

# Traffic Engineering Checklist

1. Location: Hwy 25 @ Cross Street, District of North Peace  
(route, cross street and city)

Project Number: 61118-0003 MoT Intersection SiteCode: 600017

## Instructions:

- This checklist must be completed for all new or modifications to existing traffic signals.
- Attach supplementary pages if the space provided is not adequate.
- Page 3 must be signed by a MoT Traffic Engineer for completion.

## 2. Scope (Briefly describe the scope of work)

- Modify existing traffic signal – Add NB left turn arrow

- Modify traffic islands – Add right turn lanes in all four directions

- Installation of NB deceleration and acceleration lane

## 3. Civil Design Scope

Comments based on:  civil design drawings # R1-456-402 (May 26, 2003)

and/or:  existing electrical drawings TE # \_\_\_\_\_

Crosswalk revisions required?

No  yes  All channelized right-turns to be "zebra markings"

(description or attach drawing)

Stop lines revisions required?

No  yes  See attached dwg R1-456-402 (May 26, 2003)

(description or attach drawing)

Lane marking revisions required?

No  yes  Continuity lines at NB deceleration and acceleration lanes

(description or attach drawing)

Turning path revisions required?

No  yes  All movements designed to accommodate design vehicle WB-15

(description or attach drawing)

Civil Design prepared by:

\_\_\_\_\_  
(Engineer's signature) A.B. Diamond (Diamond Engineering)  
(print name)

July 15, 2003  
(date)

## 4. Traffic Design Scope

Road classification: \_\_\_\_\_ Urban Arterial  
(rural arterial, urban arterial, etc.)

Signing modifications required? (if yes describe in detail or attach drawing)

Guide Sign modifications required?

No  yes  Relocate existing post mounted G-1 (destination dirn) sign 50m south  
(size & location – stn.#)

# Traffic Engineering Checklist

Lane Use sign modifications required?

No  yes  **Install shoulder mounted R-82R (this lane right) on EB & WB Cross St**  
(location(s) – stn.#)

Turn restrictions sign modifications required?

No  yes  **Install R-15L (no left) and R-15T (time restriction tab) on EB Cross St**  
(type & location – stn.#)

Other sign modifications required?

No  yes  **Remove W-7 (side road) warning sign in NB dirn, as access is being closed**  
(description & location – stn.#)

# Traffic Engineering Checklist

Location: Hwy 25 @ Cross Street, District of North Peace

*(route and cross street)*

## 4. Traffic Design Scope (continued)

Special features revisions required? *(describe in detail if yes)*

Advance warning signs *(complete table below)?*

No  yes  Relocate existing NB advance warning flashing (AWF) sign

*(Which approaches?)*

Approach	Speed km/h	Grade %	Approach	Speed km/h	Grade %
North	60	- 4.2	East	50	0
South	60	2	West	50	0
Road name: <u>Hwy 25</u>			Road name: <u>Cross Street</u>		

Island flashers:

No  yes  Install high intensity sheeting for W-54's- Intersection illuminated

*(Note those which exceed standards.)*

Emergency preemption:

No  yes  City supplied "Sonic" pre-emption

*(Type – hardwire, audible, radio, strobe)*

Indication lights: no  yes  Blue/white indicators on signal arms on N/S approaches

*(Type and location)*

Rail preemption: *(which approaches?)*

No  yes  East

approach

Blank-out display: no  yes  Fibre optic "no right turn" NB

right

*(Type and approach)*

Pedestrian Accommodation:

No  yes  N/S movement along Hwy 25 (audible cuckoo) – west side only (PA2)

*(Describe Location – Audibles, special pushbuttons, etc)*

Cyclist Accommodation:

No  yes  Stencil markings on Cross St as per City's request

*(Describe Location– loops, stencils, pushbuttons)*

Transit/HOV Requirements:

No  yes  Relocate bus bay to the downstream of the intersection in the NB

direction

*(Describe – HOV laning, additional phasing)*

Special detector requirements:

No  yes  NB/SB advance loops at AWF sign locations to extend A1 & A2 phases

*(Advance loops, queue loops, etc.)*

Future requirements *(within 5 years):*

No  yes  Pre-wire for future WB left turn

arrow

*(e.g.*

*advance arrows, different phasing, etc.)*

Controller requirements:

New  or Use existing  M cabinet  or S cabinet  Ministry supplied

Other items or comments: *(Attach supplementary pages if the space provided is not adequate.)*

- Signed and sealed civil drawings included

# Traffic Engineering Checklist

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## **5. Signal Phasing - ATTACH a preliminary timing sheet showing the following:**

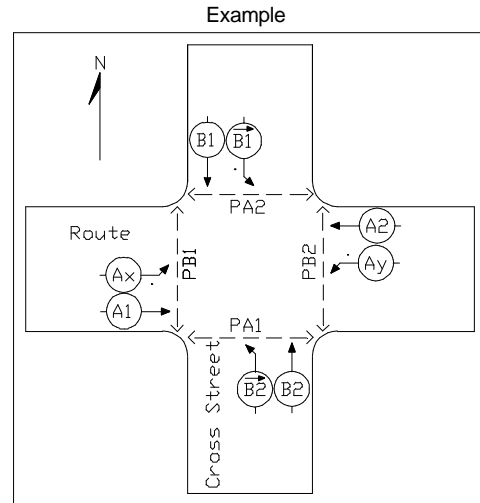
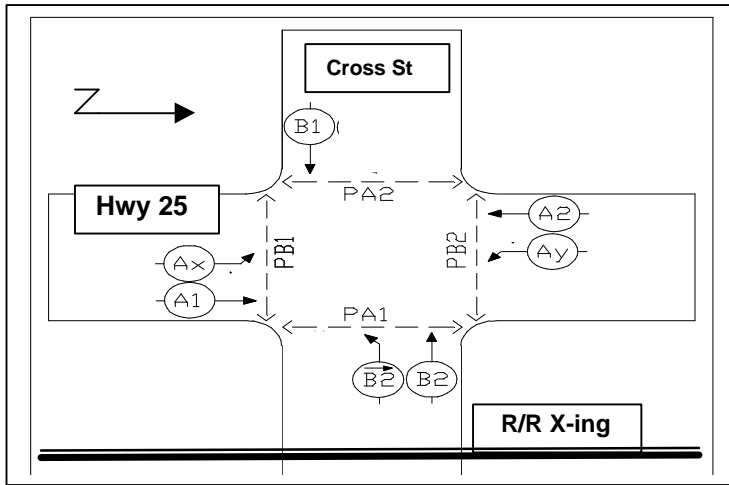
- phase assignments
- advance warning times
- resting/recall phases
- Synchro Analysis reports

# Traffic Engineering Checklist

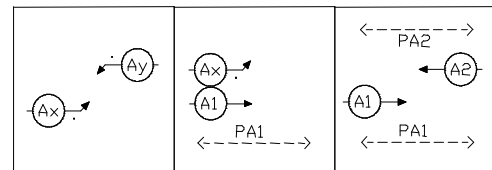
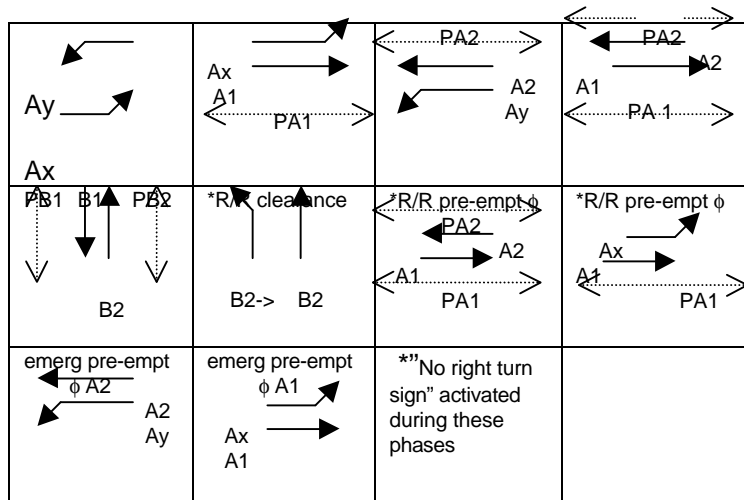
Location: Hwy 25 @ Cross Street, District of North Peace  
 (route and cross street)

## 5. Signal Phasing (continued)

Signal Phasing Layout (show all movements and north arrow).



Signal Phasing Sequencing (relative to Signal Phasing Layout above).



Show all combinations of vehicle and pedestrian movements in sequence.

Show emergency, railway, bus and other preemption sequences.

Identify clearance and preemption phases.

Traffic engineering prepared by:

\_\_\_\_\_  
 (Engineer's signature)

Q.C. Surely (Quality Transportation)  
 (print name)

July 28, 2003  
 (date)

## 6. MoT Traffic Engineering Approval (Must be completed for a checklist prepared by a consultant)

- Recommend to proceed.
- Changes required (consultant must resubmit):**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 (MOT Traffic Engineer signature)

\_\_\_\_\_  
 (print name)

\_\_\_\_\_  
 (date)