

**TABLE 1-1  
PEAK HOUR LEVELS OF SERVICE<sup>a</sup>**

Intersection Major Street      Minor Street		Existing Traffic Control Device	Level of Service by Scenario <sup>b</sup>															
			1		2		3		4		5		6		7		8	
			Affected Environment (Year 2000)		2003 No Build		2003 Building II		2003 Building II & III		2005 Building II & III + Improvements at I-494/EBLR		2005 Building II & III + Improvements at Normandale/84th St		2005 Full Development + Improvements at I-494/EBLR		2005 Full Development + All Roadway Improvements	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
E Bush Lake Rd	78th St	Signal	E	C	E	C	E	C	E	C	E	C	E	C	E	C	E	C
E Bush Lake Rd	84th St	Signal	A	C	D	E	D	E	D	E	D	F	D	F	D	F	D	F
84th St	Normandale Lake Blvd	Signal	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
84th St	Norman Center Dr	Signal	A	B	A	D	A	D	A	D	C	D	C	D	C	D	C	D
Normandale Blvd	84th St	Signal	D	F	E	F	E	F	E	F	F	F	C	C	F	F	C	C
E Bush Lake Rd	WB I-494 Ramp	Signal	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B
E Bush Lake Rd	EB I-494 Ramp	Unsignalized	B	A	C	B	C	B	C	B	A	A	C	A	C	A	C	A
E Bush Lake Rd	Green Valley Dr	Stop	B/C	B/F	C/E	B/F	C/E	B/F	C/E	B/F	C/F	C/F	C/F	C/F	D/F	D/F	D/F	D/F
Norman Center Dr	Bridge Rd	Stop	A/B	A/A	A/C	A/D	A/C	A/F	A/F	A/F	B/F	C/F	B/F	C/F	C/F	C/F	C/F	C/F
E Bush Lake Rd	Highwood Dr	Signal	D	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Norman Center Dr	Normandale Lake Blvd	Stop	A/B	A/B	A/D	A/D	B/E	B/E	B/F	B/E	C/F	B/E	C/F	B/E	C/F	B/F	C/F	B/F

**Notes**

<sup>a</sup> All unmitigated cases. Based on procedures from 1997 *Highway Capacity Manual* and Software and Synchro v.4.

<sup>b</sup> For STOP-controlled intersections: Major Street/Minor Street Level of Service.

**Recommended Mitigation by Scenario**

- 1 None.
- 2 E Bush Lake Rd / 78th St
  - Add second NB left turn lane (min. 225 ft storage).
  - Modify signal to reflect new geometry.
- Normandale Blvd / 84th St
  - Grade-separate/construct interchange.
- E Bush Lake Rd / Green Valley Dr
  - Install signal.
  - Add SB left turn lane (min. 125 ft storage).
  - Add second SB through lane.
- E Bush Lake Rd / 84th St
  - Add SB free right turn lane.
  - Add second SB through lane.
- E Bush Lake Rd / Highwood Dr
  - Add second SB left turn lane (min. 275 ft storage).
  - Add second EB through lane (with taper, min. 700 ft west of intersection).
  - Add second WB through lane (with taper, min. 700 ft east of intersection).

- 3 Scenario 2 improvements plus:
  - Norman Center Dr / Bridge Rd
  - Install signal.
- 4 Scenario 2 improvements plus:
  - Norman Center Dr / Bridge Rd
  - Install signal.
  - Norman Center Dr / Normandale Lake Blvd
  - Install signal.
  - Add SB left, through and right turn lanes.
  - Add dual EB left turn lanes.
  - Add exclusive WB right turn lane.
  - 84th St / Normandale Lake Blvd
  - Modify signal timing/phasing.

- 5 Scenario 2 improvements plus:
  - Background**
  - E Bush Lake Rd / Green Valley Dr
  - Install second NB through lane.
  - Project-Generated Traffic**
  - Norman Center Dr / Bridge Rd
  - Install signal.
  - Norman Center Dr / Normandale Lake Blvd
  - Install signal.
  - Add SB left, through and right turn lanes.
  - Add dual EB left turn lanes.
  - Add exclusive WB right turn lane.
  - 84th St / Normandale Lake Blvd
  - Modify signal timing/phasing.

- 6 Same as Scenario 5.
- 7 Same as Scenario 5.
- 8 Same as Scenario 5.