

Vehicle Crossovers

Introduction

A crossover is a constructed crossing giving access from a road carriageway to the property boundary.

This policy and the related specifications are intended to provide property owners, builders and designers with the information required to ensure that crossovers meet the requirements of the Shire of Toodyay.

Objectives

- To provide conditions that enable the property owner to construct a crossover;
- To ensure crossovers provide safe access/egress for residents, patrons, pedestrians and drivers with minimal impact on assets in the road reserve;
- To create uniformity of crossover construction and appearance across the Shire of Toodyay;
- To mitigate ongoing maintenance issues for the resident and/or the Shire of Toodyay;
- To ensure crossovers are constructed to the minimum specifications required for longevity and are fit for purpose

Scope

This policy applies to the construction of all new crossovers, and the modifications to an existing crossover for the purpose of accessing property within the Shire of Toodyay.

This policy sets out the Shire's objectives in granting approval to new and modified crossovers, guides determination of whether a crossover will be approved, and provides direction regarding the Shire's cost contribution to a crossover.

Definitions

Term	Definition
Constructed Crossover	A constructed crossing giving access from a public thoroughfare to private land or a private thoroughfare serving the land.
Council	The local government, responsible for making decisions in formal meetings held under the auspices of Part 5 of the Local Government Act 1995 and under the Shire's Standing Orders Local Law 2008.
Culvert	Sections of pre-cast reinforced concrete pipe and appropriate structure to channel stormwater beneath a road or crossover.
Footpath/Cycle Path	A walkable surface of generally asphalt or concrete that is intended to be used by both pedestrians and bike riders

Term	Definition
Hold Point	A mandatory verification point beyond which work cannot proceed without the approval of the Shire of Toodyay
Kerb	A concrete beam designed to keep vehicles on the roadway and control stormwater
MRWA	Main Roads Western Australia
Road Reserve	The portion of land between the front of the property boundary that contains both verge and the road carriageway
Shire	the Shire of Toodyay.
Specifications	Shire of Toodyay Vehicle Crossover Specifications
Thoroughfare	A road, street, lane, path, pavement, sidewalk or similar place which exists for the free passage of persons or vehicles
Verge	A verge is the area between the edge of the road and the boundary of the property

Policy Statement

1. General Requirements

- 1.1 No crossover shall be constructed without the prior written approval of the Shire for the crossover.
- 1.2 Applications to construct a crossover will be assessed against this and other related policies and standards.
- 1.3 Crossovers must provide direct access to an unauthorised driveway or car parking area within a property. Crossovers which do not ('redundant crossovers') will not be approved and will be required to be removed as condition of other works.
- 1.4 All crossovers shall be constructed in accordance with the approval issued by the Shire, including any conditions attached to this, to the Shire's specification (refer Crossover Technical Specifications).
- 1.5 Crossover treatments shall not sever existing continuous footpaths or cycle paths. Crossovers must be designed and constructed to maintain the continuous foot and cycle path treatment with the crossover treatment broken to accommodate the path rather than vice versa.

2. When to Construct a Crossover

Developed lots with existing dwellings may apply to construct a crossover at any time and should be encouraged, so the property can conform with the Policy intent.

Vacant residential lots that are to be developed, shall require a constructed crossover as a condition of planning approval.

Vacant commercial lots that are to be developed, shall require a constructed crossover as a condition of planning approval.

3. Approval to Construct or Modify Crossovers

The Shire of Toodyay has a large network of sealed and unsealed roads, as such two definitions for a constructed crossover apply:

- For properties adjoining a **sealed road**, the term “constructed crossover” shall refer to a drained crossover finished with a suitable wearing surface (concrete, asphalt, brick paving, spray seal) constructed to a size conforming to the specification.
- For properties adjoining a **gravel road**, the term “constructed crossover” shall refer to a compacted, drained gravel pavement constructed to a size conforming to the specification.

The property owner is required to complete and submit a Crossover Application to the Shire before a crossover is constructed or modified.

On receipt of the application, Shires Officers will assess the proposal and, if needed, discuss any modifications with the applicant. An approval notice letter will then be issued. Any relevant conditions unique to the construction of the crossover and crossover specifications is included. It is then the Owner/Developers’ responsibility to arrange and issue the works.

All crossovers (including associated drainage works) shall be constructed to the approved engineering standards and the Shire’s crossover specifications.

The approval to construct a crossover is valid for two years from the date of issue. If this time elapses without construction, a new application shall be submitted to the Shire.

The following roads fall under the care and maintenance of MRWA and as such, they will be the approving body for crossover construction and maintenance. –

- Toodyay Road;
- Northam Toodyay Road; and
- Goomalling Toodyay Road.

For more information regarding crossovers on designated state roads, contact the MRWA Regional Office on (08) 9622 4777

4. Number of Crossovers

In residential areas, one crossover per lot is permitted unless approved in writing by the Shire of Toodyay. Additional crossover requests will be assessed on a case-by-case basis.

In rural areas, one crossover per lot is permitted, with additional crossovers (e.g., paddock access) generally accepted at an additional crossover per 20ha or 500m of road frontage.

5. Crossover Conflict with Infrastructure Assets and Vegetation in Road Reserve

Where the location of a new crossover, requested by the property owner, conflicts with existing road reserve infrastructure assets, the cost to relocate the assets or avoid the conflict shall be borne by the property owner. Modifications to any road infrastructure assets will require approval from the Manager Infrastructure & Assets and may be completed as a private works request.

If utility assets are likely to be endangered by the crossover construction process it is advisable to contact the relevant public utility service authority.

In rural and semi-rural areas with significant vegetation on the verge, the crossover will need to be located to achieve sight distances and avoid unnecessary removal of vegetation. Any clearing proposed must be detailed on the crossover application and will be assessed by the Shire of Toodyay on a case-by-case basis. Permission must be obtained from the Executive Manager Infrastructure, Assets and Services prior to the commencement of any vegetation clearing. Any clearing of vegetation shall comply with *Environmental Protection Act 1986* and the Shire's Verge Maintenance Policy.

6. Footpath in Verge

Under the *Road Traffic Code 2000*, pedestrians and cyclists have priority over vehicles leaving properties. Existing paths shall continue through and must be clearly defined in the crossover by either of the following methods:

- Leaving the existing concrete path in place
- Removing the existing concrete path and installing matching control joint edge lines in the new crossover to line up with the edges of the path (material and finish to match footpath unless approved otherwise)

No part of the footpath may be removed or modified without written approval from the Shire of Toodyay.

7. Crossover Construction

It is the Owner/Developers' responsibility to arrange and award the construction of a crossover. To ensure construction conforms to the Shire of Toodyay's crossover specifications, hold points are nominated depending on the final surface material;

- **Concrete Crossover:**
At completion of box out and compaction of subbase, formed, prior to pouring.
- **Asphalt, Brick Pave & Spray Seal Crossover:**
At completion of box out and compaction of subbase. Prior to installation of final wearing surface

Concrete is generally the favoured material for crossover construction as it represents best value for money both in terms of quality and longevity.

Providing the appropriate specifications can be met, the Shire of Toodyay encourages the use of recycled materials in concrete or asphalt crossover construction. (e.g., recycled rubber, glass, fly ash)

Single coat spray seals do not meet the specification for a sealed crossover.

8. Shire Subsidy to Crossover Construction

At the completion of works, the property owner shall advise the Shire in writing that works are complete and, upon inspection from Infrastructure & Assets officers, a subsidy toward the construction of the crossover shall be paid into the nominated account providing:

- The crossover is constructed in accordance with the Shire's Crossover Policy and associated Specifications;
- The completed crossover has not been in place for more than three years;
- A subsidy has not previously been paid to the property;
- The crossover subsidy applies to the primary (first) crossover access only.

The crossover subsidy is based on the area of a constructed crossover. Subsidy rates cover 50% of the cost of the construction up to an approved amount outlined in the Shire's Schedule of Fees and Charges. This amount is reviewed annually by Council.

The contribution applies to industrial, commercial, and grouped dwellings as well as single residential developments. In the case of strata titles, a contribution will apply to each separate crossover which connects the development to the gazetted road.

Crossover subsidies apply both to crossovers abutting Local Authority roads and roads under the control of MRWA.

Crossovers constructed to satisfy a condition of subdivision approval will not be eligible for the Shire subsidy.

9. Maintenance of Crossovers

Maintenance and renewal of crossovers is the responsibility of the property owner, including drainage culverts. .

Any footpath or kerbing that abuts the crossover is the responsibility of the Shire of Toodyay.

As per Council's Verge Maintenance Policy, owners/occupiers are encouraged to maintain the verge area/s adjacent to their property with the Shire involvement limited to significant hazards to road users. Requests for vegetation removal/pruning to improve safe sight distance will be assessed by the Shire on a case-by-case basis.

10. Reinstatement of Crossovers

Where Shire of Toodyay works conflict with an approved crossover, access will be reinstated on a like for-like basis where possible. However, in the event of coloured/decorative concrete, Council will not accept responsibility for matching an exact colour or finish.

If a public service authority or Contractor removes part or all of a crossover, they will be responsible for its reinstatement to the condition prior to works.

The Shire of Toodyay will not take responsibility for any damages to crossovers caused by parties other than the Shire of Toodyay.

11. Technical Specifications and Standard Drawings

For technical specifications and standard drawings, refer to the relevant Shire of Toodyay - Vehicle Crossover Specification document.

Reference Information

- Vergé Maintenance Policy

Legislation

- *Local Government Act 1995; and*
- *Local Government (Uniform Local Provisions) Regulation 1996.*
- *Environmental Protection Act 1986*
- *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*
- *Road Traffic Code 2000*

Associated documents.

- Vehicle Crossover Specification.

Version control information

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Vehicle Crossover Specifications

Definitions

Term	Definition
Constructed Crossover	A constructed crossing giving access from a public thoroughfare to private land or a private thoroughfare serving the land.
Crossfall	Gradient across a surface, necessary for adequate drainage
Crossover Wings	The flared edges of a driveway as it abuts the road edge.
Culvert	Sections of pre-cast reinforced concrete pipe and appropriate structures to channel stormwater beneath a road or crossover.
Footpath/Shared path	A walkable surface of generally asphalt or concrete that is intended to be used by both pedestrians and bike riders.
Gutter	The edge of a road where it meets the kerb.
Kerb	A concrete beam designed to keep vehicles on the roadway and control stormwater.
Obstructions	An object that constitutes an obstacle to crossover/path users
Shire	the Shire of Toodyay.
Sightlines	The visual envelope of vehicles and path users (defined in <i>Austrroads Guide to Road Design Part 4A: Unsignalised and signalised intersections</i>)
Specifications	Shire of Toodyay Vehicle Crossover Specifications

1. Alignments and Dimensions

- 1.1. Crossovers shall be constructed perpendicular to the road.
- 1.2. Crossovers are not permitted in lot truncations or within 6m from an intersection tangent point.
- 1.3. Crossovers shall be a minimum of 1m from any street tree or service utility structure such as power poles, non-trafficable sewer and Telstra manholes.
- 1.4. Crossovers shall be a minimum of 1m from any council asset such as stormwater drainage structures and footpath/pram ramps.

- 1.5. Crossovers shall be a minimum of 1m or dimension “y” (refer drawings), whichever is greater, from adjacent property boundaries to allow for utility alignments and any future crossovers.

2. Dimensions

- 2.1 The width of a residential crossover at the property line shall be a minimum of 3m and a maximum of 5m wide.
- 2.2 Width of a commercial or industrial crossover at the property line shall be a minimum of 5m and a maximum of 7m wide.
- 2.3 Where a kerb aligned footpath or shared path has been constructed in the verge, crossover wings are not required and will stop at the back of the path. Mountable kerb in front of the crossover shall be for a minimum of the width of crossover plus the wings as if they continued through the path.

3. Subgrade Formation

- 3.1 Areas to be filled shall be completely cleared of all deleterious material, including the following: trees, roots and all other decayed vegetation. The site shall then be boxed out or filled, and formed to levels and gradients as required
- 3.2 Subgrade shall be compacted with a suitable vibratory compactor, to the satisfaction of Shire of Toodyay.

4. Base Course

- 4.1 A gravel base course is not required for concrete crossovers provided the subgrade is compacted to the satisfaction of Shire of Toodyay.
- 4.2 The base course shall be of good quality laterite gravel or crushed rock, free of excess amounts of clay and contaminants.
- 4.3 The base is to be spread, rolled, water bound and compacted in layers not exceeding 150mm to provide a strong, uniform pavement layer.

5. Drainage

- 5.1 Where an open drain is situated in the verge to channel stormwater runoff, a piped culvert crossing is required. All culverts under crossovers shall have approved headwalls. Protective works are required at culvert exits and entries to reduce the velocity, and to ensure erosion does not occur.
- 5.2 Drainage pipes within the road reserve shall be reinforced concrete pipes (spigot and socket type) unless otherwise approved by Shire of Toodyay. All pipes shall conform to the appropriate Australian Standards.
- 5.3 Strength class for reinforced concrete pipes shall be Class 2 unless otherwise noted and have at least the manufacturers minimum specified cover otherwise approved.
- 5.4 Bedding of pipes shall be carried out evenly and thoroughly. The trench shall be backfilled to grade with approved material and compacted to specification. All pipe bedding shall be min. 50mm clean sand unless otherwise specified.

6. Levels

- 6.1 Minimum grade desirable gradient or cross fall for a crossover is 2% (1 in 50), for properties lower than the roadway it is recommended that 2 metres of the crossover fall toward the road to assist with drainage. Where this is unachievable, the Shire of Toodyay will not be responsible from damages caused by flooding.
- 6.2 Where a footpath exists, this will be used as level control with the crossover graded from that level to the road or property boundary, respectively.

7. Sealed Crossover Materials

- 7.1 Four sealed crossover types meet the Shire of Toodyay's specification for a constructed crossover;
- Concrete
 - Asphalt
 - Two Coat Seal
 - Brick Pave

Concrete is generally the favoured material for crossover construction as it presents best value for money. Single Coat spray seals do not meet the specification for a sealed crossover.

8. Concrete

- 8.1 The minimum thickness is to be 100mm for light residential and 150mm for commercial and industrial crossovers. The concrete is to have a minimum compressive strength of 32MPa at 28 days.
- 8.2 The sub-grade is to be watered, compacted and to level before placement of the concrete to the satisfaction of the Shire of Toodyay.
- 8.3 After the base has been laid (including formwork, plastic membrane and mesh placement) Shire of Toodyay will inspect prior to installation of concrete.
- 8.4 The finished surface is to be non-slip, and decorative patterns are supported providing they are not detrimental to vehicle or pedestrian safety.

9. Asphalt

- 9.1 IPWEA - AAPA Specification for supply and laying of asphalt road surfacing shall apply.
- 9.2 The minimum thickness of consolidated asphalt shall not be less than 25mm nor greater than 40mm.

10. Two Coat Seal

- 10.1 Spray bitumen emulsion at the rate of 1.35 litres per square metre then bound with 10mm stone. The stone shall then be lightly broomed to remove high areas and rolled. A second coat of bitumen emulsion shall be applied at a rate of 1.65 litres per square metre, bound with 7mm granite aggregate and broomed and rolled.

- 10.2 Bitumen spray sealing is to be avoided in the winter months as cold weather is detrimental to its longevity. It is also to be acknowledged that the design life for this treatment will likely be significantly less than alternative treatments.

11. Brick Pave

- 11.1 New materials shall be used for brick pave construction.
- 11.2 The minimum thickness is 60mm for pavers on residential crossovers.
- 11.3 Edge restraint (haunching) is to be mixed as a 4:1 sand/cement ratio as per the standard detail, ensure it supports beneath a minimum of one third of the header course.
- 11.4 Pavers are to be spaced no more than 3mm apart.
- 11.5. All brick paved crossover require a minimum of 150mm gravel base course, compacted and tightly bound.
- 11.6. Clean bedding sand to a depth of 25mm shall then be placed and inspected to the satisfaction of the Shire of Toodyay.
- 11.7. Laying patterns are to be as per the manufacture's specification for residential crossovers.
- 11.8. It is recommended that the pavers be then compacted using a low amplitude plate compactor, not in direct contact with the surface, for two passes at a high frequency.
- 11.9. After compaction, voids shall be filled with clean, dry siliceous sand, 100% passing a 2.36mm sieve.

Reference Information

- Shire of Toodyay Policy E3 – Vehicle Crossover Policy;
- Standard Drawings Series ST-20-E3;
- IPWEA – AAPA Asphalt Specification.

Legislation

- Local Government Act 1995

Associated documents.

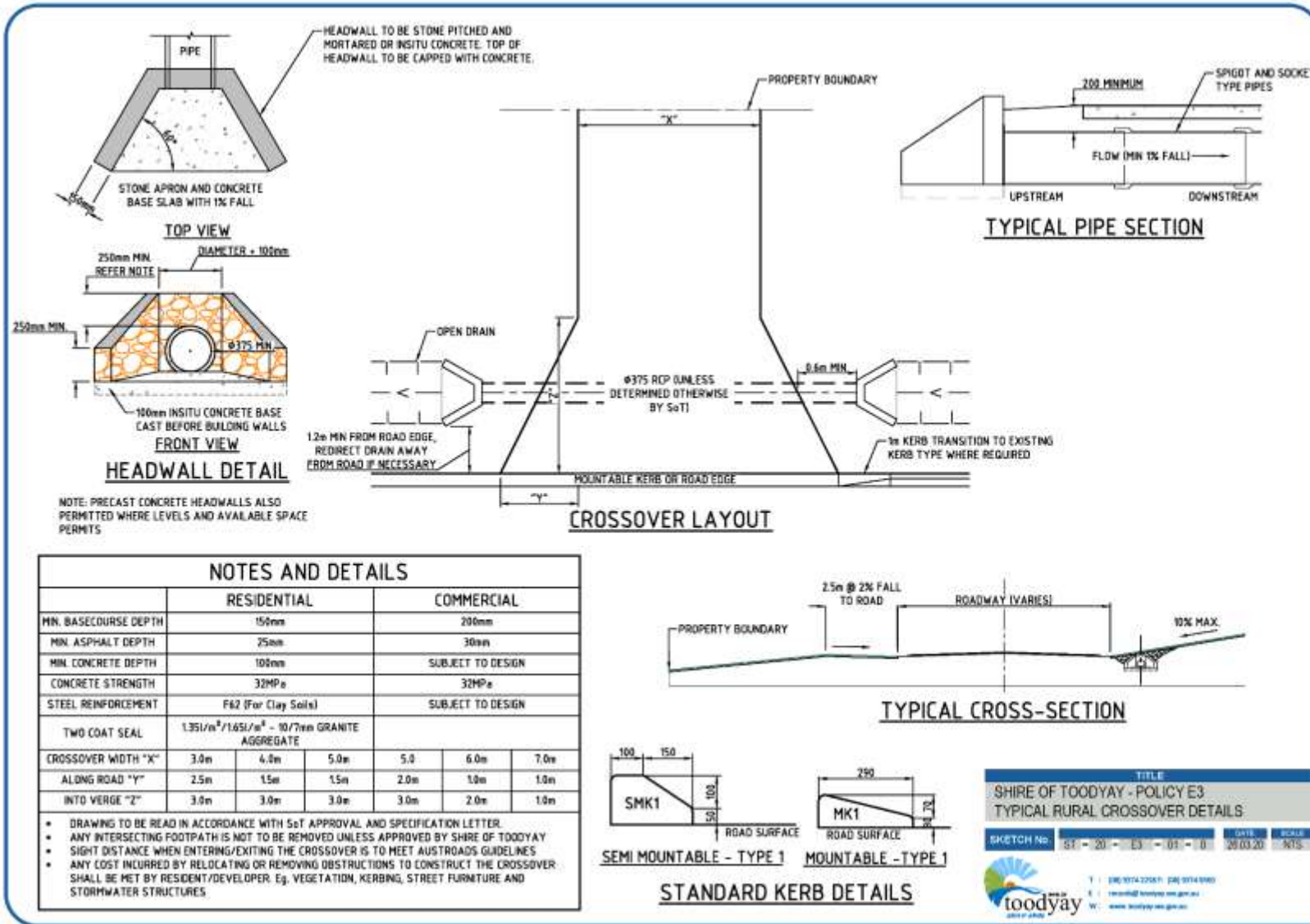
- Attachment 2 – Shire of Toodyay Standard Drawings

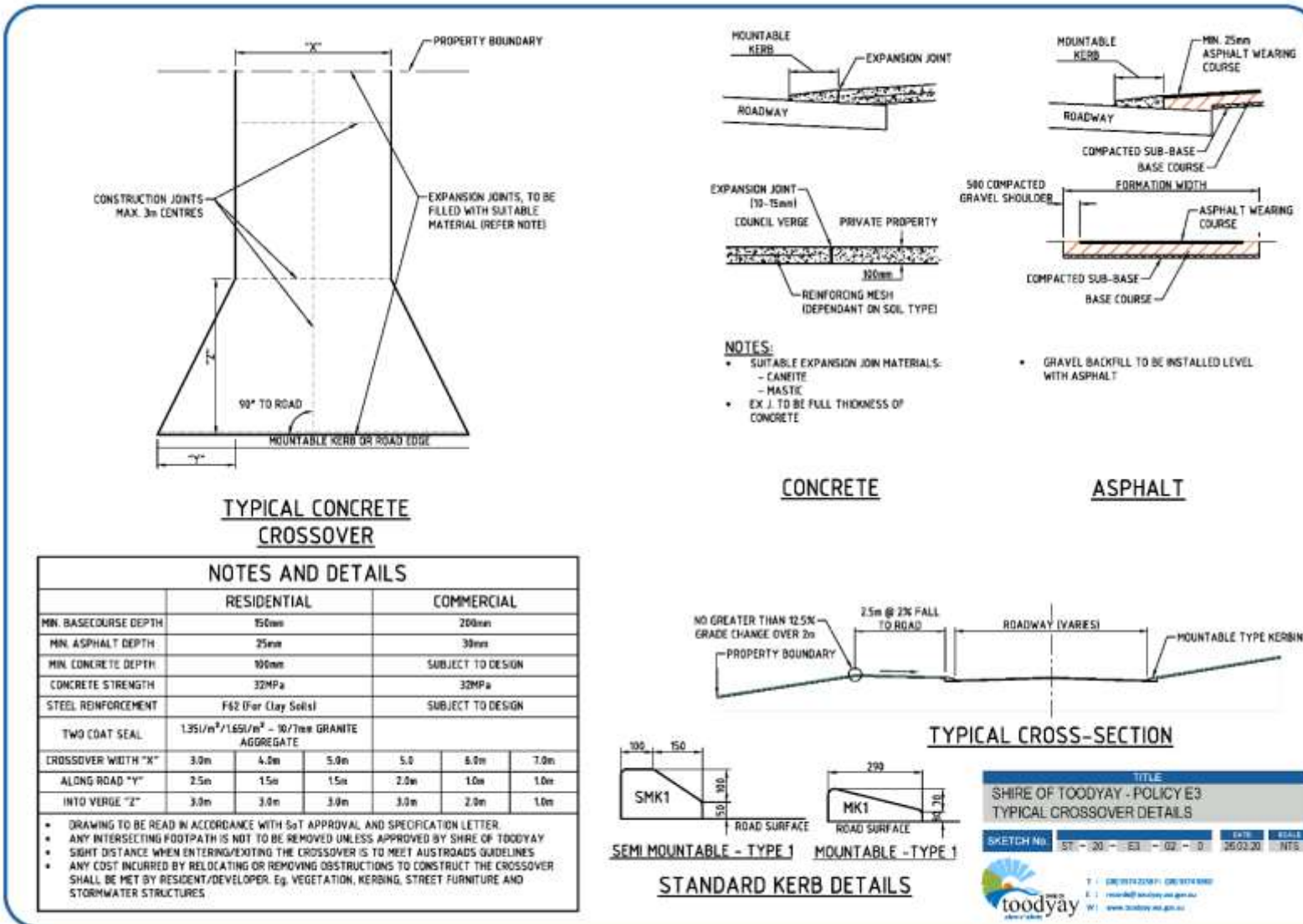
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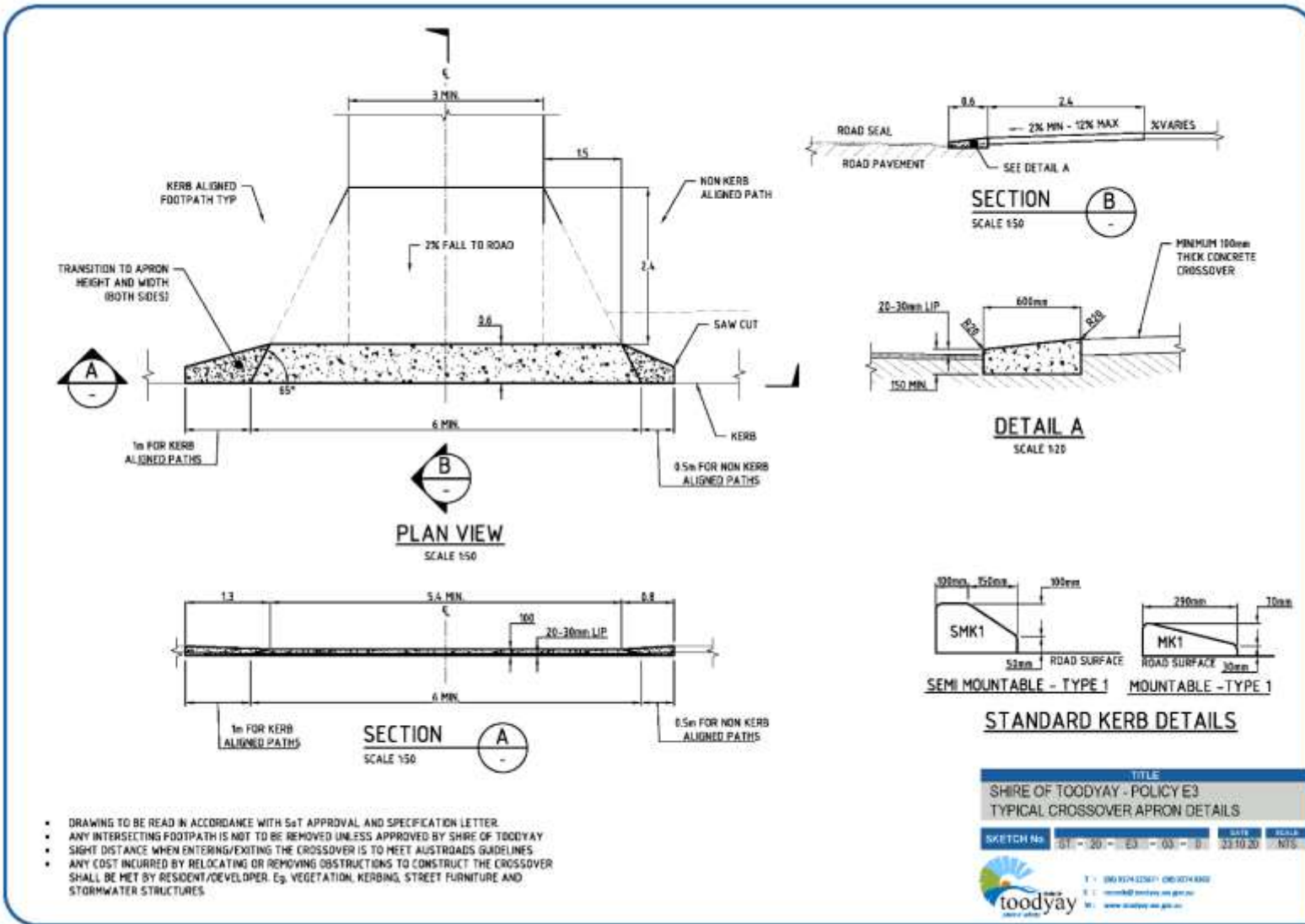
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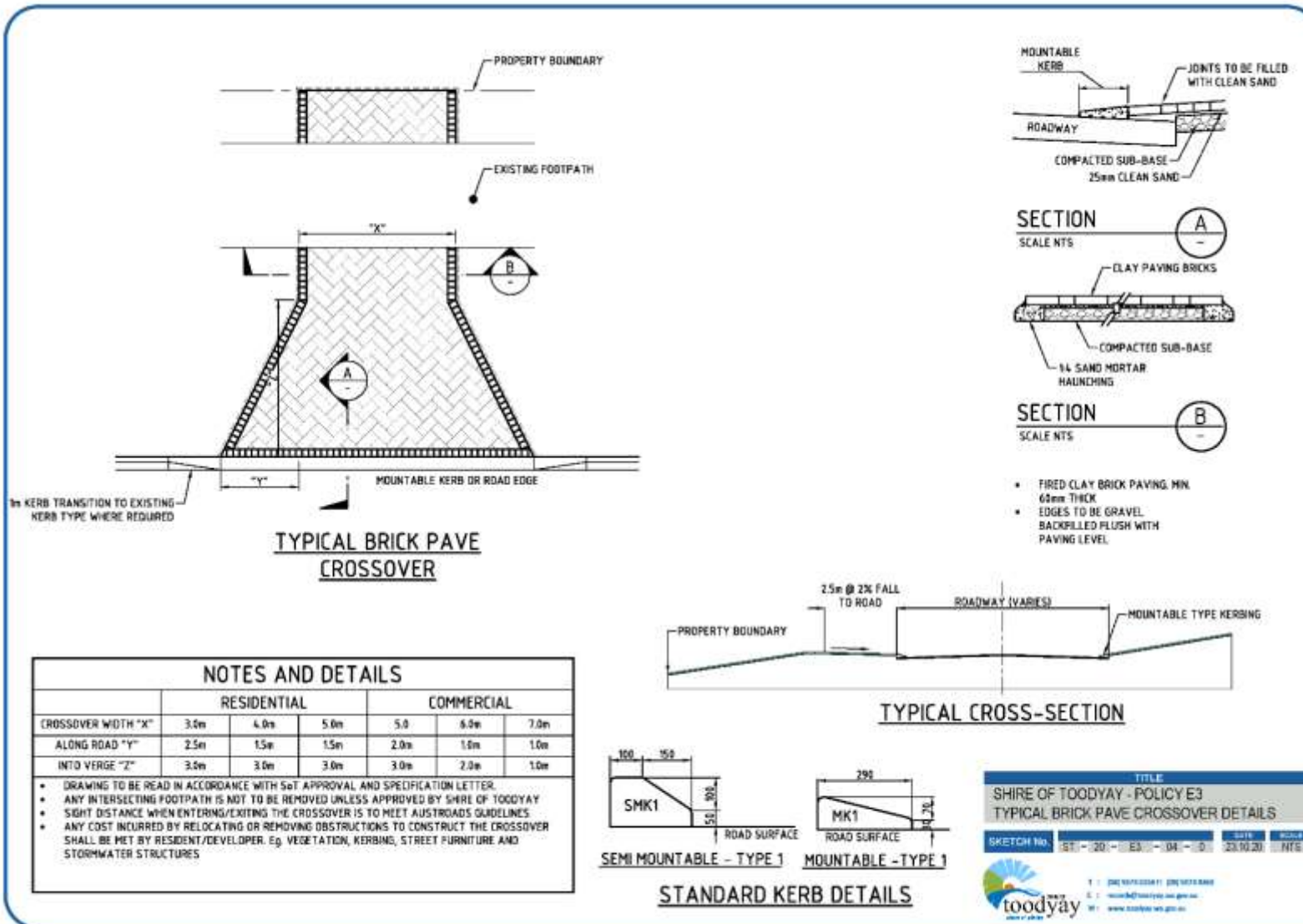
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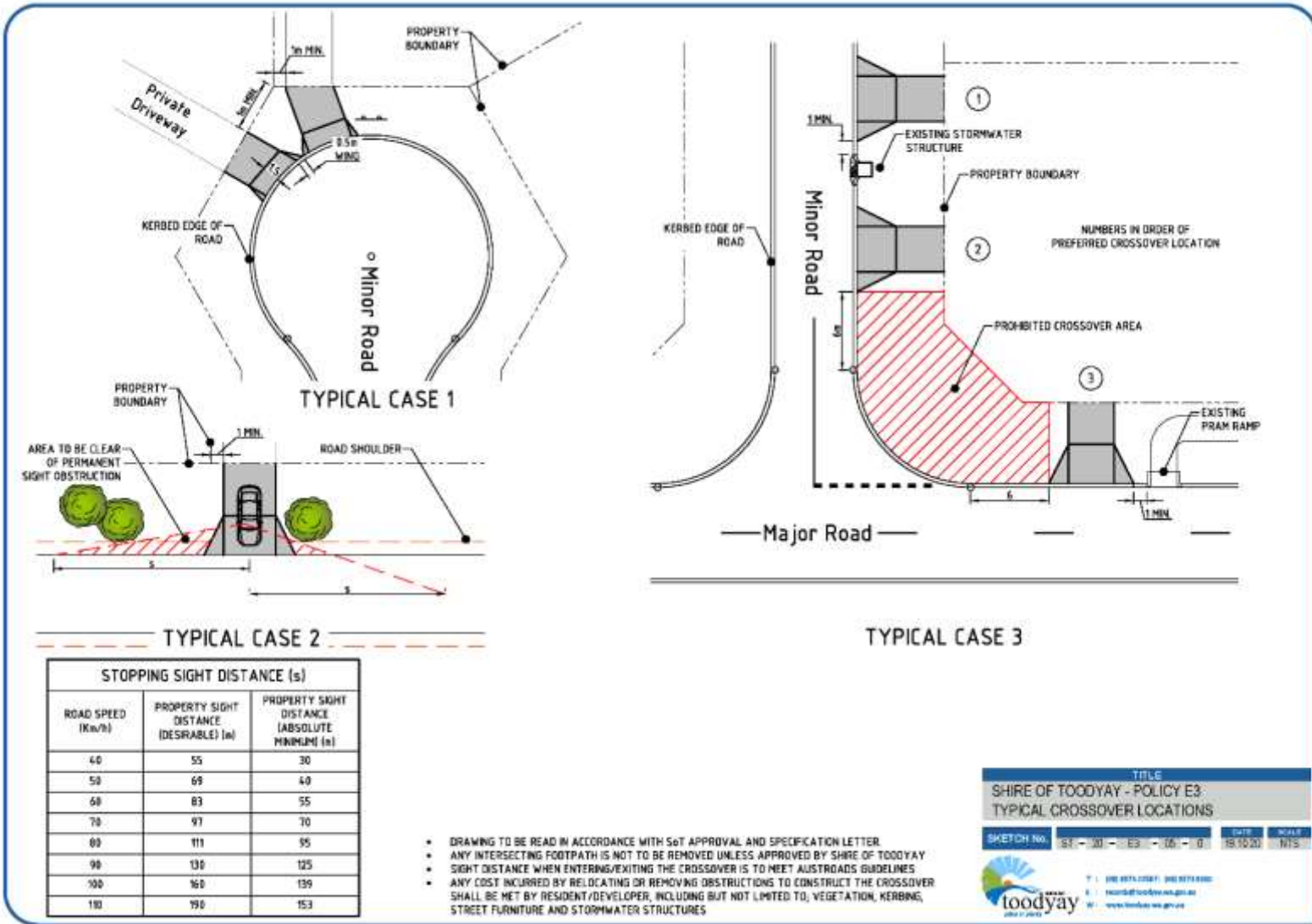
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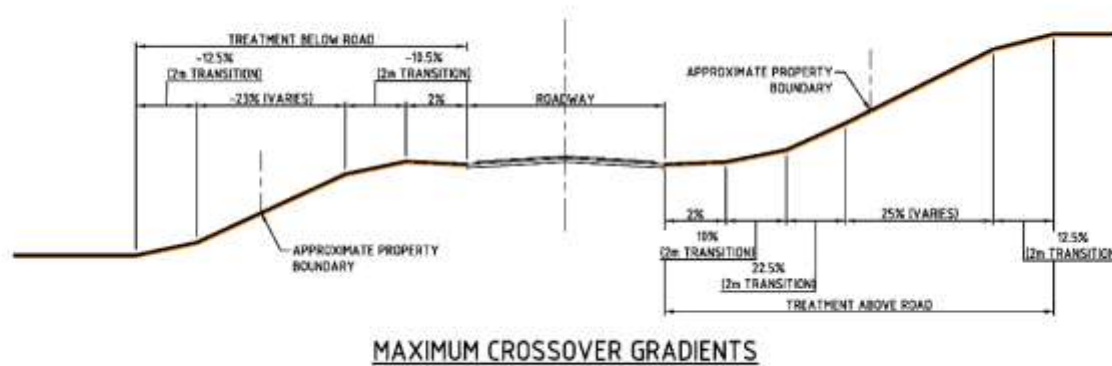












- DRAWING TO BE READ IN ACCORDANCE WITH S&T APPROVAL AND SPECIFICATION LETTER.
- ANY INTERSECTING FOOTPATH IS NOT TO BE REMOVED UNLESS APPROVED BY SHIRE OF TOODYAY
- SIGHT DISTANCE WHEN ENTERING/EXITING THE CROSSOVER IS TO MEET AUSTRADS GUIDELINES
- ANY COST INCURRED BY RELOCATING OR REMOVING OBSTRUCTIONS TO CONSTRUCT THE CROSSOVER SHALL BE MET BY RESIDENT/DEVELOPER, INCLUDING BUT NOT LIMITED TO; VEGETATION, KERBSING, STREET FURNITURE AND STORMWATER STRUCTURES

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