

## North Commuter Parkway Project

## Table 5: Design Criteria

| Element | Value |
| :--- | :--- |
| Design Speed | $80 \mathrm{~km} / \mathrm{hr}$ west of Central Avenue, |
|  | $60 \mathrm{~km} / \mathrm{hr}$ east of Central Avenue, |
|  | $60 \mathrm{~km} / \mathrm{hr}$ along Central Ave |
| Desired Posted Speed | $70 \mathrm{~km} / \mathrm{hr}$ west of Central Avenue, |
|  | $50 \mathrm{~km} / \mathrm{hr}$ east of Central Avenue, |
|  | $50 \mathrm{~km} / \mathrm{hr}$ along Central Ave |
| Vertical Curb \& Gutter | 200 mm |
| Separate Sidewalk | 1.5 m wide both sides of arterial road, |
|  | No sidewalk provided on north side of river |
| Crossing |  |
| Separate Bikeway | 2.0 m wide, both sides |
| Street-oriented Development | No driveways, on-street parking permitted |
| Design Vehicle | Frontage encouraged east of Central |
| Control Vehicle | Avenue |
| Maximum Bridge Grade | COS Transit Bus |
| Driving lanes | Not intended to be a truck route |
| Crossfall | $3.0 \%$ |
| Super-elevation | 3.6 m |
| Minimum centreline radius curve | $2.5 \%$ |
| Perimeter Highway Offset | Remove crown west of Central Avenue, |
| Concept bridge abutments | None east of Central Avenue |
| McOrmond Drive | Approximately 450m |
| Central Ave. - Wanuskewin Rd. | Maximum 8.0m |
| McOrmond Drive | 4-lane cross section, wide ROW |
| Central Ave. - Fedoruk Dr. | 4-lane cross section |
| Central Avenue | 4-lane cross section |
| North Commuter Bridge | 2-lane cross section |
| (River Crossing) | Raised centre median |
|  | 2.0 m left and right outside shoulders |
|  | 1.5 m sidewalk, south side only |

## 10.

## Recommendations

The North Commuter Bridge will link the Marquis Industrial Area with the University Heights area, providing relief to the existing Circle Drive Bridge, and will function as an arterial bridge, operating similar to the existing University and Broadway Bridges. It is not intended to function as a designated truck route, nor as a freeway.

- The preferred alignment for the North Commuter Bridge river crossing extends Marquis Drive across the South Saskatchewan River and connects to the extension of McOrmond Drive at Fedoruk Drive.
- The North Commuter Bridge should be constructed initially as a four-lane bridge; the foundations and piers should be designed to accommodate a possible expansion to six-lanes in the future, if needed.
- McOrmond Drive between the river crossing and Central Avenue should be constructed initially as a four-lane arterial roadway, with a wide right-of-way to permit the possible future expansion to six-lanes in the future, if needed.
- McOrmond Drive through the Northeast Swale should be constructed as a narrow arterial roadway with special considerations for reducing the impact on wildlife and the natural resources along the crossing through the swale.
- McOrmond Drive between Central Avenue and Fedoruk Drive should be constructed as a four-lane arterial roadway. Because of the residential and commercial development along the roadway, very effective access management requirements will be necessary to maintain the utility of the roadway.
- Central Avenue between McOrmond Drive and Fedoruk Drive should be constructed as a four-lane arterial roadway, access management will be important to maintain the utility of the roadway.
- All arterial roads should initially have a posted speed limit of $60 \mathrm{~km} / \mathrm{hr}$, and as development proceeds along the roads, the posted speed limit should be reduced to $50 \mathrm{~km} / \mathrm{hr}$. Through the Northeast Swale, the posted speed limit should remain at $50 \mathrm{~km} / \mathrm{hr}$.
- If required, staged arterial roads can be provided. The center median with street lighting is required, 1 driving lane and shoulder will be necessary on each side.

