Vehicle Crossover Construction Specifications

Nature of Work

The Contractor shall construct a concrete vehicle crossover in accordance with the Council's standard drawings, properly formed and floated to a true and even non-slip surface. The crossing shall be true to plan and to the entire satisfaction and approval of Council's Works Officer.

Permits

The person or company to whom the permit is issued shall be responsible for all works required in the construction, protection and cleaning up etc., of the vehicle crossover.

All necessary permits shall be obtained, fees paid prior to the commencement of the work. If a vehicle crossover is constructed without a permit, or without Councils supervision and if the crossing has not been constructed to Council's standards, then in accordance with the Council's power in the Local Government Act 1958, the crossing may be removed and the path, nature strip and kerb reinstated by the City of Port Phillip at the cost of the property owner concerned.

Public Protection

Provision must be made for the complete protection of the public by the erection of proper fencing and keeping sufficient lights burning all night. The person who has given notice of intention to construct a vehicle crossover, as well as the person actually constructing such a vehicle crossover, shall be held responsible and liable for any accident, damage, claim or loss which may happen to the public or any person, or to any property or loss which results during the progress of the work and until such is passed as complete by Standard Roads.

Insurance

The contractor shall be responsible for ensuring that adequate public liability insurance to a minimum value of $10,000,000 is held and kept current for the duration of any works within the City of Port Phillip and for such additional period until the works are completed.

Supervision

The construction of all vehicle crossovers shall be supervised and inspected by an officer of Council's Works Officer.

Inspections of all vehicle crossovers must be arranged by contacting Council's Works Officer. Hours of Supervision shall be between 8.00am and 4.30pm Mondays to Fridays inclusive and at least 2 business days shall be given prior to commencement of the work.

No vehicle crossovers shall be poured on any day when the temperature is in excess of 35˚C or when the Council's Works Officer determines the weather conditions to be unsuitable.

Barricades and Lights

Lighting and barricading of excavations and finished work are to be provided for the safety of the public and to protect the finished work from damage. Barricades shall be lit from sunset to sunrise but shall be in position by 4.30pm pm any day.

Excavation

The site of the proposed crossing is to be excavated and neatly trimmed to provide, after compaction of the subgrade, a clear depth in accordance with the standard drawing plus an additional depth of 50mm for an approved bedding material. For commercial vehicle crossovers the depth must be as specified by Council's Works Officer.

The excavation is to be approved by Council's Works Officer prior to the spreading and compaction of bedding material. All excavated material shall be loaded directly onto a vehicle and lawfully disposed of.

Excavated material must be removed from the site of the work on the same day as taken out. Surplus bluestone kerbing and pitchers must be taken to the council depot cnr of White and Boundary Streets, South Melbourne, 3205.

Foundation Bed

After approval of the excavation Council's Works Officer must where required, spread a layer of approved sand or fine crushed rock of sufficient thickness to obtain a compacted depth of 50mm.

Existing Construction

Existing Vehicle Crossovers

A condition of the granting of a permit to construct a vehicle crossover is that any redundant vehicle crossover must be removed and any footpath, kerb, channel and nature-strip reinstated. Any gaps left in the kerb must be reinstated with a similar kerb section to the existing kerb. Providing that such work is done at the same time as a new vehicle crossover, no further supervision fee is payable.

Existing Kerbing and Channelling

Where a proposed vehicle crossover abuts a concrete channel, such channel section between the ends of the concrete returns must be removed and replaced in concrete having a section 230mm in depth by 300mm wide reinforced with 4 no. 100mm diameter rods top and bottom or, the reinforcement must be continued across the channel.

Existing Pitcher Channelling

Where the proposed vehicle crossover abuts a pitched channel, the whole of the pitching between the ends of the concrete returns must be lifted and re-laid on a depth of 75mm of concrete. The level of the pitching must conform to the pitching on both sides of the vehicle crossover.

Size of Crossing

The maximum width of a vehicle crossover must be in accordance with the approved plans for the location in which the vehicle crossover is to be constructed.

Concrete

Material

All concrete used must be ready mixed concrete from a source approved by the FRH Group and comply with the requirements of the Australian Standard Specification for Ready Mixed Concrete AS1379-1973, and amendments thereto. The concrete must conform to the following requirements: -

- The slump of the concrete at the time and place of delivery must be not less than 30mm and not more than 75mm.
- The maximum size of the aggregate in the concrete must be 25mm.
- The type of cement in the concrete must be Portland Cement Type A ordinary or normal cement as described and specified in the Australian Standard Specification No. AS 1315 and any amendments thereto.
- The compressive strength of the concrete shall be not less than 17.5MPa at the age of 7 days and not less than 25 MPa at the age of 28 days when tested in accordance with the method laid down in the Australian Standard Method to Test for Compressive Strength of Concrete Specimens No. AS1012 and any amendments thereto.
- The proportion of fine aggregate to coarse aggregate will depend on the grading of these materials and shall be fixed to obtain the above requirements and to obtain also, after compaction, a sufficient excess and no more, of mortar, to provide for satisfactory trowel finishing.

Construction

The concrete channel must be cast monolithic (as one) with the slab.

Surface Finishing

The concrete paving must be finished to an approved, even, non-skid surface, as distinct from a smooth polished surface; this shall be achieved by trowelling the surface of the concrete immediately after it has been compacted. Attention is drawn to the provision for inclusion on the concrete mix, of sufficient fine aggregate for finishing purposes. Unless specifically approved by Standard Roads, render or dryers must not be used. Excessive trowelling of the surface must be avoided. All edges and joints in the concrete must be made by means of suitable tools. The finished surface must be true and even and to the correct grades. Freshly finished concrete surfaces must be effectively protected from rains or injury from other sources until hard set.

Stormwater Pipes

Any existing stormwater outlets that require relocation must be re-laid to an approved line and grade to discharge effectively into the street channel below the new vehicle crossover. All pipes used for drainage purposes must be of galvanised wrought iron, ductile iron or reinforced concrete.

If 600mm cover can be provided, sewer grade UPVC pipe may be used to connect to the underground stormwater system.

Street Trees and Obstructions

If an obstruction such as a street tree or Public Authority manhole, pit, or pole cannot be avoided when locating a crossing, the Contractor must arrange for relocation of the asset prior to the commencement of works. Any costs incurred in alteration of any obstruction shall be borne by the Contractor including street trees and poles.

Street trees must only be removed or pruned by an authorised officer of Council, unless specifically approved by the Parks & Open Spaced unit, and the cost of this work will be borne by the Contractor.

In the case of Public Authorities manholes or poles or other assets, the Contractor must arrange for their relocation. Service Authority assets obstructing a new vehicle crossover must be relocated within the property frontage or placed underground as appropriate.

Variation of Standard Specifications

The standard specification of concrete vehicle crossovers may be varied by Council's Works Officer if:

- The vehicles which may use such vehicle crossover warrant the construction of a heavy duty type crossover;
- And the nature of the ground is such that the construction of a heavy duty type vehicle crossover is warranted necessary.

In such cases, Standard Roads must specify the depth and type of bedding, the depth of concrete paving and the type of reinforcement.

In general, a commercial or heavy duty type of crossing must be constructed with the concrete 150mm in depth and reinforced with F72 fabric placed 40mm from the top surface. Fabric must be placed in bar chairs. Bedding requirements are as for domestic vehicle crossovers.

Cleaning Up

Upon completion of the work, the Contractor must clean up the road reserve of any materials associated with the vehicle crossover construction.

Purpose of the Guidelines

The City of Port Phillip is committed to supporting and enhancing the health and safety of its residents and therefore supports pedestrian movement. These Guidelines have been developed to support the safe and appropriate design of crossovers, to deliver pedestrian priority, and to provide a framework for their management.

Guiding Principle

The needs, desires and safety of pedestrians must be given priority over vehicular access in decision-making, design and location of crossovers within the City of Port Phillip. Council does not encourage new vehicle crossovers, but where there is a demonstrated need for a vehicle crossover, the Guidelines will be applied.

Guidelines

Pedestrian Priority

- Where there is a conflict between pedestrian facilities and crossover design, pedestrian facilities will take priority.
- To minimise pedestrian conflict and visual intrusion, ordinarily, no more than one crossover per property will be supported.
- Vehicle crossovers will maintain the material and colouring of the footpath to maintain a visually consistent footpath for pedestrians and to provide a clear pedestrian priority, consistent with Road Rules.
- The camber of the crossover must be aligned to maintain even surfaces for the effected footpath.
- Crossovers must be free from potential tripping hazards in both design and levels.
- Crossovers must be designed to ensure safety for all users of footpath including the elderly, those with disabilities and those with wheelchairs, strollers, shopping jeeps and prams.

Planning Permit Requirements

Heritage Overlays, Special Building Overlays and Road One Zones (declared arterial roads) all trigger a Planning Permit.

The granting of a Planning Permit does not constitute an approval under the Local Laws or approval of Council's Traffic Engineer, with regards to traffic and pedestrian safety, and therefore the appropriate crossover permit is required.

Arterial Roads

Vehicle crossovers requiring a vehicle to reverse onto an arterial road will not be supported.

Street Trees

Proposed vehicle crossovers adjacent to street trees must be at least two metres from the tree and/or in accordance with the requirements of Council's Tree Management Officer. Vehicle crossovers must not adversely affect the health and longevity of existing street trees.

Other Assets and Street Furniture

Vehicle crossovers must be at least one metre from existing SEC poles. Existing side entry pits are required to be relocated at the developer's expense. Vehicle crossovers must not adversely affect other street furniture and assets.

On-Street Parking

Vehicle crossovers must be located to ensure maximum retention of the existing on-street supply taking into account the length of spaces on each side of the proposed crossover and the location of other adjacent crossovers.

A vehicle crossover for a single dwelling should not lead to a net loss of parking or significantly reduce parking turn-over. Council is unlikely to support a vehicle crossover that leads to one or more on-street spaces being replaced with a private space, as this represents inefficient provision of parking for the community.

Neighbourhood Character

The scale of a vehicle crossover including the width must be designed to be sympathetic to the appearance of the street and existing kerbs and channels.

Technical Requirements

All works associated with the crossover shall be at the developer's expense. Vehicle crossovers should be standardised and be designed to accord with the standard drawings:

SD4101 - Concrete Vehicle crossing

SD4102 - Bluestone vehicle crossing (Heritage area)

SD4103 - Bluestone vehicle crossing (Non-Heritage area)

SD4104 - Temporary crossing

SD4107 - Steep Vehicle Crossing Treatment (Residential Use Only)

Council's Standard Drawings can be downloaded from:
http://www.portphillip.vic.gov.au/road_opening_permit.htm