Standard Specification for Excavation and Reinstatement of Pavements

(Relevant to installation and maintenance of underground services or pavement repairs)

AND

Application for Authorisation to Carry Out Works on Roads
(Includes Road Reserves, Footpaths, Naturestrips)
TO THE APPLICANT - IMPORTANT INFORMATION

Overview

This ‘Standard Specification for Excavation and Reinstatement of Pavement’ and ‘Application for Authorisation to Carry out Works on Roads’ applies to any works to be conducted on land which is owned or under the authority of City of Victor Harbor (Council).

Applicant refers to any Contractor, Service Authority, individual, resident or property owner.

Authorisation is an approved Application for Authorisation to Carry Out Works on Roads which has been signed by an authorised City of Victor Harbor officer and returned to the applicant.

Works include but is not limited to any activity which alters or disturbs the pavement or surface of the land or infrastructure, or occupies Council Land.

Examples: laying of underground services or drainage, partial closure of footpath, plantings, landscaping, laying of footpath surfaces, placement of an object i.e. gates, fences, shipping containers.

Please Note:

1. Shipping containers need to be referred to the Planning Department for possible Development Application and approval.
2. Works does not include Crossovers, Crossing Places or Kerb Cut for Stormwater; separate application forms are required and can be located on City of Victor Harbor website.

Council Land includes all roads and road reserves (the area that extends from property boundary to property boundary), Council car parks, footpaths, verges, naturestrips, easements.

General Information

- The Authorisation is not transferable.
- The Authorisation is only for the activity, area, time and date prescribed on the Authorisation.
- The Authorisation must be made available for inspection upon request by an authorised officer or a police officer.
- The Authorisation becomes immediately invalid if the Authorisation holder ceases to have current public liability insurance as set out in the conditions contained herein.
- Failure to comply with the conditions contained herein will result in the Authorisation being withdrawn and the liability for any penalty prescribed by the by-law.

To Apply

1. Read and understand the Standard Specification for Excavation and Reinstatement of Pavements, including the Application for Authorisation to Carry Out Works on Roads.
2. Complete the Application for Authorisation to Carry Out Works on Roads (page 17), providing:
   - Evidence of Public Liability Insurance covering the term of the authorisation.
   - Site map detailing location and type of works.
3. Submit the Application to City of Victor Harbor (methods for submission is stated in the application), minimum two weeks prior to commencement of works.
4. The approving officer may either approve or reject the Application, or direct that the Application proceed to public consultation in accordance with Section 223(1) of the Local Government Act 1999 and Council’s Public Consultation Policy.

Compliance with Other Legislative Requirements

The Authorisation holder must abide by all other State and Federal legislation. The issue of this Authorisation does not absolve the Authorisation holder or their agents from any other overriding legislation. If any permission or approval is required from any other authority this permission or approval must be current at all times. Failure to comply with this requirement will result in immediate revocation of this Authorisation.

Document Control

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**SCOPE**

The excavation and reinstatement requirements contained in this Specification apply to pavement assets which are maintained by the City of Victor Harbor. All work shall conform to this Specification unless otherwise approved by the Director Environment of Infrastructure Services or a representative as defined in Schedule 3.

This Specification shall be adhered to when excavation along or across any pavement or shoulder or road maintained by the City of Victor Harbor is required for service installations, relocation of existing services, drainage or other reasons.

Notwithstanding any variation to the requirements which any Government Authority (Federal or State) may consider it can exercise by virtue of its own or any other enabling legislation with respect to any underground installations, the technical and quality standards of roadwork and materials specified herein are the minimum acceptable within the meaning of words “make good” or “reinstate” used in such legislation.

**DEFINITIONS**

**General**

The definitions given in AS 1348 “Road and Traffic Engineering – Glossary of Terms” shall apply to all appropriate wording in this Specification.

**DoEIS**

“DoEIS” means the City of Victor Harbor Director of Environment and Infrastructure Services or delegate for the particular area affected by works of the Contractor/Service Authority.

**Director of Environment and Infrastructure Services Representative(s)**

The Director of Environment and Infrastructure Services (DoEIS) may from time to time appoint individuals to exercise any functions of the DoEIS. The DoEIS shall notify the Contractor/Service Authority in writing of the appointment and the name of any DoEIS representative. The list of names for this Specification is included in Schedule 3 attached to this Specification.

**Contractor/Service Authority**

Contractor/Service Authority means the person, Statutory Authority, Government Department, Corporate body or any other organisation (private, State or Federal) responsible for the excavation and reinstatement and boring referred to in the Specification.

**Minor Programmed Works**

Works confined to one days duration from commencement to completion in the trafficable lanes.

**Major Programmed Works**

Works exceeding one day duration from commencement to completion in the trafficable lanes.

**Working Day**

A working day means a week day from Monday to Friday inclusive that has not been designated as a public holiday in the area in which the excavation is being undertaken.

**Excavation**

Excavation is to include any work which causes disturbance to the pavement surface.
GENERAL

Notification of Works
The Contractor/Service Authority shall notify City of Victor Harbor where it carries out excavation on, along or across any pavement asset or shoulder which is maintained by the City of Victor Harbor, in accordance with the procedures given below.

These notification requirements also apply to those Service Authorities, where enabling legislation (e.g. Waterworks Act, Sewerage Act etc) provides for, or where the DoEIS approves otherwise, the quality, supply and placing of the surfacing by the Contractor/Service Authority (in accordance with Clause 6.5 “Asphalt and Sprayed Bituminous Surfacing”).

Minor Programmed Works
The Contractor/Service Authority shall advise the DoEIS of the intention to commence work at least 2 working days before commencement of excavation in order that regular inspections can be made. Such notification shall include submitting a “Works Impact Form” (provided in Schedule B). This notification shall include a plan of the intended works, timetable and traffic management plans.

Major Programmed Works
Work shall be in accordance with drawings, specifications and work methods submitted to the DoEIS for approval at least 4 weeks prior to commencement of the intended work.

The Contractor/Service Authority shall advise the DoEIS of the intention to commence work at least 2 working days before commencement of excavation in order that regular inspections can be made. Such notification shall include submitting a “Works Impact Form” (provided in Detail Schedule 1) with attached Traffic Management Plans that show the location of all traffic control devices and proposed times of traffic restrictions.

Emergency Works
Where the pavement asset is damaged, or excavation of same is necessary in emergency circumstances, then the Contractor/Service Authority shall provide verbal notification to the DoEIS, or a representative, as soon as practicable after the emergency becomes known, in order that regular inspections and arrangements for maintenance period commencement can be made.

Attachment of Services to Bridge and Culvert Structures
Drawings, including fixture details and structural assessment, shall be submitted to the DoEIS for approval at least 6 weeks prior to commencement of the intended work.

Public Notification
For major programmed works, or others works that are likely to cause undue disruption to traffic flows, the Contractor/Service Authority shall arrange a media release advising of the works and notify the City of Victor Harbor.

The Contractor/Service Authority shall provide local businesses and residents with notification of possible disruptions that may affect them as a result of the work. Such notification shall be undertaken immediately the DoEIS has approved of the undertaking of the works.

Service Notification
The Contractor/Service Authority shall notify S.A. Police, S.A. Ambulance Service, the relevant Fire Service and the relevant bus service of the location and duration of works if delays are expected for service response times.

Service Location
The Contractor/Service Authority shall arrange for the location of all services prior to commencement of work.
Depth of Service

Unless otherwise approved by the DoEIS, the minimum depth of the new service under the Council pavement asset shall be 1000mm.

Safety

The Contractor/Service Authority shall be responsible for the safety of vehicle, bicycle and pedestrian traffic for the duration of the work and all due precautions shall be taken and adequate warning given to traffic to ensure safety around the worksite in accordance with the AS 1742 “Manual of Uniform Traffic Control Devices in SA”, Part 3 as modified by the “Code of Practice for the installation of Traffic Control Devices in SA”.

Work Health and Safety

The Contractor/Service Authority shall supply a copy of their WH&S Policy and shall comply with all requirements of the Work Health and Safety Act and Regulations and the specific conditions of the City of Victor Harbor WH&S Policy.

Insurances

The Contractor/Service Authority shall supply a copy of their Public Liability Insurance Certificate of Currency which shall be a minimum value of $20 million.

Completion of Work and Maintenance Period

Within 5 working days of completion of the work, and at any time upon request within the maintenance period (as defined in Clause 8 “Maintenance Period”), the Contractor/Service Authority shall supply the DoEIS with details, including sketches, size, location and date constructed, of the reinstatement:

- Location plan with depth and approximate dimensions of service;
- Any reference to site features, property boundaries, easements or buildings;
- Other services known to intersect or in proximity.

Trenchless Methods

Where applicable Clauses 1, 2, 3, 4, 5, 6, 7 and 8 apply to the installation of services where alternatives to open trenching such as thrust boring, tunnelling etc. are used. Notification to the DoEIS shall be in accordance with Clause 3.1.1 “Minor Programmed Works”.

For all trenchless methods a minimum diameter cavity for the conduit/s or service/s to pass through shall be created. Multiple conduits or services may be passed through a single bore or tunnel. There shall be a minimum spacing of 10D (where D is the diameter of the largest conduit or service) between individual bores or tunnels to ensure the combined surrounding cavities of multiple bore or tunnels do not undermine the road, unless otherwise approved by the DoEIS. The DoEIS or representative may request grouting of any bore or tunnels that has an unacceptably large cavity and where the cavity could cause a defect in the road surface.

The requirements of Clause 8 “Post Reinstatement Conditions and Obligations” shall be applied to any subsidence of the road surface attributed to trenchless methods.

EXCAVATION

Trenching Times

Work which is likely to restrict traffic should not be carried out between the hours of 7:00am to 9:00am and 4:00pm to 6:00pm on peak flow traffic lanes unless unavoidable due to emergency circumstances or as otherwise approved by DoEIS.

Works shall be organised so as to cause minimal disruption to traffic, pedestrians and access to properties at all time. Only complete lanes shall be closed and a minimum of one half of the roadway shall remain open to all traffic at all times, unless otherwise approved by the DoEIS.
All excavation shall be of sufficient width to allow for safe and practical working, including the proper placing and subsequent removal of any formwork, shoring or dewatering systems and for the compaction of the backfill.

The depth of the Trench shall be sufficient to achieve the minimum cover of 1.0 m to the Service and the requirements of any applicable Service Authority. This minimum cover does not apply to culverts installed for stormwater, DPTI assets (e.g. electrical or telecommunications conduit) and Services installed in unsealed roads.

Where excavation takes place outside of existing pavement, any topsoil present shall be stripped and stockpiled to a depth of 100mm or other depth specified.

**Detector Loops**

Where excavation work is to be undertaken in the vicinity of traffic signals, all necessary care and precautions shall be taken to prevent damage to detector loops. Where damage occurs the Contractor/Service Authority shall immediately advise the asset owner (Department of Planning Transport and Infrastructure) to arrange for repair.

**Saw Cut**

The edges of the trench shall be saw cut or cold planed to the depth of pavement, particularly for cement stabilised pavements, prior to commencing excavation.

Any additional breakage of the existing pavement edge shall be cut out square to the edge of the excavation prior to reinstatement.

All saw cutting shall be dampened by water to reduce dust and any resultant slurry shall be collected and disposed of in accordance with the requirements of the Environmental Protection Act. The slurry must not enter stormwater drainage systems or dry out on the road surface.

Longitudinal saw cuts shall not be positioned within the wheel path.

**Excavated Material**

Unless otherwise approved by the DoEIS, excavated material shall not be reused in the reinstatement of trenches and shall be removed from the site and appropriately disposed of, in accordance with the requirements of the Environment Protection Act.

**Use of Steel Plates**

If steel plates are used to enable traffic to cross an excavation, the Contractor must ensure that:

- (a) the surface of the plate does not create a skidding hazard to motorists;
- (b) a speed restriction of 60km/h or less is imposed on the section of road where a steel plate is situated;
- (c) there is a smooth transition for traffic from the road surface onto the steel plate by the use of a temporary ramp;
- (d) the steel plate is treated with an approved anti-skid compound in accordance with the manufacturer’s instructions (the use of checker plate or plain steel alone is insufficient); and
- (e) the steel plate is restrained, pinned or anchored to reduce impact noises caused by motorists.

The anti-skid compounds listed in the DPTI Approved Products List, available from: http://www.dpti.sa.gov.au/documents/contractsandtenders/specifications/general are approved for use on steel plates. The Contractor may submit a request for the approval of additional anti-skid products.

The anti-skid compound must be maintained in good order. The skid resistance must exceed 0.5 GN when tested in accordance with DPTI Test Procedure: TP344
BACKFILL

Services Installed in Trenches
This clause applies to the backfill of Trenches and to the placement of backfill against services not in excavation.

Prior to backfill operations, all loose rubbish and foreign material shall be removed from the excavation. All excavations not occupied by permanent work shall be backfilled.

Excavations shall be backfilled with Sand Sa-C Type C or alternatively, clean quarry, pit or dune sand or rubble with plasticity index not exceeding 8 or Controlled Low Strength Material (CLSM conforming to DPTI Master Specification Part 209) and approved by the DoEIS.

The backfilling shall be uniformly compacted in horizontal layers not exceeding 200 mm (loose) thickness to the dry density determined using AS 1289, test method 5.2.1 (modified compaction) to meet the requirements detailed in Clause 7.3.1.

Flooding of sand with water is, by itself, not an acceptable method of compaction. Compacted backfill shall be brought to a level below the finished road level in accordance with the relevant figure specified by the DoEIS and provided in the figures in Detail Schedule C.

Sa-C Type C Sand backfill shall be compacted alternately on each side of the Service. Backfill shall not be placed against any cast-in-place concrete within 48 hours of the placing of concrete.

Services Installed Within Fill Locations
Backfill material shall be Sa-C Type C Sand and shall be placed to a level at least 300 mm above the top of the Service after compaction.

Placement of CLSM Backfill
If CLSM is used, it shall be placed in accordance with Appendix K “Controlled Low Strength Materials—CLSM” of AS 2566.2: Buried flexible pipelines - Part 2: Installation.

Placement of Sand Backfill
Sa C Type C Sand backfill shall be compacted alternately on each side of the Service. Backfill shall not be placed against any cast-in-place concrete within 48 hours of the placing of concrete. Flooding of sand with water is, by itself, not an acceptable method of compaction.

Backfill Against Drainage Structures
Backfill placed against drainage structures shall:

(a) be free draining material in locations where it is necessary to prevent the build up of hydrostatic pressures;
(b) develop sufficient strength to ensure it is stable and does not undergo post-construction settlement;
(c) where backfill is to be placed on both sides of wing walls or retaining walls, the backfill shall be brought up level with a maximum height differential of 300 mm;
(d) not be placed against concrete which is less than 48 hours old; and
(e) not be placed against wingwalls or retaining walls until all cast in place concrete has reached the 28 day characteristic compressive strength and is at least 14 days old.
Warning Tape

Warning tape which has been specified or is a requirement of a Utility Service Authority shall be inserted at the depth specified.

PAVEMENT REINSTATEMENT

Asphalt Surfaced Roads

After completion of the backfill, a pavement consisting of PM1 (Class 1) 20 mm crushed rock and complying with DPTI Standard Specification 215 shall be used to reinstate the excavation to the level below the existing asphalt surface adjoining the excavation shown in the figure in Detail Schedule C.

Where specified in the figure in Schedule 4, a base of 20mm crushed rock complying with Standard Specification PM1 shall be placed to the level shown in that figure.

The subbase and, basecourse, shall be uniformly compacted in horizontal layers not exceeding 170mm thickness to not less than the requirement of Clause 7.3.1. Asphalt shall be uniformly compacted in accordance with the requirements of AS 2150 “Hot Mix Asphalt – A guide to good practice” and satisfy the requirements of Clause 7.3.2.

Sprayed Bituminous Surfaced Roads

After completion of the backfill, a pavement PM1 (Class 1) 20mm crushed rock complying with DPTI Standard Specification 215 shall be used to reinstate the excavation to the level of approximately 10mm below the existing sealed surface adjoining the excavation shown in the figure in Schedule 4.

Where specified in the figure in Schedule 4, a base of 20mm crushed rock complying with Standard Specification PM1 shall be placed to the level shown in that figure.

The subbase and, basecourse, shall be uniformly compacted in horizontal layers not exceeding 170mm thickness to not less than the requirements of Clause 7.3.1.

Unsealed Shoulders

After completion of the backfill, a compacted pavement 300mm depth of PM2 (Class 2) 20mm screened quarry rubble complying with DPTI Standard Specification 215, or an equivalent material approved by the DoEIS, shall be placed and compacted in two horizontal layers to reinstate the road shoulder to the finished shoulder level and matching crossfall.

Compaction shall be not less than the requirements of Clause 7.3.1.

Temporary Pavement Surface

On completion of the backfill and pavement reinstatement, it shall be the responsibility of the Contractor/Service Authority to maintain the open surface of the reinstated excavation until final asphalt or other bituminous surfacing has commenced.

A temporary pavement shall be provided and maintained by the Contractor/Service Authority in a safe and trafficable condition for all traffic including bicycles and pedestrians, at all times pending final surfacing. This temporary surface shall consist of either asphalt or premix to a minimum depth of 25mm if the excavation is in a trafficable lane, unless otherwise approved by the DoEIS.

In the case of Emergency Works, where the surrounding subbase and base have been weakened by saturation, a temporary reinstatement shall be placed until the site stabilises. The Contractor/Service Authority shall obtain approval from the DoEIS or representative prior to commencing placement of the final surface.
Asphalt and Sprayed Bituminous Surfacing

The quality, supply and placing of the surfacing in accordance with the requirements of the relevant figure in Detail Schedule C shall be undertaken by the Contractor/Service Authority, provided that in all circumstances, confirmation is made with the DoEIS to ensure that the asphalt treatment matches the existing surfacing along the road section where work is to be carried out.

Where modified asphalt treatment exists, the DoEIS will specify the appropriate pavement treatment.

Wherever standard dense mix asphalt or other bituminous surfacing exists, the following surface reinstatement requirements shall apply as appropriate:

(a) Comply with quality requirements and the finished acceptance criteria Part 227 “Supply of Asphalt” and Part 228 “Construction of Asphalt Pavements” of the DPTI Master Specification for Roadworks.

(b) Comprise a tack-coat evenly applied to the base and sides of the excavation and in accordance with the requirements of the figure in Detail Schedule C and, where specified, an asphalt AC14 levelling course, and an asphalt AC10 surface course mix, as directed by the DoEIS. The level of workmanship shall comply with the requirements of Part 227 & Part 228 (unless otherwise directed by the DoEIS and all asphalt shall be placed in layers of compacted thickness as shown in the relevant figure in Schedule 4. The surface layer shall be finished evenly and flush with the adjoining pavement surface with the resultant surfacing having a test result under a 3m straight edge of < 15mm in any direction.

(c) Comprise primerseal and sprayed bituminous surface with matching size and texture to the existing adjacent road surfacing, placed not less than 1 week after the primerseal with an emulsion or 1 month after cutback primerseal. The level of workmanship shall comply with the general requirements of Part 226DA “Design and application of Sprayed Bituminous Surfacing” of the DPTI Master Specification for Roadworks.

Pavement Markings

The Contractor/Service Authority shall replace all pavement markings, raised pavement markers or pavement bars, which are removed or damaged during trenching works. Such replacements shall be completed within 5 working days of the completion of the final surfacing and shall conform with the general requirements of Part 245 “Supply of Materials for Pavement Marking” and Part 246 “Application of Pavement Marking” of the DPTI Master Specification for Roadworks. Costs for this work shall be borne by the Contractor/Service Authority.

The Contractor/Service Authority shall provide temporary delineation at the site until reinstatement of pavement marking has been completed. Costs for this work shall be borne by the Contractor/Service Authority.

Road Furniture

The Contractor/Service Authority shall replace all road signs, guide posts, guard fence or other road furniture which are temporarily removed or damaged during trenching work.

Concrete Kerbing

The Contractor/Service Authority shall reinstate any concrete kerb and gutter or median type kerb which is removed or damaged during trenching work, ensuring that the kerb profile and materials, conform with the existing. Kerb reinstatement shall be completed by the Contractor/Service Authority, within 3 days of reinstatement of the road pavement.

Concrete used in the work shall be in accordance with AS 1379, “The Specification and manufacture of Concrete”, and shall be Grade N20 concrete.
Road Drainage Systems

The Contractor/Service Authority shall report to the DoEIS all instances of damage caused to the road drainage systems i.e. Culverts, gullies, subsoil drainage, roadside drainage systems, STEDS etc. incurred during trenching works. All costs for the repairs shall be borne by the Contractor/Service Authority.

Medians/Traffic Islands

The Contractor/Service Authority shall reinstate medians and traffic islands to match the existing surface treatment using new materials of the same type, quality, depth and compaction. Costs for this work shall be borne by the Contractor/Service Authority.

The Contractor/Service Authority shall replace any vegetation (e.g. shrubs, median, grasses, etc) which are removed or damaged during trenching works with vegetation that is of the same type and in the same positions as that removed or damaged. Costs for this work shall be borne by the Contractor/Service Authority.

Native Vegetation

Contractor/Service Authority shall observe relevant information under the Native Vegetation Act and Local Roadside Vegetation Management Plans using proper land management.

Proper Land Management can be referred to as the organisation or regulation of land use activities for a specific purpose in the manner that will support sustained use. The objective is maintenance of improvement of the integrity of the land, atmosphere and its aesthetic value.

Capability, in relation to land, means the ability of land to sustain a particular use without suffering permanent damage or a reduction in future productivity.

Degradation of land means a decline in the quality of soil, vegetation, water and other natural resources of the land resulting, form overgrazing, excessive tillage, over clearing, mineral extraction, development of towns, disposal of wastes, road construction, failure to control plant and animal pests or any other human activity on the land.

The Oxford Dictionary defines “sustained” use as the ability to support that use for a long period of time and “integrity” of the land as the wholeness of soundness of the land.

Construction Material Stockpiles

Stockpiles of materials used for reinstatements shall be located within areas that are delineated by traffic control devices (bollards and bunting or their equivalent) and placed such that stockpiles do not impede the line of sight for road users. Stockpiles shall not be left on the carriageway when works are not in progress. Stockpiles left on road shoulders whilst works are not in progress shall be located a minimum of 2.5m from the edge of seal.

CONFORMITY TESTING

General

Within 14 days of testing, the Contractor/Service Authority shall submit to the DoEIS copies of laboratory test results to confirm compliance with materials and compaction requirements as specified herein for any reinstatement works carried out. Testing is not required for temporary or emergency work.

Testing shall be arranged by the Contractor/Service Authority. The Contractor/Service Authority shall remove and replace any material which does not comply with this Specification.
The cost of such testing shall be borne by the Contractor/Service Authority. The Contractor/Service Authority shall remove and replace any material which does not comply with this Specification.

Testing shall be undertaken by a laboratory registered by the National Association of Testing Authorities (NATA).

The arrangement and cost of such testing shall be borne by the Service Authority. It shall be the responsibility of the Contractor/Service Authority to remove and replace any material used by the Contractor/Service Authority, which does not comply with this specification.

**Material**

All pavement material shall comply with DPTI Master Specification requirements as appropriate, and conformance documentation may be required.

**Compaction**

The following minimum frequencies of testing shall apply:

*Unbound Pavement*

The following minimum requirements for backfill testing shall apply:

Unless specified otherwise, the backfilling shall be uniformly compacted in horizontal layers not exceeding 200 mm (loose) thickness to the values shown in Table 4.2. Compaction shall be the Dry Density Ratio determined using AS 1289, test method 5.2.1 (modified compaction). Compaction testing shall comply with Tables 7.3 and 7.4

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<td>More than 800 mm below finished surface</td>
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<tr>
<th>TABLE 7.4 MINIMUM COMPACTION TEST FREQUENCY</th>
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<td>Small box culverts and stormwater pipes 1 m or less in diameter:</td>
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<tr>
<td>Large box culverts and stormwater pipes over 1 m in diameter:</td>
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<td>All other Services:</td>
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A minimum of 3 compaction tests shall be carried out.
Asphalt Testing

The following minimum frequencies shall apply:

- 0 - 100 tonnes: 2 samples
- 101 - 300 tonnes: 3 samples
- 301 - 600 tonnes: 4 samples
- > 600 tonnes: 4 samples plus 1 sample for each additional 200 tonnes or part thereof.

Asphalt density testing requirements are as defined in DPTI Master Specification Part 228 “Construction of Asphalt Pavements”, with field air voids in the range of 4% - 8.5%.

Unbound granular pavement density testing are a characteristic minimum of 96% relative modified density for subbase layers and 98% for basecourse layers.

MAINTENANCE PERIOD

For all work, notwithstanding the reinstatement of the surface by the DPTI, the Contractor/Service Authority will be responsible for the cost of making good any settlement or other deterioration in the reinstated excavation for maintenance period one year after reinstatement.

Where it is agreed by the DoEIS that the reinstatement of the asphalt or other bituminous surface of the excavation for a service installation or repair service is to be carried out by the Contractor/Service Authority, or where enabling legislation exists the same, then the responsibility to maintain the completed surface in a safe and trafficable condition for all traffic to include bicycles, shall remain with the Contractor/Service Authority until the end of the maintenance period unless an order covering the full cost of maintenance is lodged with the DoEIS to take over this responsibility.

The Contractor/Service Authority shall indemnify, and keep indemnified Council against all claims which may arise due to excavations or settlement of excavation until the maintenance responsibility has transferred to the Council.

All costs and charges incurred by the DoEIS for any work necessitated by the Council due to non-compliance with the requirements of this specification for all installations by the Contractor/Service Authority are to be borne by the Contractor/Service Authority until the end of the maintenance period.

Before carrying out any work necessitated by settlement of the excavation for all the installation and for which an order has not been obtained, the DoEIS will give notice in accordance with the requirements of Section 229 of the Local Government Act 1999, to the Contractor/Service Authority of his intentions so that the deficient work may be inspected before rectification.

Where the Contractor/Service Authority is required to undertake additional works due to a defect occurring during the maintenance period, the maintenance period shall be extended for twelve months from when the DoEIS is notified of the completion of the additional works. Conformity testing of the additional works may be requested by the DoEIS.

If the DoEIS advises the Contractor/Service Authority that conformity testing is not required and the Contractor/Service Authority elects not to undertake conformity testing the maintenance period shall be 18 months. If the Contractor/Service Authority elects to undertake conformity testing then the maintenance period shall be 12 months.
The DoEIS may still undertake verification testing if non-conformance to the reinstatement requirements is observed.

**Defect Recording Levels**
A defect is considered to be the settlement, rutting or other deformation that signifies the deterioration of the reinstatement. A defect is considered to exist if:

- there is deformation of ≥ 20 mm under a 1.2 m straight edge, and/or,
- the surface of the pavement is cracked, ravelling or stripping.

When a reinstatement exhibits any defect, including those works covered by “Temporary Pavement Surface”, the reinstatement is considered to have failed. If the reinstatement fails within the Maintenance Period, as defined in Clause 8 “Maintenance Period”, it shall be the responsibility of the Contractor/Service Authority to rectify the reinstatement.

If the DoEIS notifies the Contractor/Service Authority of a failed reinstatement, the Contractor/Service Authority shall, within 7 days rectify the defect, provided that the deformation of the defect never exceeds 50 mm under a 1.2 m straight edge. If corrective action is not taken within 7 days, the DoEIS reserves the right to undertake the rectification of the defect and all associated costs shall become a debt due to City of Victor Harbor from the Contractor/Service Authority.

If the deformation exceeds 50 mm under a 1.2 m straight edge the defect shall be repaired or made safe for road users immediately. If the DoEIS is required to make the reinstatement safe as a result of an Emergency Callout (i.e. the condition of the reinstatement creates an immediate hazard to road users) the cost of works carried out by City of Victor Harbor shall be borne by the Contractor/Service Authority. The Contractor/Service Authority shall repair a reinstatement that has been made safe within 24 hours. The DoEIS reserves the right to undertake the rectification of the defect after this period and all associated costs shall become a debt due to City of Victor Harbor from the Contractor/Service Authority.

**Crack Sealing**
During the maintenance period the Contractor/Service Authority shall be required to repair cracks greater than 3 mm that develop within the reinstated pavement or between the reinstatement and the adjoining road pavement.

**Material**
The crack sealing compound shall be Class 170 bitumen to AS 2008 "Residual Bitumen for Pavements"; modified with an appropriate polymer, designed to penetrate the crack, adhere to the crack surface and resist further crack activity. Product to be used shall be submitted to the DoEIS for approval.

The material shall remain stable on the pavement surface during periods of extreme temperature.

Gritting off of sealant or plugging excessively deep cracks prior to sealing shall be undertaken with Sealing Aggregate to Standard Specification SAS -2.

**Crack Sealing Treatment**
Prior to placement of sealant, all cracks shall be thoroughly cleaned of foreign material, without damage to the adjoining sound pavement, to provide a clean, dry surrounding. If the pavement is damp, warm/hot compressed air may be used in the drying of the surface of the crack.

Crack sealing shall not be undertaken unless the surfaces of the cracks are dry.

Cracks shall be cleaned to a depth of between 10mm - 15 mm. In excessively deep cracks, the crack may be plugged with 5 - 2 mm Sealing Aggregate to within 10mm - 15 mm of the pavement surface. All cracks shall be filled with sealant material to a level of not less than 10 mm below the pavement surface.
The level of sealant after gritting shall be flush with the adjoining road pavement. The width of the visible bond on the pavement surface shall be as narrow as is practical. Run out of the sealant over the asphalt surface beyond the crack length will not be permitted.

**Gritting**

The Contractor/Service Authority shall place 5-2 mm Sealing Aggregate on the surface of all sealed material while it is sufficiently hot for the sealing aggregate to adhere to the material. Sealing aggregate shall be placed at the minimum application necessary to provide adequate skid resistance and prevent pick-up of the sealant by traffic.
APPLICATION FOR
AUTHORISATION TO CARRY OUT WORKS ON ROADS
(ALTERATION TO A ROAD)
PURSUANT TO SECTION 221 OF THE LOCAL GOVERNMENT ACT 1999
(Includes Roads, Road Reserves, Footpaths, Naturestrips)

**A site map outlining proposed works is to be attached.**
Note 1: The Act provides that a road extends from property boundary to property boundary and includes the carriageway, footpaths and verges.

Note 2: Pursuant to the Act, it is an offence to make an alteration to a public road without an Authorisation to do so from the Council. The following are considered road altering activities pursuant to the Act.

The nature of the Proposed Alteration is:
(Tick whichever is/are applicable to this Application)

- Alter the construction or arrangement of the road to facilitate access to/from property;
- Erect or install a structure (including pipes, wires, cables, fixtures, fittings or other objects) in, on, across, under or over the road;
- Change or interfere with the construction, arrangement or materials of the road;
- Change, interfere with or remove a structure (including pipes, wires, cables, fixtures, fittings or other objects) associated with the road;
- Plant, interfere with or remove a tree or vegetation from the road.

A detailed list of all structures, fittings and fixtures you intend on using for carrying out the alteration of the road (including the carriageway, footpath, or verge), whether erected or installed temporarily or permanently must be included with this Application including how the structure, fixture or fitting is to be erected or installed.

Permit:
Commencing the .................. day of ................. 20............
And
Expiring the ..................... day of ......................... 20............
On the days and during the hours as follows:
APPLICATION CONDITIONS

The issuing of this Authorisation is subject to the following conditions:

The Applicant agrees to the Conditions of Authorisation as contained in this Authorisation.

The Applicant agrees to any/all Special Conditions that the Council may determine and attach to the Authorisation.

a) The Applicant pays the Authorisation fee upon request.

b) For the term of the Authorisation, to comply with all applicable industry standards, health or safety standards, current standards of Standards Australia or any applicable Code of Practice.

c) To ensure that all works carried out are undertaken to the highest standard and are carried out promptly and with all due care, skill and diligence.

d) To ensure that any alteration to the road does not interfere with or cause damage to or in any way affect the property of any other person.

e) To comply with any direction given by any authority, statutory authority or the Council to remove, maintain or otherwise modify the alteration to the road subject to this Authorisation.

f) That all fixtures and equipment erected or installed in, on, across, under or over the road remain the property of the Applicant/s pursuant to Section 209 of the Local Government Act 1999.

g) The Applicant must undertake their own utility services location checks prior to the commencement of any trenching and/or excavation works.

h) The Applicant will be responsible for ensuring that no damage is caused to underground utility services, for example Telstra, SA Water, NBN, SA Power Networks, during the execution of the work and that provision is made where necessary for the requirements of these utilities to be met.

i) Australian Standards in regards to signage must be in place to direct pedestrians to safe access around the footpath area without utilising the road. There must be:

a. highly visible bunting around your entire materials;
b. clear signage installed at each end of the bunted area directing pedestrians to “Use the Other Footpath”;
c. at least a 1.5 metre wide pedestrian access provided and maintained at all times; and

d. a clear (no tripping hazards) refuge for pedestrians along the entire frontage of the road.

j) Reinstatement of all trenching and excavation works must comply with the Council’s Standards Specification for the Excavation and Reinstatement of Road Pavement/Footpaths and Footways.

k) Prior to commencement of the work the Applicant is to advise the Council’s Environment and Infrastructure Department on 8551 0500, of their intention to commence, and such advice should be given at least three (3) business days in advance.

l) The Applicant must advise the Council’s Environment and Infrastructure Department on 8551 0500 upon completion of works.
m) For the term of the Authorisation, to maintain all fixtures and equipment erected or installed, or vegetation planted, in good condition and to recognised standards and to the satisfaction of the Council.

n) The Applicant is responsible to ensure that all existing vegetation is not damaged or removed; if this risk is possible or likely the applicant must advise the Council’s Environment and Infrastructure Department on 8551 0500, prior to any works being undertaken.

o) For the term of the Authorisation, to maintain the car parks within the road area in good condition and to recognised standards, including line marking and bituminising as required and to the satisfaction of the Council.

p) To indemnify the Council, its servants and/or agents against all actions, costs, claims and demands for injury, loss or damage arising out of any negligent act or omission of the Applicant/s in relation to the alteration of the road, the granting of this Authorisation and the General and Special Conditions contained herein and such indemnity shall be in addition to any statutory immunity in favour of the Council.

q) For the term of the Authorisation, to take out and keep current a public liability policy of insurance to an appropriate level of cover per claim in respect of any negligent act or omission of the Applicant/s in relation to the alteration of the road or any activity arising out of or from the granting of this Authorisation by the Council.

r) At the expiration or earlier termination of this Authorisation and at the Applicant’s cost in all things, to remove, if so directed by the Council, any structure or object erected or installed on the road and to reinstate the road to the satisfaction of the Council.

s) If this Application is approved and returned to the Applicant Authorisation has been granted and the listed conditions must be met by the Applicant.

Special Conditions of Authorisation:

The Applicant/s further agree:

[insert if applicable]

PUBLIC CONSULTATION

The Council may, prior to granting an Authorisation in respect of this Application in accordance with Section 223(1) of the Local Government Act 1999, be required to follow the steps outlined in its public consultation policy. Accordingly, there may be a delay in considering and/or granting its approval to this Authorisation. The Applicant agrees that it shall not make any claim against the Council as a result of any delay by the Council in considering or granting the Authorisation or not granting the Authorisation applied for, as a result of the Council complying with Section 223(1) of the Act.

DISPUTE PROCESS

The applicant may dispute the decisions, actions or inactions of the Council in relation to this application form. All disputes/complaints are to be in writing, and emailed to localgov@victor.sa.gov.au or posted to PO Box 11, Victor Harbor, SA, 5211. Once a dispute/complaint is received council will enforce its Complaint Handling Policy. The dispute/complaint will be investigated by Manager Operations and/or Director Environment and Infrastructure, the applicant will be advised of outcome of the investigation in due course.
ACKNOWLEDGEMENT

In making this Application, I/we acknowledge and agree:

1. that if granted an Authorisation from the Council I/we shall comply with the Conditions of the Authorisation and any other Special Conditions the Council may impose, in its absolute discretion, in granting the Authorisation; and

2. that I/we have read, understood and agree to the conditions of the Authorisation and declare that the particulars provided by me/us with regard to the Proposed Alteration are true and accurate.

Executed by the Applicant:

Signature: ........................................................................................................................................

Name: ...........................................................................................................................................

(Applicant / Authorised Person of Applicant)

Date: ...............................................................................................................................................

☐ Before submitting - ensure evidence of current $20,000,000 public liability insurance is included with your application

Office Use Only

**APPROVAL - APPLICATION APPROVAL IS SUBJECT TO THE ABOVE LISTED CONDITIONS BEING MET**

1) Director Environment & Infrastructure:-

* Proceed to assessment: ☐ No ☐ Yes Initial __________________________ Date: __________________

* If ‘No’ state reason: ______________________________________________________________________

2) Manager Operations or Delegate:-

* Site Inspected: Date: ____________________ Comment: ________________________________________ ☐ N/A

* Asset Data Base checked: ☐ N/A ☐ No ☐ Yes - Existing Infrastructure No / Yes __________________

* Native Vegetation Evident: ☐ N/A ☐ No ☐ Yes - Refer to Manager Environment & Recreation

3) Authorisation Approved: ☐ No ☐ Yes

* If ‘No’ state reason: ______________________________________________________________________

Approving Officers Name: ....................................................................................................................

Signature: ........................................................................................................................................

Date: .............................................................................................................................................

Administration:

☐ Public Liability $20,000,000 Received – Date ____ / ____ / ______

☐ Site Plan received – Date ____ / ____ / ______

☐ Copy of this application advice issued to the Applicant – Date _____ / _____ / ______

☐ Issued to the Applicant – Copy of Council’s Standards Specification for the Excavation and Reinstatement of Road Pavement / Footpaths and Footways – Date _____ / _____ / ______

☐ Saved in Synergy Records – Record Number: _________________________________

☐ If container/shipping container involved refer to Planning Department for approval.

☐ If approved, date & details of works entered in to E&I Admin calendar with 2 day reminder, & calendar invite to Manager Operations, Group Leader Operations, and Group Leader Open Space. (insert file into calendar containing application approval).

☐ Copy of approval placed in folder ‘Applications for Underground Services’ if relevant.
SCHEDULE 2

RELEVANT INFORMATION

ACTS

1. Native Vegetation Act
2. Local Government Act
3. Sewer Act
4. Waterworks Act
5. ETSA Act
7. Telecommunications National Code 1996 (Revised)

STANDARDS

1. AS 1289
2. AS1379
3. AS1742 Part 3

SPECIFICATIONS

DPTI Master Specification Parts 215, 225, 226, 227, 228, 245, 246
### SCHEDULE 3

**Director of Environment and Infrastructure Services Delegates**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jodi Roberts</td>
<td>Manager Infrastructure</td>
<td>Phone: 08 8551 0500</td>
</tr>
<tr>
<td>Mike Ross</td>
<td>Manager Operations</td>
<td>Phone: 08 8551 0500</td>
</tr>
<tr>
<td>Anthony Taylor</td>
<td>Project Coordinator</td>
<td>Phone: 08 8551 0500</td>
</tr>
</tbody>
</table>
SCHEDULE 4

PAVEMENT DETAIL FIGURES

CONTENTS:

Figure 1  Lightly Trafficked Roads with Sprayed Bituminous Seal Surface
Figure 2  Lightly Trafficked Roads with Asphalt Surface
Figure 3  Medium Trafficked Roads with Sprayed Bituminous Seal Surface
Figure 4  Medium Trafficked Roads with Asphalt Surface
Figure 5  Heavy Trafficked Roads with Sprayed Bituminous Seal Surface
Figure 6  Heavy Trafficked Roads with Asphalt Surface
Figure 7  Unsealed Roads
Figure 8  Open Graded Asphalt Roads
FIGURE 1
LIGHTLY TRAFFICKED ROADS WITH SPRAYED BITUMINOUS SURFACE

Roads with AADT (two way) ≤ 2000 vpd and commercial vehicle content ≤ 10%

Spray seal to match existing placed on primerseal, refer Clause 3.3.7(c)

Class 1 pavement material to PM1/20 to 98% modified compaction

Either as above or 20 mm Class 2 pavement material to PM2/20 in two layers to 98% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 95% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 92% modified compaction

Conduit or Service

NOTE:
1. Not to scale.
2. All dimensions in millimetres.
3. The wearing course shall extend 100 mm either side of the excavated trench and the outer edge shall be saw cut.
4. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.
FIGURE 2
LIGHTLY TRAFFICKED ROADS WITH ASPHALT SURFACE

Roads with AADT (two way) ≤ 2000 vpd and commercial vehicle content ≤ 10%

AC10 Wearing Course (Light Duty Mix) on tack coat (e.g. CRS60) applied at 1.0 l/m².

Class 1 pavement material to PM1/20 to 98% modified compaction

Either as above or 20 mm Class 2 pavement material to PM2/20 in two layers to 98% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 95% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 92% modified compaction

Conduit or Service

NOTE:

1. Where pavement options are given the actual product will be advised by the Director (DoEIS) or delegate.
2. Not to scale.
3. All dimensions in millimetres.
4. The wearing course shall extend 100 mm either side of the excavated trench and the outer edge shall be saw cut. Actual depth of wearing course to be 50mm or thickness of existing wearing course whichever is greater.
5. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.
FIGURE 3
MEDIUM TRAFFICKED ROADS WITH SPRAYED BITUMINOUS SURFACE

Roads with AADT (two way) > 2000 vpd but < 10000 vpd and commercial vehicle content ≤ 10%

Spray seal to match existing placed on primerseal, refer Clause 3.3.7(c)

Class 1 pavement material to PM1/20 to 98% modified compaction

Either as above or 20 mm Class 2 pavement material to PM2/20 in two layers to 98% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 95% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 92% modified compaction

Conduit or Service

NOTE:
1. Not to scale.
2. All dimensions in millimetres.
3. The wearing course shall extend 100 mm either side of the excavated trench and the outer edge shall be saw cut.
4. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.
FIGURE 4
MEDIUM TRAFFICKED ROADS WITH ASPHALT SURFACE

Roads with AADT (two way) > 2000 vpd but < 10000 vpd and commercial vehicle content ≤ 10%

AC10 Wearing Course (Medium Duty Mix) on tack coat (eg CRS60) applied at 0.2 to 0.3 l/m².

Levelling Course
AC14 in two layers on Emulsion prime (eg CRS60) applied at 1.2 l/m²

Either as above or 20 mm Class 2 pavement material to PM2/20 in two layers to 98% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 95% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 92% modified compaction

NOTE:
1. Where pavement options are given the actual product will be advised by the Director (DoEIS) or delegate.
2. Not to scale.
3. All dimensions in millimetres.
4. Tack coat not required if hot bond is achieved between levelling courses and wearing surface.
5. The wearing course shall extend 100 mm either side of the excavated trench and the outer edge shall be saw cut. The depth of the asphalt should be as shown or equal to the depth of the existing asphalt pavement, whichever is greater.
6. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.
FIGURE 5

HEAVY TRAFFICKED ROADS WITH SPRAYED BITUMINOUS SURFACE

Roads with AADT (two way) \( \geq 10000 \) vpd and commercial vehicle content \( \geq 10\%

Spray seal to match existing placed on primerseal, refer Clause 3.3.7(c)

Class 1 pavement material to PM1/20 to 98% modified compaction

Either as above or 20 mm Class 2 pavement material to PM2/20 in two layers to 98% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 95% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 92% modified compaction

Conduit or Service

NOTE:

1. Not to scale.
2. All dimensions in millimetres.
3. The wearing course shall extend 100 mm either side of the excavated trench and the outer edge shall be saw cut.
4. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.
FIGURE 6
HEAVY TRAFFICKED ROADS WITH ASPHALT SURFACE

Roads with AADT (two way) \( \geq 10000 \) vpd and commercial vehicle content \( \geq 10\% \)

- **AC10 Wearing Course (Medium Duty Mix)** on tack coat (eg CRS60) applied at 0.2 to 0.3 l/m².
- **Levelling Course**
  - AC14 in two layers on Emulsion prime (eg CRS60) applied at 1.2 l/m²
  - Either as above or 20 mm Class 2 pavement material to PM2/20 in two layers to 98% modified compaction
- **Sand to Sa-C placed in maximum 200 mm (loose) layers to 95% modified compaction**
- **Sand to Sa-C placed in maximum 200 mm (loose) layers to 92% modified compaction**
- **Conduit or Service**

**NOTE:**
1. Where pavement options are given the actual product will be advised by the Director (DoEIS) or delegate.
2. Not to scale.
3. All dimensions in millimetres.
4. Tack coat not required if hot bond is achieved between levelling courses and wearing surface.
5. The wearing course shall extend 100 mm either side of the excavated trench and the outer edge shall be saw cut. The depth of asphalt shall be as shown or equal to the depth of the existing asphalt pavement, whichever is greater
6. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.
FIGURE 7
UNSEALED ROAD PAVEMENTS AND SHOULDERS

NOTE:
1. Where pavement options are given the actual product will be advised by the Director (DoEIS) or delegate.
2. Sealed shoulders shall be reinstated in accordance with the above, but with a seal applied to match the surrounding sealed surface type.
3. Not to scale.
4. All dimensions in millimetres.
5. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.
FIGURE 8

OPEN GRADED ASPHALT ROADS

Roads with AADT (two way) > 2000 vpd but < 10000 vpd and commercial vehicle content ≤ 10%

OG14 Wearing Course (Medium Duty Mix) on C170 spray seal applied at 1.0 l/m². (see Note 7)

Existing open graded surface

Levelling Course
AC14 in two layers on Emulsion prime (eg CRS60) applied at 0.3 l/m²

Either as above or 20 mm Class 2 pavement material to PM2/20 in two layers to 98% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 95% modified compaction

Sand to Sa-C placed in maximum 200 mm (loose) layers to 92% modified compaction

NOTE:
1. Where pavement options are given the actual product will be advised by the Director (DoEIS) or delegate.
2. Not to scale.
3. All dimensions in millimetres.
4. Tack coat not required if hot bond is achieved between levelling courses and wearing surface.

5. The wearing course shall extend 100 mm either side of the excavated trench and the outer edge shall be saw cut.

6. The depth of the asphalt pavement shall be the depth as shown or the depth of the existing asphalt pavement, whichever is greater.

7. The depth of the top of the conduit or service shall be a minimum of 1 m below the surface.

8. Should the existing open grade surfacing layer be greater than 5 years old or the Regional Manager considers it to be no longer draining, a dense mix shall be used in lieu of open graded.

9. As required to match existing at both top of existing surface and spray seal with bottom SAMI.