

## CHECKLIST SUBMISSION For Traffic Control Plan

(To be submitted 45 working days before traffic control plan is implemented on-site)

Contract No:			
Project Title :			
Main Contractor :			
Traffic Consultant :			
Drawing Title/ Drawing No :			
Implementation Period :	From	То	]
Attached Document:			
Cleared with PSR: (apply to LTA Projects only)	YES / NO		
If no, Target Date for PSR:			

S/No.	Checklist items	YES/ NO/ N.A.	Consultant's Response	TM's Comments
1	Road Capacity and Traffic Movements			
1.1	Road Capacity			
1.1.1	Is the number of lanes reduced at the junction and along the road? If yes, please conduct traffic study to show the impact of lane reduction.			
1.1.2	Is/Are the length of the storage lane/slip road reduced? If yes, please conduct traffic study to show the traffic impact.			

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S/No.	Checklist items	YES/ NO/ N.A.	Consultant's Response	TM's Comments
1.1.3	Does the lane width fulfil the minimum requirement? (e.g. leftmost and rightmost lanes are at least 3.5m wide. Any other lanes are at least 3.2m wide? If no, has any swept path analysis¹ been conducted to demonstrate the lane width is sufficient in terms of safety and efficiency?			
1.2	Vehicular Movements			
1.2.1	Are there any movements removed (e.g. direct right turn, U-turn and etc)? If so, what are the reasons for removal? And what are the alternatives?			
1.2.2	Has any traffic study been conducted to justify the removal of these movements? If no, why not?			
1.3	Pedestrian Movements			
1.3.1	Is any existing footpath affected? If yes, please provide replacement and state the length of the existing and proposed footpath.			
1.3.2	Is the effective width (excluding the space for any protective barriers) of footpath reduced? If so, please ensure the new footpath is wide enough to accommodate wheelchair (1.5m) and to meet the existing demand.			
1.3.3	Are the waiting areas for pedestrians smaller than the existing ones? If so, please ensure it is spacious enough to meet the demand.			
1.3.4	Is raised kerb provided for the traffic island? If not, why?			
1.3.5	Is any existing zebra crossing/ pedestrian crossing affected? If yes, please provide alternative zebra crossing/ pedestrian crossing.			
1.4	Cycling Path			
1.4.1	Is any existing cycling path affected? If yes, please provide replacement and state the length of the existing and proposed cycling path.			

<sup>&</sup>lt;sup>1</sup> The calculation and analysis of the movement and path of different parts of a vehicle when that vehicle is undertaking a turning manoeuvre. This includes calculating the path taken by each wheel during the turn and also calculating the space needed by the vehicle body during the turn.

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S/No.	Checklist items	YES/ NO/ N.A.	Consultant's Response	TM's Comments
1.4.2	Is the effective width (excluding the space for any protective barriers) of cycling path reduced? If so, please ensure the new cycling path meet the existing demand.			
2	Road Works along Expressway/Major Arterial F	Roads		
2.1	Are there any road works/lane closures along expressway/major arterial roads? If so, please consult ITSO (Frankie Ng) for their comments and clearance.			
3	Access to Property and Development			
3.1	Are any accesses to the development removed? If so, please ensure that alternative accesses are provided and the stakeholders are consulted.			
4	Road Geometry			
4.1	Horizontal Alignment			
4.1.1	Do all curve radius fulfil the minimum requirement? If not, please conduct swept path analysis to demonstrate the existing speed limit can be maintained.			
4.1.2	Is there any S-curve? Please consider to provide transition curve to remove the S–curve. If not, please redesign.			
4.1.3	Do all taper length/ratio fulfil the minimum requirement? If not, why?			
4.1.4	Do all sight distance fulfil the minimum requirement? If no, please redesign.			
4.1.5	For left-turn slip lane, is the merging angle adequate to enable motorists on the slip road to properly observe on-coming vehicles before turning out?			
4.1.6	Do all corner kerb radiuses fulfil the minimum requirement? If no, please redesign.			
4.2	Vertical Alignment			
4.2.1	Are there any signalised pedestrian crossings proposed on downstream slope of a crest? If yes, please ensure it is designed in accordance to Civil Design Criteria Clause 10.4.2.3.1.			

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S/No.	Checklist items	YES/ NO/ N.A	Consultant's Response	TM's Comments
4.2.2	Are there any structures overhanging the proposed diverted road? If yes, please redesign or check height limit/redesign/provide prohibition sign/provide warning sign.			
4.3	Junction Layout			
4.3.1	Is the junction layout skewed? If so, please redesign. If redesign is not possible, please conduct traffic study to ensure sufficient capacity and safety.			
4.3.2	Is the turning movement at the junction adequate to ensure vehicles are able to keep their lanes without encroaching into adjacent lanes or in the path of oncoming vehicles, or veering off the carriageway?			
4.3.3	Are the lanes across junctions aligned? If not, please redesign.			
4.4	Cross Section			
4.4.1	Is/Are cross section(s) provided in the plan? If not, why not?			
4.4.2	Is/Are the lane width(s) consistent with those checked in item 1.1.3? If not, please make them be consistent.			
4.4.3	Are the sidetables wide enough to accommodate the necessary street furniture? If not, why not?			
5	Signs and Road Markings			
5.1	Signs			
5.1.1	Are all temporary warning signs provided according to COP? If no, why?			
5.1.2	Are there any signs provided to inform motorists the change in lane arrangement/alignment? If no, why?			
5.1.3	Are all existing/relocated signs captured in the plan? If not, please indicate.			
5.1.4	Is there adequate lateral offset between traffic lanes and the signs?			

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S/No.	Checklist items	YES/ NO/ N.A	Consultant's Response	TM's Comments
5.2	Road Markings			
5.2.1	Are all necessary road markings shown in the plan (lane markings, arrow markings and etc)? If not, please provide.			
5.2.2	Are marking types indicated for all kinds of road markings in the plan? If not, please provide.			
6	Traffic Signal/ERP/Red Light Camera/Speed Ca	mera (Please fol	low Traffic Signals [	Orawing Guideline)
6.0.1	Are all traffic light aspects provided for the signalized junction/pedestrian crossing? If not, please provide.			
6.0.2	Is phase diagram provided for every signalized junction or signalized pedestrian crossing, including existing phase diagram and proposed one? If not, please provide.			
6.0.3	Where the signal phasing allows for simultaneous right turn movement from opposite direction, is there adequate gap separation between the opposing traffic flow?			
6.0.4	Are the traffic light poles relocated or traffic signals changed? If so, please inform ITSO with the traffic control plans.			
6.0.5	Are overhead traffic light poles replaced by ground traffic light poles due to site constraint? It is recommended that overhead traffic light poles be provided whenever possible.			
6.0.6	If existing 2 lane road has less than 2 traffic lights, please provide at least 2 traffic lights during diversion stage. Likewise, if existing 3 or more lanes road has less than 2 traffic lights, please provide at least 3 traffic lights during diversion stage.			
6.0.7	Are there any work zone near ERP zones? If so, please ensure motorists are not forced to exit and re-enter ERP Zones.			
6.0.8	Are any Red Light Camera affected? If so, please consult Traffic Police and provide replacement.			
6.0.9	Are any Speed Camera affected? If so, please consult Traffic Police and provide replacement.			

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S/No.	Checklist items	YES/ NO/ N.A	Consultant's Response	TM's Comments
7	Site Access			
7.0.1	Are the site accesses designed with consideration of local traffic condition in terms of the location of the accesses and the treatment (lay-by, flare rate and etc.) If no, why?			
7.0.2	Are there signs provided for the site accesses? If not, why?			
7.0.3	Is there good visibility when exiting from site access to main flow traffic? If not, please redesign.			
8	Commuter Facilities			
8.0.1	Are bus stops and their related facilities (shelters, bays, crossings, bollards) affected? If so, please provide replacement and consult Bus Licensing Division.			
8.0.2	Are existing bus priority measures such as Mandatory Give Way to Bus scheme, bus lanes, yellow box, etc affected? If so, please provide replacement.			
8.0.3	Are taxi stands/stops and their related facilities (shelters, bays, crossings) affected? If so, please provide replacement and consult Taxi Licensing Division.			
8.0.4	Are there sufficient signs or information provided for pedestrian regarding the diverted footpath? If not, why?			
8.0.5	Are there sufficient safety devices provided to segregate the pedestrian and vehicles? If not, why?			
9	Barriers and Hoardings			
9.0.1	Are there reasonable barriers provided for delineation and channelization? If not, why?			
9.0.2	Are safety barriers provided for the warranted locations? If not, why?			
9.0.2	Are hoardings provided without affecting the sight distance for motorists? If not, please redesign.			

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S/No.	Checklist items	YES/ NO/ N.A	Consultant's Response	TM's Comments
10	Necessary Features in the Plan			
10.0.1	Is implementation period shown clearly in the plan? If not, please indicate.			
10.0.2	Is key plan provided properly in the plan? Can you identify the location of the diverted road based on the key plan provided? If not, please ensure the orientation is clear.			
10.0.3	Are legends provided without any confusion when you look through the plan? If not, please redesign.			
10.0.4	Are the plans provided based on a formal scale(1:1000 or 1:500)? If no, why?			
10.0.5	Is the plan provided according to the colour code described in traffic signal drawing guideline? If no, why not?			
	Is the proposed traffic control plan designed based on LTA Standard Details of Road Elements, LTA Civil Design Criteria and LTA Code of Practice on "Traffic Control at Work Zone"?			
10.0.6	Please include a note on the plan to indicate that the proposed traffic control plan is designed according to LTA latest Standard Details of Road Elements, LTA Civil Design Criteria and follow LTA Code of Practice on "Traffic Control at Work Zone.			
11	QP/Traffic Consultant Endorsement			
11.0.1	Are all the final drawings submitted with the endorsements of QP/Traffic Consultant? If this is not final submission, please indicate N.A.			
11.0.2	Please ensure that the Post Implementation Checklist is submitted within 10 working days after traffic control plan is implemented on-site.			

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Checklist Completed by: (Traffic Consultant/Contractor)	Name / Designation/ Signature
Checklist Checked by: (Project Team i.e. LTA/PUB/MOH/HDB/URA/JTC/CAG/Developer etc)	Name / Designation/ Signature
Submission Date:	

<u>For Official use only</u>
Name:
Date:
Re-Submission Required: (Yes /No)

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