

**SPECIFICATION**

**for**

**WORKS ON ROADS**

**Carried out for organisations other than the
Commissioner of Highways**

(Including Excavation and Reinstatement of Road Pavement)

***This Specification stipulates the requirements for undertaking work on roads under the care, control and management of the Commissioner of Highways in South Australia. It applies to any company, statutory authority, organisation or person that proposes to install, replace or repair a Service in the road or undertake any other work on these roads.***

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**SPECIFICATION FOR WORKS ON ROADS**

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20. **INTRODUCTION**

This Specification applies when any company, statutory authority, organisation or person (**“Owner”**) proposes to install, replace, repair or inspect a Service or undertake any other work on a road which is under the care, control and management of the Commissioner of Highways (**“Commissioner”**).

This Specification applies regardless of whether the Owner is operating under powers pursuant to statute or by an agreement with the Commissioner.

Compliance with this Specification will be deemed by the Commissioner to meet the requirements of the phrases "make good", "reinstate" or “restore” used in applicable Code of Practice or any legislation which gives power to a Statutory Authority to install infrastructure in a Road. The requirements of this Specification may only be varied by the written agreement of the Commissioner.

The Commissioner may nominate a Representative who may exercise all powers and responsibilities of the Commissioner under this Specification.

This specification applies to Services installed both transversely and longitudinally in the Road.

1. **DEFINITIONS**

The meaning of terms used in this Specification shall be those in AS 1348 “Road and Traffic Engineering – Glossary of Terms”, except where described otherwise in this Specification.

“**Defect**” means settlement, rutting or other deformation that signifies the deterioration of the Works, including but not limited to any of the following:

1. deformation of ≥ 20 mm under a 1.2 m straight edge;
2. the surface of the pavement is cracked, ravelling or stripping; or
3. any cracks greater than 3 mm within the reinstatement or between the reinstatement and the adjoining road pavement.

**“DPTI”** means the Department for Planning, Transport and Infrastructure;

**“DPTI Master Specification”** means the DPTI Master Specification for Transport Infrastructure (available via the internet from: [DIT Master Specification](https://www.dit.sa.gov.au/contractor_documents/masterspecifications)) current at the date of commencement of work. A reference to “Part” or “Division” in this specification is a reference to a part or division of the Master Specification;

“**Hold Point”** means an identified point in a work-related process, beyond which the subsequent activity cannot proceed without release of the Hold Point by the Commissioner.

**“Minor Works”** meanswork up to 1 day’s duration from commencement to completion in the trafficable lanes;

**“Major Works”** means work exceeding 1 day’s duration from commencement to completion in the trafficable lanes;

**“Pavement”** includes the pavement of carriageways, road shoulders (sealed or unsealed), driveways, footpaths, medians, traffic islands and aprons to side streets;

**“Practical Completion”** means completion of the Works, completely free of Defects, to the satisfaction of the Commissioner;

**“Road”** means any road under the care, control and management of the Commissioner pursuant to the *Highways Act 1926* (SA);

**“TMC”** means the DPTI Traffic Management Centre (telephone 1800 018 313);

**“Working Day”** means a week day from Monday to Friday inclusive that has not been designated as a South Australian public holiday;

**“Service”** means a culvert, drainage structure, cable, conduit, pit, pipe or similar infrastructure;

**“Works”** means all infrastructure and work associated with the installation, replacement or repair of a Service in a Road.

**3. POSITION OF SERVICE**

The following order of precedence shall apply to the position and / or method of installation of the Service:

1. Outside of the Pavement (i.e. in the verge or roadside)
2. In footpaths (where present)
3. In the road shoulder
4. Installed by under Road Boring under traffic lanes
5. Installed by trenching in a traffic lane.

The Owner must position / install the Service in accordance with the highest order of precedence which is reasonably practicable.

**4. NOTIFICATIONS**

**4.1 General**

Whenever the Owner proposes to undertake works on a Road, the Owner must notify the Commissioner by submitting a "**Notification of Works Impacting DPTI Roads**" form, available by telephoning 1800 018 313 or from the following internet address:

[Works on Roads by Other Organisations](https://www.dit.sa.gov.au/contractor_documents/works_on_roads_by_other_organisations)

Traffic Management Plans must be attached to the form that show the location of all traffic control devices and proposed times of traffic restrictions (regardless of duration).

**4.2 Minor Works**

The Owner must advise the Commissioner its intention to commence work on a Road at least 5 Working Days before commencement of site work.

**4.3 Major Works**

The Owner must submit drawings, specifications and work methods to the Commissioner for approval at least 4 weeks prior to commencement of site work. The submitted drawings must meet the requirements outlined in Appendix 1. In the event that the Owner’s drawings and / or specifications are amended prior to the start of work, the Owner must resubmit revised copies.

The Owner must advise the Commissioner its intention to commence work on a Road at least 5 Working Days before commencement of site work.

**4.4 Public Notification**

No less than 2 weeks before the commencement of work on site, the Owner must notify all local businesses and residents of possible disruptions that may affect them as a result of the work. If the Works restrict traffic flow and are likely to impede emergency services, the Owner must notify all emergency services of the roadworks, no sooner than 72 hours and no later than 24 hours prior to commencement of work.

If the Works will affect the operation of bus services, the Owner must contact the DPTI Public Transport Division to ensure bus services are catered for adequately.

For Major Works exceeding 3 days duration, advance road works signs must be installed at key locations no less than 2 weeks prior to the commencement of work on site.

**4.5 Contact Details**

Prior to commencing work on site, the Owner must provide the Commissioner with the names and telephone numbers of contact personnel.

**4.6 Emergency Works**

In the event of an emergency (refer Clause 11 “Emergency Repairs), the Owner must provide verbal notification to the Commissioner as soon as practicable after the emergency becomes known. The Owner must submit a “Notification of Works Impacting DPTI Roads" form to the Commissioner within 24 hours of the emergency occurring.

**4.7 Notification of Completed Works**

As soon as practicable after completion of the Works, the Owner must notify the TMC (telephone 1800 018 313) of the completion of the Works on site.

**4.8 As Constructed Drawings**

If requested by the Commissioner, at any time within the Defects Liability Period, the Owner must supply the Commissioner with details of the Works, including sketches or drawings showing size and location of the Service(s) and the date constructed.

**5. STANDARD OF WORKS**

The Works must be executed in accordance with the requirements of this Specification and all relevant Parts of the DPTI Master Specification. The following parts and division of the DPTI Master Specification are specifically referenced in this Specification:

Part R06 Boring

Part R07 Trench Excavation and Backfill

Part R08 Reinstatement of Existing Pavements

Part R09 Controlled Low-Strength Material (CLSM)

Part R15 Supply of Pavement Materials

Part R22 Plant Mixed Stabilised Pavement

Part R26 Application of Sprayed Bituminous Surfacing

Part R27 Supply of Asphalt

Part R28 Construction of Asphalt Pavements

Part R38 Application of Pavement Crack Sealant

Part R42 Supply and Installation of Steel Beam Road Safety Barrier Systems

Part R44 Construction of Concrete Safety Barrier Systems

Part R46 Application of Pavement Marking

Part R48 Supply of Signs and Supports

Part R49 Installation of Signs

Division L Landscaping

The DPTI Master Specification is available from:

[DIT Master Specification](https://www.dit.sa.gov.au/contractor_documents/masterspecifications)

The obligations of the Owner are those of the Contractor in the DPTI Master Specification. The Owner is liable to the Commissioner for the acts and omissions of any contractor, sub-contractor or consultant engaged by the Owner as if they were acts or omissions of the Owner. A reference to the Principal of Superintendent in the DPTI Master Specification means a reference to the Commissioner. Where the DPTI Master Specification requires an approval, the Commissioner is responsible for either providing or withholding that approval. The Commissioner owes no duty to the Owner to review or examine any documentation submitted by the Owner for compliance with the Specification or any applicable legislation. The failure of the Commissioner to enforce a provision of the Specification shall not be interpreted as a waiver of that provision.

The Commissioner may specify requirements in addition to those in the Master Specification so that future roadworks may be undertaken without the need for further relocation of the Service. Where the DPTI Master Specification requires the release of a Hold Point, the Commissioner is responsible for either withholding or releasing the Hold Point.

**6. UNDER ROAD BORING**

Where a Service is to be installed longitudinally under a road pavement, the Commissioner encourages the use of under-road boring in preference to the excavation and reinstatement of trenches.

Where a Service is to be installed transversely under a road pavement, the Service must be installed by under-road boring in accordance with Part R06, unless the prior written approved of the Commissioner has been obtained.

The Owner may submit a request to vary the requirements of Part R06. Any such request must be made in writing and submitted as soon as possible and no later than the time of submitting the “Notification of Works Impacting DPTI Roads” form.

In considering the submission, the Commissioner will take into account the following:

1. age of the existing surfacing;
2. condition of the existing surfacing;
3. size of the Trench;
4. future proposed roadworks by the Commissioner; and
5. traffic volumes on the Road.

**7. FINAL SURFACING OF THE ROAD**

Unless approved otherwise in writing by the Commissioner, the final surfacing must comply with Part R08.

The Owner may submit a request to vary the requirements of Part R08. Any such request must be made in writing and submitted as soon as possible, and no later than the time of submitting the “Notification of Works Impacting DPTI Roads” form.

In considering the submission, the Commissioner will take into account the following:

1. age of the existing surfacing;
2. condition of the existing surfacing;
3. size of the Trench;
4. future proposed roadworks by the Commissioner; and
5. traffic volumes on the Road.

**8. ATTACHMENT OF SERVICES TO DPTI STRUCTURES**

Services may only be attached to structures only with the prior written approval of the Commissioner. Drawings, including fixture details, must be submitted to the Commissioner for approval at least 6 weeks prior to commencement of the intended work. A Service must not damage or penetrate a drainage culvert.

**9. LOCATION OF UTILITY SERVICES AND THE COMMISSIONER’S INFRASTRUCTURE**

The Owner must arrange for the location of all existing utility services prior to commencement of the Works.

The Owner must determine the location of any traffic signal detector loop, traffic signal conduit or lighting conduit at least 5 Working Days before commencing the Works by contacting the TMC. Care must be taken to prevent damage to detector loops and conduits where excavation is undertaken in the vicinity of traffic signals. The Owner is responsible for the cost of repair to any damage to the Principal’s infrastructure.

**10. PROTECTION OF THE ENVIRONMENT**

At all times, the Owner must undertake the work in accordance with:

1. the requirements of the Environmental Protection Act; and
2. DPTI Operational Instruction 21.5 "Rail and Roadside Significant Sites", available under Vegetation Documents from: <https://www.dit.sa.gov.au/standards/home>

**11. CONFORMITY TESTING**

Unless advised otherwise by the Commissioner, the Owner is responsible for testing of the Works to verify compliance with the requirements of this Specification. Copies of all test results shall be submitted to the Commissioner within 14 days of testing.

Testing shall be undertaken by a laboratory registered by the National Association of Testing Authorities (NATA). If the Owner fails to undertake the required testing, the Commissioner may arrange for the required testing to be undertaken and the cost of this testing shall become a debt due and payable from the Owner to the Commissioner.

Additional testing may be undertaken by the Commissioner. Where such testing shows that the reinstatement does not comply with the specified requirements, the cost of the additional testing and any rectification works shall be borne by the Owner.

**12. DEFECTS**

**12.1 General**

Notwithstanding the Owner’s compliance with this Specification, the Owner warrants that it will repair any Defect in the Works at its own expense that becomes apparent prior to the expiration of the Defects Liability Period. Except for a defect that creates a hazard to road users (refer Clause 12.2), a Defect must be rectified within 7 days of the Owner becoming aware of the Defect. If requested by the Commissioner, the Owner must undertake additional conformity testing of the rectification Works.

During the Defects Liability Period, the Owner is responsible for maintaining the completed surface in a safe and trafficable condition for all road users (including cyclists and pedestrians), unless an order covering the full cost of maintenance is lodged with the Commissioner for the Commissioner to take over this maintenance responsibility.

The Defects Liability Period shall be in accordance with the following:

|  | **DEFECTS LIABILITY PERIOD** |
| --- | --- |
| Where conformity testing is undertaken in accordance with Clause 9 "Conformity Testing". | 1 year after Practical Completion. |
| Where the Commissioner advises the Owner that pursuant to Clause 9 “Conformity Testing”, conformity testing is not required and the Owner elects not to undertake conformity testing. | 2 years after Practical Completion. |
| Where conformity testing is required pursuant to Clause 9 “Conformity Testing” and the Owner fails to undertake conformity testing. | 3 years after Practical Completion. |
| Where the Owner is required to undertake rectification work due to a Defect occurring during the Defects Liability Period. | As above, or 12 months from when the Defect is fully rectified and the Commissioner is notified accordingly, whichever is the later. |

In the event that a Defect is not rectified within the timeframes specified in this Specification, the Commissioner may arrange for the repairs to be undertaken and the cost of the repairs shall be a debt due and payable from the Owner to the Commissioner.

If the Defect is a crack greater than 3mm, the crack must be sealed in accordance with Part R38 “Application of Pavement Crack Sealant”.

**12.2 Hazardous Defects**

Where the Works creates a hazard to road users, the Owner must immediately make the road safe for road users and commence rectification of the defect. Rectification of the defect must be completed as soon as practicable. For the purpose of this Clause, a deformation is deemed to be a hazardous defect it exceeds the following under a 1.2 m straight edge:

* Within trafficked lanes: 50 mm
* Within bike lanes: 20 mm.

If:

* the Owner does not rectify a hazardous defect as soon as practicable; and
* the Commissioner then makes the Road safe,

the cost of the rectification work carried out by the Commissioner to make the Road safe shall be a debt due and payable from the Owner to the Commissioner.

**13. EMERGENCY REPAIRS**

For the purpose of this clause, an emergency refers to an unforseen event which causes significant damage to the Road (such as a burst water main) and requires immediate closure of traffic lane(s) for public safety. Following repair of the Services, a temporary pavement may be placed by the Owner to enable the opening of the traffic lane(s) as soon as practicable. The permanent repair of the Road must comply with the requirements of this Specification. Any call out costs reasonably incurred by the Commissioner as a result of the emergency shall be a debt due and payable from the Owner to the Commissioner.

**14. CARE OF SITE**

Stockpiles of materials must be located within areas that are delineated by traffic control devices (bollards and containment fence or equivalent) and placed such that they do not impede the line of sight for road users. Stockpiles must not be left on the carriageway when work is not in progress. Stockpiles left on road shoulders whilst work is not in progress must be located a minimum of 2.5 m from the edge of seal.

Rubbish and surplus material arising from execution of the Works must be regularly removed from the site so that at the completion of the Works the site is clean, tidy and free from surplus material. Surplus material must not be spread over roadside areas.

Drainage sumps, pipes, culverts and waterways must be inspected for any silt and other material from the Works that has entered past silt traps and other protection measures and must be cleaned out accordingly.

**15. HOURS OF WORK**

Unless unavoidable due to emergency circumstances, or otherwise approved in writing by the Commissioner, work which will disrupt traffic flow must not be carried out during any of the following periods:

1. 7.00 am to 9.00 am on peak flow traffic lanes;
2. 4.00 pm to 6.00 pm on peak flow traffic lanes;
3. during Clearway times on roads designated as Clearways or bike lanes.

**16. TRAFFIC MANAGEMENT**

**16.1 General**

The Owner is responsible for traffic management at the worksite from the time of commencement of the Owner’s activities at the worksite to the time of completion of the Owner’s activities.

This includes ensuring that the road is safe for users of the road, providing a safe work area for those involved in work on the trafficked network and minimising any disruption to the smooth flow of traffic in accordance with the requirements of this Specification**.** Unless specified otherwise by the Commissioner**,** provision for existing traffic and pedestrian movements (including access to properties and local roads) affected by the Owner’s activities must be maintained at all times.

The Commissioner owes no duty to the Owner to review any traffic management plan submitted by the Owner for errors, omissions or compliance with the requirements. The Commissioner may direct the suspension of Works in the event that the Owner does not comply with the traffic management parts of this Specification.

**16.2 Notification of Lane Closures**

Unless advised otherwise by the Commissioner, the Owner must notify the TMC on telephone 1800 018 313 a minimum of 15 minutes prior to closing a portion of the Road and again within 15 minutes of the Road being reopened to traffic. Should the work in progress cause unnecessary traffic build-up and delays, the Owner must liaise with the TMC to ensure satisfactory traffic flows are restored.

**16.3 Standards and Codes**

The Owner must ensure that traffic control devices and signs used at the Site are in accordance with:

1. *Road Traffic Act 1961* (SA);
2. AS 1742.3 "Manual of Uniform Traffic Control Devices";
3. DPTI: The Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices:
* Part 1 – The Notice from the Commissioner of Highways for the Temporary Use of Traffic Control Devices by personnel other than Road Authorities;
* Part 2 – Code of Technical Requirements for the Legal Use of Traffic Control Devices; specifically Section 4 – Speed Control."; and
1. DPTI: Field Guide, “Traffic Control Devices for Workzone Traffic Management”.

In the event of an inconsistency between any of the above documents, the higher standard shall apply.

 Other DPTI publications are available from the following web site: <http://www.dpti.sa.gov.au/standards/tass>.

**16.4** **Accreditation for Signing at Roadworks**

The Owner must ensure that at least one person who is accredited in signing at roadworks is on site at all times while work is being carried out. Accreditation for signing at roadworks can be obtained by successfully completing the training course "Work Zone Traffic Management". A list of approved training providers is available from the Traffic and Access Standards Section, DPTI, telephone (08) 8343 2283.

**16.5 Traffic Control**

Stop/slow banners or temporary traffic signals must be used in accordance with AS 1742. 3 whenever two way traffic is restricted to a single lane. Only complete lanes shall be closed and a minimum of one half of the roadway must remain open to traffic at all times, unless otherwise approved by the Commissioner.

**16.6 Delineation**

Wherever pavement marking has been removed, temporary delineation must be provided at the site until reinstatement of pavement marking has been completed. Self-adhesive Temporary Retroreflective Raised Pavement Markers (RRPM) must be used for temporary delineation on the finished surface course. The RRPM must be white, 100 mm wide and 50 mm high and must comply with Appendix C of AS 1742.3. Temporary linemarking must not be placed on the finished surface course.

Permanent linemarking must be installed within 10 working days of the completion of the reinstated pavement.

**16.7 Records**

The Owner must maintain accurate records of all traffic management activities (including audits). The records must include the date, time of operation, extent, location and the nature of the speed restriction implemented.

**16.8 Hauling of Cable Through Conduit**

Where the Works includes the hauling of cables through conduits on Roads, the Owner must submit a site specific traffic management plan. When the hauling of cables through conduits is for distances exceeding 0.5 km, the traffic management plan must be for each work site.

**17.** **WORK ZONE TRAFFIC CONTROL DEVICES**

**17.1 Devices**

The Owner must supply all necessary Temporary Traffic Control Devices such as signs, barriers, bollards, cones and other approved devices. All Temporary Traffic Control Devices must be located and maintained such that they provide the required level of traffic control. The Owner must make allowance to replace devices that become ineffective during the course of the Works, including those damaged by vehicles or vandalism.

**17.2 Regulatory Devices**

At the completion of the Works, the Owner must reinstate any regulatory devices (such as regulatory signs or pavement marking) that have been temporarily removed or covered.

**18. LOCAL ACCESS AND TRAFFIC RESTRICTIONS**

The Owner must:

1. maintain provision for safe and convenient pedestrian traffic and control pedestrian movement through the work site in accordance with AS 1742.3 and the appropriate AS Field Guide;
2. provide and maintain access to property entrances adjoining the Works;
3. provide for local traffic throughout the Works, and
4. provide temporary ramps for local traffic and access to side streets where necessary.

**19. AUDITS**

The Commissioner may undertake audits of signing at roadworks at any time.

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**APPENDIX 1**

**requirements for Drawings SUBMITTED by the owner**

(Refer Clause 4.3 “Major Works”)

1. Drawings shall use a suitable base (the road authority may be able to provide appropriate base drawings) to a scale that would generally not be smaller than 1:500.
2. The drawings shall show a north point.
3. The name of the road on which the works are proposed to be carried out, shall be clearly shown.
4. The names of nearby intersecting roads shall be clearly indicated.
5. The drawings shall clearly indicate which side of the road and the distance from the edge of the road and/or road reserve boundary that the infrastructure is proposed to be installed.
6. For infrastructure that is proposed to be placed underground, the depth of cover shall be indicated on the drawings.
7. If the proposed infrastructure is likely to be positioned within 1 metre of other utility infrastructure already existing in the road reserve, this shall be clearly indicated on the drawings.
8. If the proposed infrastructure is likely to affect any vegetation that has significant conservation value, any building with a heritage listing etc., this shall be clearly indicated on the drawings.
9. Where infrastructure is proposed to cross under a road pavement, the location of pits on each side of the road shall be located as close as possible to the boundary and clearly indicated on the drawings, together with the proposed depth of cover under the road pavement. If possible, pits shall be located on side roads.
10. If infrastructure is proposed to be attached to any structure owned by the road authority, this shall be clearly indicated on the drawings. In such cases, digital photos marked up to show the proposed location of the infrastructure (conduit, antenna etc.) on and adjacent to the road authority structure, shall accompany the drawings. Refer to Clause 5 “Attachment of Services to DPTI Structures”.
11. Plans shall also be provided to indicate how traffic (vehicles and pedestrians) will be managed during the course of the proposed works.

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