# NZ Roadmarkers Federation Inc

# **Competitive Pricing Procedures Tender Evaluation Checklist**

This document describes the items relating to roadmarking that should be assessed by Tender Evaluation Teams. The elements covered are those that should have been addressed by the Contractor's tender submission.

The aim of this checklist is to provide assurance that tender evaluations have been completed professionally and objectively, by providing each member of the Tender Evaluation Team with the appropriate technical support.

The checklist is applicable for the evaluation of:

- 1 Individual tenders submitted for evaluation by weighted attributes
- 2 Applications for entry to Pre-Qualification Registers
- 3 Subcontractors for pavement marking services by Head Contractors.

The checklist is intended to be used in conjunction with Volume 1 of Land Transport New Zealand's CPP Manual and related procedures and guidelines. The checklist is by no means exhaustive and the users or Contract Supervisor should add items based on personal experience and specific contract requirements.

The users of this checklist should familiarise themselves with:

- 1 Volume 1 of LTNZ CPP Manual
- 2 Related Consultant procedures and guidelines (where available)
- 3 Reference documents as contained in section 3.

## 1 INTRODUCTION

The purpose of this checklist is to provide a basis for assessment during tender evaluation being conducted by Tender Evaluation Teams on tenders for the supply of pavement marking services.

It is aimed at assessing compliance with the requirements of:

- 1. Land Transport New Zealand's Competitive Pricing Procedures Manual
- 1. Transit New Zealand quality specifications.

The checklist is intended to provide grounds for confidence to the Principal that the contractor has the appropriate systems in place and the resources and technical capability to meet their contractual and legislative requirements.

# 2 SCOPE

The checklist covers the contractual requirements relating to roadmarking operations. The activities as outlined by the Land Transport NZ CPP Manual:

- 1. Relevant Experience
- 2. Track Record
- 3. Technical Skills
- 4. Resources
- 5. Management Skills
- 6. Methodology
- 7. Price

# **3 REFERENCES**

The recommended list of documents that need to be considered are set out at the end of this document. The Tender Evaluation Team should also add to this list any additional material relating to special materials and or special conditions.

The Documents referred to should those defined in the contract documents. Transit New Zealand supply the latest versions of their Specifications on their WebPages. www.transit.govt.nz

### 1 REVIEW AND AMENDMENT

This document has been developed by Quality Surveillance Ltd (QSL) for The New Zealand Roadmarkers Federation Inc (NZRF).

All information contained in it has been prepared in good faith by QSL and the NZRF and is, to the best of their knowledge, correct and complete. While every care has been taken in the preparation of the information provided, no warranty is given by either QSL or the NZRF as to the correctness of the information herein and no liabilities accepted for any statement or opinion, nor for any error or omission.

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ITEM	Complies Y/N	COMMENT
<b>CONTRACT PACKAGE DETAILS</b> <i>Provide brief description of :</i> <i>Tender, Contractor, Scope of Works,</i> <i>Contractors Representative.</i>		
<b>RELEVANT EXPERIENCE</b> (tenderer's previous experience in technical areas comparable to this project)		
Is there evidence that contractor has experience with proposed work package and the related reporting mechanisms, ie: Transit New Zealand? Local Authority		
<ul> <li>Repaints?</li> <li>Installation of new painted markings?</li> <li>Installation and removal of RPM's?</li> <li>Application of thermoplastic markings?</li> <li>Application of other long-life materials?</li> <li>Removal of roadmarkings?</li> </ul>		
<ul> <li>State Highway work?</li> <li>City roading environment?</li> <li>Urban roading environment?</li> <li>Rural roading networks?</li> </ul>		
<ul> <li>Traffic management to TNZ CoPTTM Level 3?</li> <li>Traffic management to TNZ CoPTTM Level 2?</li> <li>Traffic management to TNZ CoPTTM Level 1?</li> <li>Traffic management to NZRF TTM?</li> <li>Traffic management to Local Roads Supplement to TNZ CoPTTM</li> <li>Submission of TMP's?</li> </ul>		
How long ago was this work?		
What portion of the roadmarking work is to be subcontracted?		
Does the nominated subcontractor have the resources required?		
Referees verify stated relevant experience? Who were they?		

TRACK RECORD		
(tenderer's record of completing projects to the		
quality standards, on schedule and within budget)		
Does submission provide evidence of client		
satisfaction with roadmarking services provided?		
Are submitted projects relevant to proposed works?		
Are submitted projects relevant to proposed works?		
Is there evidence / indication of significant Notices to		
Contractor being required?		
Does statement of completion on time cover all		
stages/phases of projects described? e.g.		
• For repaints, were scheduled works always		
completed on time?		
<ul> <li>What was contractor's performance relating to "urgent work"?</li> </ul>		
<ul> <li>Were there retentions relating to non-completion</li> </ul>		
of "service work"?		
Were referees happy with quality of work?		
Was work carried out within agreed time?		
Was work completed within budget?		
Has contractor worked for your client recently, if so		
what the level of performance was contained in Engineers Reports / Audit Reports?		
Ligineers reports / Audit Reports /		
Do any other Tendering Authorities have records of		
the roadmarkers performance?		
If so, are there areas of concern?		
(state)		

TECHNICAL SKILLS	
(competence of the personnel that the tenderer	
proposes to use with particular regard to their skills	
and experience in technical areas comparable to the	
project)	
projecty	
Is there evidence that staff have achieved	
competence in issues relating to the Health & Safety	
in Employment Act 1992, e.g.	
<ul> <li>Hazard Identification and management on work-</li> </ul>	
sites?	
Traffic Management?     Safety on Department/	
Safety on Roadmarking Sites including Paint	
Injection, thermoplastic application, etc?	
Is there evidence that nominated people have the	
requisite skills and experience, e.g.	
Contractors Representative has experience in	
receiving roadmarking contract instructions?	
Contract Manager has experience in managing	
contract of the type / complexity proposed?	
Quality Manager has experience in Contract	
Quality Plan implementation and management?	
<ul> <li>Traffic Manager has relevant qualification?</li> </ul>	
<ul> <li>Safety Manager has experience in roadmarking</li> </ul>	
hazard management?	
Does the tender submission provide evidence that	
these people will be used on the contract?	
Are there sufficient operational staff having	
appropriate technical training and skills relating to:	
<ul> <li>Setting out of new work?</li> </ul>	
Supervision of paint	
<ul> <li>Supervision Long-life material application?</li> </ul>	
<ul> <li>Supervision of Traffic Management?</li> </ul>	
<ul> <li>Review &amp; amendment of TMP's</li> </ul>	
Traffic Control?	
<ul> <li>Taking and measurement of test plates?</li> </ul>	
<ul> <li>Determination of paint and bead application</li> </ul>	
rates?	
<ul> <li>Calibration of paint computers?</li> </ul>	
How many:	
Operators have InfraTrain National Certificate as	
Roadmarking Grade 2 or 3?	
Assistants have InfraTrain National Certificate as	
Roadmarking Grade 1?	
Operators/Transport Drivers hold Unit Standard	
1739 – Load, convey and unload hazardous	
substances by road transport or equivalent?	
Note: Roadmarking staff are usually multi-skilled	
such that a Type A applicator operator is likely to	
have most of the skills required for roadmarking.	

<b>RESOURCES</b> ( equipment, including facilities and intellectual property, which the tenderer proposes to use on physical works project)	
Documented Quality System	
Is there evidence of compliance with Clauses 2, 3 and 6.2.1 of TNZ P/12 or TNZ P/22? Is there evidence of quality system registration? Which Certification Body? Does ISO 9001 Certification Scope cover roadmarking? Does Certification Scope include the technical requirements of NZRF QAP002? Is there evidence of recent surveillance of roadmarking activity by Certification Body?	
Note: Copies of Quality System Certificates submitted should include copy of Scope of Certification page.	
Licences & Agreements Does Contractor hold appropriate licence and or agreement for any special or long-life material proposed?	
Work Commitments / Resources	
Are all contractor current commitments listed? Does contractor have subcontract commitments that are not listed?	
What commitments are likely to have a significant impact on proposed work: <i>(list)</i>	
Is there evidence that there are sufficient resources to meet commitments?	
Does the contractor own or have control of all of the plant stated as being proposed for work package?	
What evidence is there of a "healthy" relationship with materials suppliers?	
Note: Transit New Zealand publishes a table that identifies by region the head contractors holding all TNZ contracts. As roadmarking is often subcontracted further inquiries are necessary to assess the true level of work commitments	

Type A Paint Applicators		
How many?		
How old are they?		
What paint systems do they have? i.e.:		
<ul> <li>high pressure airless, (paint pumps)</li> </ul>		
<ul> <li>low pressure airless, (pressurised vessel)</li> </ul>		
<ul> <li>conventional spray (air atomising)</li> </ul>		
or a combination?		
Are they capable of both white & yellow paint?		
Glass bead application system?		
Size and numbers of paint and glass bead tanks?		
Do they have paint computers? If so, do they display		
calculated dry film thickness?		
What cleaning systems are used:		
Rotary Broom?     Fixed Broom?		
• Fixed Broom?		
Compressed Air?		
Type B Paint Applicators		
How many:		
What type are they:		
Pedestrian?		
Operator Mounted?		
Operator Mounted Type B1?		
Umbilical?		
How old are they?		
What paint systems do they have? i.e.:		
<ul> <li>high pressure airless, ( i.e. paint pumps)</li> </ul>		
<ul> <li>low pressure airless, (pressurised vessel)</li> </ul>		
<ul> <li>conventional spray (air atomising)</li> </ul>		
<ul> <li>or a combination?</li> </ul>		
Are they capable of both white & yellow paint?		
Glass bead application system?		
Sizes and numbers of paint and glass bead tanks?		
Do they have paint computers?		
If so, do they display calculated dry film thickness?		
Long-Life Material Applicators		
How many:		
Operator Mounted?		
Truck mounted?		
What delivery systems do they have? i.e.		
Extrusion?		
Screed?		
Spray?		
Sizes and numbers of material tanks?		
Capabilities for:		
Audio Tactile Markings?		
Water Shedding Markings?     Other?		
Other?		
How many pre-heaters?		
Sizes and numbers of tanks?		
Drop-on glass bead application system?		

Raised Pavement Marker Installation			
What equipment is used:			
Dedicated truck & adhesive heater?			
Dedicated pedestrian trolley?			
<ul> <li>De-mountable heating tanks?</li> </ul>			
Other?(state)			
Are RPM's placed as:			
Mobile operation,			
Semi-static, or			
• Fixed site operation?			
Deieed Devement Merker Demovel			
Raised Pavement Marker Removal			
What methods are proposed for:			
Removal of RPM's?			
Repair of pavement surface?			
Disposal of old RPM's?			
Disposal of old ICF IVI S?			
Line Removal & Sweeping			
Water injection?			
Sand & Grit Blasting?			
Water blasting?			
Vacuum Broom?			
Traffic Management Equipment			
Numbers of:			
Truck mounted attenuators?			
Dedicated Pilot Vehicles?			
<ul> <li>Signs Transport Vehicles?</li> </ul>			
<ul> <li>Vehicles with Arrow Boards?</li> </ul>			
Number type and grade of signs;			
Number of Reflectorised:			
900mm Cones?			
150 0 0			
• 450mm Cones?			
Support & Transport			
••			
Number & Capacities of:			
<ul> <li>Dedicated transport vehicles?</li> </ul>			
<ul> <li>Load lift vehicles?</li> </ul>			
Other vehicles?			
Is there evidence of appropriate:			
Mechanical and repair services?			
<ul> <li>Depot / Yard security and facilities?</li> </ul>			
Computers and financial systems?			
le thore evidence of appropriate environmental			
Is there evidence of appropriate environmental			
protection equipment and systems for:			
<ul> <li>Storage of Dangerous Goods?</li> </ul>			
<ul> <li>Transfer of Paint &amp; Solvent?</li> </ul>			
<ul> <li>Cleaning of plant &amp; equipment?</li> </ul>			
Containment of spills?			
<ul> <li>Protection of waterways?</li> </ul>			
- Trococion of waterways!			
Is there evidence that where the contract requires			
work away from the main depot that appropriate			
	I		

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esources will always be provided?		
Communication Systems		
Radio Telephones:		
All vehicles?		
Depot or base?		
Vehicle to vehicle?		
Cell Phones?		
• Email?		
• Other?		
Cartified Diant 8 Equipment		
Certified Plant & Equipment		
s there evidence of compliance with Clauses 6.2.2		
and 6.2.3 of TNZ P/12? Or TNZ P/22		
Do TNZ T/8 & T/12 Certificates cover all the		
applicators described in Resources? Are there		
certificates for any pre-heaters?		
Nhat are Expiry dates? (list)		
Will any expire shortly after start of work?		
Have Certificates been registered with Registration		
Body (NZRF)?		
Discuss validity /authenticity of certificates as		
presented		
Are they valid / compliant?		
Notes:		
Under TNZ P/12 and TNZ P/22:		
<ul> <li><u>all</u> paint applicators require valid TNZ T/8</li> </ul>		
Certificates at time of tender ,		
<ul> <li><u>all</u> Long-life product require valid TNZ T/12 or</li> </ul>		
Certificates at time of tender,		
<ul> <li>and Certificates are to be maintained for the</li> </ul>		
period of the contract.		
TNZ T/8 & T/12 require that certificates must be		
registered to be valid. The NZRF is the		
registration body. A copy of the register is		
available from the NZRF Executive Director or		
from the NZRF Website at www.nzrf.co.nz		
Where umbilical Type B paint applicators are     included ears should be taken to identify if		
included, care should be taken to identify if		
attached to a Type A, a dedicated mother vehicle		
or transferable from vehicle to vehicle.		

<ul> <li>MANAGEMENT SKILLS <ul> <li>(availability within the tenderer's organisation of personnel and appropriate management skills together with effective management systems and methods appropriate to the successful management of the project)</li> </ul> </li> <li>Personnel <ul> <li>Does submission provide evidence of skills and experience in:</li> <li>Contract Management – in particular roadmarking to TNZ requirements?</li> <li>Quantity Surveying &amp; Tender Submissions?</li> <li>Programming of roadmarking work?</li> <li>Quality Systems – in particular:</li> <li>Technical requirements?</li> <li>Quality Records?</li> <li>Training of operational staff?</li> <li>Health &amp; Safety?</li> <li>Progress Claims?</li> </ul> </li> <li>Does submission provide evidence of a formalised</li> </ul>		
<ul> <li>competency and training programme for all staff?</li> <li>Do Supervisory staff hold appropriate qualifications, i.e.:</li> <li>Civil Construction Works Supervisor National Certificate?</li> <li>Roadmarking Grade 4 Supervisor National Certificate?</li> <li>Civil Construction Works Foreperson National Certificate?</li> <li>Unit Standard in TNZ T/8 Testing?</li> <li>Other Unit Standards in Testing</li> <li>Other?</li> </ul>		
<b>Communication</b> Does the submission provide a clear description of the lines of communication within management team and the Engineer? Are the systems appropriate to the contract works? Where contract requires a remote or separate depot, how will management services be provided?		

METHODOLOGY	
(procedures the tender proposes to use to achieve	
the specified end result)	
Note: As the Contract Quality Plan which provides	
the control mechanisms required for effective control	
of the contract is developed from the methodology	
submitted, evidence of a well conceived	
methodology increases the chances of appropriate	
Contract Quality Plan being submitted.	
Selection of Treatment & Method	
Are all types and stages of work covered?	
Are appropriate specifications referred to:	
• Manual of Traffic Signs & Markings Part 2, RTS 4	
& RTS 5 for set-outs?	
• TNZ P/12 or TNZ P/22 for paint and bead	
application?	
<ul> <li>TNZ P/14 for raised pavement marker</li> </ul>	
installation?	
TNZ P/20 for long-life application?	
What equipment is being proposed?	
Does the contractor own or have control of all this	
plant?	
Is liaison with Principal / Contract Supervisor referred	
to?	
Products & Materials	
Are all products and materials clearly specified, i.e.:	
Standard Alkyd Paint?	
High Solids Alkyd?	
<ul> <li>Chlorinated Rubber modified Alkyd?</li> </ul>	
Waterborne?	
Thermoplastic?	
Cold applied plastic?	
<ul><li>Plastic RRPM's?</li><li>Ceramic RPM's</li></ul>	
Does material comply with TNZ materials	
specifications and on approvals lists, i.e.:	
Paint to TNZ M7?	
Thermoplastic & Long-life to M/20?	
Can Contractor demonstrate expected life for the	
proposed long-life materials?	
RPMS to TNZ M/12?	
RPM Adhesive to M/13?	
Do Materials & Handling procedures cover:	
Dangerous Goods storage?	
Containment of Spills?	
Transport of Hazardous Goods?	
• Correct disposal of used containers and waste?	
Is there evidence that Materials Records will comply	
with TNZ P/12 or TNZ P/22?	
What material records systems are proposed for	

TNZ P/20?	
<b>Programming</b> What plant & equipment, including certified applicators and pre-heaters, will need to be available to meet programme requirements? What systems are used to programme work	
<ul> <li>packages?</li> <li>Does the proposed method cover resourcing for:</li> <li>Contingencies?</li> <li>Urgent Work?</li> <li>Accidents &amp; Emergencies?</li> <li>Support e.g. Traffic Management where subcontracted?</li> </ul>	
<ul> <li>Application of markings</li> <li>Is appropriately certified plant being used to apply markings, i.e. :</li> <li>TNZ T/8 for paint?</li> <li>TNZ T/12 for all Long-life product?</li> </ul>	
How are RPM's applied?	
<ul> <li>Protection of Markings</li> <li>Does the submission demonstrate that the contractor has sufficient product knowledge to ensure that markings are protected such that they:</li> <li>Are not tracked by vehicles?</li> <li>Cost-effectively attain highest possible effectiveness?</li> </ul>	
Inspection & Testing Is there evidence that contractor understands inspection and testing requirements? Are test plates used and when? How are acceptance criteria defined? How are application rates for paint and beads determined?	
<ul> <li>Does contractor own appropriate test equipment - in particular:</li> <li>Elcometers for dry paint film thickness?</li> <li>Elcometer for Audio Tactile and thick films?</li> <li>Retroreflectometer?</li> </ul>	
Progress Monitoring, Reporting & Invoicing What systems are used to monitor, report and invoice work packages? Is there evidence of appropriately skilled and experienced staff responsible for these tasks?	
Public Liability Does cover match scope of works? Is level of cover: As specified?	

Appropriate / adequate for works contracted?	
Quality Assurance	
Does submission provide evidence of knowledge of	
Contract Quality Plans and their contents?	
Is there evidence that Specification Review will	
include any special requirement?	
How are contract requirements translated /	
communicated to operational staff?	
Do staff have access to relevant TNZ Specifications:	
<ul> <li>Manual of Traffic Signs &amp; Markings?</li> </ul>	
<ul> <li>TNZ P/12 or TNZ P/22?</li> </ul>	
<ul> <li>TNZ P/14 (for RPM's)?</li> </ul>	
What audit programme is proposed?	
Does the audit programme contain External Audits?	
What system for control of non-conforming markings	
is proposed?	
Applicator Contification Densus	
Applicator Certification Renewal	
Does the submission indicate that applicator testing	
will be managed in such a way that plant certification	
is maintained throughout the entire contract period?	
Health & Safety	
Is there evidence that the contractor understands his	
obligations under the HSE Act 1992 in particular:	
<ul> <li>Identification of hazards, e.g. paint injection,</li> </ul>	
traffic, solvents, etc?	
<ul> <li>Briefing of staff and visitors to site?</li> </ul>	
thinners, hot thermoplastic, RPM adhesive, etc?	
Is there evidence that the Contractor understands	
the current industry good practice as described by	
MOSHH Code of Practice and the NZRF Safety,	
Health & Environment Guide?	
Is there evidence of a system for ensuring that new	
staff are appropriately trained or controlled?	
Is there evidence that the stated processes will apply	
to any subcontractors or support service provider?	
Traffic Management Plans – (TMP's)	
What is Transit TTM Designation for the Contract	
Works	
Is there evidence that the Contractor understands his	
obligations under relevant TNZ Code of Practice for	
Temporary Traffic Management in particular:	
Generation and amendment of Traffic	
Management Plans (TMP's)	
<ul> <li>Review and amendment (TMP's)</li> </ul>	
Use of relevant equipment, e.g. use of 900mm     conos on tapors STMS Warrant Cards atc2	
cones on tapers, STMS Warrant Cards, etc?	

requiring?	OTHER (items for consideration within all the attributes above) Health & Safety Plan Environmental Plan For both of these, does Tender Submission demonstrate a clear understanding of what RFT is			
	requiring?			

# **Recommended Reference Documents**

Land Transport NZ Competitive Pricing Procedures Manual; Volume 1, Physical Works & Professional Services

Quality Specifications TNZ TQS2 AS/NZS/ISO 9001:2000 Quality NZRF QAP002	Quality system for Road Construction, Road Maintenance and Structures Physical Works Contracts having a Normal QA Level management systems - Requirements Quality Assurance Programme Specifications and Guidelines, <i>(referenced by TNZ P/12 &amp; P/22)</i>
National Standard Specifications	
AS 2009	Glass beads for road-marking materials
NZS 3910	Conditions of contract for building and civil engineering construction
NZS 4224	Code of practice for measurement of civil engineering quantities
NZS 5433	Code of Practice for the Transport of Hazardous Substances on Land
Transit New Zealand Specifications & Related Documents	
TNZ P/12	Specification for Pavement Marking
TNZ P/20	Performance Based Specification for Roadmarking
TNZ P/22	Specification for Reflectorised Pavement Marking
TNZ T/8	Specification for Roadmarking Paint Applicator Testing
TNZ T/12	Specification for Certification of Long-Life Pavement Marking Material Applicators
TNZ M/7	Specification for Roadmarking Paints
TNZ M/12	Specification for Raised Pavement Markers
TNZ M/13	Specification for Adhesion Agents
TNZ M/20	Specification for Long-Life Roadmarking Materials
MOTSAM : Part 2	Manual of Traffic Signs & Markings: Part 2 Road Markings
TNZ CoPTTM	Transit New Zealand Code of Practice for Temporary Traffic Management
TNZ/LTSA Guidelines	
TNZ QG Notes	Guidelines on Roles of the Client, Consultant and Contractor in Quality Assurance
RTS 4	Guidelines for Flush Medians
RTS 5	Guidelines for Rural Road Marking and Delineation

#### Industry Guidelines and Codes of Practice

NZRF Roadmarkers Guides: - available on request from the NZRF

- Safety Health & Environment Guide (provides guidance on HSE and Environment)
- Guide to the Management of Traffic Hazard while Roadmarking (provides interpretation of TNZ CoPTTM)
- Line Removal Guide (provides guidance on line removal methods)
- Roadmarking Materials (provides information on roadmarking materials
- Local Roads Supplement to TNZ CoPTTM

RNZ Safe Handling of Bituminous Materials used in Roading (relates to RPM Adhesive)

NZCF Contractors Guide to Health & Safety in the Workplace

Code of Practice for the Management of Substances Hazardous to Health (MOSHH)

CRT&L ITO Operators Handbook for the Transport of Dangerous Goods (DG) by Road (provides guidance on DG requirements) – available from the Commercial Road Transport & Logistics ITO

#### NZ Roadmarkers Federation Checklists

NZRF:CONDEV001 Contract Development Checklist NZRF:CMC001 NZRF Contract Management - Site Review Checklist