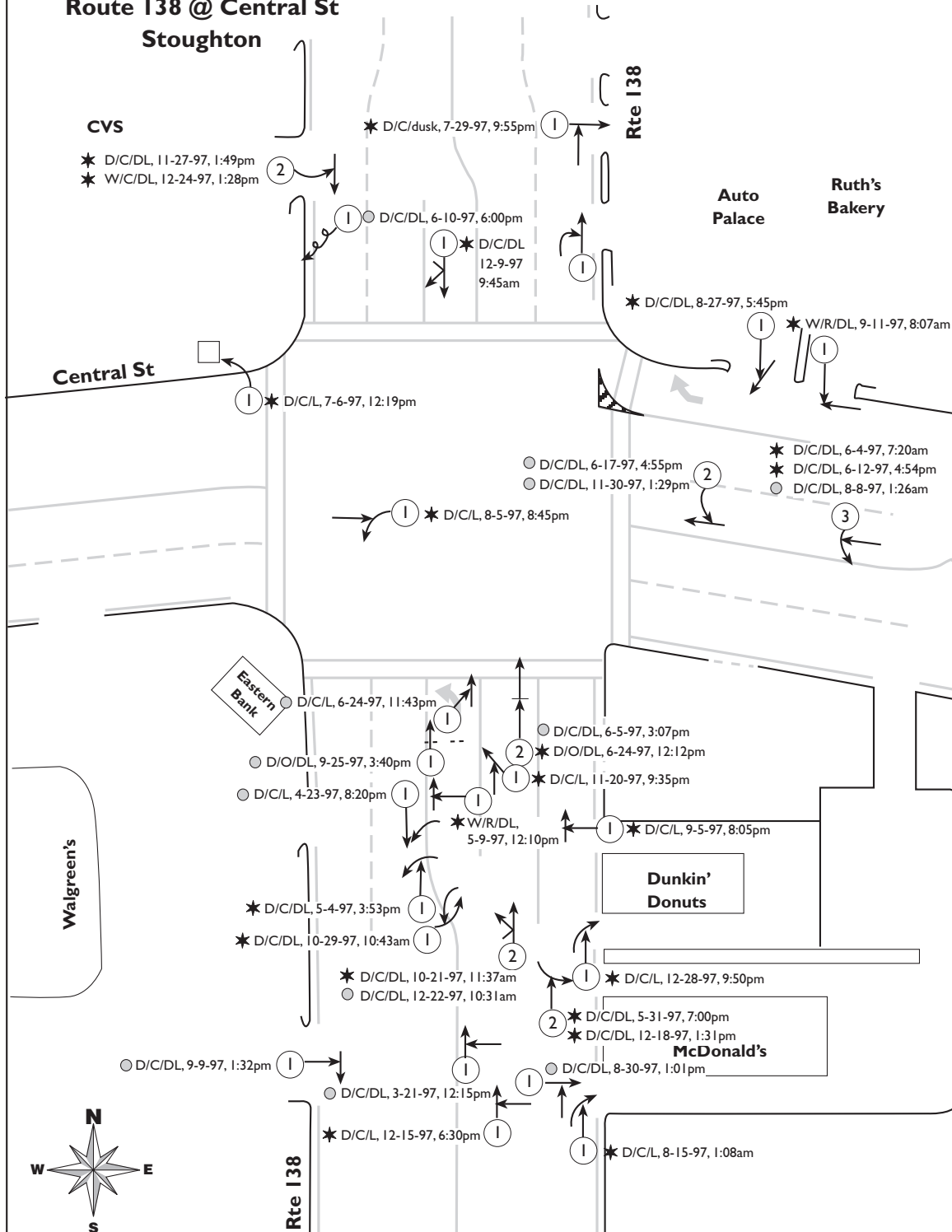
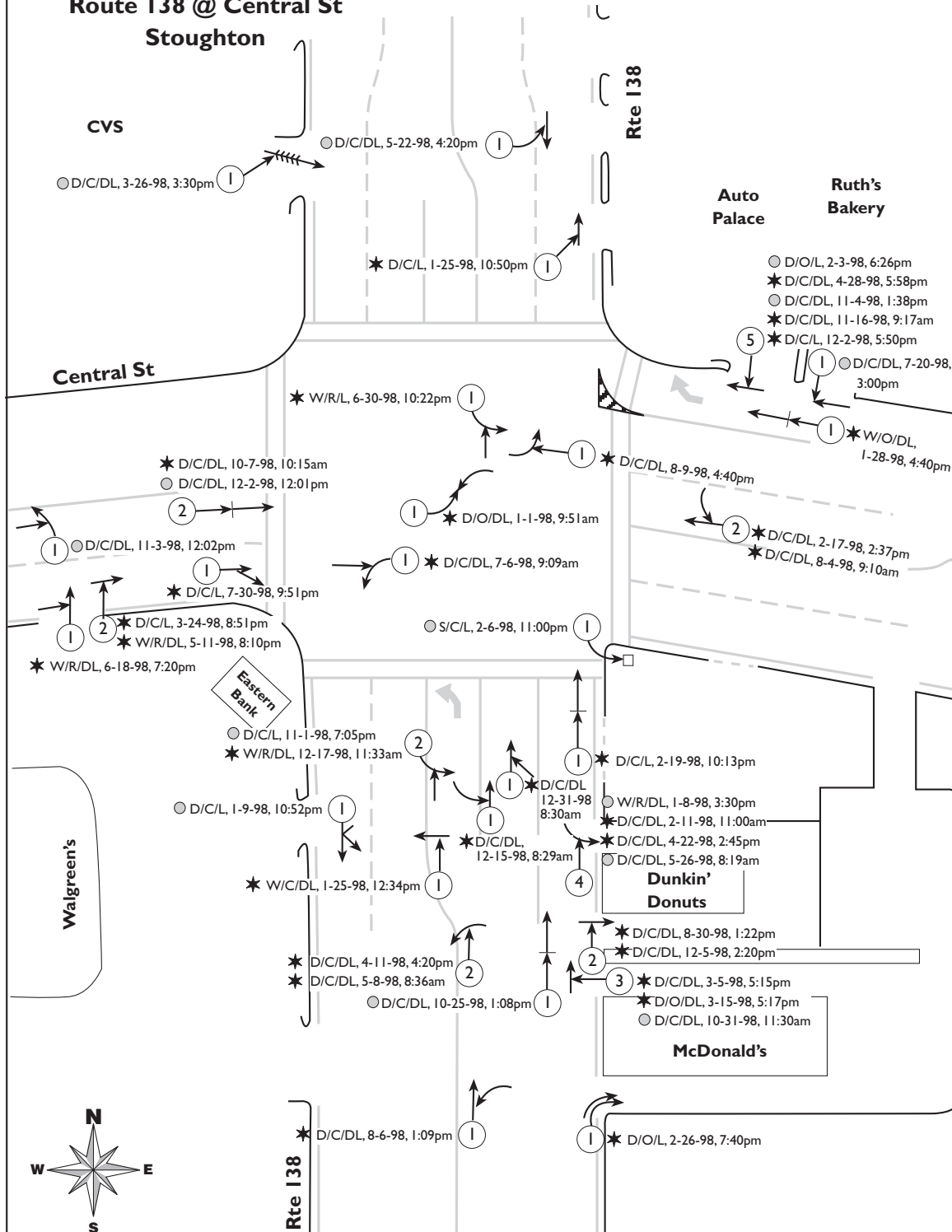


Figure 12a
Collision Diagram
1/1/97 to 12/31/97
Route 138 @ Central St
Stoughton



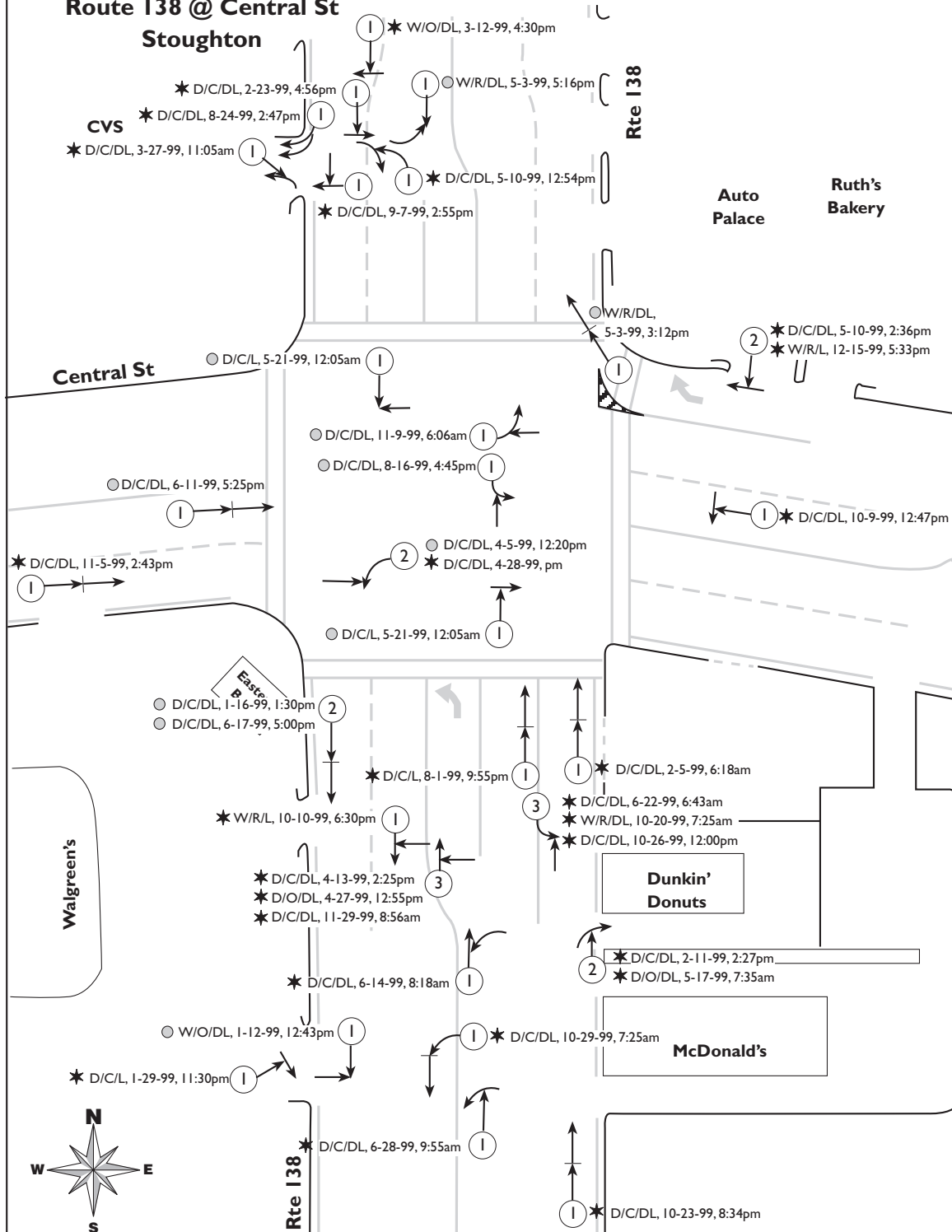
SYMBOLS	PAVEMENT/WEATHER/LIGHTING	TYPES OF COLLISIONS
Moving Vehicle Backing Vehicle Pedestrian Parked Vehicle Property Damage Only Injury Fatality Fixed Object Out of Control Number of Accidents	D Dry C Clear W Wet R Rain F Foggy S Snowy, Icy O Other DL Daylight N Dark – No Lights L Dark – Lighted	Head On Angle Rear End Sideswipe Broadside CTPS

Figure 12b
Collision Diagram
1/1/98 to 12/31/98
Route 138 @ Central St
Stoughton



CTPS

Figure 12c
Collision Diagram
1/1/99 to 12/31/99
Route 138 @ Central St
Stoughton



SYMBOLS	PAVEMENT/WEATHER/LIGHTING	TYPES OF COLLISIONS
Moving Vehicle Backing Vehicle Pedestrian Parked Vehicle Property Damage Only Injury Fatality Fixed Object Out of Control Number of Accidents	D Dry C Clear W Wet R Rain F Foggy S Snowy, Icy O Other DL Daylight N Dark – No Lights L Dark – Lighted	Head On Angle Rear End Sideswipe Broadside
CTPS		

ROUTE 138/CENTRAL STREET:

		<u>1999</u>	<u>2020 No-Build</u>	<u>2020 Build</u>
• Intersection LOS/Delay (1)	AM:	F / *	F / *	F / *
	PM:	F / *	F / *	F / *

- Number of Collisions, 1997–1999 (Stoughton Police): 119 (39.7 per year)
- Jurisdiction of Improvement(s): MassHighway, Town of Stoughton, business owners

(1) = LOS is for the entire intersection. Delay is in seconds, * = 75 or more seconds total delay (for signalized intersections).

20 Concern: “Properties with poorly defined curb cuts abutting Route 138; for example, #472 (Stoughton Car Wash), #500 (Windsor Tire), and #590 (Stoughton Sport Center).”

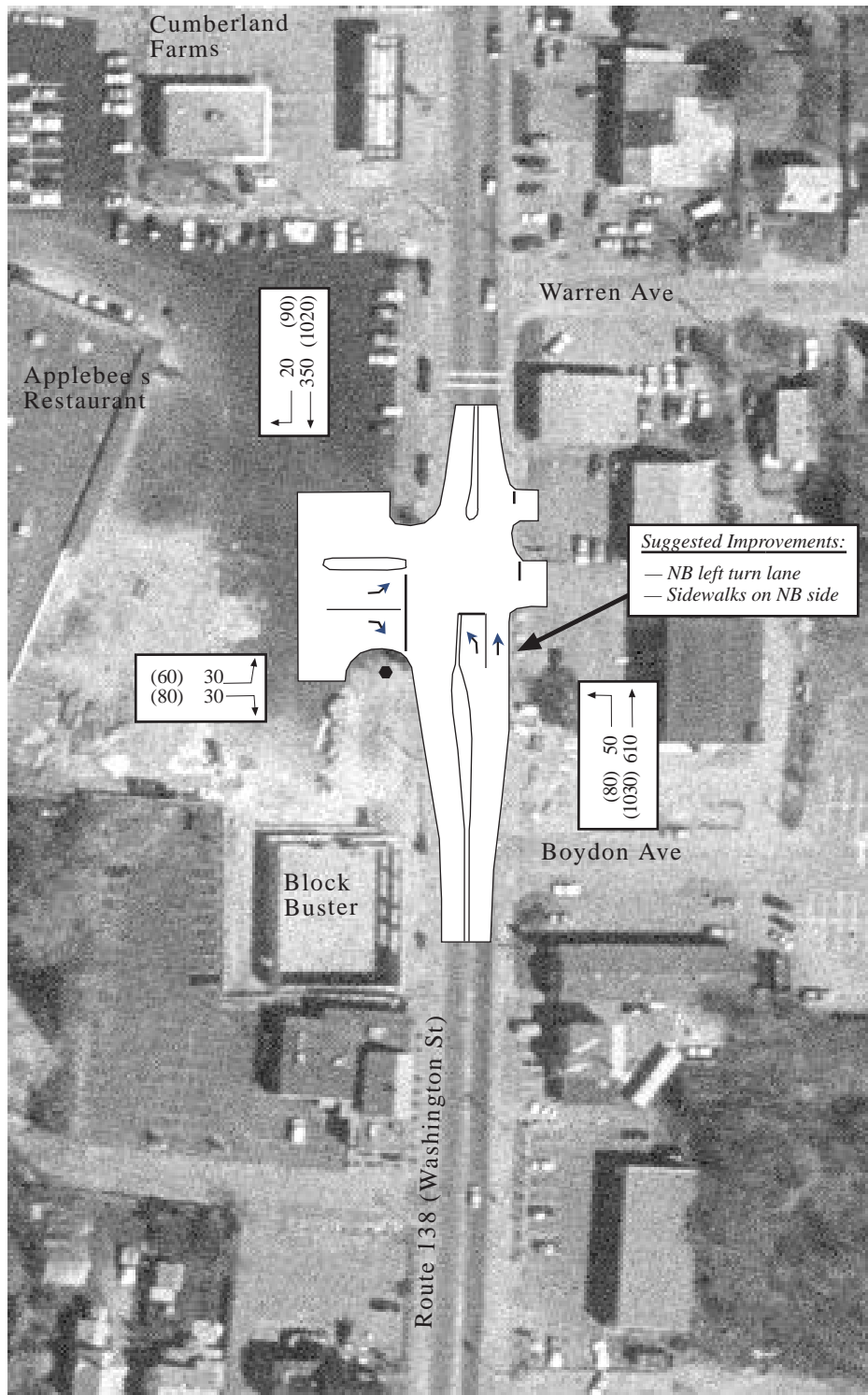
Recommendation: There is no known data which links the poorly defined or excessively wide driveways on Route 138 with unsafe operations or high collision rates. However, to upgrade the efficiency and general aesthetics of the access points to specific properties abutting the roadway, the Stoughton Chamber of Commerce and town planners may wish to investigate what the original curb cut permits allowed in terms of paved frontage. If blatant differences exist, suggestions to comply with the approved permits could be made to the property owners.

21 Concern: “There are many turning movements and much congestion on Route 138 between Lincoln Street and York Street.”

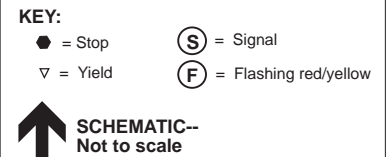
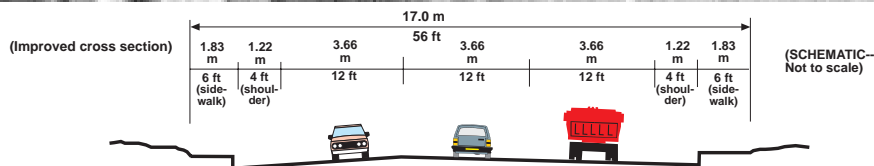
Recommendation: It has been suggested that a two-way center left-turn lane be created between Lincoln Street and York Street. Although this segment contains a number of moderate-volume left-turn driveways, particularly between Lincoln Street and Central Street, *it would not merit a continuous two-way center left-turn lane.* Measures to control turning movements in the Central Street area have already been discussed in Concern/Recommendation 19. These measures would include raised medians to the north, east, and south of the Central Street intersection, thereby limiting left turns to and from Route 138 and the nearby businesses. Improvements at the Route 138/York Street intersection were also recommended in Concern/Recommendation 17. Left turns to and from the Stop & Shop plaza currently safely use the signalized driveway location at the plaza’s northern end. Finally, a two-way center left-turn lane in a three-lane cross section is most appropriate for roadways with numerous left turns and daily volumes below 12,000.¹³ Route 138 in this area of Stoughton has daily volumes of about 16,000 to 20,000.

One intersection in this segment where improvement is recommended is at the Blockbuster/Applebee’s plaza. There are numerous left turns to and from the plaza, particularly in the PM peak period and early evening. Route 138 northbound peak hour through vehicles are often blocked by turning vehicles and attempt to pass on the right, encroaching upon the abutting frontages (Manhattan Bagel and 3¢ Copy Center). *It is therefore recommended that an exclusive left-turn lane be added in the northbound direction at the Route 138 at Blockbuster/Applebee’s intersection. Sidewalks on the northbound side, with improved curbing and defined driveways, between Lincoln and Central Streets are also recommended.* With a ROW of 60 ft, there should be ample space for these improvements (see Figure 13). Jurisdiction would belong to MassHighway.

¹³ Hummer, J.E., and Lewis, C.F., op. cit.



Aerial photo source: MassGIS and MIT



CTPS
Route 138 Corridor
Planning Study

Figure 13
Route 138 at Blockbuster/Applebee's Driveway (Stoughton)
— Suggested Improvements
— 1999 AM (PM) Peak Hour Turning Movements

ROUTE 138/BLOCK-BUSTER/APPLEBEE'S:

		<u>Turns</u>	<u>1999</u>	<u>2020 No-Build</u>	<u>2020 Build</u>
• Intersection LOS/Delay (1)	AM:	EB L	E / 39	F / *	F / 64
		EB R	A / 4	A / 5	A / 5
		NB L	A / 3	A / 4	A / 4
	PM:	EB L	F / *	F / *	F / *
		EB R	C / 12	C / 18	C / 18
		NB L	B / 9	C / 13	C / 13
• Number of Collisions: N.A.					
• Jurisdiction of Improvement(s): MassHighway					
(1) = LOS is for the critical turning movements. Delay is in seconds. * = 60 or more seconds delay (for unsignalized intersections).					

22 Concern: “Only one westbound travel lane exists on Lincoln Street to serve high levels of left and right turns. Consequently, left-turning traffic sometimes blocks right-turning vehicles.”

Recommendation: During field reconnaissance, it was noticed that there were already left and right turns taking place simultaneously from Lincoln Street onto Route 138. However, the existing “lanes” are too narrow to comfortably accommodate two lanes of turning vehicles. Therefore, *it is recommended that some widening of Lincoln Street take place in order to create 12-ft exclusive left- and right-turn lanes. In addition, existing crosswalks at this intersection should be made more prominent.* Since Lincoln Street is a town facility, and Route 138 becomes a state facility north of the intersection, the recommended improvements fall under local jurisdiction. Figure 14 shows existing turning movements and the recommended improvements.

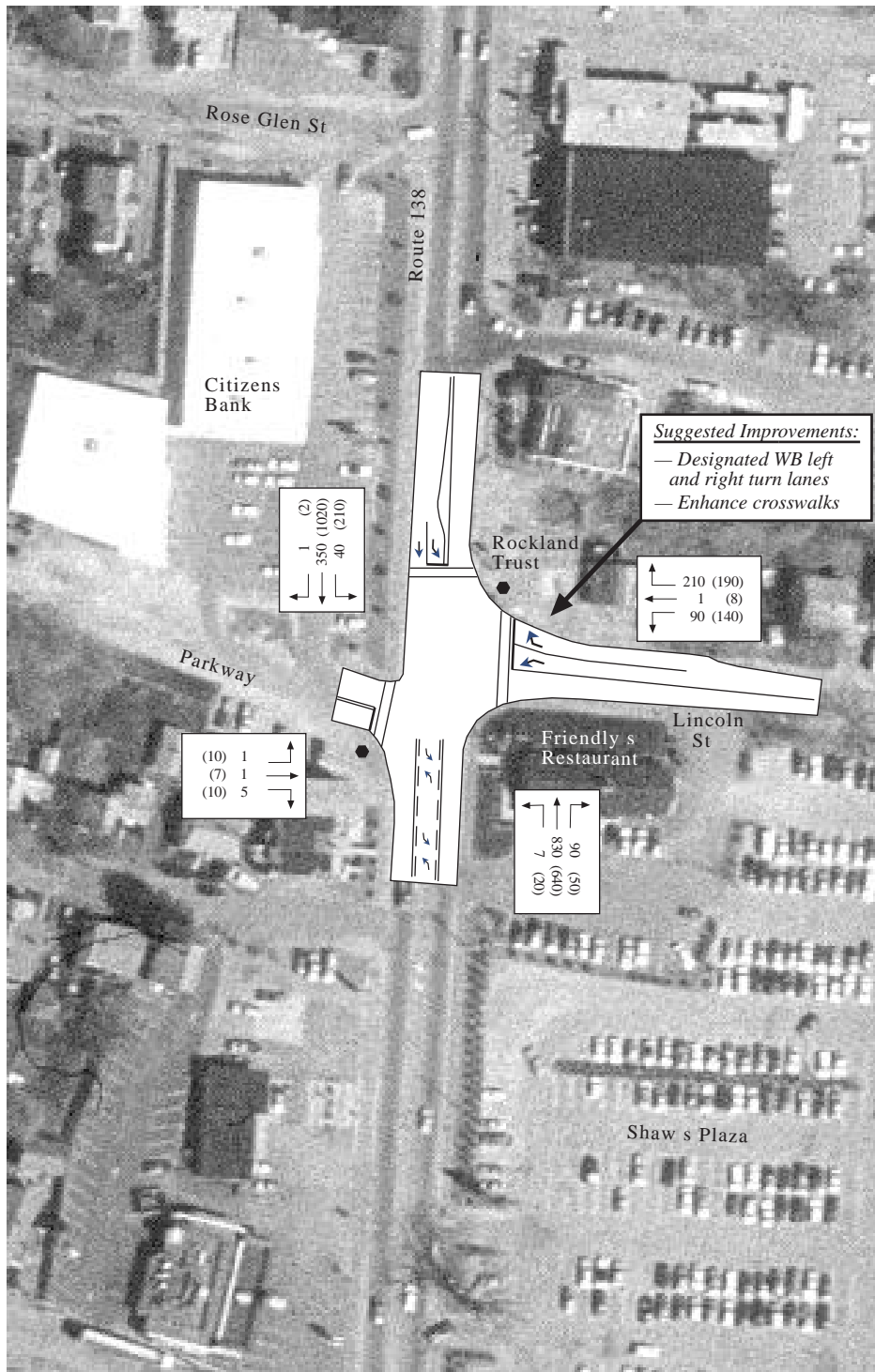
ROUTE 138/LINCOLN ST:

		Turns	1999	2020 No-Build	2020 Build
• Intersection LOS/Delay (1)	AM:	EB all	C / 14	D / 23	D / 23
		WB all	F / *	F / *	N.A.
		WB L,T	N.A.	N.A.	F / *
		WB R	N.A.	N.A.	E / 31
		NB L	A / 3	A / 3	A / 3
		SB L	B / 7	B / 8	B / 8
	PM:	EB all	F / *	F / *	F / *
		WB all	F / *	F / *	N.A.
		WB L,T	N.A.	N.A.	F / *
		WB R	N.A.	N.A.	C / 16
NB L		B / 8	C / 10	C / 10	
SB L		B / 8	C / 11	C / 11	
• Number of Collisions, 1995–1997 (Mass Registry): 17 (5.7 per year)					
• Jurisdiction of Improvement(s): Town of Stoughton					

(1) = LOS is for the critical turning movements. Delay is in seconds. * = 60 or more seconds delay (for unsignalized intersections).

23 Concern: “Difficult turning movements and accidents are prevalent at Route 138 at School Street.”

Recommendation: Currently, this is an unsignalized three-way intersection (see Figure 15 for 1999 AM and PM turning movements). School Street connects Route 138 to Pearl Street, another north-south roadway, about 500 feet to the west. There were 23 accidents recorded at Route 138 at School Street during 1997 through 1999. The majority of accidents (18) were angle collisions, and of these, 16 involved vehicles turning left from School Street to Route 138 northbound (see Figure 16).



Aerial photo source: MassGIS and MIT

KEY:

- = Stop
- ▽ = Yield
- Ⓢ = Signal
- ⓕ = Flashing red/yellow

SCHEMATIC--
Not to scale

CTPS
*Route 138 Corridor
Planning Study*

Figure 14
Route 138 at Lincoln St (Stoughton)
— *Suggested Intersection Improvements*
— *1999 AM (PM) Peak Hour Turning Movements*

