

# APPLICATION FOR RESIDENTIAL CROSSOVER SUBSIDY RESIDENTIAL GRAVEL/ BITUMEN/ ASPHALT

Applicant to Complete				
I, wish to advise that I have made arrangemen	nts with			
(Print Name)	(Contractor)			
to construct a Gravel Bitumen Asphalt crossover to Council's				
boundary of my property to the road at:	(Town and Postcode)			
I understand that <b>NO WORK IS TO COMMENCE</b> until consultation with the Shire of Waroona's Director Technical Services and that all work must conform to the standard specifications set down by the Technical Services Department of The Shire of Waroona.  Consultation /site visit completed// crossover specification discussed and copy to property owner.				
I am further aware that if drainage pipes are deemed necessary when constructing the crossover, that the supply and cost of such pipes is my responsibility and that regular care by myself to keep the crossover drainage pipes clear is required in order to prevent flooding problems.				
(Signature of Property Owner) (Date)	_			
PH: Home				
Work				
Mobile				
Email	(Postal Address)			
Contractor to Complete  I Certify that this crossover has been constructed in accordance with Council's standards and specifications. Also, the total cost for the construction of the crossover exceeds \$500.00 and the maximum subsidy of \$250.00 is hereby requested.  (Contractors Signature)  OFFICE USE ONLY_ CROSS OVER INSPECTION PRIOR TO BACK FILL				
Crossover inspected:/				
Comments:				
Approved for subsidy: Yes  No	Manager Works & Services			



# APPLICATION FOR RESIDENTIAL CROSSOVER SUBSIDY SPECIFICATIONS FOR THE CONSTRUCTION OF STANDARD VEHICLE CROSSINGS OVER FOOTPATH RESERVATIONS

#### 1. GENERAL

- a. This specification is made pursuant to the provisions of Section 357 and Section 358 of the Local Government Act 1950 1982 as may be amended.
- b. The construction of vehicle crossings shall be executed under the supervision of and to the direction of the Manager of Works and Services or his authorised representative (hereinafter referred to as "the MWS")
- c. All material used in the construction of vehicle crossings shall be in accordance with the standard specification of Council and any materials which are inferior to those specified or as directed by the Director Technical Services shall be liable to rejection and replacement without any payment or compensation being made to the Contractor for the supply, delivery, laying, placing, finishing, removal or disposal of anything so rejected as directed by the MWS.

**NOTE**: The Contractor shall be known as the person responsible for the construction of the driveway.

- d. Protection of works and the public shall be provided and maintained by the contractor who shall supply and keep supplied as directed all the necessary signs, barricades, road warning lamps, temporary bridges or any other thing necessary or as may be directed by the Director Technical Services to provide for the safety of the public generally and to protect the works from damage for the minimum period of three days following completion of the works and failure to provide or keep provided shall render the Contractor liable under Section 377 of the Local Government Act 1960 1982, as amended. All such protective equipment shall comply with the relevant S.A.A. Code.
- e. Any damage which may occur to any Council facilities or private property or the vehicle crossing itself during the course of the works or which may subsequently become evident from the operation thereof shall be the sole responsibility of the Contractor, legal claims, liability, or any other things which may arise from the carrying out of any such works.

#### 2. LOCATION

Crossings shall be positioned as directed by the MWS. Crossings shall be located in such a position as to not cause interference to public utility facilities and shall not be positioned within a corner truncation or closer than 6.5 metres from the property line intersection point at a corner site unless specifically approved by the MWS. Crossings shall be constructed to 90° (right angles) to the kerbline.

#### 3. LEVELS

a. The crossover levels will be as set out in attached specification/drawings all variation from specification/drawings shall be approved by the MWS or his representative.



#### **GRAVEL/ BITUMEN/ ASHPHALT SPECIFICATIONS**

### **Contents**

1.	Sco	pe of Works	2
2.	Gen	eral	3
3.	Traf	fic Control	3
4.	Mat	erials	3
4	l.1	Sub-Grade Fill Material	3
2	1.2	Crushed Limestone	3
2	1.3	Gravel	3
5.	Pre	paration and placement	4
5	5.1	Sub-grade	4
5	5.2	Sub-Base	4
5	5.3	Base-Course	4
5	5.4	Sealing of Pavements	5
5	5.5	Aggregate	5
5	5.6	Asphalt Seal	6
6.	Layl	pack Construction	6
7.	Foo	t Paths	6
8.	Backfilling and Reinstatement of verge		6
9.	). Keyed Layback		6
10.	Finis	sh	7
11	Clea	an-un	7

#### 1. Scope of Works

The Contractor shall carry out the complete works being;

- Supply of Gravel, Bitumen, Aggregate, Asphalt, Concrete,
- Supply of labour, plant, formwork and materials,
- Traffic control,
- Trenching where required,
- Cut, filling and boxing out of sub-grade shall conform to shape and dimensions of the drawings
- Supply of sub-grade fill material to achieve the design
- Stockpile surplus materials on site as instructed by Principal.

•



#### **GRAVEL/ BITUMEN/ ASHPHALT SPECIFICATIONS**

#### 2. General

The final shape and dimensions of the driveway shall be in accordance with the attached standard drawing included in this contract; Drawing number WR009-X03.

#### 3. Traffic Control

For each site of works, the Contractor shall submit a traffic management plan for the works. The cost of preparing and implementing this traffic management will remain with the Contractor.

All Traffic Management Plans must be in accordance with the most current version of AS unless overridden by Main Roads WA's Code of Practice. All Traffic Management plans must also meet the following:

- Be prepared and signed by an accredited person
- Must include a Risk Assessment
- Be lodged with Council a minimum of three (3) working days before commencing works, and be endorsed by a Council representative

#### 4. Materials

All concrete used shall be supplied in a ready mixed state and shall comply with requirements of AS 1379: Specification and Supply of Concrete. All concrete used in the works shall develop a minimum compressive strength of 25 MPa at 28 days with a maximum slump of 75 millimetres and maximum aggregate size of 14mm.

#### 4.1 Sub-Grade Fill Material

All fill material shall be clean and free draining free of roots foreign and organic matter.

The fill material shall not contain either oversize spalls or an excessive proportion of fine grained material.

#### 4.2 Crushed Limestone

Crushed Limestone shall be obtained and crushed to comply with IPWEA Local Government Guidelines for Subdivisional Development Edition 2.1 – 2011 Crushed Limestone.

All Crushed Limestone shall be free from sand, loam, capstone, roots and other foreign and organic material, and shall not contain either oversize spalls or an excessive proportion of fine grained material.

#### 4.3 Gravel

Gravel shall be obtained and crushed to comply with IPWEA Local Government Guidelines for Subdivisional Development Edition 2.1 – 2011 Gravel.

#### General:

A gravel base course shall consist of a combination of soil binder, sand and laterite gravel and shall be free of vegetable matter and lumps or balls of clay and shall not contain excessive quantities of pyrites or other foreign substances.



#### **GRAVEL/ BITUMEN/ ASHPHALT SPECIFICATIONS**

#### 5. Preparation and placement

The driveway site shall be cleared of all top soil, vegetation, roots, humus and organic material. Only trees nominated by the Principal shall be pruned or removed.

#### 5.1 Sub-grade

Sub-grade the entire width of the driveway shall be cut or filled as necessary. After excavation or filling, compaction, trimming the finish surface of the driveway sub-grade shall conform to the shape and dimensions shown in the drawing.

The sub-grade for the depth of 250mm (or the depth of fill if greater) shall be compacted to not less than 95% of the dry density obtained from modified maximum dry density compaction tests conducted in accordance with AS 1289-1993: methods of testing soils for engineering purposes.

The tolerance for sub-grade width shall be  $\pm$  100 mm.

The finish levels of sub-grade shall be within +5 mm and – 30mm.

#### 5.2 Sub-Base

Sub-Base shall be constructed of crushed limestone or gravel. The sub-base shall be placed so that the compacted sub-grade is not disturbed or broken up and the even thickness specified is achieved. Sub-base shall be watered to optimum moisture content and compacted by rolling to a density not less than 95% of maximum dry density when tested in accordance with AS1289: 'Methods of testing Soils for Engineering Purposes'.

The depth of sub-base after compaction shall be as specified on the approved drawings with a tolerance of +5 mm and – 10mm.

The tolerance for sub-Base width shall be ± 100 mm.

All irregularities in the longitudinal grade and cross section and any imperfections or failures detected in the surface of the sub-base shall be corrected in an approved manner until the road sub-base is brought to a uniformly compacted, smooth and even surface.

#### 5.3 Base-Course

The Base-Course shall consist of either stabilised Crushed Limestone or laterite gravel (unless otherwise approved)

The Base-Course shall be placed so that the compacted sub-base is not disturbed or broken up and the even thickness specified is achieved.

The Base-Course material shall be watered, compacted and cut to grade and cross-fall as specified in the approved drawings. Each course shall be rolled until it is compacted to a firm, even surface by appropriate self-propelled steel-wheel and pneumatic tyred rollers. The use of the pneumatic tyred roller is essential for the final passes to achieve the compaction of the immediate surface material. Where damage to adjoining properties may result, the use of vibrating rollers will not be permitted.



#### **GRAVEL/ BITUMEN/ ASHPHALT SPECIFICATIONS**

Grading of loose material over a hard surface and/or compaction in a thin layer is not permitted. The Base-Course shall be compacted to not less than 98% of the maximum dry density when tested in accordance with 'AS 1289: Method of testing Soils for Engineering Purposes'.

The thickness of the Base-Course after compaction shall be as specified on the approved drawings with a tolerance of +10 mm and – 0mm.

The tolerance for Base-Course width shall be ± 100 mm.

The surface course shall be tested for shape and level and any irregularities greater than 10mm, when tested with a straight edge 3m long shall be made good by reworking Base -Course material, addition or removal of material and further rolling and cutting to grade until the specified cross section is obtained.

Any imperfections or failures detected in the surface of the Base-Course shall be corrected in an approved manner. Unsatisfactory material shall be removed from site and replaced with material as specified. The base construction shall be approved by The Shire of Waroona prior to the application of a primer seal.

#### 5.4 Sealing of Pavements

The surface of the Base-Course shall be prime sealed in accordance with 'Bituminous Surfacing Volume 1, Sprayed Works' (Austroads, 1989) prior to the application of the wearing course.

The surface of the Base-Course shall be swept free from loose stones, dust, dirt and foreign matter.

Bitumen Emulsion in accordance with 'AS1160: Bituminous Emulsions for Construction and Maintenance of Pavements', shall be uniformly and evenly sprayed onto the existing surface at a rate determined by design but shall not be less than 1.3 ltr/m2 measured at 15° C.

To achieve the specified application rate the Bitumen Emulsion shall be applied in two applications of Bitumen and aggregate.

#### 5.5 Aggregate

The primer shall immediately after spraying be covered with 5 or 7 mm diorite, granite or basalt so that all sprayed areas shall be completely covered within a period of 15 min.

The aggregate shall be dry and free from dust and other deleterious material and be spread by means of an approved aggregate spreader capable of spreading a uniform layer of aggregate.

The rate of application shall be controlled so that only a sufficient amount is applied to give a uniform dense mat one stone thick. Additional aggregate may be added to any bare or insufficiently covered areas to produce the required uniform cover.

Within 5 minutes of the application of the aggregate, rolling shall commence and continue until the aggregate is well embedded in the binder and a uniform surface obtained.



#### **GRAVEL/ BITUMEN/ ASHPHALT SPECIFICATIONS**

#### 5.6 Asphalt Seal

The Asphalt shall be composed of the materials to the specification detail in IPWEA Local Government Guidelines for Subdivisional Development Edition 2.1 – 2011 Asphalt.

Surface preparation, which includes sweeping, removal of all rich fat areas of binder, shall be carried out immediately before applying tack coat.

Tack coat the application rate shall generally be sufficient to fully coat the surface with a residual binder content of 0.1 litres per square metre. The application rate may be varied or even omitted to satisfy particular conditions.

The asphalt shall be laid upon a base which is clean of all loose or foreign material and dry and in dry weather conditions.

The mixture shall be delivered on site in accordance with the requirements of 'AS 2150 – Hot Mix Asphalt' and 'AS 2734 – Asphalt (Hot-Mix) Paving-Guide to Good Practice', unless otherwise approved.

The mixture shall be spread to such line, level and camber detailed in the approved drawings in a single layer and compacted to give the average compacted thickness specified.

The tolerance on thickness shall be + 5mm - 2mm. The tolerance for Asphalt width shall be ± 25 mm.

Asphalt shall be spread in such a manner as to minimize the number of joints in the surface.

#### 6. Layback Construction

The finished product shall be true to the drawing dimensions and finish specified. Tolerances for driveway shall be in accordance with the following requirements:

- the top surface of the layback shall be parallel to the ruling grade of the pavement and free from depressions exceeding five millimetres when measured with a three metre straight edge;
- level ±5 millimetres;
- line ±10 millimetres to face of layback or gutter line;
- Cross-section dimensions ±5 millimetres

#### 7. Foot Paths

Where a foot path intersects a driveway the path section of the driveway will be constructed to foot path design and continues through the driveway.

#### 8. Backfilling and Reinstatement of verge

Backfilling to the driveway shall be placed after pavement construction is complete. Backfill material shall be free draining sand or a similar material to the local topsoil, free from debris and compacted to a thickness not less than that of the surrounding natural surface.

#### 9. Keyed Layback

Where keyed layback is specified on approved drawings, excavation of the base shall be by an approved method. The primed road surface beyond the line of the face of layback shall not be disturbed.





#### **GRAVEL/ BITUMEN/ ASHPHALT SPECIFICATIONS**

#### 10.Finish

The completed pavement surface shall satisfy the following criteria prior to acceptance

The complete pavement surface shall be constructed in accordance with design profiles and shall drain freely;

The pavement shall not be cracked, damaged or distorted;

The surface of the finished course shall have uniform texture and be free from abrasion or wear, shall be free from protuberances, depressions exceeding 5mm as measured with a 3m straight edge.

#### 11.Clean-up

Works site shall be kept clear of debris and spoil at all times.

Specification based on IPWEA (WA) Subdivisional Guidelines Edition No.2.1 July 2011



## RESIDENTIAL DRIVEWAY CROSSOVER DETAILS (WR009-X03) GRAVEL/ BITUMEN/ ASHPHALT

