



ETHEKWINI TRANSPORT AUTHORITY
ROAD SYSTEM MANAGEMENT DEPARTMENT
TRAFFIC ENGINEERING

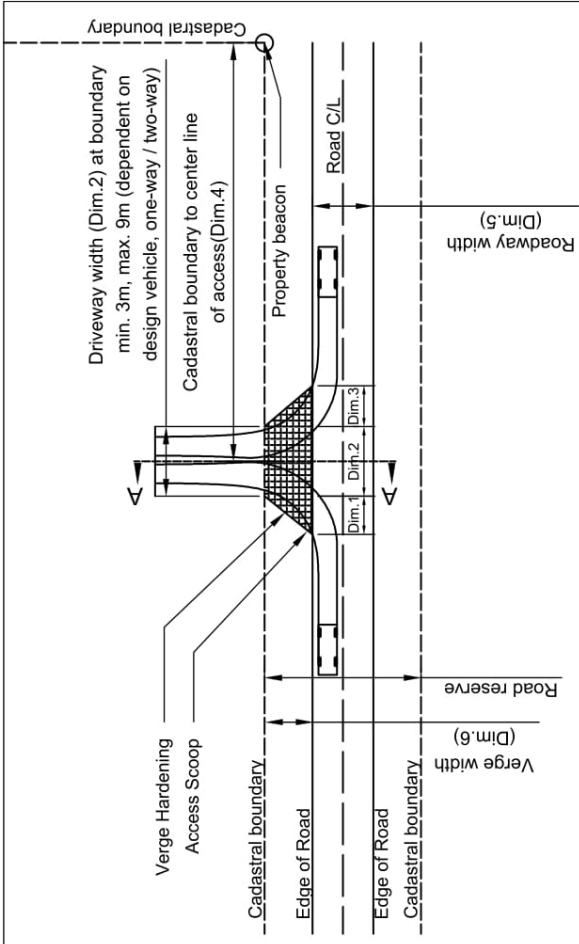
29 November 2022

PUBLICATION
MANUAL FOR TRAFFIC IMPACT ASSESSMENTS
AND SITE TRAFFIC ASSESSMENTS

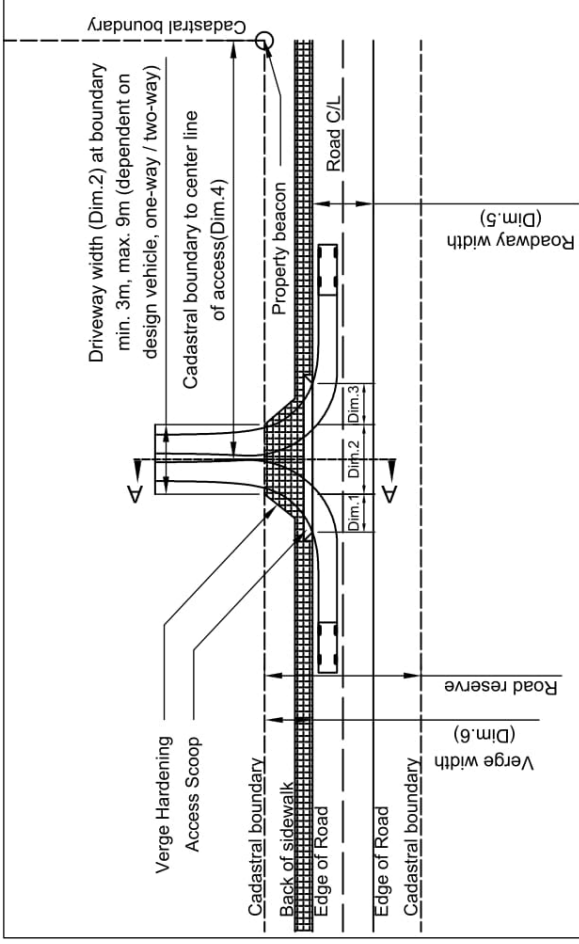
Previous Publication Notice 0.9

REASON FOR NOTICE:

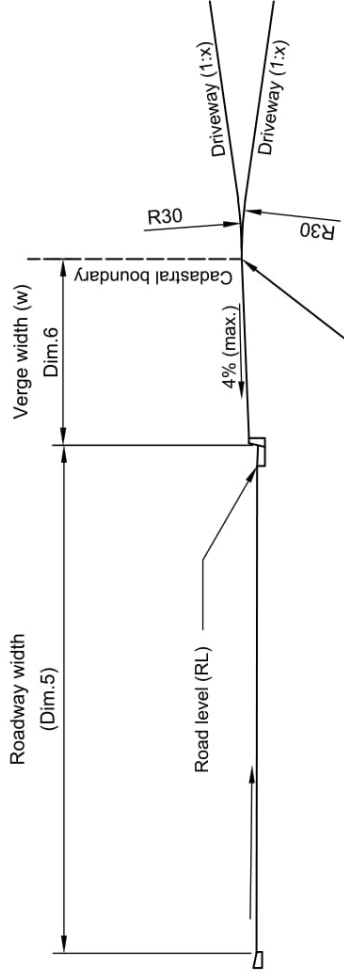
- 1. Amendments to Publication Notices 0.8 and 0.7.**
 - a. Submitting SPLUMA applications during the COVID-19 lockdown period until further notice.**
 - b. Revised threshold for traffic impact and site traffic assessments**
 - c. Base traffic count information for preparing traffic impact assessments**
 - 2. Updated access detail**
-
- 1.a. Submitting SPLUMA applications during the COVID-19 lockdown period until further notice as indicated in Publication Notice 0.8 is no longer applicable. The submission of SPLUMA applications is via the Development Planning, Environmental and Management Unit.
 - 1.b. The threshold for traffic impact and site traffic assessments remains at 50 peak hour vehicle trips as per Publication Notice 0.7.
 - 1.c. Base traffic count information for preparing traffic impact assessments - Adjustments to base traffic counts used for the preparation of traffic impact and site traffic assessment reports are no longer required for traffic count surveys carried out from 1 January 2022.
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2. Updated access detail – updated access detail with requirements for specific dimensions.



TYPICAL ACCESS DETAIL WITHOUT SIDEWALK



TYPICAL ACCESS DETAIL WITH SIDEWALK



Driveway level at boundary (m) = RL + 0.15 + (w/25)

SECTION A-A

Notes:

1. Dim.1, Dim.2, Dim.3, Dim.4, Dim.5, Dim.6 - Required access dimensions to be shown on building plan
2. Driveway gradients:
 - a. max. 1:7 for light vehicles
 - b. max. 1:8 for light vehicles and pedestrians
 - c. max. 1:10 for heavy vehicles (no pedestrians)
 - d. max. 1:5 for light vehicles over short sections at discretion of ETA

ACCESS DETAIL

Previous Publication Notice 0.8

REASON FOR NOTICE:

Submitting SPLUMA applications during the COVID-19 lockdown period until further notice.

1. SPLUMA (Spatial Planning and Land Use Management Act) – ETA submission procedure and requirements

In view of the pandemic ETA requires that all SPLUMA applications are electronically submitted via email as follows:

1. A cover e-mail must be submitted to ETA : Pretty.Khumalo@durban.gov.za / Nomusa.Luthuli2@durban.gov.za
2. The cover e-mail must contain the application reference details in the subject line of the e-mail, i.e. description of the SPLUMA application, town planning enquiry number, property address and cadastral description. Further description of the application can be contained in the body of the e-mail
3. A list of documents (e.g. Traffic impact assessment report, designs, town planning reference document, etc) with their reference numbers must be contained in the e-mail
4. The documents can be attached to the e-mail or made available via a *downloadable link* included in the e-mail.
5. The maximum file size for e-mails is 10MB. Should the application documentation exceed 10MB, several e-mails can be submitted as parts and clearly referenced as such. Alternatively make use of providing ETA with access to a *downloadable link*.
6. All documents shall be in PDF file format. Where necessary, ETA will request electronic copies of the native software files.
7. ETA does not require the town planning document. A letter from the town planner must be included in the submission that contains the pertinent information that was used in the traffic impact assessment e.g. existing and proposed zoning, development proposal, town planning controls, etc. The town planner is required to include a disclaimer in the letter stating that the information contained in the letter is as per the town planning document. The town planning document may be made available via a *downloadable link*.
8. ETA may request other information to be submitted during the assessment of the application
9. All communication on the application will be via e-mail, telephone or where necessary using video calls. Physical presence meetings will only be entertained by exception.

2. All other traffic impact assessment or traffic engineering related submissions

10. All other traffic impact assessment or traffic engineering related submissions must be made in electronic format to ETA via e-mail : : Pretty.Khumalo@durban.gov.za / Nomusa.Luthuli2@durban.gov.za

Previous Publication Notice 0.7

8 May 2020

REASON FOR NOTICE:

Preparing traffic impact studies during the COVID-19 lockdown period until further notice.

- 1. Revised threshold for traffic impact and site traffic assessments**
- 2. Base traffic count information for preparing traffic impact assessments**
- 3. Public transport plans for traffic impact assessments**

1. Revised threshold for traffic impact and site traffic assessments

The threshold for traffic impact and site traffic assessments (TIA/STA) has increased from 11 trips to 50 trips

The thresholds for submission of TIA's are as follows:

- *A TIA shall be undertaken and submitted when an application is made for a change in land use when the highest total additional hourly vehicular trip generation (including pass-by and diverted trips) exceeds **50** vehicle trips.*

The thresholds for submission of STA's are as follows:

- *A STA shall be undertaken and submitted when an application is made for the erection of a building or other structure (e.g. roads and other) on a site for which a Site Development Plan is required when the highest total hourly vehicular trip generation (including pass-by and diverted trips) exceeds **50** vehicle trips.*

Notwithstanding the thresholds, the ETA may require a TIA / STA to be undertaken having considered factors peculiar to the application and/or its impacts in terms of the environment, road network, and persons directly affected by the application.

Applications for changes in land use that result in additional vehicular trip generation that are below the threshold values are not exempt from the provision of transport infrastructure where such infrastructure is deemed necessary by the ETA.

Applications for which a site development plan is required and where the vehicle trip generation values are lower than the thresholds for STA's shall not be exempt from the provision of transport infrastructure where required such infrastructure is deemed necessary by the ETA.

2. Base traffic count information for preparing traffic impact assessments

Due to the change in travel demand and patterns (as a result of the COVID-19 Lockdown), the following approach shall be used for obtaining the base year traffic counts to be used in traffic impact assessments:

For traffic impact assessments of less than 1000 peak hour vehicle trips (including pass- by and diverted trips):

1. Obtain historic traffic counts for at least one intersection in the study area.
2. Apply an applicable growth factor (from the ETA manual) to the historic counts in order to arrive at the base year traffic counts (this is the no lockdown scenario).
3. Carry out existing traffic count surveys (counts carried out during the lockdown) at the intersection in 2 above and determine the percentage / factor difference between the counts for the no lockdown scenario and lockdown scenario.
4. Apply this percentage / factor difference to all other intersections in the study area for which traffic counts are carried out during the lockdown period.
5. Where there are no available historic traffic counts, contact the ETA to agree on a percentage / factor to be applied to traffic counts carried out during the lockdown period or an alternative approach.

For traffic impact assessments of 1000 or more peak hour vehicle trips (including pass- by and diverted trips):

1. The EMME 4 model shall be used to obtain traffic percentage / factors to be applied to existing counts carried out during the lockdown period and also future background traffic.

Please note that ETA will be carrying out traffic surveys at key cordons and screen lines (which will be analysed against historic records) to establish factors that can be applied to traffic counts that are undertaken during the lockdown period. ETA will advise in due course relating to this aspect.

3. Public transport plans for traffic impact assessments

A public transport plan will **not** require where the public transport demand (based on modal splits from the ETA's TIA and STA manual) is less than 100 public transport passengers.

Please note the compliance with the infrastructure (facilities) requirements as per Section 5.3.5 of the ETA's TIA and STA manual is required.

Previous Publication Notice 0.6

13 April 2018

REASON FOR NOTICE:

Application for change in land use to commercial or industrial development that requires access from residential Class 4 and 5 roads.

The ETA Manual for Traffic Impact Assessments and Site Traffic Assessments currently prohibits access to commercial and industrial development from residential roads. Access to commercial and industrial developments from residential roads are now supported subject to compliance with the following minimum requirements (in addition to the requirement for a traffic impact assessment where required):

1. Minimum road reserve and surfaced road width to accommodate the proposed land use
2. Traffic operations (e.g. vehicular road capacity)
3. Pedestrian facilities (e.g. sidewalk)
4. Required pavement layer structure to accommodate the proposed land use

Previous Publication Notice 0.5

REASON FOR NOTICE:

- 1. PARKING REDUCTION**
- 2. SPLUMA (Spatial Planning and Land Use Management Act) APPLICATIONS – ETA SUBMISSION PROCEDURE AND REQUIREMENTS**

1. PARKING REDUCTION

A reduction in parking is considered subject to the following:

- a. Site constraints (e.g. terrain, environmental, etc.) – maximum 10 %
- b. Public transport utilisation and provision of public transport facilities – This is development specific and the extent of reduction is subject to agreement with the Ethekwini Transport Authority Public Transport Planning Branch

Parking utilisation surveys shall not be used for a reduction in parking

2. SPLUMA (Spatial Planning and Land Use Management Act) – ETA SUBMISSION PROCEDURE AND REQUIREMENTS

- a. Applications that are lodged via the SPLUMA application process must be submitted to ETA offices as specified in the following requirements.
- b. It is mandatory that the Planning Enquiry Form (completed and signed by the Ethekwini Municipal Land Use Management official) accompanies the application together with the necessary documentation as specified in the following requirements:



ETHEKWINI TRANSPORT AUTHORITY

30 Archie Gumede Place | Durban | 4001
P O Box 680 | Durban | 4000
Tel: 031 311 7344 | Fax: 031 305 5871
www.durban.gov.za

SPLUMA APPLICATION ETHEKWINI TRANSPORT AUTHORITY LAND USE AND DEVELOPMENT REQUIREMENTS

ID	Land use information	YES	NO	N/A
1.1	Planning application enquiry form – completed application form			
1.2	Existing zoning and zoning certificate (including scheme land use information)			
1.3	Existing land use			
1.4	Proposed zoning and land use controls			
1.5	Proposed land use			
1.6	Does the development conform to an approved LAP / FAP			
1.7	Council reference for LAP / FAP			
1.8	Title deed and Surveyor General Diagram			
	Development proposal			
2.1	Site area			
2.2	Previously approved building plans			
2.3	Development proposal – schematic plan with extent of development			
2.4	Parking and loading requirements			

LAP – Local Area Plan, FAP – Functional Area Plan

The APPLICANT TO ENSURE THAT THE ABOVE INFORMATION IS PROVIDED TO ETHWKINI TRANSPORT AUTHORITY IN ORDER TO ASSESS THE APPLICATION.

REFER TO ETHEKWINI TRANSPORT AUTHORITY TRAFFIC IMPACT AND SITE TRAFFIC IMPACT ASSESSMENT MANUAL FOR TRANSPORT REQUIREMENTS:

http://www.durban.gov.za/City_Services/ethekwini_transport_authority/Road%20System%20Management/Pages/Traffic-Engineering.aspx

NB: TWO COPIES OF THE APPLICATION ARE REQUIRED FOR ETA
All applications lodged with ETA are acknowledged with a receipt

ETA address: **ETHEKWINI TRANSPORT AUTHORITY**
30 Archie Gumede Place
Durban
4000
ETA Building, First Floor, Room 119
Tel: 031 311 7495
E-mail : Pretty.Khumalo@durban.gov.za



ETHEKEKWINI TRANSPORT AUTHORITY

30 Archie Gumede Place | Durban | 4001

P O Box 680 | Durban | 4000

Tel: 031 311 7344 | Fax: 031 305 5871

www.durban.gov.za

SITE DEVELOPMENT / BUILDING PLAN ASSESSMENT CHECKLIST

ID	Description	YES	NO	N/A
1	Previous conditions of approval (e.g. at rezoning approval stage)			
2	Site traffic assessment required (refer to STA checklist)			
3	Engineering Drawings, Cost estimate, Financial guarantees, and Undertakings for new or existing road improvements			
4	Light vehicle access/driveway			
4.1	Access location dimension from property beacon to center line of access Access location from intersection: Min. 150m from class 1 / 2 roads Min. 60m from class 3 roads Min. 20m class 4 / 5 roads			
4.2	Access width at road edge			
4.3	Access scoop shown/access hardening shown (refer to Access Detail)			
4.4	Access / driveway long section to be shown (refer to Access Detail)			
4.5	Access width at boundary to be max. 9m			
4.6	Min. access width / driveway widths (refer to Table 1)			
4.7	Two-way driveway/ramp width min. 3m may be allowed if serving ≤ 6			
4.8	parking bays (no pedestrians)Max. gradient 1:8 if access/driveway used by pedestrians			
4.9	Max. gradient 1:7 if access/driveway used by light vehicles only			
5	Heavy vehicle access/driveway			
5.1	Access location dimension from property beacon to center line of access Access location from intersection: Min. 150m from class 1 / 2 roads Min. 60m from class 3 roads Min. 20m class 4 / 5 roads			
5.2	Access width at road edge based on heavy vehicle tracking and tracking shown Access width at boundary max. 9m			
5.3	Access scoop / access hardening shown (refer to Access Detail)			
5.4	Access / driveway long section to be shown (refer to Access Detail)			
5.5	Min. access width / driveway widths (refer to Table 1)			
5.6	Max. gradient for access/driveway 1:10			
6	Ramps			
6.1	Light vehicle ramps grade max.1:7			
6.2	Heavy vehicle ramp grade max. 1:10			
6.3	Max. gradient for parking ramps 1:15			
6.4	Min. ramp widths (refer to Table 1)			
7	Parking and loading			
7.1	Max. gradient across parking area 1:15			
7.2	Light vehicle parking area min. height clearance 2.5m			
7.3	Loading vehicle parking area min. height clearance 4.5m			

7.4	Parking / loading bay dimensions – refer to Town Planning : Minimum Standards for Parking and Loading Facilities to be Provided Within Any Site			
ID	Description	YES	NO	N/A
7.5	Aisle width adequate for two-way/one-way – refer to Town Planning : Minimum Standards for Parking and Loading Facilities to be Provided Within Any Site			
7.6	Vehicle tracking for loading areas			
7.7	No. of loading bays – refer to Town Planning : <i>Minimum Standards for</i>			
7.8	<i>Parking and Loading Facilities to be Provided Within Any Site</i> No. of light vehicle parking bays relaxed from 4.9m depth to 4.6m only if			
7.9	less than 10% of the total parkingParking bay width for light vehicles relaxed to max. 0.1m if isolated			
7.10	parking areasMin. one access (ingress and egress) for max. 400 parking bays			
7.11	Full frontal access to parking from road not permitted			
7.12	Tandem parking bays permitted <u>only if</u> surplus to parking requirements			
8	Additional/General			
8.1	Site plan			
8.2	Schedule of development areas			
8.3	Schedule of parking and loading requirements			
8.4	Boundary wall / fence to be shown for all developments (excluding			
8.5	single dwelling house Petrol service station (PSS) frontage min. 36m single unit per site)			
8.6	Pump island for PSS min. 5m from site boundary			
8.7	PSS clear visibility of min. 120m in both directions at height of 1.37m from point of egress			
8.8	PSS not to be sited on a road having gradient at any point within 120m of any point of access to the PSS > 1:7			
8.9	Heavy vehicle access control (gate/boom/security control) to be setback based on requirements of ETA Manual for Site Traffic and Traffic Impact Assessments– or waived if building plan endorsed that ‘access to remain open during business operating hours’			
8.10	Light vehicle access control (gate/boom/security control) to be setback based on requirements of ETA Manual for Site Traffic and Traffic Impact Assessments - or waived if building plan endorsed that ‘access to remain open during business operating hours’			
8.11	Left-in-left out access designed and endorsed on plan			
8.12	Accesses to be clearly annotated for type of vehicle use (light/heavy veh. or both)			

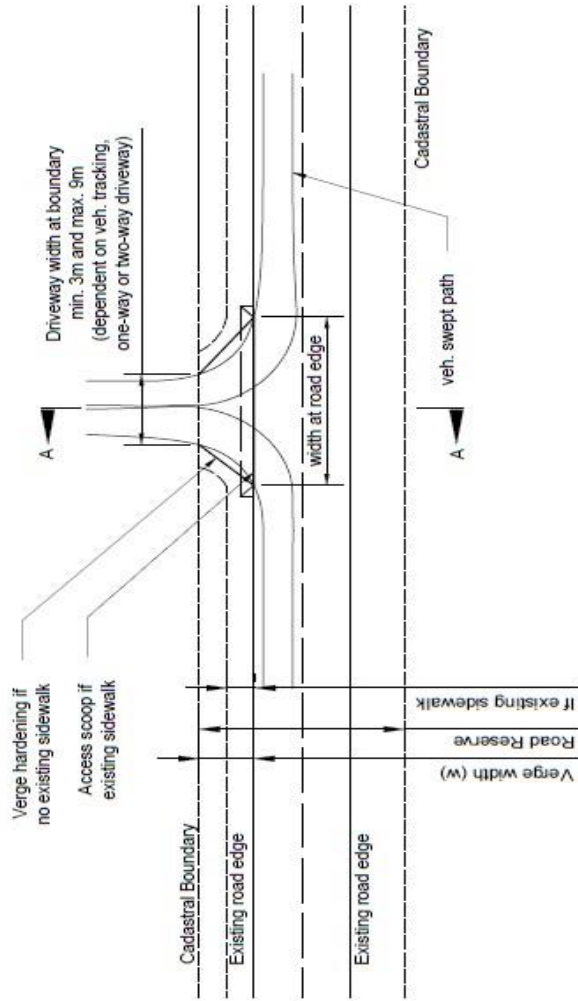
Table 1 : Minimum access /driveway/ ramp widths

Description	Minimum width (m) ^{1,2}	
	One-way	Two-way
Access / driveway / ramp ³	3.0	5.5

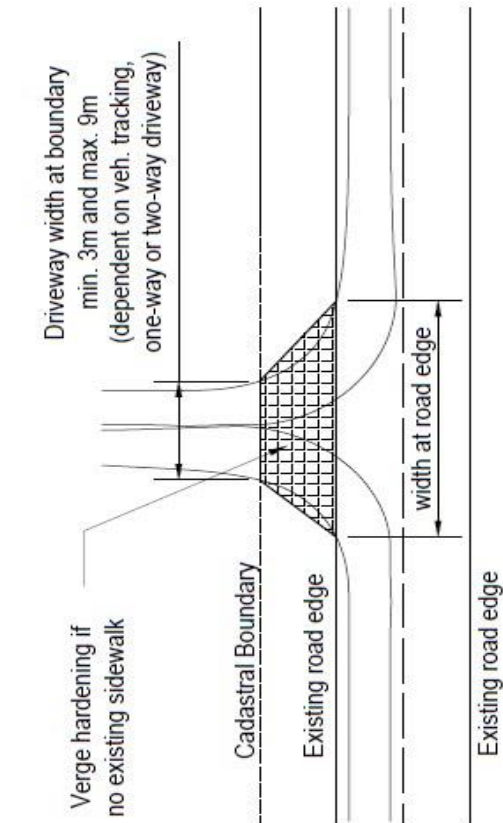
¹ minimum width to be widened to accommodate turning paths of design vehicles

² minimum width to be increased by min. 1.2m to accommodate pedestrians and must include physical separation from vehicles e.g. kerb ³ minimum width at site boundary.

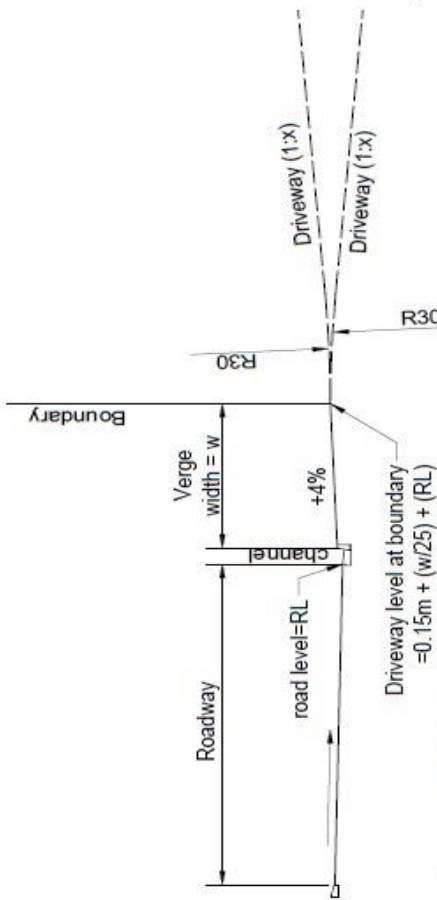
4.5m two-way driveway width permitted within the site subject to design vehicle requirements



TYPICAL DRIVEWAY DETAIL

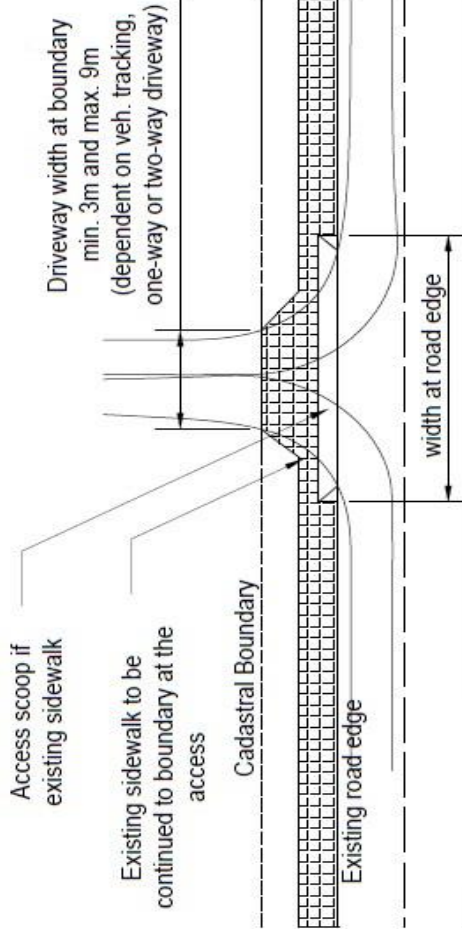


TYPICAL DRIVEWAY DETAIL - NO EXISTING SIDEWALK



- Driveway gradient varies:
1. max. 1:7 for light vehicles
 2. max. 1:8 for light vehicles and pedestrians
 3. max. 1:10 for loading vehicles
 4. max. 1:5 for light vehicles on short section at discretion of ETA

SECTION A-A



TYPICAL DRIVEWAY DETAIL - EXISTING SIDEWALK

ACCESS DETAIL

Previous Publication Notice 0.4

1 August 2017

Access (via vehicle and/or non-motorised transport) to education facilities from arterial roads are not supported

Education facilities include crèches, primary/secondary schools, tertiary institutions, etc.)

SATURN SOFTWARE:

SATURN software is no longer accepted for traffic studies

Previous Publication Notice 0.3

10 April 2017

ECSA Registered Professional Implies:

Either Professionally Registered Engineer or Professionally Registered Engineering Technologist in the discipline of Civil Engineering

Previous Publication Notice 0.2

13 February 2017

Ethekwini Transport Authority is hosting a workshop for Traffic Impact Assessment procedures and requirements

Venue: 174 Florida Road, Durban, :ETA: Go Durban Offices

Date: 3 March 2017

Time: 9:00 for 9:30

RSVP : Mr Eugene Naidoo: e-mail: eugene.naidoo@durban.gov.za or Telephone : 031 3117316

N.B.: restricted to one representative per organisation / consultancy

Previous Publication Notice 0.1

1 October 2015

1. The Manual for Traffic Impact Assessments and Site Traffic is published by the eThekweni Transport Authority and is effective 1 July 2015.
2. Previous version : Version 0.0, July 2015
3. Current version: Version 0.1, October 2015
4. Revisions applicable to Version 0.1:
 - a. Mixed Use Development (Land Use 770) has been removed – Trip rates for individual land uses together with mixed use reduction factors for each land use can be utilised where applicable to account for mixed land use development
 - b. Refer to eThekweni Transport Authority: Manual for Micro-Meso Simulation Modelling
5. Submission and approval process:
 - a. In order to facilitate ease of approval from the eThekweni Transport Authority (ETA), the professional carrying out the traffic assessment is responsible for obtaining in principle approval (via letter or e-mail) from the ETA relating to the following aspects:
 - i. Confirmation of type of traffic assessment (TIA or STA), land use, trip rates, assessment years / hours, road classification, type of traffic modelling, validity of traffic surveys, growth rates, modal, split, preliminary trip distribution, and future transport planning
 - ii. Design standards
 - iii. Traffic Road Layout concepts (following from results of traffic analysis / assessment)