

| $\mathbf{V}$ (MPH) | F | F | (FT) |
| :--- | :--- | :--- | :--- |
| 10 | 0 | 0.38 | 18 |
| 15 | 0 | 0.32 | 47 |
| 20 | 0 | 0.27 | 99 |
| 25 | 0 | 0.22 | 174 |

## NOTES

Unsignalized intersections get penalized as they do not provide indication for safe turning
Signalized T-intersections are bumped up because there are less movements impacting cyclists
If radius is larger than 14 m , then turning speed $>25 \mathrm{~km} / \mathrm{hr}$
Any intersections with RT > 50m and more than 2 lanes to cross turning --> BLOS F

| Intersection |  | Clark Avenue and Bathurst Street |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\stackrel{\circ}{\square}$ | Right turn lane length | >50m | $>50 \mathrm{~m}$ | >50m | >50m |
|  | Turning Speed (based on curb radii) | >25km/h | >25km/h | >25km/h | $>25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | F | F | F | F |
|  | Operating Speed | $60 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 2 or more | 2 or more |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | F | F | F | F |
|  | Overall Approach LOS (average) | F | F | F | F |
|  | LEVEL OF SERVICE | F |  |  |  |


| Intersection |  | Clark Ave W and S Promenade |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { O2 } \\ & \stackrel{1}{0} \end{aligned}$ | Right turn lane length | 25m to 50m |  | 25 m to 50 m |  |
|  | Turning Speed (based on curb radii) | >25km/h |  | >25km/h |  |
|  | Dual right-turn lanes? | No |  | No |  |
|  | Right Turn LOS | E |  | E |  |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ |  |  | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 1 lane |  |  | 2 or more |
|  | Two-stage, left-turn bike box? | No |  |  | No |
|  | Dual left-turn lanes (share or exclusive)? | No |  |  | No |
|  | Left Turn LOS | D |  |  | F |
|  | Overall Approach LOS (average) | D/E |  | E | F |
|  | LEVEL OF SERVICE | D |  |  |  |


| Intersection |  | Clark Drive and New Westminster Drive |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | Right turn lane length | None | None | >50m | >50m |
|  | Turning Speed (based on curb radii) | >25km/h | >25km/h | >25km/h | >25km/h |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | D | D | F | F |
|  | Operating Speed | $40 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 2 or more | 2 or more |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | F | F | F | F |
|  | Overall Approach LOS (average) | E | E | F | F |
|  | LEVEL OF SERVICE | E |  |  |  |


| Intersection |  | Westminster Drive and West Promenade / Brownridg |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\stackrel{\infty}{0}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | = $<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | = $<25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | C | C | C |
|  | Operating Speed | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 1 lane | 1 lane |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | D | D | B | B |
|  | Overall Approach LOS (average) | C/D | C/D | B/C | B/C |
|  | LEVEL OF SERVICE | C |  |  |  |



| Intersection |  | New Westminster Drive and Katerina Avenue |  |  |  | not done minor unsignalized |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |  |
| $\begin{aligned} & \circ \\ & 0 \\ & 0 \end{aligned}$ | Right turn lane length | None | None | None | None |  |
|  | Turning Speed (based on curb radii) | = $252 \mathrm{~km} / \mathrm{h}$ | = $<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | = $<25 \mathrm{~km} / \mathrm{h}$ |  |
|  | Dual right-turn lanes? | No | No | No | No |  |
|  | Right Turn LOS | C | C | c | C |  |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |  |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 1 lane | 1 lane |  |
|  | Two-stage, left-turn bike box? | No | No | No | No |  |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |  |
|  | Left Turn LOS | F | F | D | D |  |
|  | Overall Approach LOS (average) | D/E | D/E | F | F |  |
|  | LEVEL OF SERVICE | D |  |  |  |  |


| Intersection |  | New Westminster Drive and North Park Road |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| 见 | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | =<25km/h | =<25km/h |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | C | C | C |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 1 lane | 1 lane |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | F | F | D | D |
|  | Overall Approach LOS (average) | D/E | D/E | F | F |
|  | LEVEL OF SERVICE | D |  |  |  |


| Intersection |  | New Westminster Drive and Beverly Glen Boulevard |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { ® } \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | = $<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | =<25km/h |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | C | C | C |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 1 lane | 1 lane |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | F | F | B | B |
|  | Overall Approach LOS (average) | D/E | D/E | B/C | B/C |
|  | LEVEL OF SERVICE | D |  |  |  |


| Intersection |  | Atkinson and Higholiffe Drive / Rosedale Heights |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{gathered} \text { O2 } \\ \stackrel{\rightharpoonup}{0} \end{gathered}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | =<25km/h |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | c | c | C |
|  | Operating Speed | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 1 lane | None | 2 or more | 2 or more |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | B | B | F | F |
|  | Overall Approach LOS (average) | B/C | B/C | D/E | D/E |
|  | LEVEL OF SERVICE | D |  |  |  |


| Intersection |  | tkinson and Edmond Seager Drive / Rosedale Height |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { O } \\ & \hline 0 \end{aligned}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | = $<25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | c | c | C | C |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 1 lane | 1 lane |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | F | D | B | B |
|  | Overall Approach LOS (average) | D/E | C/D | B/C | B/C |
|  | LEVEL OF SERVICE | C |  |  |  |
| Intersection |  | Atkinson Avenue and Centre Street |  |  |  |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { O} \\ & \text { O } \end{aligned}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | c | c | C | c |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 2 or more | 2 or more |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | F | D | D | F |
|  | Overall Approach LOS (average) | D/E | C/D | C/D | D/E |
|  | LEVEL OF SERVICE | D |  |  |  |


| Intersection |  | Atkinson Avenue and Manor Gate / Campbell Avenue |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { on } \\ & \stackrel{1}{0} \end{aligned}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | C | C | C |
|  | Operating Speed | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 1 lane | 1 lane | None | None |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | B | B | B | B |
|  | Overall Approach LOS (average) | B/C | B/C | B/C | B/C |
|  | LEVEL OF SERVICE | C |  |  |  |


| Intersection |  | Atkinson Avenue and Arnold Avenue |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \circ 0 \\ & \stackrel{0}{0} \end{aligned}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | C | C | C |
|  | Operating Speed | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 1 lane | 1 lane | None | None |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | B | B | B | B |
|  | Overall Approach LOS (average) | B/C | B/C | B/C | B/C |
|  | LEVEL OF SERVICE | C |  |  |  |


| Intersection |  | Atkinson Avenue and Spring Gate Boulevard |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{gathered} \text { OO } \\ \stackrel{1}{\circ} \end{gathered}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | =<25km/h |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | C | C | C |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 1 lane | 1 lane | None | None |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | D | D | B | B |
|  | Overall Approach LOS (average) | C/D | C/D | B/C | B/C |
|  | LEVEL OF SERVICE | C |  |  |  |


| Intersection |  | Atkinson Avenue and Clark Avenue West |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { OO } \\ & \stackrel{1}{\circ} \end{aligned}$ | Right turn lane length | None | None | 25 m to 50m | None |
|  | Turning Speed (based on curb radii) | $=25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C | C | D | C |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | 50 |
|  | Number of Lanes Crossed | 1 lane | 1 lane | 2 or more | 2 or more |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | D | D | F | F |
|  | Overall Approach LOS (average) | C/D | C/D | E | D/E |
|  | LEVEL OF SERVICE | D |  |  |  |


| Intersection |  | Bathurst Street and East Promenade |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { n } \\ & \text { O} \end{aligned}$ | Right turn lane length | None |  |  | None |
|  | Turning Speed (based on curb radii) | >25km/h |  |  | >25km/h |
|  | Dual right-turn lanes? | No |  |  | No |
|  | Right Turn LOS | D |  |  | D |
|  | Operating Speed | $60 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ |  | $60 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 1 lane | 1 lane |  | 2 or more |
|  | Two-stage, left-turn bike box? | No | No |  | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No |  | No |
|  | Left Turn LOS | F | F |  | F |
|  | Overall Approach LOS (average) | E | F |  | E |
|  | LEVEL OF SERVICE | E |  |  |  |


| Intersection |  | Disera Drive and Unnamed Road |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { O2 } \\ & \underset{0}{2} \end{aligned}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | =<25km/h |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | c | C | c | c |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 1 lane | 1 lane | 1 lane | 1 lane |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | D | D | D | D |
|  | Overall Approach LOS (average) | C/D | C/D | C/D | C/D |
|  | LEVEL OF SERVICE | C |  |  |  |


| VIVA: Under Construction | Intersection |  | Disera Drive / North Promenade and Centre Street |  |  |  | raised bike lanes on east and west approaches |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | NORTH | SOUTH | EAST | WEST |  |
| Reference Drawing PM104 | $\begin{aligned} & \text { O } \\ & \stackrel{3}{\circ} \end{aligned}$ | Right turn lane length <br> Turning Speed (based on curb radii) <br> Dual right-turn lanes? | $\begin{gathered} \text { None } \\ =<25 \mathrm{~km} / \mathrm{h} \\ \text { No } \end{gathered}$ | $\begin{gathered} \text { None } \\ =<25 \mathrm{~km} / \mathrm{h} \\ \text { No } \end{gathered}$ | $\begin{gathered} \text { None } \\ =<25 \mathrm{~km} / \mathrm{h} \\ \text { No } \\ \hline \end{gathered}$ | $\begin{gathered} \text { None } \\ =<25 \mathrm{~km} / \mathrm{h} \\ \\ \text { No } \end{gathered}$ |  |
|  |  | Right Turn LOS | C | c | A | A |  |
|  |  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ |  |
|  |  | Number of Lanes Crossed | 1 lane | 2 or more | 2 or more | 2 or more |  |
|  |  | Two-stage, left-turn bike box? | No | No | Yes | Yes |  |
|  |  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |  |
|  |  | Left Turn LOS | D | F | B | B | 2-stage, left-turn bike box |
|  |  | Overall Approach LOS (average) | D | D/E | A/B | A ${ }^{\text {B }}$ |  |
|  |  | LEVEL OF SERVICE | C |  |  |  |  |


| VIVA: Under Construction | Intersection |  | Bathurst Street and Centre Street |  |  |  | raised bike lanes on all approaches |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | NORTH | SOUTH | EAST | WEST |  |
| Reference Drawing PM104 | $\begin{aligned} & \text { On } \\ & \underset{\sim}{1} \end{aligned}$ | Right turn lane length | 25m to 50m | None | None | None |  |
|  |  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |  |
|  |  | Dual right-turn lanes? | No | No | No | No |  |
|  |  | Right Turn LOS | A | A | A | A |  |
|  |  | Operating Speed | $60 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ |  |
|  |  | Number of Lanes Crossed | 2 or more | 2 or more | 2 or more | 2 or more |  |
|  |  | Two-stage, left-turn bike box? | Yes | Yes | Yes | Yes |  |
|  |  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |  |
|  |  | Left Turn LOS | B | B | A | B |  |
|  |  | Overall Approach LOS (average) | A/B | A/B | A | A/B |  |
|  |  | LEVEL OF SERVICE | A |  |  |  |  |


| VIVA: Under Construction | Intersection |  | Bathurst St and Beverly Glen Boulevard |  |  |  | raised bike lanes on north and south approaches |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | NORTH | SOUTH | EAST | WEST |  |
| Reference Drawing PM104 | $\begin{aligned} & 0 \\ & \stackrel{0}{0} \end{aligned}$ | Right turn lane length | 25 m to 50 m | None | None | None |  |
|  |  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |  |
|  |  | Dual right-turn lanes? | No | No | No | No |  |
|  |  | Right Turn LOS | A | A | c | c |  |
|  |  | Operating Speed | $60 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $40 \mathrm{~km} / \mathrm{h}$ |  |
|  |  | Number of Lanes Crossed | 2 or more | 2 or more | 2 or more | 2 or more |  |
|  |  | Two-stage, left-turn bike box? | No | No | Yes | Yes |  |
|  |  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |  |
|  |  | Left Turn LOS | F | F | A | B |  |
|  |  | Overall Approach LOS (average) | C/D | C/D | B | B/C |  |
|  |  | LEVEL OF SERVICE | C |  |  |  |  |

VIVA: Under
Construction

Reference Drawing
PM104

| Intersection |  | thurst St and New Westminster Blvd / Atkinson Aven |  |  |  | raised bike lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |  |
| $\begin{aligned} & 00 \\ & 0 \\ & 0 \end{aligned}$ | Right turn lane length | 25 m to 50 m | None |  | None |  |
|  | Turning Speed (based on curb radii) | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |  |
|  | Dual right-turn lanes? | No | No | No | No |  |
|  | Right Turn LOS | A | A | c | C |  |
|  | Operating Speed | $60 \mathrm{~km} / \mathrm{h}$ | $60 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{hr}$ |  |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 2 or more | 2 or more |  |
|  | Two-stage, left-turn bike box? | Yes | Yes | No | No |  |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |  |
|  | Left Turn LOS | B | B | F | F | 2-stage, left-turn bike box on north and south approaches |
|  | Overall Approach LOS (average) | A/B | A/B | D/E | D/E |  |
|  | LEVEL OF SERVICE | C |  |  |  |  |

Tintersection

| Intersection |  | Promenade Circle and North Promenade |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { O } \\ & \text { © } \end{aligned}$ | Right turn lane length | 25 m to 50 m |  | >50m |  |
|  | Turning Speed (based on curb radii) | = $<25 \mathrm{~km} / \mathrm{h}$ |  | = $<25 \mathrm{~km} / \mathrm{h}$ |  |
|  | Dual right-turn lanes? | No |  | No |  |
|  | Right Turn LOS | D |  | F |  |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ |  |  | $30 \mathrm{~km} / \mathrm{hr}$ |
|  | Number of Lanes Crossed | 1 lane |  |  | 1 lane |
|  | Two-stage, left-turn bike box? | No |  |  | No |
|  | Dual left-turn lanes (share or exclusive)? | No |  |  | No |
|  | Left Turn LOS | D |  |  | B |
|  | Overall Approach LOS (average) | D |  | F | B |
|  | LEVEL OF SERVICE | D |  |  |  |
|  | Adjusted LOS | E |  |  |  |

T-intersection

| Intersection |  | Promenade Circle and West Promenade |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \circ 0 \\ & \stackrel{0}{0} \end{aligned}$ | Right turn lane length <br> Turning Speed (based on curb radii) Dual right-turn lanes? | $\begin{gathered} \hline \text { None } \\ =<25 \mathrm{~km} / \mathrm{h} \\ \text { No } \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \hline \text { None } \\ =<25 \mathrm{~km} / \mathrm{h} \\ \text { No } \\ \hline \end{gathered}$ |
|  | Right Turn LOS | C |  |  | C |
|  | Operating Speed |  | $30 \mathrm{~km} / \mathrm{h}$ |  | $30 \mathrm{~km} / \mathrm{hr}$ |
|  | Number of Lanes Crossed |  | 1 lane |  | 1 lane |
|  | Two-stage, left-turn bike box? |  | No |  | No |
|  | Dual left-turn lanes (share or exclusive)? |  | No |  | No |
|  | Left Turn LOS |  | B |  | B |
|  | Overall Approach LOS (average) |  | B |  | B/C |
|  | LEVEL OF SERVICE | B |  |  |  |
|  | Adjusted LOS | C |  |  |  |

penalize as there are no signals to indicate when turns can be completed
T-intersection

| Intersection |  | Promenade Circle and South Promenade |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\stackrel{\text { O}}{\square}$ | Right turn lane length |  | 25 m to 50 m |  | >50m |
|  | Turning Speed (based on curb radii) |  | = $<25 \mathrm{~km} / \mathrm{h}$ |  | $=<25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? |  | No |  | No |
|  | Right Turn LOS |  | D |  | F |
|  | Operating Speed |  | $50 \mathrm{~km} / \mathrm{h}$ | $30 \mathrm{~km} / \mathrm{h}$ |  |
|  | Number of Lanes Crossed |  | 1 lane | 1 lane |  |
|  | Two-stage, left-turn bike box? |  | No | No |  |
|  | Dual left-turn lanes (share or exclusive)? |  | No | No |  |
|  | Left Turn LOS |  | D | B |  |
|  | Overall Approach LOS (average) |  | D | B | F |
|  | LEVEL OF SERVICE | D |  |  |  |
|  | Adjusted LOS | E |  |  |  |


| Intersection |  | Promenade Circle and East Promenade |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { n } \\ & \text { © } \end{aligned}$ | Right turn lane length |  | >50m |  |  |
|  | Turning Speed (based on curb radii) |  | = $<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |  |
|  | Dual right-turn lanes? |  | No | No |  |
|  | Right Turn LOS |  | F | F |  |
|  | Operating Speed | $30 \mathrm{~km} / \mathrm{h}$ |  | $50 \mathrm{~km} / \mathrm{h}$ |  |
|  | Number of Lanes Crossed | 1 lane |  | 2 or more |  |
|  | Two-stage, left-turn bike box? | No |  | No |  |
|  | Dual left-turn lanes (share or exclusive)? | No |  | No |  |
|  | Left Turn LOS | B |  | F |  |
|  | Overall Approach LOS (average) | B | F | F |  |
|  | LEVEL OF SERVICE | E |  |  |  |
|  | Adjusted LOS | F |  |  |  |

penalize as there are no signals to indicate when turns can be completed

T-intersection

| Intersection |  | Promenade Circle and East Promenade |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \text { O. } \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ | Right turn lane length |  | None | None |  |
|  | Turning Speed (based on curb radii) |  | $=<25 \mathrm{~km} / \mathrm{h}$ | = $<25 \mathrm{~km} / \mathrm{h}$ |  |
|  | Dual right-turn lanes? |  | No | No |  |
|  | Right Turn LOS |  | C | C |  |
|  | Operating Speed | $30 \mathrm{~km} / \mathrm{h}$ |  | $50 \mathrm{~km} / \mathrm{h}$ |  |
|  | Number of Lanes Crossed | 1 lane |  | None |  |
|  | Two-stage, left-turn bike box? | No |  | No |  |
|  | Dual left-turn lanes (share or exclusive)? | No |  | No |  |
|  | Left Turn LOS | B |  | B |  |
|  | Overall Approach LOS (average) | B | c | B/C |  |
|  | LEVEL OF SERVICE | B |  |  |  |
|  | Adjusted LOS | C |  |  |  |

penalize as there are no signals to indicate when turns can be completed


T-intersection

| Intersection |  | Katerina Avenue and McArthur Drive |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\stackrel{\text { O}}{\square}$ | Right turn lane length |  | None | None |  |
|  | Turning Speed (based on curb radii) |  | $=<25 \mathrm{~km} / \mathrm{h}$ | $=<25 \mathrm{~km} / \mathrm{h}$ |  |
|  | Dual right-turn lanes? |  | No | No |  |
|  | Right Turn LOS |  | C | C |  |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{hr}$ |  | $50 \mathrm{~km} / \mathrm{h}$ |  |
|  | Number of Lanes Crossed | None |  | None |  |
|  | Two-stage, left-turn bike box? | No |  | No |  |
|  | Dual left-turn lanes (share or exclusive)? | No |  | No |  |
|  | Left Turn LOS | B |  | B |  |
|  | Overall Approach LOS (average) | B |  | B/C |  |
|  | LEVEL OF SERVICE | B |  |  |  |
|  | Adjusted LOS | B |  |  |  |


| Intersection |  | New Westminster Drive and Katerina Avenue |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH | EAST | WEST |
| $\begin{aligned} & \infty \\ & 0 \\ & 0 \end{aligned}$ | Right turn lane length | None | None | None | None |
|  | Turning Speed (based on curb radii) | >25km/h | >25km/h | >25km/h | $>25 \mathrm{~km} / \mathrm{h}$ |
|  | Dual right-turn lanes? | No | No | No | No |
|  | Right Turn LOS | C/D | C/D | C/D | C/D |
|  | Operating Speed | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ | $50 \mathrm{~km} / \mathrm{h}$ |
|  | Number of Lanes Crossed | 2 or more | 2 or more | 1 lane | 1 lane |
|  | Two-stage, left-turn bike box? | No | No | No | No |
|  | Dual left-turn lanes (share or exclusive)? | No | No | No | No |
|  | Left Turn LOS | F | F | D | D |
|  | Overall Approach LOS (average) | D/E | D/E | D | D |
|  | LEVEL OF SERVICE | E |  |  |  |

Penalize as there is no signal indicating when to cross

* Bike Facility Type

1 = Physically separated bikeway
$2=$ Bike Lanes not adjacent to parking
3 = Bike Lanes adjacent to parking
4 = Mixed Traffic
,
**For mixed traffic, report traffic lanes in both directions. All else report in the direction of travel.

Raised bike lanes: part of the vivaNext rapidway project on Highway 7 West and Bathurst \& Centre is bicycle lanes at the same level as sidewalks, separated from oncoming traffic by a curb

Clark Avenue

| From | New Westminster Drive | South Promenade | Bathurst Street |
| :--- | :---: | :---: | :---: |
|  | To | South Promenade | Bathurst Street |
|  | Segment 1 | Segment 2 | Segment 3 |
| Segment BLOS | 4 | 4 | 4 |
| Bikeway Type* | 4 | 6 | 4 |
| No. Travel Lanes** | 4 | n/a | n/a |
| Bike Lane width (if applicable) | n/a | 50 | 50 |
| Operating Speed (kph) | 50 | NA | NA |
| Bike Lane Blockage (if applicable) | NA | F | E |
| LOS | E |  |  |

## New Westminster Drive

| From |  | Clarke Avenue West |
| :--- | :--- | :--- | Centre Street $\quad$.

Atkinson Avenue

| From | Bathurst Street | Highcliffe Drive / Rosedale Heights | Karmin Education Centre (north access) | Centre Street |
| :---: | :---: | :---: | :---: | :---: |
| To | Highcliffe Drive / Rosedale Heights | Karmin Education Centre (north access) | Centre Street | Clark Avenue West |
| Segment BLOS | Segment 1 | Segment 2 | Segment 3 | Segment 4 |
| Bikeway Type* | 4 | 4 | 4 | 4 |
| No. Travel Lanes** | 4 | 4 | 4 | 4 |
| Bike Lane width (if applicable) | n/a | n/a | n/a | n/a |
| Operating Speed (kph) | 50 | 50 | 40 | 40 |
| Bike Lane Blockage (if applicable) | NA | NA | NA | NA |
| LOS | E | E | D | D |


| Centre Street | VIVA CONST |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| From | Vaughan Boulevard / Carl Tennen Street | New Westminster Drive | North Promenade / Disera Drive | Bathurst Street |
| To | New Westminster Drive | North Promenade / Disera Drive | Bathurst Street | Atkinson Avenue |
| Segment BLOS | Segment 1 | Segment 2 | Segment 3 | Segment 4 |
| Bikeway Type* | 1 | 1 | 1 | 4 |
| No. Travel Lanes** | 2 | 2 | 2 | 4 |
| Bike Lane width (if applicable) | 1.9 | 1.9 | 1.9 | n/a |
| Operating Speed (kph) | 60 | 60 | 60 | 50 |
| Bike Lane Blockage (if applicable) | NA | NA | NA | NA |
| LOS | A | A | A | E |


| Bathurst Street |  |  | VIVA CONST |  |
| :---: | :---: | :---: | :---: | :---: |
| From | Clark Avenue West | East Promenade | Centre Street | Beverly Glen Boulevard |
| To | East Promenade | Centre Street | Beverly Glen Boulevard | New Westminster Drive / Atkinson Avenue |
| Segment BLOS | Segment 1 | Segment 2 | Segment 3 | Segment 4 |
| Bikeway Type* | 4 | 4 | 1 | 1 |
| No. Travel Lanes** | 6 | 4 | 2 | 2 |
| Bike Lane width (if applicable) | n/a | n/a | 1.9 | 1.9 |
| Operating Speed (kph) | 60 | 60 | 60 | 60 |
| Bike Lane Blockage (if applicable) | NA | NA | NA | NA |
| LOS | F | F | A | A |


| From | Kingsbridge Circle | Beverly Glen Boulevard | North Park Road | Centre Street | Promenade Circle |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To | Beverly Glen Boulevard | North Park Road | Centre Street | Promenade Circle | Promenade Circle |
| Segment BLOS | Segment 1 | Segment 2 | Segment 3 | Segment 4 | Segment 5 |
| Bikeway Type* | 4 | 4 | 4 | 4 | 4 |
| No. Travel Lanes** | 2 | 2 | 3 | 4 | 2 |
| Bike Lane width (if applicable) | n/a | n/a | n/a | n/a | n/a |
| Operating Speed (kph) | 50 | 50 | 50 | 30 | 30 |
| Bike Lane Blockage (if applicable) | NA | NA | NA | NA | n/a |
| LOS | B | B | D | D | B |
|  | (marked as Class 5 / residential) narked as Class 5 / residential) |  |  |  |  |


| From | North Promenade | West Promenade | South Promenade | East Promenade |
| :---: | :---: | :---: | :---: | :---: |
| To | West Promenade | South Promenade | East Promenade | North Promenade |
| Segment BLOS | Segment 1 | Segment 2 | Segment 3 | Segment 4 |
| Bikeway Type* | 4 | 4 | 4 | 4 |
| No. Travel Lanes** | 4 | 4 | 4 | 4 |
| Bike Lane width (if applicable) | n/a | n/a | n/a | n/a |
| Operating Speed (kph) | 30 | 30 | 30 | 30 |
| Bike Lane Blockage (if applicable) | NA | NA | NA | NA |
| LOS | D | D | D | D |

West Promenade

|  | From |
| :--- | :---: |
|  | Now Westminster Drive |
|  | Promenade Circle |
| Segment BLOS | Segment 1 |
| Bikeway Type $^{*}$ | 4 |
| No. Travel Lanes** | 4 |
|  |  |
| Bike Lane width (if applicable) | n/a |
|  |  |
| Operating Speed (kph) | 30 |
| Bike Lane Blockage (if applicable) | NA |
| LOS | D |

South Promenade

| From | Clark Avenue West |
| :--- | ---: |
|  | To |
|  | Promenade Circle |
| Segment BLOS | Segment 1 |
| Bikeway Type* $^{*}$ | 4 |
| No. Travel Lanes** | 4 |
| Bike Lane width (if applicable) | $\mathrm{n} / \mathrm{a}$ |
| Operating Speed (kph) | 30 |
| Bike Lane Blockage (if applicable) | NA |
| LOS | D |


| East Promenade |
| :--- |
| From  Bathurst Street |
|  | To Promenade Circle 9 Segment 1


| From | Centre Street |
| :---: | :---: |
| To | Lawrie Road |
| Segment BLOS | Segment 1 |
| Bikeway Type* | 4 |
| No. Travel Lanes** | 3 |
| Bike Lane width (if applicable) | n/a |
| Operating Speed (kph) | 50 |
| Bike Lane Blockage (if applicable) | NA |
| LOS | D |

McArthur Drive

| From | Katerina Ave |
| :--- | :--- |
|  | To |
|  | Cul-de-sac |
| Segment BLOS | Segment 1 |
| Bikeway Type* $^{*}$ | 4 |
| No. Travel Lanes** | 2 |
| Bike Lane width (if applicable) | n/a |
| Operating Speed (kph) | 50 |
| Bike Lane Blockage (if applicable) | NA |
| LOS | B |

Katerina Ave

| From | McArthur Drive |
| :--- | ---: |
|  | To |
|  | New Westminster Drive |
| Segment BLOS | Segment 1 |
| Bikeway Type $^{*}$ | 4 |
| No. Travel Lanes** | 2 |
| Bike Lane width (if applicable) | n/a |
| Operating Speed (kph) | 50 |
| Bike Lane Blockage (if applicable) | NA |
| LOS | B |

Intersection PLOS - Results
Notes:

1. it was assumed that vivaNext intersections will maintain there existing traffic signals for the identification of turning movement types driver judgment, pedestrians will feel less safe where a car is waiting to make the turn in their vicinity.
2. Intersections PLOS scores were adjusted on an individual basis to better capture the conditions within the specific context.



| Intersection |  | Atkinson Avenue and Centre Street |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH | SOUTH |  |  | EAST | WEST |  | Point |  |
|  |  | Selection |  | Selection | Point | Selection | Point | Selection |  |  |
| $\mid$ | Lanes | 5 | 75 | 5 | 75 | 5 | 75 | 5 | 75 |  |
|  | Median | Yes |  | Yes |  | Yes |  | Yes |  |  |
|  | Island Refuge | No | -4 | No | -4 | No | -4 | No | 4 |  |
|  | Conflicting Left Turn | Protected | 0 | Protected | 0 | Protected | 0 | Protected | 0 |  |
|  | Conficting Right Turn | Permissive or yield control | -5 | Permissive or yield control | -5 | Permissive or yield control | -5 | Permissive or yeild control | -5 |  |
|  | RTOR | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 |  |
|  | Ped Leading Interval | No | -2 | No | -2 | No | -2 | No | -2 |  |
|  | Corner Radius (largest) | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 | $>10 \mathrm{~m}$ to 15 m | -6 | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 |  |
|  | Crosswalk Type | No marking | -10 | Faded / unclear makkings | -9 | Faded / unclear markings | -9 | Faded / unclear markings | -9 |  |
|  | LEVEL OF SERVICE | D (45) | 45 | D (46) | 46 | D (46) | 46 | D (46) | 46 |  |
|  |  | D |  |  |  |  |  |  |  |  |
|  | Adjusted LOS based on location and context | D ${ }^{\text {no adjustments required }}$ |  |  |  |  |  |  |  |  |




| Intersection | Afkinson Avenue and Clark Avenue |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NORTH |  | SOUTH |  | EAST | WEST |  | Point |
|  | Selection |  | Selection | Point | Selection | Point | Selection |  |
| Lanes | 4 | 95 | ${ }^{3}$ | 100 | 6 | 65 | 5 | 75 |
| Median | No |  | No |  | Yes |  | Yes |  |
| Island Refuge | No | -4 | No | -4 | No | -4 | No | 4 |
| Conflicting Left Turn | Protected | 0 | Permissive | -7 | Permissive | -7 | Protected | 0 |
| . . Conflicting Right Turn | Permissive or yield control | -5 | Permissive or yield control | -5 | Permissive or yield control | -5 | Permissive or yield control | -5 |
| $\stackrel{\text { ¢ }}{0}$ RTOR | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 |
| - ${ }_{0}^{\circ}$. Ped Leading Interval | No | -2 | No | -2 | No | -2 | No | -2 |
| Corner Radius (largest) | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 | $>10 \mathrm{~m}$ to 15 m | -6 |
| Crosswalk Type | Raised crosswalk | 0 | Zebra stripe hi-vis markings | -4 | Zebra stipe hi-vis markings | -4 | Zebra stripe hi-vis markings | -4 |
| LEVEL OF SERVICE | B (75) | 75 | C (69) | 69 | E (34) | 34 | D (51) | 51 |
|  | E |  |  |  |  |  |  |  |
| Adjusted LOS based on location and context |  |  |  | E |  |  |  | no adjustments required |


| VIVA Under Reference [ | Intersection | Centre Street and North Promenade / Disera Drive |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH |  | SOUTH |  | EAST |  | WEST |  |
|  |  | Selection |  | Selection | Point | Selection | Point | Selection | Point |
|  | Lanes | 3 | 100 | 5 | 75 | 7 | 55 | 7 | 55 |
|  | Median | No |  | Yes |  | Yes |  | Yes |  |
|  | Island Refuge | No | 4 | No | -4 | Yes | 0 | Yes | 0 |
|  | Conflicting Left Turn | Protected | 0 | Protected | 0 | Permissive | -7 | Permissive | -7 |
|  | Conflicting Right Turn | Permissive or yield control | -5 | Permissive or y yield control | -5 | Permissive or yield control | -5 | Permissive or yield control | -5 |
|  | RTOR | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 |
|  | Ped Leading Interval | No | -2 | No | -2 | No | -2 | No | -2 |
|  | Corner Radius (largest) | $>5 \mathrm{~m}$ to 10 m | -5 | $>5 \mathrm{~m}$ to 10 m | -5 | $>5 \mathrm{~m}$ to 10 m | -5 | $>5 \mathrm{~m}$ to 10 m | -5 |
|  | Crosswalk Type | Textured/coloured pavement | 4 | Textured/coloured pavement | -4 | Textured/coloured pavement | -4 | Textured/coloured pavement | -4 |
|  | LEVEL OF SERVICE | B (77) | 77 | D (52) | 52 | F (29) | 29 | F (29) | 29 |
|  |  | F |  |  |  |  |  |  |  |
|  | Adjusted LOS based on location and context |  |  |  | E |  |  |  |  |




| VIVA Under <br> Reference $\square$ | Intersection | Bathurst Street and New Westminster Drive / Atkinson Avenue |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NORTH |  | SOUTH |  | EAST |  | WEST |  |
|  |  | Selection |  | Selection | Point | Selection | Point | Selection | Point |
|  |  | 7 | 55 | 7 | 55 | 5 | 75 | 6 | 65 |
|  |  | Yes |  | Yes |  | Yes |  | Yes |  |
|  |  | Yes | 0 | Yes | 0 | No | -4 | No | 4 |
|  |  | Protected | 0 | Protected | 0 | Protected | 0 | Protected | 0 |
|  |  | Permissive or yield control | -5 | Pemissive or yield control | -5 | Permissive or yied control | -5 | Permissive or yield control | -5 |
|  |  | RTOR allowed | -3 | RTOR allowed | - 3 | RTOR allowed | -3 | RTOR allowed | -3 |
|  |  | No | -2 | No | -2 | No | -2 | No | -2 |
|  |  | $>5 \mathrm{~m}$ to 10 m | -5 | $>5 \mathrm{mto} 10 \mathrm{~m}$ | -5 | $>5 \mathrm{~m}$ to 10 m | -5 | $>5 \mathrm{~m}$ to 10 m | -5 |
|  |  | Textured/coloured pavement | 4 | Textured/coloured pavement | -4 | Textured/coloured pavement | -4 | Textured/coloured pavement | - 4 |
|  |  | E(36) | 36 | E(36) | 36 | D (52) | 52 | E (42) | 42 |
|  |  |  |  |  | E |  |  |  |  |
|  |  |  |  |  | E |  |  |  |  |

unsignalized T intersection

unsignalized T intersection

unsignalized T intersection

unsignalized T intersection


PM-102


unsignalized intersection

| Intersection | Katerina Avenue and New Westminster Drive |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NORTH |  | SOUTH |  | EAST |  | WEST |  |
|  | Selection |  | Selection | Point | Selection | Point | Selection | Point |
| Lanes | 5 | 75 | 5 | 75 | 2 | 105 | 2 | 105 |
| Median | Yes |  | Yes |  | No |  | No |  |
| Island Refuge | No | -4 | No | 4 | No | -4 | No | 4 |
| Conficting Left Turn | Permissive | -7 | Permissive | -7 | Permissive | -7 | Permissive | -7 |
| ㄷ.0 Conflicting Right Turn | Permissive or yield control | -5 | Permissive or yield control | -5 | Permissive or yield control | -5 | Permissive or yield control | -5 |
| \% RTOR | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 | RTOR allowed | -3 |
| \% Ped Leading Interval | No | -2 | No | -2 | No | -2 | No | -2 |
| Corner Radius (largest) | $>10 \mathrm{mto} 15 \mathrm{~m}$ | - 6 | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 | $>10 \mathrm{mto} 15 \mathrm{~m}$ | -6 |
| Crosswalk Type | No marking | -10 | No marking | -10 | No marking | -10 | No marking | -10 |
| LEVEL OF SERVICE | E(38) | 38 | E(38) | 38 | C (68) | 68 | C (68) | 68 |
| LEVEL Of SERVICe |  |  |  | E |  |  |  |  |
| Adjusted LOS based on location and context |  |  |  |  |  |  |  |  |

Segment PLOS - Results



Abbeywood Gate / Disera Drive / North
Promenade

| Disera Drive / North | From | Circe | Bevery Glen Bouevard |  | Centre Streat | ${ }_{\text {cricte }}^{\text {Promenad }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | To |  |  | Centre Steet | Promenade Circle | (extemende |
| Segment PLOS |  | Segment 1 | Segment 2 | Sogment 3 | Sogment 4 | Sogment 5 |
| $\begin{aligned} & \frac{8}{5} \\ & \stackrel{\circ}{5} \\ & \stackrel{\rightharpoonup}{4} \end{aligned}$ | Sidewalk Width (m) | 1.5 | 1.5 | >2.5 | 1.5 | 1.5 |
|  | Boulevard Width ( $m$ ) | 3.3 | 3 | 2.65104 | 1103 | 0.3 |
|  | AADT | <3000 | <3000 | 7120 | 7480 | 3000 |
|  | Presence of on-street parking or other equivalent barrier | No | No | Yes, On-street parking + planters | No | No |
|  | Operating Speed (km/h) | 50 | 50 | 50 | 50 | 50 |
|  | Los | c | c | B | D | E |
|  | Sidewalk Widh ( $m$ ) | 0 | 1.5 | >2.5 | 1.5 |  |
|  | Baulevard Width ( $m$ ) | 300 | 3103.3 | 2.3104 .3 | 0102 |  |
|  | AADT | -3000 | <3000 | 7120 | 7480 |  |
|  | Presence of on-street parking or other equivalent barrier | No | No | Yes, On-street parking + planters | No |  |
|  | Operating Speed (km/h) | 50 | 50 | 50 | 50 |  |




