



# Gladstone Regional Council

## Council Policy

Title	INTERSECTION SIGHT DISTANCE
Policy Number	P-2015/37
Responsible Directorate	ENGINEERING SERVICES
Responsible Officer	MANAGER TECHNICAL SERVICES
Date of Adoption	17 NOVEMBER 2015
Resolution Number	G/15/2647
Date Review Due	17 NOVEMBER 2018

### 1.0 PURPOSE:

The purpose of this policy is to provide clear direction as to the minimum Sight Distance Council requires at existing intersections within the Council area where Council is the Road Authority for any of the roads forming the intersection.

This Policy also seeks to outline when Council will remove parking and/or other on-street infrastructure identified as being an obstruction interfering with the minimum Sight Distance requirements of Council, and install the appropriate signage and line marking to provide the minimum Sight Distance outlined in this policy.

### 2.0 SCOPE:

The policy applies to all existing intersections within the Council area for which Council is the Road Authority for any of the roads forming the intersection.

### 3.0 RELATED LEGISLATION:

- Local Government Act 2009

### 4.0 RELATED DOCUMENTS:

- Austroads Guide to Road Design suite
- Australian Standard 2890 (AS2890)

## 5.0 DEFINITIONS:

To assist in interpretation of this policy the following definitions apply:-

- **Council** refers to Gladstone Regional Council.
- **Minor Road** refers to the road where the driver must give way to the driver on the Major Road.
- **Major Road** refers to the road where the through movement has right of way over all other movements.
- **Road Authority** means the authority that has control of the road. Under the Local Government Act 2009 Council has control over all roads in its area except for State-controlled roads and public thoroughfare easements<sup>1</sup>.
- **Travel Lane** refers to the section of road between the road centre/dividing line and the kerb/continuity line.
- **Sight Distance** refers to the distance a driver at or approaching an intersection should be able to see unobstructed.
- **Safe Intersection Sight Distance (SISD)** is the sight distance required for a driver of a vehicle on the Major Road to observe a vehicle on a Minor Road approach moving into a collision situation (e.g. in the worst case, stalling across the traffic lanes) and provide sufficient distance for the vehicle on the Major Road to decelerate to a stop before reaching the collision point.
- **Minimum Gap Sight Distance (MGSD)** is the distance to allow a driver on the Minor Road to identify an acceptable gap and enter the traffic flow, only requiring the following car to apply minor breaking when the entering vehicle accelerates to the posted speed slowly.
- **Metre (m)** refers to the SI unit of distance measurement.

## 6.0 POLICY STATEMENT:

### 6.1 Long term Changes to site distance

It is Council policy that for intersections where there has been a fatal crash (a death) within a five (5) year period and Sight Distance was a factor in the crash, a full investigation will be conducted at the intersection to determine if any long term changes need to be made to Sight Distances for that intersection. In cases where a hospitalisation crash has occurred in the last five years the implementation of this policy at that intersection will be monitored using traffic classifiers and formally reviewed after three months.

---

<sup>1</sup> See Sections 59 and 60 of the Local Government Act 2009

## **6.2 When a Carpark is considered to be an obstruction**

Council considers a carpark to be an obstruction when the sight triangle passes through more than 15% of the plan area of a B99 (AS2890) when it is placed in the middle of the delineated park. [Attachment A has a number of examples].

## **6.3 Sight Distance Methodology**

### **6.3.1 General**

Sight Distance design is to be in conjunction with the following manuals:-

- Austroads Guide to Road Design suite.
- Australian Standard 2890 (AS2890).

### **6.3.2 Sight Distance Requirement**

Council has adopted the Minimum Gap Sight Distance (MGSD) [as specified in Austroads] as the minimum sight distance to be provided at all intersections for which Council is the Road Authority.

### **6.3.3 Sight Triangle Calculation Methodology (Drawing No. 14-107-001 (Rev 0) - Attachment B)**

*Step 1. Determine the location of the stopped vehicle on the minor road (Point A)*

- This is achieved by locating the centre of the travel lane of the minor road;
- Then Offset 3m (away from the travel lane) from the hold, give way or continuity line.
- Where these two (2) points intersect is the location stopped vehicle (Point A).

*Step 2. Determine the conflict point (Point B)*

- This is achieved by drawing a line from Point A that follows the centre of the minor road travel lane to the furthestmost edge line of the Major Road;
- Then identify the centre of the travel lane for the conflicting through movement of the major road.
- Where these two (2) lines meet this is the conflict point (Point B).

*Step 3. Determine the location of the object/vehicle of the major road (Point C)*

- This is achieved by drawing a line back from Point B following the centre of the travel lane for the through movement of the major road, for the distance specified in section 3.2.3 of Austroads, Guide to Road Design - Part 4A, 2010.
- The point along the centre of the travel lane at the specified distance is Point C.

*Step 4. Determine the sight triangle.*

- Draw a triangle connecting points A, B and C.

**Note:** This methodology outlines the procedure to identify the sight triangle to be used. Vertical geometry should also be taken into account and checked in accordance with Austroads specifications.

#### 6.3.4 Sight Triangle Requirements

The sight triangle is required to be free of obstructions taking the drivers eye height and obstruction height as Specified in Austroads, Guide to Road Design - Part 4A, 2010, into account. Some examples of sight obstructions are:-

- trees/plants which have foliage below 2.4m;
- parked vehicles/delineated parking spaces; and
- where Council considers a car park to be an obstruction.

#### 7.0 ATTACHMENTS:

Appendix A - Parked Vehicle Example (Drawing No. 14-107-002 (Rev 0))

Appendix B - Sight Triangle Calculation Methodology (Drawing No. 14-107-001 (Rev 0))

#### 8.0 REVIEW TRIGGER:

This policy will be reviewed when any of the following occur:

1. The related legislation/documents are amended or replaced.
2. Other circumstances as determined from time to time by a resolution of Council.
3. Periodic Review – 3 years from date of adoption.

TABLE OF AMENDMENTS		
Originally Adopted	16 December 2014	G/14/2280
Amendment 1	17 November 2015	G/15/2647

.....  
**STUART RANDLE**  
**CHIEF EXECUTIVE OFFICER**

## Appendix A

<p style="text-align: center;"><b>EXAMPLE A</b></p> <p style="text-align: center;">Existing park to remain as sight triangle does not intersect the parked vehicle</p>	<p style="text-align: center;"><b>EXAMPLE B</b></p> <p style="text-align: center;">Existing park to be removed as the sight triangle intersects the parked vehicle</p>
<p style="text-align: center;"><b>EXAMPLE C</b></p> <p style="text-align: center;">Existing park to remain as sight triangle does not intersect the parked vehicle</p>	<p style="text-align: center;"><b>EXAMPLE D</b></p> <p style="text-align: center;">Existing park to be removed as the sight triangle intersects the parked vehicle</p>

<p><b>GLADSTONE REGIONAL COUNCIL</b></p> <p><b>Sight Distance Policy</b></p> <p><b>Parked Vehicles</b></p>	<p><b>CONCEPT</b></p> <p><b>DRAWING NO.</b></p> <p><b>14-107-002</b></p> <p><b>A1 SHEET</b></p> <p><b>REVISION</b></p> <p><b>0</b></p>
--	--

<p><b>GLADSTONE REGIONAL COUNCIL</b></p> <p>5 Don Cameron Drive, Cullara Qld 4880 P.O. Box 20, Gladstone DC Qld 4680 Ph: +61 7 4920201 Fax: +61 7 4920200 Email: Design@grc.qld.gov.au</p>	<p><b>REVISIONS</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Initial Design</td> <td>20/11/2014</td> </tr> <tr> <td>2</td> <td>Final Design</td> <td>20/11/2014</td> </tr> </tbody> </table> <p><b>APPROVED</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DESIGNER</th> <th>CHECKED</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>DATE</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>20/11/2014</td> <td>Initial Design</td> </tr> <tr> <td>20/11/2014</td> <td>Final Design</td> </tr> </tbody> </table> <p><b>SCALE</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SCALE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1:100</td> <td>20/11/2014</td> </tr> <tr> <td>1:200</td> <td>20/11/2014</td> </tr> <tr> <td>1:400</td> <td>20/11/2014</td> </tr> <tr> <td>1:800</td> <td>20/11/2014</td> </tr> </tbody> </table> <p><b>REVISION</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Initial Design</td> <td>20/11/2014</td> </tr> <tr> <td>2</td> <td>Final Design</td> <td>20/11/2014</td> </tr> </tbody> </table> <p><b>DATE</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>20/11/2014</td> <td>Initial Design</td> </tr> <tr> <td>20/11/2014</td> <td>Final Design</td> </tr> </tbody> </table> <p><b>SCALE</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SCALE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1:100</td> <td>20/11/2014</td> </tr> <tr> <td>1:200</td> <td>20/11/2014</td> </tr> <tr> <td>1:400</td> <td>20/11/2014</td> </tr> <tr> <td>1:800</td> <td>20/11/2014</td> </tr> </tbody> </table>	NO.	DESCRIPTION	DATE	1	Initial Design	20/11/2014	2	Final Design	20/11/2014	DESIGNER	CHECKED	DATE				DATE	DESCRIPTION	20/11/2014	Initial Design	20/11/2014	Final Design	SCALE	DATE	1:100	20/11/2014	1:200	20/11/2014	1:400	20/11/2014	1:800	20/11/2014	NO.	DESCRIPTION	DATE	1	Initial Design	20/11/2014	2	Final Design	20/11/2014	DATE	DESCRIPTION	20/11/2014	Initial Design	20/11/2014	Final Design	SCALE	DATE	1:100	20/11/2014	1:200	20/11/2014	1:400	20/11/2014	1:800	20/11/2014
NO.	DESCRIPTION	DATE																																																							
1	Initial Design	20/11/2014																																																							
2	Final Design	20/11/2014																																																							
DESIGNER	CHECKED	DATE																																																							
DATE	DESCRIPTION																																																								
20/11/2014	Initial Design																																																								
20/11/2014	Final Design																																																								
SCALE	DATE																																																								
1:100	20/11/2014																																																								
1:200	20/11/2014																																																								
1:400	20/11/2014																																																								
1:800	20/11/2014																																																								
NO.	DESCRIPTION	DATE																																																							
1	Initial Design	20/11/2014																																																							
2	Final Design	20/11/2014																																																							
DATE	DESCRIPTION																																																								
20/11/2014	Initial Design																																																								
20/11/2014	Final Design																																																								
SCALE	DATE																																																								
1:100	20/11/2014																																																								
1:200	20/11/2014																																																								
1:400	20/11/2014																																																								
1:800	20/11/2014																																																								

## Appendix B

