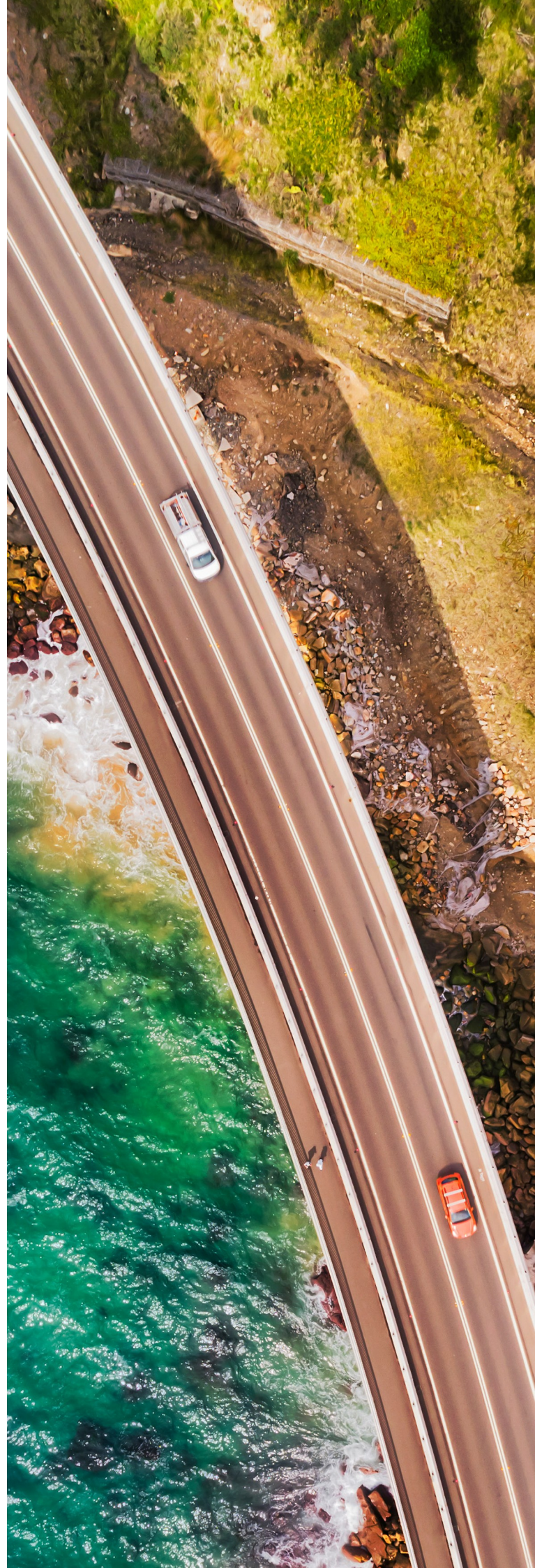
Collaboration amplifies us; we communicate openly and constructively to deliver world-class research because our people work together and with partnering organisations and clients.

ENERGY & PASSION

Collaboration amplifies us; we communicate openly and constructively to deliver world-class research because our people work together and with partnering organisations and clients.

INTEGRITY

Collaboration amplifies us; we communicate openly and constructively to deliver world-class research because our people work together and with partnering organisations and clients.





OFFICES IN:
BRISBANE, SYDNEY, ADELAIDE, PERTH.

NATIONAL TRANSPORT RESEARCH
CENTRE AND HEAD OFFICE:
MELBOURNE
80A TURNER STREET
PORT MELBOURNE VIC 3207

ARRB.COM.AU