

CROSSOVER SPECIFICATION - CONCRETE

To provide information to property owners, developers and builders, to ensure a common understanding of how a crossover should be installed within the City of Greater Geraldton.

DEFINITION: A crossover is the part of the driveway that crosses over the verge area fronting a property, i.e. from the kerb line to the property boundary line.

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GENERAL REQUIREMENTS

INTRODUCTION

This document has been prepared to provide customers of the City of Greater Geraldton with information regarding the City's requirements for a vehicular crossover and ensure a uniform approach to the construction of a vehicle crossover in the City of Greater Geraldton.

STATUTORY REQUIREMENTS

The legislation that governs crossovers or crossings from a public thoroughfare to private land, or a private thoroughfare is defined in;

- Local Government Act 1995 Schedule 9.1(7)
- Local Government (Uniform Local Provisions) Regulation 1996 – Sections 12, 13, 14 and 15.

The legislation describes requirements to construct or repair a crossover and the City's obligation (subsidy) towards the cost of crossovers.

ROAD RESERVE (VERGES)

The portion of land between a road and the boundary of private property is called the road reserve or verge. The purpose of the road reserve (verge) is to allow the placement of services and infrastructure such as communications cables, drainage, gas, power, street furniture (bus stops) and pathways. As and when works are required to these services, they are accessible to service authorities and Local Government with minimal disruption to the property owner.

The following road reserves are designated as "Main Roads" and approval for construction of a crossover from the Commissioner of Main Roads is required:

- H004 Brand Highway
- H007 North West Coastal Highway
- H050 Geraldton-Mount Magnet Road (some sections are known as Gray Street and Maitland Road within the locality of Mullewa)
- H062 John Willcock Link
- M039 Wubin-Mullewa Road
- M054 Geraldton-Walkaway Road (or commonly known as Edward Road)

WHO CAN CONSTRUCT MY CROSSOVER?

The construction of your crossover can be constructed by any of the following:

I. <u>By Your Builder</u>

You may have already included the construction of the crossover in the contract between you and your builder.

ISE01 – Crossover Permit Application will need to be submitted after Planning Approval, but before a Building Permit Approval. You will need to ensure that your Builder has a current copy of the City's Vehicular Crossovers (Bitumen, Concrete, Block/Brick Paving and Gravel and/or Culvert), General Requirements and Specifications and a copy of your approved ISE01 – Crossover Permit Application.

II. <u>A Private Contractor</u>

You can engage a private contractor, which can be sourced from the Yellow Pages or a Local Newspaper.

Again, you will need to ensure that the Contractor you engage has a current copy of the City's Vehicular Crossovers (Bitumen, Concrete, Block/Brick Paving and Gravel and/or Culvert) General Requirements and Specifications and a copy of your approved ISE001 – Crossover Permit Application.

III. <u>Timeframes</u>

A crossover should be constructed within three (3) months of the building being completed (e.g. Notice of Completion).

COUNCIL SUBSIDY

I. <u>Residential Properties</u>

Regulation 15 of the Local Government (Uniform Local Provisions) Regulations 1996 states that where a crossing (hereafter called a crossover) constructed is:

- a. To the first crossover constructed to the private land and;
- b. A standard crossover or a type that is superior to a standard crossing.

The City is obliged to bear 50% of the cost, as estimated by the Local Government, of a standard grey concrete crossover, but otherwise the Local Government is not obliged to bear, nor prevented from bearing, any of the cost.

A standard crossover is defined by the City of Greater Geraldton as:

- A minimum of 3.0m wide at the property boundary;
- 4.5m verge length, plus 1.35m² for each wing (total area of 14.8m²); and

- A crossover that is constructed to the City's Specifications.
- II. <u>Commercial and Industrial Properties</u> Do not attract a subsidy for a crossover.

III. <u>Eligibility for a Crossover Subsidy</u>

To be eligible to claim the Crossover Subsidy, you must meet the following eligibility criteria:

- a. The crossover is the first crossover to the property or an upgrade from a bitumen crossover to a standard crossover;
- b. The crossover is a standard crossover as defined in clause I. Residential Properties (Council Subsidy);
- c. Crossover Subsidy Application is received within 12 months of the crossover being constructed; and
- d. All requirements of the ISE01 Crossover Permit Application are met to the satisfaction of the City.

IV. Fees and Subsidy Amounts

Crossover fees and subsidies for this financial year are as followed:

RESIDENTIAL

A sealed crossover from the property boundary to a kerbed sealed road;

Amount	\$ 355.00
Inspection Fee	\$ 35.50
SUBSIDY	\$ 319.50

RURAL/SEMI-RURAL

A sealed/unsealed crossover to a sealed or unsealed road;

IF A CULVERT IS NOT REQUIRED	
Amount	\$ 300.00
Inspection Fee	\$ 30.00
SUBSIDY	\$ 270.00

IF A CULVERT IS REQUIRED	
Amount	\$ 725.00
Inspection Fee	\$ 72.50
SUBSIDY	\$ 652.50

DIMENSIONS

- I. <u>Residential Crossover</u>
 - a. Minimum width at property line 3.0 metres;
 - b. Maximum width at property line 6.0 metres;
 - c. Where two (2) residential crossovers abut one another, they may be combined, provided that the two (2) crossovers are delineated by contrasting colour/material (minimum width 90mm);
 - d. Where the combined width exceeds 6.0 metres, the two (2) crossovers shall be separated by a

pedestrian refuge island of a minimum 2.0 metre in width, unless specifically approved by the Director of Infrastructure Services; and

- e. If wings will be installed on a crossover the minimum width of a wing, must be 1.5 metres and shall not cross the adjoining property line.
- II. Commercial/Industrial Crossover
 - a. Minimum width at the property line 3.0 metres;
 - b. Maximum width at the property line 10.0 metres;
 - c. All crossovers shall be separated from one another by a pedestrian refuge island, which will have a minimum width of 3.0 metres; and
 - d. Wing width will be a maximum of 6.0 metres and a minimum width of 1.5 metres straight or curved radius.

CONSTRUCTION MATERIALS

Crossovers for Residential and Commercial/Industrial properties can be constructed in a number of different materials. Please refer to the following technical specifications;

- Bitumen [ISE04]
- Block/Brick Paving [ISE05]
- Concrete [ISE06]
- Gravel and/or Culvert [ISE07]

CROSSOVER CONSTRUCTION

The construction of crossovers shall be executed in accordance with the City's Specifications. The Director of Infrastructure Services must approve any variation to these Specifications in writing prior to the construction of the crossover. Where a property owner fails to obtain prior written approval for any variation to the City's Specifications, the City may give written notice of corrective works to be undertaken by the property owner at the property owner's cost.

WARRANTIES

All materials and workmanship used in the construction of crossovers shall be in accordance with the City's Specification and any materials or workmanship that are inferior to those specified shall be rejected and the works made good to the City's satisfaction.

The work shall be carried out with minimum disruption to pedestrians and vehicular traffic. Every precaution shall be taken to ensure the safety of persons and property at the site. Where the work is being constructed on a busy Street, the contractor will be required to provide Traffic and Pedestrian management on site. All excavations, materials, plant and equipment must be made safe, barricaded and provided with warning lights, during the hours of darkness to the satisfaction of the Director of Development and Community Services. All works are to be carried out in accordance with the Occupational Safety and Health Act 1984 and its Regulations as amended.

Any damage which may occur to any City infrastructure assets or private property during the course of works or which subsequently becomes evident shall be the sole responsibility of the Applicant or their Contractor. The Applicant or their Contractor shall be held responsible for the repair, replacement, legal claims or any other claims, which may arise from the carrying out of any such work on site.

RESPONSIBILITY OF THE APPLICANT AND/OR THE CONTRACTOR

The applicant and/or their Contractor is responsible for the following items:

- I. Where required, the cutting of the existing semi-mountable or barrier kerbing with a concrete saw and remove existing kerbing without damage to remaining kerbing and road pavement.
- II. The removal and disposal of all surplus materials from the site of the works and leaving the site in a clean and tidy condition at all times.
- III. The reinstatement of kerbing, concrete, brick paving or bituminous road surfaces damaged during the course of the work during construction of the crossover.
- IV. The reinstatement of verge area adjoining the crossover.
- V. Crossover that are no longer required or no longer connect with an internal driveway are deemed redundant. Under the Division 2 Vehicle Crossings, Subdivision 2 Redundant Vehicle Crossovers, Clause 2.5 of the City's Local Laws for Activities in Thoroughfares and Public Places and Trading Local Law 2011, redundant crossovers must be removed and the verge and kerb reinstated at the cost of the Applicant.
- VI. Application to the relevant public utilities authorities for approval to alter any utilities service that is in conflict with the proposed crossover. Any costs incurred in the alteration of any service and subsequent reinstatement of the verge shall be borne by the Applicant.
- VII. With regard to pathways, comply with the requirements of the City's Pathway Technical Specification [ISM007 Concrete Pathway Specification].
- VIII. The cost of any traffic management that may be required to ensure the safety of road users, Contractors and pedestrians during the construction of the crossover. Only qualified traffic management personnel shall be used and all traffic management shall be in accordance with Main Roads Western Australia's code of Practice "Traffic Management for Roadworks" and Australian Standard AS 1742.3 – 2002.
- IX. Dial Before you Dig on telephone number 1100 or via <u>www.1100.com.au</u> has been contacted to determine the location of services such as water mains, telecommunications cables, gas mains and sewer mains within the section of the verge to be excavated.
- X. It is the responsibility of the property owner to maintain the crossover once constructed.

GENERAL PROVISIONS

LEVELS, PATHWAYS AND OTHER FEATURES

All levels for grading, surface finishing, jointing or other construction requirements shall be as outlined in this Specification and attached drawings.

I. <u>Clearances</u>

Crossover shall have the following minimum clearances:

•	Side Boundary (at the front property line)	1.0m
•	Street Trees	1.5m
-	Drainage – Side Entry Pits	1.0m
•	Western Power Poles	0.6m
•	Minimum distance from the truncation of the Intersection (corner sites)	6.0m

II. <u>Crossover Location</u>

Crossovers are to be constructed perpendicular to the adjoining road edge alignment with a minimum clearance of 1metre from the side boundary and must align with the internal access (driveway) into the property. In cul-de-sacs and at other locations, approval may be given for a variation of this requirement. Please refer to drawing (STD36 – Crossover Location: Cul-de-sac & Intersection).

Crossovers including wings, shall not be constructed any closer than 6.0m to the intersection of property line on a corner site/and or cross the adjoining property line.

Where there is difficultly in positioning a crossover on a property due to potential traffic problems, the Department of Infrastructure Services should be consulted for assistance.

III. <u>Street Trees</u>

Where a street tree is within 1.5m of the proposed crossover, the Applicant shall submit a written request to the City's Tree and Horticulture Department requesting an assessment of the street tree with regard to the street tree's relocation or removal and replacement (size and species dependant). For public liability purposes, all works associated with the removal and replacement of any street tree shall be undertaken by the City at the Property Owner's cost.

IV. <u>Pathways</u>

Where a slab or brick paved pathway exists, the slabs/brick paving are to be removed and re-laid as necessary to match the crossover level and not leave any gaps or trip hazards. All slabs in surplus can be taken to the City's Depot – located at the Geraldton Airport.

Where a concrete pathway exists, the footpath is to be cut by means of a concrete saw at the nearest joint in the pathway from the proposed side of the crossover. This pathway is to be replaced as necessary to match the new crossover level and the existing pathway level. There is to be expansion joint material placed in between the new crossover and the pathway. The pathway is then to be reinstated in 100mm thick grey in-situ concrete and the balance of the crossover constructed either side of the pathway in accordance with City's specifications.

The existing concrete pathway can be left in place, if it is 100mm thick, in good repair and; when

located against the kerb, has fully mountable kerbing.

Where an existing concrete pathway is situated within the proposed crossover, the pathway shall be removed. The pathway is to be neatly saw cut along the nearest expansion joint to the proposed crossover alignment and removed. The pathway is then to be reinstated in 100mm thick grey in-situ concrete and the balance of the crossover constructed either side of the pathway in accordance with City's Specifications.

V. <u>Kerbing</u>

Where fully mountable kerbing is cast, the crossover is to be constructed without removing the kerb. Where the carriageway is kerbed in barrier or semi-mountable kerbing, the kerb must be cut by means of a concrete saw and removed for the width of the crossover, plus any tapers.

If the kerbing is precast, the whole section of the kerb should be removed without damaging the pavement or remaining kerbing.

VI. Gradient (Verge Levels)

The crossover gradient is to be a maximum of 2.5% from the top of the kerb line to the property boundary. If the average verge level in the street is below 2% for the first 2.5 metres it will need to be constructed at a positive 2% to cater for future pathway construction. If unsure, please contact the City of Greater Geraldton to obtain correct levels.

VII. <u>Manholes and Service Pits</u>

Where the crossover covers an existing City of Greater Geraldton manhole, the lid is to be adjusted to be flush with the finished surface. For Commercial and Industrial crossovers, the lid of the City's drainage manhole is to be replaced with a trafficable (heavy-duty) type. Where the manhole or service pit belongs to a Public Utility, the property owner is to liaise with the relevant public utility and ensure that their requirements are satisfied prior to the construction of the crossover.

Where a doubt exists on the above, all queries are to be referred to the Director of Infrastructure Services or his delegated representative for determination prior to construction.

GENERAL INFORMATION

- I. A reinstatement must be made to kerbing, concrete paving or bituminous road surfaces, if damaged during the crossover construction. All spilt concrete must be total removed from the road surface immediately.
- II. The area must be cleared of all debris, bitumen, concrete etc., once the works have been completed.
- III. The public shall be protected at all times through the erection of adequate signage, barricades, flashing warning lights, temporary bridges or any other items necessary for pedestrian safety.
- IV. Any special requirements placed on the construction or location of a crossover by the Director of Infrastructure Services must be compiled with.
- V. Adequate measures (such as Dial Before you Dig) must be taken to avoid damage to services and other infrastructure prior to commencement.

TECHNICAL SPECIFICATIONS

CONCRETE

All concrete used in the works shall develop a minimum compressive strength of 25 MPa at 28 days and shall be composed of a mixture of crushed metal screenings, sand and cement to give the strength specified with a minimum slump of 50mm.

EXCAVATION

The excavation for the crossing bed shall be taken out to the level line and grade as given for the site. All excavation shall be executed cleanly and efficiently to provide for a firm, sound base free of depressions or soft spots or any deleterious materials to give a minimum of 100mm depth of concrete pavement for residential crossover and minimum depth of 150mm for commercial crossover, please refer to drawing (MISC83 – C4: Concrete Crossover).

PLACING CONCRETE

The base shall be thoroughly and evenly compacted and then evenly moistened with water (not saturated) immediately prior to placing of the concrete.

Concrete shall be evenly place to the depth specified and shovelled into position continuously and spaded especially at all edges to give maximum density. There shall be no break in operations from time of placing to finishing.

FINISHING

The The finish shall be obtained by screeding to correct levels with a wooden float to provide a non-slip, dense surface fee of any depressions, float marks, jointing marks, honeycomb sections, or accumulation of fine dusty accretions liable to cause excessive surface wear. The final surface finish shall be to the entire satisfaction of the Director of Infrastructure Services who shall reserve the right to require the removal of or the correction of any surface deficiencies or finishes.

Where required, due to grade, and or where directed, any portion of the surface may be required to be treated with a multi-grooved tool with grooving to be at 225mm centres, worked parallel to the kerb line to minimise any slipping effect.

STEEL TROWEL FINISH IS NOT PERMITTED ON ANY SURFACES OF A VEHICLE CROSSOVER.

JOINTING

All joints shall be made in the form of plain dummy construction joints with an approved jointing tool as follows;

- I. In In line with and parallel to:
 - a. The property line junctions;
 - b. The edge of the pathway construction or future pathway line, both back and front edge line of pathway; and
 - c. The kerb line faces across the crossing.
- II. The centre of the crossing at 90° to the street kerb line and at no more than 2m apart.

- III. An approved edging tool to be used on all sides (edges); and
- IV. All dummy joints shall only be cut to the depth of the grooving tool, a minimum of 10mm.

RETURN OF KERBING

The crossover kerb shall be matched with the existing kerb with an expansion (rubber) joint on each side of the crossover.

CURING OF CONCRETE

The concrete crossover shall be cured by wetting the surface after it has hardened. The concrete must be continually damp through wetting for a period of 24 hours.

CROSSING SPLAY

I. <u>Residential</u>

If wings will be installed on a crossover, the minimum width of a wing must be 1.5 metres straight or curved radius and shall not cross the adjoining property line. Wings of a crossover shall be shown on the approved plan.

II. <u>Commercial/Industrial</u>

Wing width will be a maximum of 6.0 metres and a minimum width of 1.5 metres straight or curved radius and shall not cross the adjoining property line. Minimum distance from the truncation of the Intersection (corner sites) will be 6.0 metres. A wider splay may be approved on application to the Department of Infrastructure Services.

STANDARD DRAWINGS

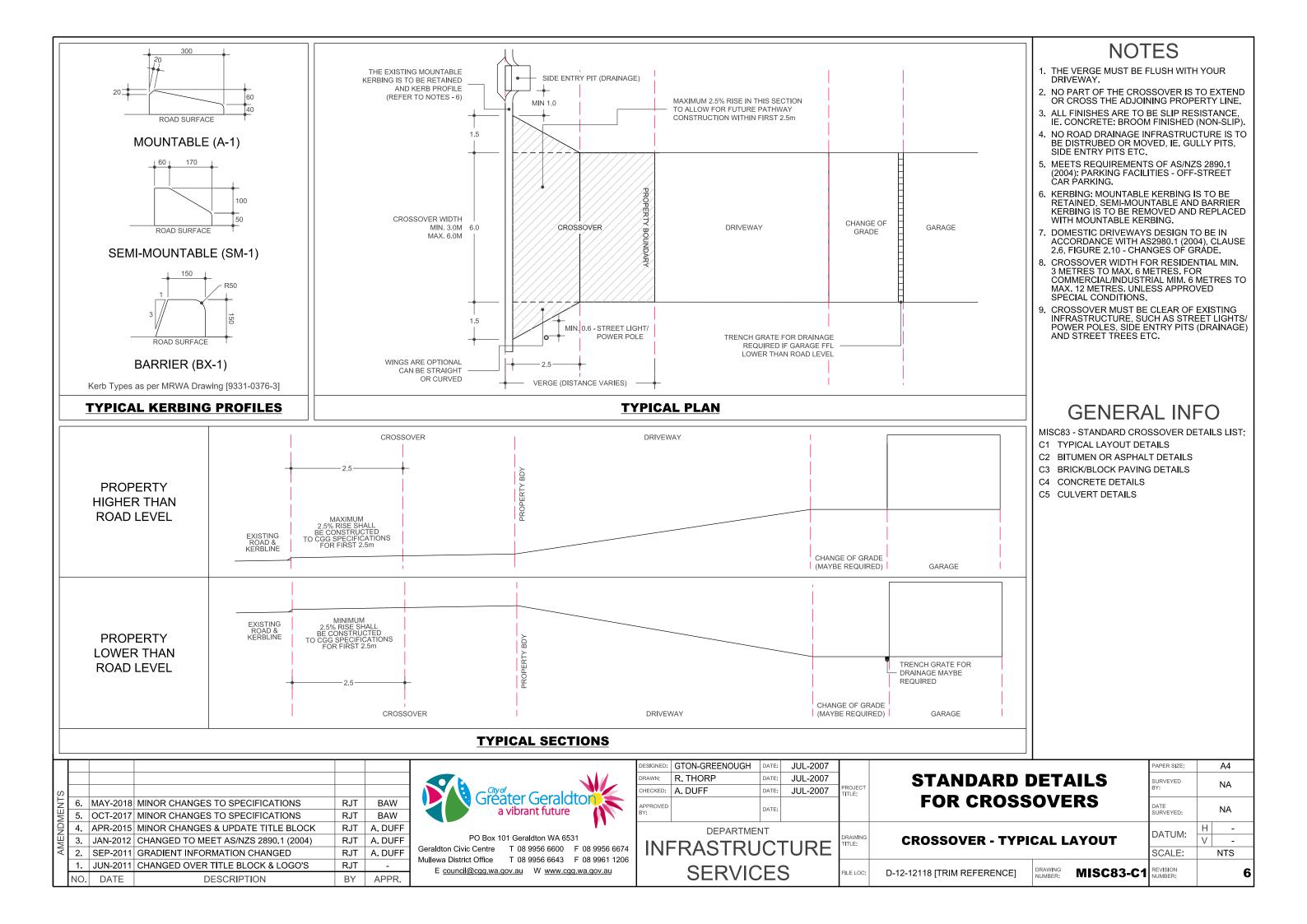
List of drawing to be read in conjunction with the General Requirements/Provisions and Technical Specifications for a Concrete Crossover;

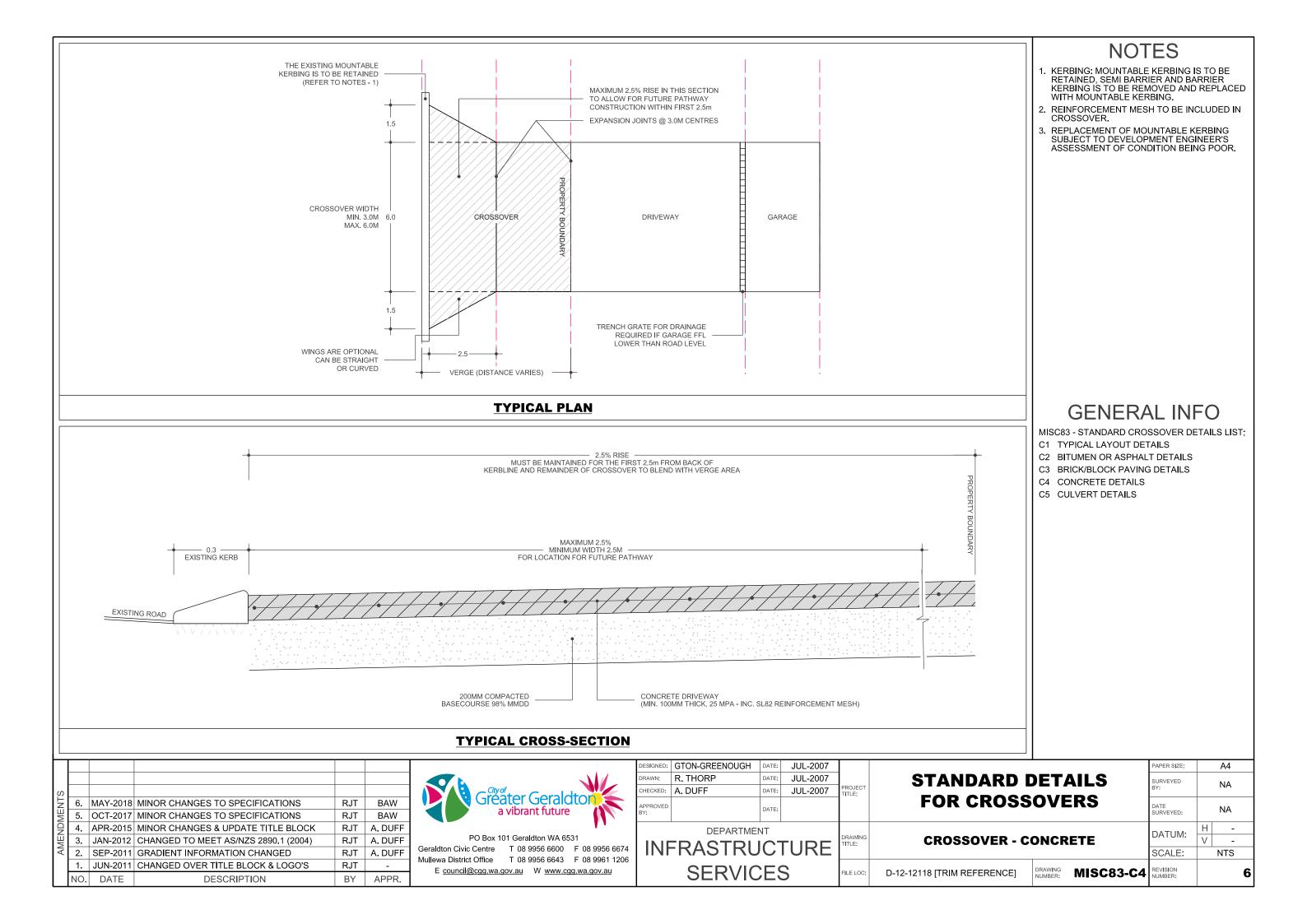
- MISC83 [C1]: Typical Layout
- MISC83 [C4]: Concrete Crossover
- ST36" Crossover Location (Cul-de-sac and Intersections)

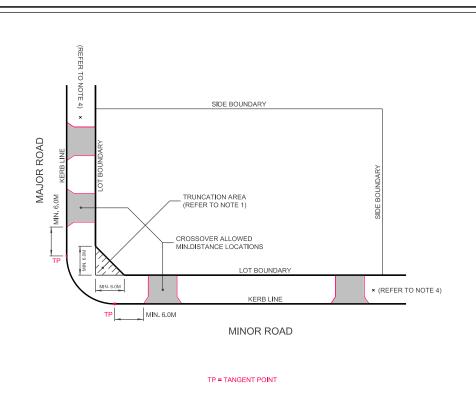
City of Greater Geraldton

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D17-79065









NOTES:

3. OCT-2017 UPDATED TO COMPLY WITH AS2890.1 (2004)

DESCRIPTION

1. DEC-2014 DRAWING CREATED AND APPROVED

2. APR-2015 UPDATED TITLE BLOCK

NO. DATE

- 1. CROSSINGS ARE NOT PERMITTED WITHIN THE LOT TRUNCATION AREA (HATCHED AREA).
- 2. TRAFFIC ISLANDS WILL NOT BE REMOVE OR ALTERED UNDER ANY CIRCUMSTANCES, CROSSINGS SHOULD BE LOCATED IN A POSITION TO AVOID TRAFFIC ISLANDS.
- 3. CROSSINGS LOCATED NEAR TRAFFIC LIGHTS MUST BE APPROVED BY MRWA AND BE IN ACCORDANCE WITH MRWA GUIDELINES.
- 4. CROSSINGS ARE PREFERRED TO BE LOCATED FURTHEREST AWAY FROM THE INTERSECTION ON THE LONGEST BOUNDARY AND INSTALLED ON MINOR ROAD RESERVE.
- 5. TO COMPLY WITH AS 2890.1 (2004) CLAUSE 3.2.3 AND FIG 3.1 PROHIBITED LOCATIONS OF ACCESS DRIVEWAYS MIN. 6m FROM TANGENT POINT OF CORNER KERBLINE.

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APPR.

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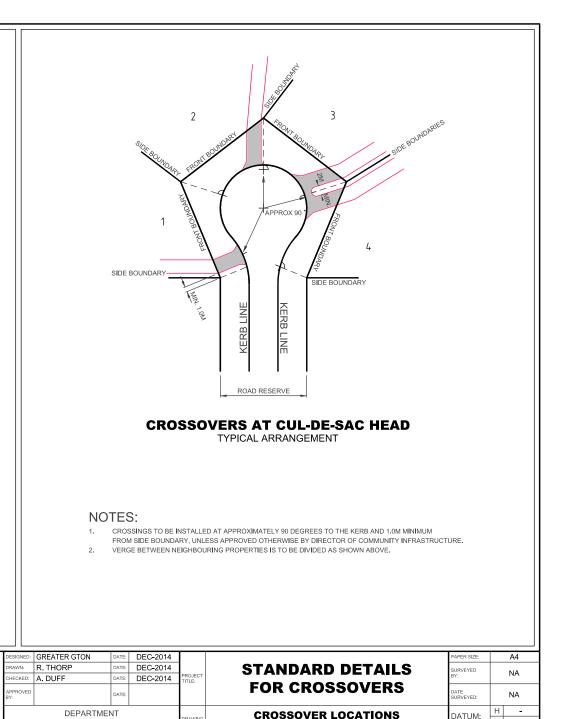
a vibrant future

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(Cul-de-sac and Intersections)

DRAWING

D-14-83465 [TRIM REFERENCE]

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3

NTS

SCALE:

EVISION

STD36

RAWING

FILE LOC:

INFRASTRUCTURE

SERVICES