

### Schedule of Requirements

- a) Minimum Width at Property Line: 3.0m.
- b) Maximum Width at Property Line: 6.0m.
- c) Pavers: Minimum 60mm heavy duty rectangular or square unit.
- d) Brick paving Pattern: Refer to Standard Drawing TS 07-8.
- e) Sand Bed: 20-40mm thick.
- f) Sub-base: Minimum 100mm crushed limestone or rock base.
- g) Edge Restraints: refer to City's Standard Drawing TS 07-4, to the satisfaction of the Director Assets.
- h) Wing Dimension: refer to City's Standard Drawing TS 07-1.
- i) Verge Gradient: A positive 2% slope from the top of kerb to the property boundary (i.e. a rise of 20mm for every 1.0m).
- j) Vehicle crossing to be constructed to meet the kerb line at an angle of 90°. Any variation must be approved by the Director Assets
- k) Crossings at adjoining properties will each be constructed a minimum 1.0m from the common boundary.  
Note - wings to these crossovers may overlap.
- l) Vehicle crossings shall not be constructed closer than 7.5m to the intersection of property lines at street corners.

Please Note: Council will not accept liability for replacing any paving bricks located within the road reserve which are subsequently damaged through works undertaken therein.

### Construction

- a) General: The major brick paving manufacturers have identified the requirements of Local Government Authorities in the area of vehicle crossings. Their brochures covering the specifications for construction and laying of the pavers form the basis of this specification.
- b) Excavation:
  - (i) All surplus material resulting from site preparation and construction of the vehicle crossing shall become the property of the owner/contractor and shall be removed at the owner/contractor's expense.
  - (ii) Where an existing footpath is laid in the location where a vehicle crossing is to be constructed, the contractor shall:
    - If the footpath is precast concrete slabs - the slabs shall be removed and disposed of at the contractor's expense.
    - If the footpath is insitu concrete and has a thickness of 100mm or more - they must not remove the footpath, the vehicle crossing must be constructed either side of it.
- c) Sub-base Construction: The required compacted thickness of the sub-base layer will depend on the existing ground condition, however, the schedule of conditions indicates the minimum requirements.

- d) Edge Restraints:
  - (i) The perimeter of all paved areas must be provided with a restraining barrier (refer to TS 07-4).
  - (ii) Restraints must be 250mm wide and a minimum of 80mm deep and robust enough to withstand vehicle impact and prevent any lateral movement of the bricks as this movement could cause pavement failure.
  - (iii) Mountable road kerbs provide adequate restraint on the vehicle crossing/road interface. The remaining sides must be supported with barriers - eg concrete, grouted brick.
  - (iv) Visible edge restraints shall be installed flush to the crossover and approved verge level.
- e) Bedding Sand:
  - (i) The bedding material needs to be a well-graded sand passing a 5mm sieve. Bricklayers sand and single sized dune sands are not suitable. The sand shall be non-plastic and free from deleterious materials such as stones, tree roots, clay lumps and excessive organic material.
  - (ii) At the time of placing, the sand should have a uniform moisture content. The sand must be screeded slightly ahead of laying and protected from the compaction. The pre-compacted depth should be 20-40mm.
- f) Laying Patterns: As per schedule of requirements.
- g) Laying of Bricks: Bricks shall be placed on the bedding sand by hand with 2-4mm gaps between adjacent bricks. All full bricks shall be laid first. Closure bricks shall be cut with a saw and fitted subsequently. Spaces of less than 20% of brick size shall be in-filled subject to the supplier recommendation.
- h) Compaction and Joint Filling:
  - (i) The units should be immediately compacted and brought to level by not less than three passes of the vibrating plate compactor. The plate should have sufficient area to simultaneously cover 12 units. To prevent damage to pavers, sheets of plywood of minimum thickness of 12mm shall be laid on the bricks to prevent the compactor coming in contact with the paved surface. As soon as possible after compaction, sand for joint filling should be broomed over the pavement and into the joints. Excess sand should be removed as soon as joints are filled.
  - (ii) Ideally the sand used for joint filling should be finer than the bedding layer with a nominal maximum particle size of 2mm. Sand used for joint filling should be free from salts or contaminants likely to cause efflorescence. However, the use of bricklayer's sand or the addition of a small amount of silty material to the joint filling sand can be of considerable benefit in reducing water penetration in the early life of the pavement.
- i) Levels:
  - (i) The vehicle crossing levels shall be at a minimum grade of positive 2% or as specified by the Director Assets but in no case shall the vehicle crossing junction at the property line be stepped unless specifically authorised by the Director Assets.
  - (ii) The vehicle crossing junction with the kerb face shall be matched to the mountable kerb section as the existing situation requires.

## **General**

- a) This specification is made pursuant to the provision of Regulation 12 of the Local Government (Uniform Local Provisions) Regulations 1996.
- b) The construction of vehicle crossings shall be executed to the direction of the City or its authorised deputy.
- c) All materials used in the construction of vehicle crossings shall be in accordance with the standard specification of Council and any materials used which are inferior to those specified or as directed by the City shall be liable to rejection and replacement without 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 Director Assets.

- d) Protection of works and the public shall be provided by the contractor who shall supply and keep supplied as directed, all necessary signs, barricades, road warning lamps, temporary bridges or any other thing necessary or as may be directed by the Director Assets and failure to provide or keep provided shall render the contractor liable under Regulation 17 of the Local Government (Uniform Local Provisions) Regulations 1996.
- e) Any damage which may occur to any Council facilities or private property during the course of the works or which may subsequently become evident from the operations thereof, shall be the sole responsibility of the owner/contractor who shall be held responsible for the repair, replacement, legal claim liability or any other thing which may arise from the carrying out of any such works.

### **Contribution**

If it is a first vehicle crossing constructed to the premises, Council may contribute towards the cost. Application for a subsidy payment must be made in writing within six (6) months of the date it was constructed and must be accompanied by proof of payment (invoice or delivery docket). The Director Assets may then inspect the vehicle crossing and if it is constructed in accordance with Council's specification, the subsidy payment will be forwarded by post.

### **Street and Verge Bond Permits**

If you apply for a building permit, you will also be required submit an application for the City's Street and Verge Bond Permit. This application includes a non-refundable administration fee. If the construction value is over \$5000, an additional bond fee applies. For more information on these applications (including fees and a link to apply online), please refer to the [Street and Verge Bond page](#) on the City's website.

### **Fees**

To determine your application fees, please refer to please refer to our [Building Fee Schedule](#) or [Building Application Fee Calculator](#) on the City's website.

**For further information, please contact the City's Building Services on 9405 5000.**

Harminder Singh  
**DIRECTOR ASSETS**

#### Disclaimers:

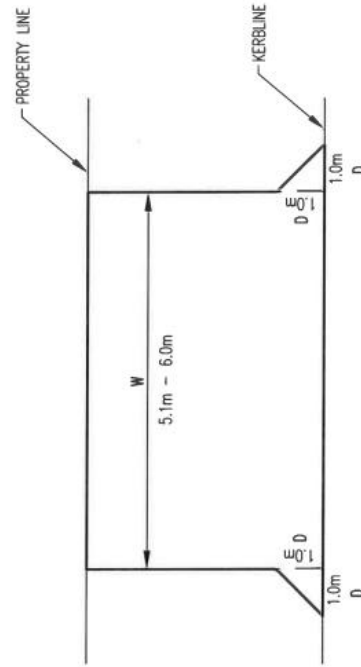
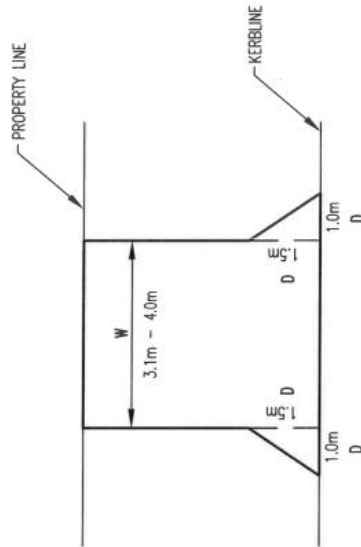
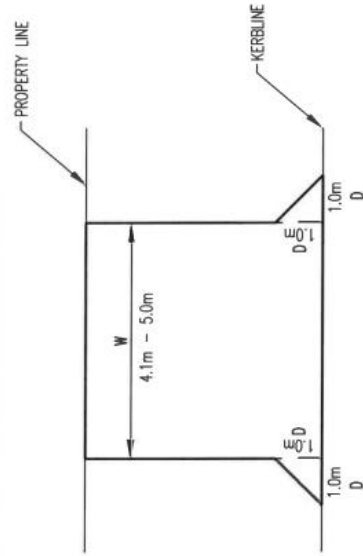
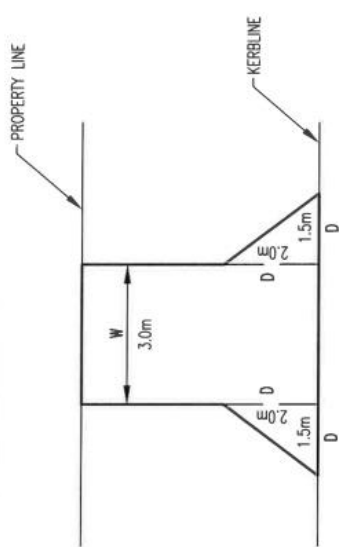
1. In line with the City's recordkeeping requirements, please ensure that the information included on any application form is accurate and complete. Please also retain a copy of the completed form before submitting with the City as the form and any supporting documents will not be returned. The City accepts no responsibility for any loss, damage, liability or inconvenience suffered by any person as a result of using an application form or lodging an application form with the City.

2. This information sheet is produced by The City of Wanneroo in good faith and the City accepts no responsibility for any ramifications or repercussions for providing this information. This information sheet is correct as of July 2020 and prone to alteration without notification.

No	ISSUED	BY	DATE	AUTH
0.		J.M.T.	8/2001	B.C.
1.	CURVED WINGS REMOVED, NOTES AMENDED	T.T.	3/2006	B.C.
2.	LENGTHS OF WINGS REDUCED, NOTE AMENDED	P.J.	9/2017	B.C.
3.	UPDATED TITLE BLOCK BRAND	K.R.	7/2022	P.W.

CROSSOVER WIDTH (W)	WING DIMENSIONS (D)
3.0m	2.0m x 1.5m
3.1m - 4.0m	1.5m x 1.0m
4.1m - 5.0m	1.0m x 1.0m
5.1m - 6.0m	1.0m x 1.0m

IF A CONCRETE FOOTPATH EXISTS ACROSS THE FRONTAGE OF A PROPERTY, THE FOOTPATH MUST REMAIN AND THE CROSSOVER CONSTRUCTED AS TO MATCH THE EXISTING FOOTPATH LEVELS EITHER SIDE.



\* INDICATES SIGNATURES ON ORIGINAL ISSUE OF DRAWING.

SCALE: 1:100	DATUM: N/A	GRID: N/A
DESIGNED: C.O.W. CIVIL DESIGNER	APPROVED: * B. McCRAWLEY COORDINATOR ASSET PLANNING SERVICES 28/7/2022	
DRAWN: C.O.W. CIVIL DESIGNER	APPROVED: * B. CHANG MANAGER ASSET PLANNING 1/8/2022	
DRAWING ARCHIVE:	STANDARD CHECK: * J. SONG 1/8/2022	
	* B. GEE 1/8/2022	

## CROSSOVERS AND VERGE

RESIDENTIAL  
WIDTH ALTERNATIVES

STANDARD

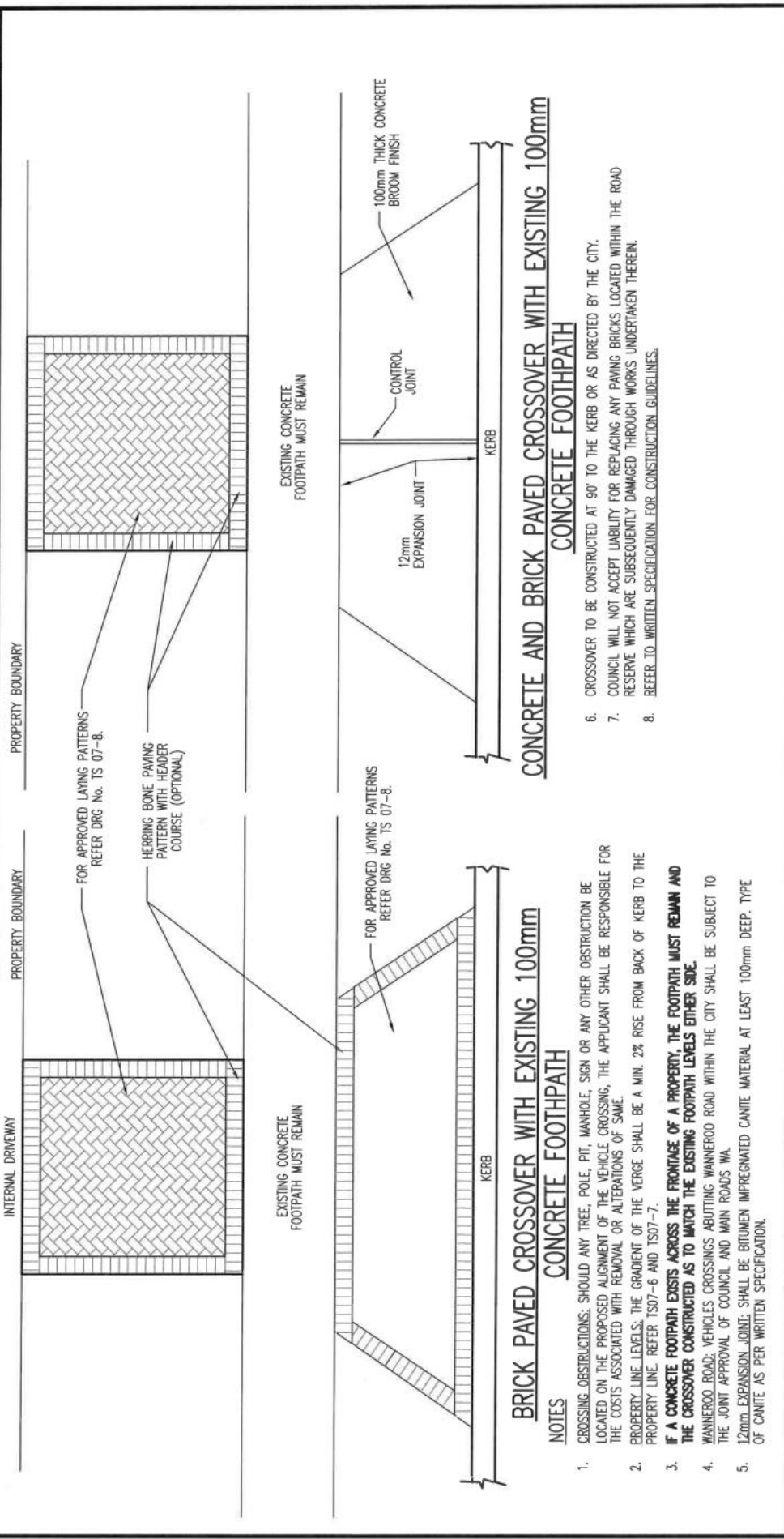
## CITY OF WANNEROO ASSETS

FILE No. N/A	DRAWING No. TS 07 -1-3	SHEET	REVISION
PROJECT No. N/A			



ORIGINAL PRG. SIZE  
**A3**

No		REVISION		BY	DATE	AUTH	No	REVISION		BY	DATE	AUTH
0.	ISSUED	J.W.T.	8/2001	J.W.T.	8/2001	J.W.T.	3.	NOTES AMENDED - DUPLICATE REFERENCE REMOVED	P.A.	6/2007	B.C.	
1.	AMENDED	J.W.T.	5/2003	J.W.T.	5/2003	J.W.T.	4.	NOTES AMENDED - NOTE 3 BOLD, SCHEDULE OF REQUIREMENTS REMOVED	P.A.	9/2017	B.C.	
2.	REFERENCE TO CURVE WINGS REMOVED	J.T.	3/2006	J.T.	3/2006	J.T.	5.	UPDATED TITLE BLOCK BRAND	K.R.	7/2022	P.W.	



**BRICK PAVED CROSSOVER WITH EXISTING 100mm CONCRETE FOOTPATH**

**CONCRETE AND BRICK PAVED CROSSOVER WITH EXISTING 100mm CONCRETE FOOTPATH**

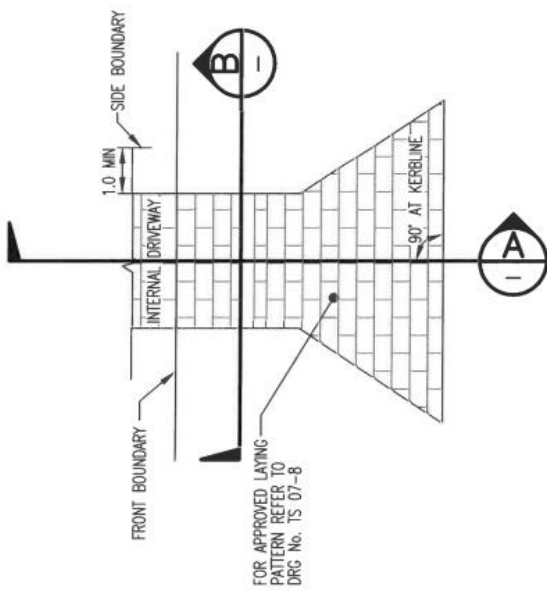
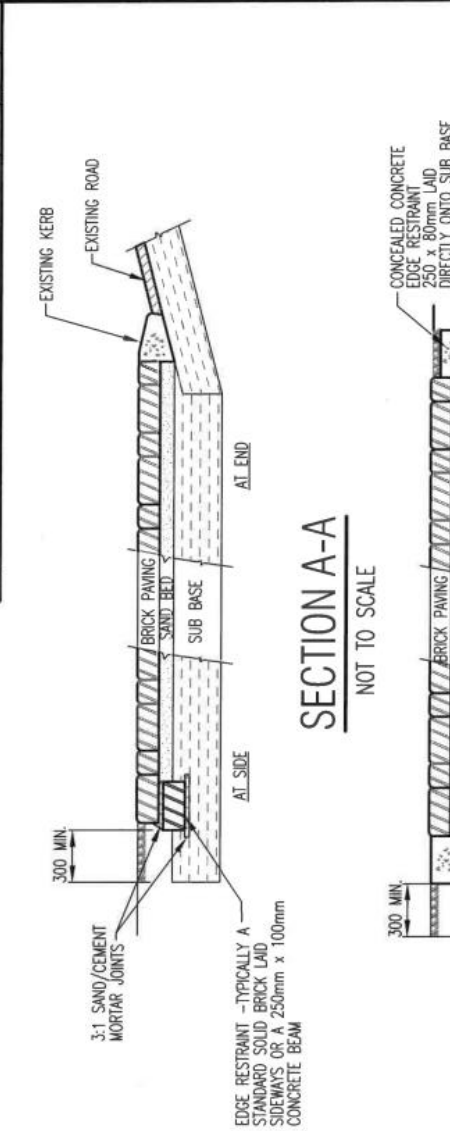
- NOTES**
- CROSSING OBSTRUCTIONS: SHOULD ANY TREE, POLE, PIT, MANHOLE, SIGN OR ANY OTHER OBSTRUCTION BE LOCATED ON THE PROPOSED ALIGNMENT OF THE VEHICLE CROSSING, THE APPLICANT SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH REMOVAL OR ALTERATIONS OF SAME.
  - PROPERTY LINE LEVELS: THE GRADIENT OF THE VERGE SHALL BE A MIN. 2% RISE FROM BACK OF KERB TO THE PROPERTY LINE. REFER TS07-6 AND TS07-7.
  - IF A CONCRETE FOOTPATH EXISTS ACROSS THE FRONTAGE OF A PROPERTY, THE FOOTPATH MUST REMAIN AND THE CROSSOVER CONSTRUCTED AS TO MATCH THE EXISTING FOOTPATH LEVELS EITHER SIDE.**
  - WANNEROO ROAD: VEHICLES CROSSINGS ABUTTING WANNEROO ROAD WITHIN THE CITY SHALL BE SUBJECT TO THE JOINT APPROVAL OF COUNCIL AND MAIN ROADS WA.
  - 12mm EXPANSION JOINT: SHALL BE BITUMEN IMPREGNATED CANITE MATERIAL AT LEAST 100mm DEEP. TYPE OF CANITE AS PER WRITTEN SPECIFICATION.

- CROSSOVER TO BE CONSTRUCTED AT 90° TO THE KERB OR AS DIRECTED BY THE CITY.
- COUNCIL WILL NOT ACCEPT LIABILITY FOR REPLACING ANY PAVING BRICKS LOCATED WITHIN THE ROAD RESERVE WHICH ARE SUBSEQUENTLY DAMAGED THROUGH WORKS UNDERTAKEN THEREIN.
- REFER TO WRITTEN SPECIFICATION FOR CONSTRUCTION GUIDELINES.

		<b>CITY OF WANNEROO</b> <b>ASSETS</b>		ORIGINAL Dwg. SIZE <b>A3</b>
<b>CROSSOVERS AND VERGE</b> RESIDENTIAL CONCRETE AND BRICK PAVED		DRAWING No. <b>TS 07 -3-5</b>	SHEET <b>-3-5</b>	REVISION
FILE No. N/A	PROJECT No. N/A	<b>STANDARD</b>		

SCALE: 1:50	DATUM: N/A	GRID: N/A
DESIGNED: C.O.W. CIVIL DESIGNER	APPROVED: * B. McCAWLEY COORDINATOR ASSET PLANNING SERVICES	28/7/2022
DRAWN: C.O.W. CIVIL DESIGNER	APPROVED: * B. CHANG WANNEROO ASSET PLANNING	1/8/2022
DRAWING ARCHIVE	STANDARDS CHECK: * J. SONG TRANSPORT & TRAFFIC ASSET PLANNER	1/8/2022
	APPROVED: * B. GEE DIRECTOR ASSETS	1/8/2022

No	REVISION	BY	DATE	AUTH
0.	ISSUED	J.W.T.	8/2001	
1.	KERBED WINGS REMOVED, NOTES AMENDED	T.T.	3/2006	B.C.
2.	REMOVED SCHEDULE OF REQUIREMENTS	P.J.	9/2017	B.C.
3.	UPDATED TITLE BLOCK BRAND	K.R.	7/2022	P.W.



### BRICK PAVED CROSSOVER LAYOUT

#### NOTES:

- CROSSING OBSTRUCTIONS: SHOULD ANY TREE, POLE, PT. MANHOLE, SIGN OR ANY OTHER OBSTRUCTION BE LOCATED ON THE PROPOSED ALIGNMENT OF THE VEHICLE CROSSING, THE APPLICANT SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH THE REMOVAL OR ALTERATIONS OF SAME.
- PROPERTY LINE LEVELS: THE GRADIENT OF THE VERGE SHALL BE A MIN. 2% RISE FROM BACK OF KERB TO THE PROPERTY LINE. IF A CONCRETE FOOTPATH EXISTS ACROSS THE FRONTAGE OF A PROPERTY, THE FOOTPATH MUST REMAIN AND THE CROSSOVER CONSTRUCTED SO AS TO MATCH THE EXISTING FOOTPATH LEVELS EITHER SIDE.
- WANNEROO ROAD: VEHICLE CROSSINGS ABUTTING WANNEROO ROAD WITHIN THE CITY SHALL BE SUBJECT TO APPROVAL OF COUNCIL AND MAIN ROADS JOINTLY.
- COUNCIL WILL NOT ACCEPT LIABILITY FOR REPLACING ANY PAVING BRICKS LOCATED WITHIN THE ROAD RESERVE WHICH ARE SUBSEQUENTLY DAMAGED THROUGH WORKS UNDERTAKEN THEREIN.
- REFER TO WRITTEN SPECIFICATION FOR CONSTRUCTION GUIDELINES.

		<b>CITY OF WANNEROO</b> <b>ASSETS</b>		ORIGINAL DRG. SIZE <b>A3</b>
FILE No. N/A	DRAWING No. <b>TS 07 -4-3</b>	SHEET <b>4-3</b>	REVISION	
<b>CROSSOVERS AND VERGE</b> RESIDENTIAL BRICK PAVED CROSSOVER		<b>STANDARD</b>		
SCALE: <b>1:100</b>	DESIGN CHECKED: C.O.W.	DATE:	GRD:	N/A
DRAWN: C.O.W.	DESIGN ARCHIVE:	APPROVED: * B. McCAWLEY COORDINATOR ASSET PLANNING SERVICES 26/7/2022	APPROVED: * B. CHANG MANAGER ASSET PLANNING 1/8/2022	N/A
CIVIL DESIGNER DRAWING ARCHIVE:	STANDARDS CHECK: * J. SONG 1/8/2022	APPROVED: * B. GEE DIRECTOR ASSETS 1/8/2022		