

Appendix

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Appendix 1

Public Outreach Summary

Local Advisory Committee..... A1-2

Steering Committee A1-3

Public Information Meetings/Open Houses..... A1-3

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Public Outreach Summary

The Route 305 corridor study has been conducted with input from municipal advisory committees, municipal staff, Connecticut Department of Transportation officials, stakeholders and the community. A series of public informational meetings were held to share information with and receive comments and suggestions from the public. To further supplement this effort, stakeholder meetings were also held. This summary describes the community involvement process, reporting on activities and comments received.

Local Advisory Committee

Local Advisory Committees (LACs) were established in the Town of Bloomfield and the Town of Windsor during the initiation of the study. LACs had regular meetings to guide the study and comment on proposed concepts and ideas and attended Public Open Houses over the course of the study.



The following tables identify LAC members in each community and the dates of the meetings. Specific meeting minutes are on record at CRCOG’s offices.

Windsor Municipal Advisory Committee Members	
<u>Name</u>	<u>Agency/Representing</u>
Eric Barz	Town Planner
Tom Lenehan	Town Engineer
James Martin	Economic Development
Michael O’Brien	Zoning Commission
Peter Souza	Town Manager

Bloomfield Municipal Advisory Committee Members	
<u>Name</u>	<u>Agency/Representing</u>
Don Bercowetz	Business Owner
Barry Berson	Chairman, TPZ
John Colman	Town Council
Jonathan Thiesse	Town Engineer
Thomas Hooper	Director of Planning
David Kamins	Secretary TPZ
Randy LaVigne	Business Owner
Al LeFebvre	Former Town Council Member
Gail O’Keefe	Economic Development Comm.
Deborah Davis	Economic Development Director
John Sheehan	Town Council & Resident

Windsor Local Advisory Committee Meeting Dates	
November 14, 2007 7 PM	December 3, 2008 7 PM
January 9, 2008 7 PM	January 14, 2009 4 PM
June 4, 2008 7 PM	April 16, 2009 7 PM
October 7, 2008 7 PM	July 30, 2009 7 PM

Bloomfield Local Advisory Committee Meeting Dates	
November 29, 2007 4 PM	December 16, 2008 7 PM
January 23, 2008 7 PM	April 15, 2009 7 PM
May 28, 2008 7 PM	
October 22, 2008 7 PM	

Steering Committee

The Steering Committee (SC) assisted the project team in coordinating the overall study recommendations at key study milestones and was composed of representative members from both town LACs. The primary responsibility of the SC was to review and comment on corridor-wide improvements. The SC met on March 7, 2008 and January 21, 2009.

Steering Committee Members	
<u>Name</u>	<u>Agency/Representing</u>
Eric Barz	Town Planner, Town of Windsor
Jon Colman	Town Council, Town of Bloomfield
Thom Hooper	Town Planner, Town of Bloomfield
Al LeFebvre	Former Town Council Member, Town of Bloomfield
Michael O'Brien	Zoning Commission, Town of Windsor
Peter Souza	Town Manager, Town of Windsor

Public Information Meetings/Open Houses



A total of six open houses were held throughout the study process, three in Windsor and three in Bloomfield. The first two open houses (one each in Windsor and Bloomfield) specifically focused on existing conditions. The next two open houses presented proposed alternatives in the corridor and sought feedback from the community on these alternatives. The last two open houses focused on conceptual improvement plans for the public to comment on.

The first open houses were held on April 3, 2008 and April 9, 2008 in the towns of Windsor and Bloomfield, respectively. The main purpose of these workshops was to present the existing conditions analysis to the public and to hear about their concerns and experiences on the corridor. Participants were engaged in several hands on activities allowing them to express concerns and point out where they live and/or work in relation to Route 305.

Comments from these public meetings are summarized as follows:

April 3, 2008 Windsor Town Hall, Windsor, CT (44 people signed in)

Key concerns raised by the public at this meeting were the volume of traffic on Route 305 and speed and safety concerns associated with the excess volume. Residents understand that much of the traffic on this road is destined to businesses and commercial developments on or around Day Hill Road and would like to see issues at Interchange 38 dealt with. Pedestrian issues, aesthetics and open space are things that the public would like to see once the volume of peak hour traffic is addressed. Twenty-nine members of the public were in attendance at this meeting.



April 9, 2008 Bloomfield Senior Center, Bloomfield, CT (27 people signed in)

Key concerns raised by the public at this meeting were about the implementation process once this study is complete. Other concerns were raised about the safety of the area near Kaman Aerospace and possible changes to accessing this site. The current high volume of traffic, particularly truck traffic on Woodland Avenue is also a concern. Eleven members of the public were in attendance at this meeting.

The next open houses were held on January 29, 2009 and February 5, 2009 in the towns of Windsor and Bloomfield, respectively. The goal of these meetings was to present preliminary alternatives throughout the corridor and to obtain feedback from the public on these options. Attendees had the opportunity to circulate around the room, reviewing preliminary alternative boards/demonstrations and engage in feedback activities while talking with study team and advisory committee members.

Comments from these public meetings are summarized as follows:

January 29, 2009 Windsor Town Hall, Windsor, CT (25 people signed in)

Attendees were primarily concerned with safety issues related to speed and truck traffic along the Corridor, access to Route 305 from driveways and side roads, and the undesirable impacts of living on a four-lane highway. The attendees were interested in the other alternatives that were considered. Fifteen members of the public were in attendance at this meeting.

February 5, 2009 Bloomfield Senior Center, Bloomfield, CT (18 people signed in)

The key concerns raised by the public included the implementation process (timing and whether recommendations would be phased in), impacts of recommendations on personal property (increased traffic in some areas), and options to divert traffic directly from I-91 to Day Hill Road rather than along Route 305. Six members of the public were in attendance at this meeting.

The final public information sessions were held on June 8, 2009 and June 10, 2009 in the towns of Bloomfield and Windsor, respectively. These meetings provided an overview of the draft study recommendations. Public attendees were able to review boards summarizing the study findings and recommendations and view a presentation of this material. The open house and presentation question and answer period of each evening encouraged comments on these concepts from all attendees.

Comments from these public meetings are summarized as follows:

June 8, 2009 Bloomfield Town Hall, Bloomfield, CT (15 people signed in)

Strong support and enthusiasm for the recommendations was expressed by attendees which included Bloomfield Town Council members. Benefits mentioned include economic growth, improved access and response time for emergency vehicles with the potential Route 305 extension, and multimodal enhancements. Key concerns were safety for the possible extension of the East Coast Greenway, minimization of wetland impacts, potential backups on Peters Road caused by railcar activity with an at-grade crossing, and the preservation of the capability to extend the rail line to Springfield.

June 10, 2009 Windsor Town Hall, Windsor, CT (43 people signed in)

Key concerns raised by the meeting attendees include safety and speeding vehicles throughout the corridor, potential property acquisitions associated with two options, difficulty in finding traffic gaps to exit driveways, limited access with the potential use of medians, and the timeline for implementation of these improvement concepts. The project team addressed each these concerns during this information session explaining features designed to mitigate current issues, the benefits and drawbacks of each option, the depth of analysis involved with the development of the recommendations, and the remaining steps prior to implementation.



Stakeholder Meetings

DOT Rail Regulatory Unit – A meeting was held with ConnDOT Rail Regulatory staff on December 18, 2007 to discuss the feasibility of constructing a new at-grade railroad crossing in the vicinity of Peters Road.

Railroad – The project team outreached to ConnDOT’s Rail Regulatory Unit and CNZR, the freight rail operator on the Griffin Line. Meetings were held on October 1, 2008 and November 17, 2008. At the October 1, 2008 meeting, discussions focused on preliminary concepts for a potential at-grade railroad crossing in the vicinity of Peters Road. A follow up meeting with

ConnDOT Rail Regulatory was held on November 17, 2008. On January 23, 2009, CRCOG issued a memorandum summarizing the potential rail crossing alternatives under consideration.

Cicero Property – CRCOG staff met with the owners of the Cicero property (located in the northwest corner of the I91 SB off Ramp / Route 305 intersection) on October 7, 2008 to discuss development of their property and the preliminary Route 305 conceptual alternatives.

ConnDOT – A meeting was held on November 25, 2008 to review existing conditions with ConnDOT and introduce some of the preliminary future alternatives the Advisory Committees are considering.

ConnDOT – A meeting was held on December 18, 2008 to review conceptual improvement alternatives that related to the introduction of a new interchange on I-91 (Pigeon Hill Road).

Kaman Corporation – CRCOG staff met with Kaman Corporation and the Bloomfield Town Planner on April 1, 2009 to discuss improvement alternatives near Kaman’s property, specifically a relocation of East Newberry Road and improvements at Old Iron Ore Road.

Selig Ford – The project team talked with a Selig Ford representative during the Windsor Public Meeting held on June 10, 2009 to discuss potential access management improvements in the vicinity of their property. A field investigation on July 8, 2009 resulted in the development of two alternatives that may be implemented independently or in conjunction with one another to improve access to these properties. These concepts were shared with Selig Ford for their consideration and advancement, separate of this study.

ConnDOT – A meeting was held on August 5, 2009 to review the recommended draft improvement alternatives, respond to DOT’s earlier comments, and obtain any final comments.

Other Outreach Initiatives:

- All project information was available on CRCOG’s website including meeting announcements, meeting minutes, newsletters, presentations, and reports.
- Three surveys were prepared and distributed to residents, business owners and commuters. Surveys were conducted in the fall of 2007 and winter of 2008.
- Two Route 305 Corridor Study Newsletters explaining the study, summarizing the latest developments, and announcing upcoming meetings were sent to all residents and businesses immediately abutting and surrounding the corridor. These newsletters are included in this appendix.
- Flyers for all Windsor and Bloomfield Public Meetings/Open Houses were posted in the Windsor and Bloomfield town halls, libraries, area businesses, and on the Route 305 website.
- Public Meeting announcements were posted in the *Bloomfield* and *Windsor Journals*. A representative from the Journal was also present at the meetings and articles have been published in the newspapers.
- An official legal notice was posted in the *Hartford Courant* for the Public Meetings.
- Public Meeting announcements were listed on both the Windsor and Bloomfield public access television stations.

Other Outreach Initiatives (continued):

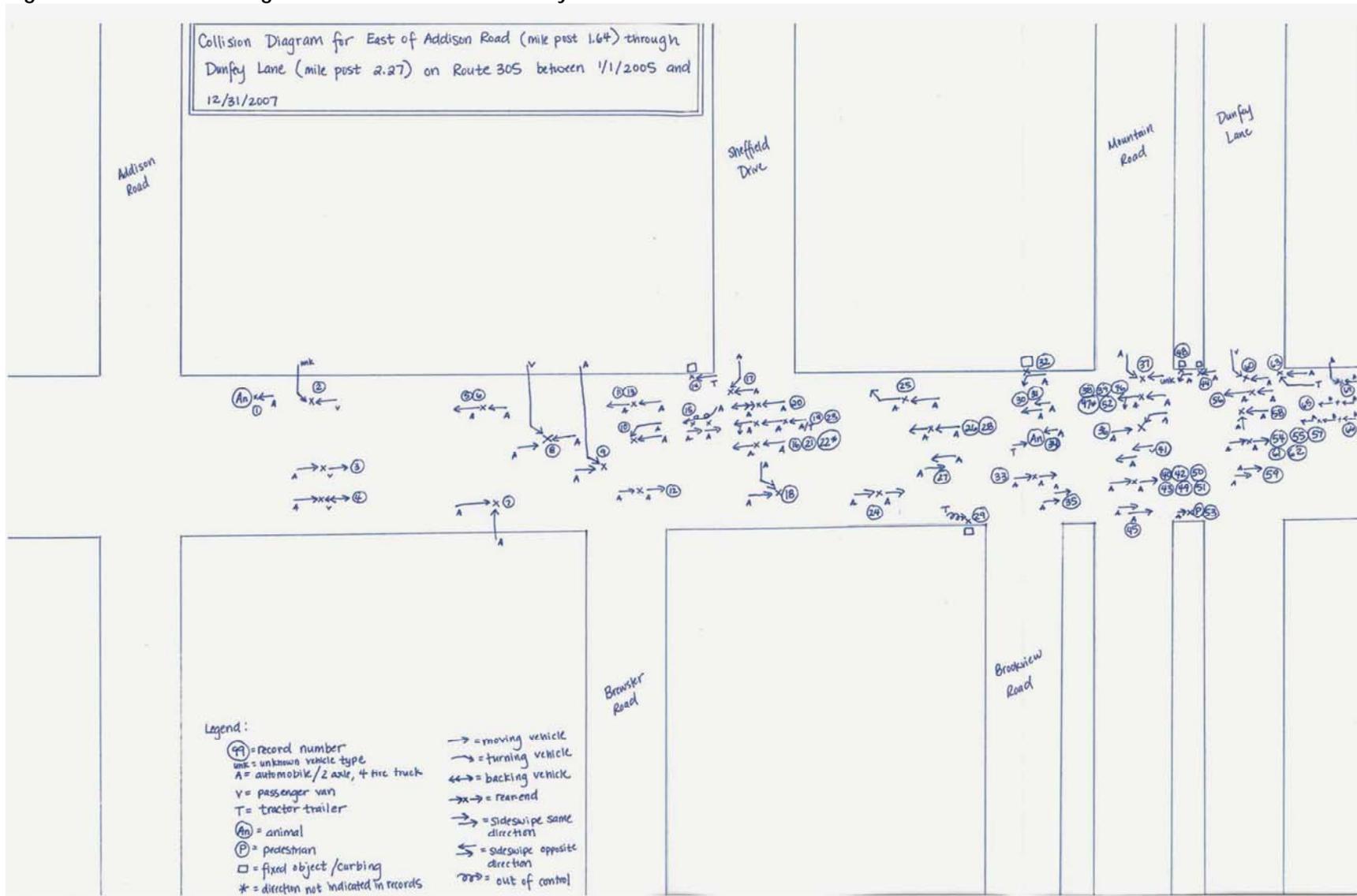
- Comment sheets were available at all Open House meetings to solicit comments and ideas.
- Presentations to the Windsor Town Council were made on February 4, 2008; March 2, 2009; and September 21, 2009.
- Presentation to the Windsor Planning and Zoning Commission on March 10, 2009 and September 9, 2009.
- Presentation to the Bloomfield Town Council on June 8, 2009 in coordination with the third public meeting.
- Presentations to CRCOG's Transportation Committee were made on December 10, 2007; May 18, 2009; and October 19, 2009.
- Numerous emails and phone calls were initiated to respond to resident questions and concerns.
- Letters to residents and business owners in the vicinity of Peters Road and along Route 189 were sent to explain the planning study and solicit input.

Appendix 2

Accident Data

Collision Diagram: Addison Road to Dunfey Lane..... A2-2

Figure A2-1. Collision Diagram: Addison Road to Dunfey Lane



Appendix 3

Build-out Analysis

Build-out Analysis Methodology..... A3-2

Build-out Analysis – Windsor A3-5

Build-out Analysis – Bloomfield..... A3-6

TAZ Boundaries and Build-out Area Map A3-7

Build-out Analysis Methodology

Tables A3-1 and A3-2 summarize the results of the build-out analysis in Windsor and Bloomfield, respectively. It should be noted that the quantities represented in the tables are general in nature; however, the methodology used to determine these quantities is an appropriate and effective way to approximate development potential for planning purposes. The components of the build-out analysis, as illustrated in the tables, and the methodology used to determine the property development and redevelopment potential of the Route 305 study area can generally be described as follows:

- Table columns C through E report the raw land data for each TAZ¹ designation (column A) including total gross land area, total undeveloped land area that is available for development, and percent of land area that is developed. Figure A3-1 shows the boundaries of each TAZ.
- Table columns F through I account for land areas that are considered usable lands by deducting unusable land areas (specifically wetlands, existing road rights-of-way (ROW) and steep slopes) from the total available (undeveloped) land area. This step recognizes that not all the land is developable due to physical constraints on development.
- Table columns J through L further reduce available land area by recognizing that not all of the vacant and usable land area can be developed and sold as building lots. These are considered regulatory reductions because town regulations require that some of the land in new commercial and industrial subdivisions be dedicated to public uses; specifically, for ROW to construct new access to developments and for the preservation of open space.

As shown in column J, the study team assumed that 5% of the net usable land area will be used for future ROW. This percentage is consistent with typical development patterns in Windsor and Bloomfield where the construction of new roadways has been necessary to provide access to larger, undeveloped tracts of land.

Current land use regulations in Windsor and Bloomfield do not require “set-asides” for open space for the development of commercial or industrial zoned land. Rather, regulations restrict the percentage of the total site that can be covered by impervious surfaces (i.e. buildings and pavement). The analysis assumed that no land in Bloomfield would be set aside for open space. However, the Town of Windsor identified several TAZs where it was assumed that some land would be set aside for open-space.

This step results in net buildable area (column L), which refers to commercial and industrial zoned land that is vacant, and buildable.

¹ TAZ – Traffic Analysis Zone. The build-out analysis was performed for blocks of land that correlate to the TAZ boundaries used in CRCOG’s regional traffic model. The traffic model was used to evaluate the potential traffic impacts associated with the build-out analysis. Correlating the land blocks to the TAZ boundaries helped facilitate the traffic modeling tasks of this study.

- The study team then translated the net buildable land area in each town into potential floor area by applying a floor area ratio (FAR) to the net buildable acreage. The expected FAR and potential floor areas are shown in columns M and N.

FAR is a factor customarily used by planners and is derived by dividing the total floor area that can be accommodated on a given site by the total or gross land area of that site. Commercial and industrial development that is typical of existing development in Windsor and Bloomfield has an FAR of approximately 0.20. By comparison, corporate office development typically has an FAR of 0.25 to 0.30 with two stories. Retail development, usually on one level, typically results in an FAR of 0.20 to 0.25. Because higher FARs require multiple stories and/or structured parking – features that are usually cost prohibitive except in urban areas – the study team and participating municipalities determined that an overall FAR of 0.20 would most likely anticipate the intensity of development for the remaining commercial and industrial land and is consistent with the intensity of development that exists on previously developed sites in these districts.

The potential floor area shown in column N is important because it shows the full build-out, or potential total floor area of commercial and industrial development that could directly affect traffic in the Route 305 study corridor.

- Table column O shows an approximate absorption rate for each TAZ that reflects the anticipated percent of buildable area within each TAZ that will likely be developed by Year 2030. The absorption rates were developed in consultation with Town of Windsor and Town of Bloomfield staff and their respective study advisory committees based on development trends in the area.
- Table columns P through T show estimated floor areas for various land uses that could be built-out or developed by Year 2030 given a potential floor area (column N) and an estimated absorption rate (column O) for each TAZ. The assumed breakdown of land uses was developed in consultation with Town of Windsor and Town of Bloomfield staff and their respective study advisory committees based on current zoning; recommendations of the respective municipal Plans of Conservation and Development; current land use trends, and anticipated future land use trends. The breakdown of land uses is an important step in the build-out analysis because it anticipates what type of development is likely to be constructed on the undeveloped or under-developed commercial and industrial land in the study area. For the purposes of the build-out analysis, the study team assumed that the potential future land uses in the study area could include retail, warehouse/light industry, general office/commercial, corporate office/research and development, and residential uses.

The breakdown of land uses is also important because each land use results in a different intensity of development and building occupancy, and therefore, each results in a different rate of traffic generation. For example, retail uses can generate approximately 43 vehicle trips per day for each 1000 square feet of floor area, whereas warehouse uses generate approximately 3 vehicle trips per day for the same floor area. Therefore, the assumed mix of land uses, as shown in the tables, could have considerable impact on the rate of traffic generation in the corridor.

The study team notes that development in the commercial and industrial zoned land of Windsor and Bloomfield is controlled or influenced by a variety of factors, both regulatory and market-driven, including zoning, proximity to interstate highways, proximity to markets, land values, market forces, local and state economic development policies (e.g. tax incentives), adjacent development, and physical characteristics of the land (e.g. size of parcels, topography, etc.). Therefore, it is difficult to predict with any certainty what specific type of development will occur in the future. The results of the build-out analysis demonstrate only one potential development scenario.

Table A3-1. Build-out Analysis – Windsor

1	A	B	C			D				E			F			G			H			I			J			K			L			M	N		O	P				
	TAZ Designation (Block)	Nickname	Total Gross Area [ac]	Total Available (Undeveloped) Area [ac]	% of Area Developed	Wetlands [ac]	Existing Road R.O.W. [ac]	(5% of Column C)	Steep Slopes [ac]	(Slopes > 15%)	Net Usable Area [ac]	Column D - (F+G+H)	Future Road R.O.W. [ac]	(Assume 5% of Column I)	Open Space (ac.)	Net Buildable Area [ac]	Column I - (J + K)	Average Expected F.A.R.	Potential Floor Area [sq. ft]	Column (L x M) x 43,560	Absorption Rate	% Developed by Year 2030	Retail [sq. ft]	Warehouse Light Industry [sq. ft]	General Office Commercial [sq. ft]	Corporate Office R&D [sq. ft]	Residential [sq. ft]															
2	114A	Northern ABB	108	108	0%	8	5	23	71	4	10	58	23%	580,049	100%	0	0	0	0	280,000																						
3	283A	ABB	521	521	0%	1	26	99	395	20	30	345	34%	5,114,838	100%	541,571	692,008	1,022,968	1,022,968	1,878,400																						
4	283B	The Hartford	441	300	32%	15	15	70	200	10	160	30	34%	439,212	50%	0	0	109,803	109,803	0																						
5	284A	TLD ACE	166	75	55%	32	4	0	39	0	37	2	0%	0	100%	0	0	0	0	0																						
6	284B	Shemin Nursery	65	40	38%	3	2	0	35	0	0	35	34%	523,740	50%	0	86,417	87,281	87,281	0																						
7	843A	Blue Hills Ave.	83	48	42%	0	2	0	46	0	3	42	34%	628,938	50%	0	0	157,235	157,235	0																						
8	844B	Aero Gear	148	61	59%	1	3	0	57	0	0	57	23%	571,507	50%	42,863	80,954	80,954	80,954	0																						
9	845A	Emhart Glass	296	219	26%	2	11	16	190	9	0	180	34%	2,669,127	50%	0	440,406	444,810	444,810	0																						
10	845B	Hudson RPM	134	44	67%	7	2	0	35	2	0	33	23%	334,486	50%	0	55,190	55,742	55,742	0																						
11	845C	Family Med. Grp.	65	37	42%	9	2	0	26	1	0	25	23%	251,429	50%	0	125,714	0	0	0																						
12	845D	555 Day Hill	151	86	43%	6	4	0	75	4	0	71	23%	714,601	50%	0	357,300	0	0	0																						
13	845E	BOA Proc. Ctr.	161	105	35%	6	5	0	93	5	8	80	23%	805,567	50%	0	402,784	0	0	0																						
14	845F	Mototown	231	180	22%	2	9	13	156	8	0	148	34%	2,191,525	50%	0	361,602	365,218	365,218	0																						
15	846A	Marriott	78	46	41%	0	2	0	44	2	0	42	34%	619,398	100%	216,789	0	216,789	0	240,000																						
16	846B	Konica	89	7	92%	0	0	0	7	0	7	0	0%	0	100%	0	0	0	0	0																						
17	846C	ING (northern)	47	12	75%	0	1	0	11	0	0	11	23%	110,978	50%	0	0	27,745	27,745	0																						
18	848A	Travelers Claim U	120	23	81%	0	1	0	22	1	0	21	23%	210,226	50%	0	52,556	52,556	0	0																						
19	848B	Highway Garage	86	46	46%	10	2	0	34	2	0	32	23%	325,002	50%	0	81,250	81,250	0	0																						
20	849A	Cicero	28	12	57%	0	1	0	12	0	0	12	23%	115,832	50%	28,958	0	28,958	0	0																						
21	855A	Ezra Silva	135	109	19%	39	5	0	65	3	0	61	23%	614,906	25%	0	153,727	0	0	0																						
22	856B	1 & 10 Targeting	19	0	100%	0	0	0	0	0	0	0	0%	0	100%	0	0	0	0	0																						
23	Land Totals		3,172	2,080	34%	142	104	222	1,613	71	256	1,287	-	16,821,361	-	830,182	2,889,908	2,731,309	2,351,755	2,398,400																						
24	Total Build-out by Year 2030 (from above) 11,201,554 sq. ft (sum of area from Columns P, Q, R, S, T) 852 ac. (area derived from Column L x O)																																									
25	Resultant Mix of Land Uses¹ Retail (Column P / P31) 7.4% Warehouse/ Light Industry (Column Q / P31) 25.8% General Office/ Commercial (Column R / P31) 24.4% Corporate Office/ R&D (Column S / P31) 21.0% Residential (Column T / P31) 21.4%																																									
26	¹ Assumptions regarding the mix of land uses that could comprise the Year 2030 build-out were developed in consultation with Windsor town staff and study advisory committee.																																									

Table A3-2. Build-out Analysis – Bloomfield

	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	TAZ Designation (Block)	Total Land Area			Net Usable Land Area				Land Use Reduction Factors			Average Expected F.A.I.R.	Potential Floor Area [sq. ft] <small>Column (L x M) x 43,560</small>	Absorption Rate <small>% Developed by Year 2030</small>	Approximate Build-out by Year 2030: Estimated Floor Area [sq. ft] ¹				
2		Total Gross Area [ac]	Total Available (Undeveloped) Area [ac]	% of Area Developed	Wetlands [ac]	Existing Road R.O.W. [ac] <small>(6% of Column C)</small>	Steep Slopes [ac] <small>(Slopes > 15%)</small>	Net Usable Area [ac] <small>Column D - (F+G+H)</small>	Future Road R.O.W. [ac] <small>(Assume 5% of Column H)</small>	Open Space Factor <small>(Assume 0% of Column C)</small>	Net Buildable Area [ac] <small>Column I - (J + K)</small>				Retail [sq. ft]	Warehouse Light Industry [sq. ft]	General Office Commercial [sq. ft]	Corporate Office R&D [sq. ft]	Residential [sq. ft]
3	25A	82	69	16%	25	3	0	41	2	0	39	20%	335,670	50%	5,035	83,918	62,099	8,392	8,392
4	25B	61	20	68%	7	1	1	11	1	0	11	20%	94,500	50%	1,417	23,625	17,482	2,362	2,362
5	25C	198	158	20%	20	8	14	116	6	0	110	20%	961,465	50%	14,422	240,366	177,871	24,037	24,037
6	25E	18	18	0%	7	1	0	10	0	0	9	20%	78,990	50%	1,185	19,747	14,613	1,975	1,975
7	26A	299	213	29%	21	11	35	146	7	0	139	20%	1,211,375	50%	18,171	302,844	224,104	30,284	30,284
8	26B	121	94	22%	10	5	0	79	4	0	75	20%	655,305	50%	9,830	163,826	121,231	16,383	16,383
9	26C	90	54	40%	0	3	0	51	3	0	49	20%	422,771	50%	6,342	105,693	78,213	10,569	10,569
10	26D	34	4	89%	0	0	0	4	0	0	4	20%	30,664	50%	460	7,666	5,673	767	767
11	26F ¹	68	37	45%	11	2	0	24	1	0	23	20%	197,847	50%	32,971	0	0	32,971	32,971
12	26E ¹	124	67	46%	3	3	0	60	3	0	57	20%	499,009	50%	83,160	0	0	83,160	83,160
13	26G	135	102	24%	20	5	0	77	4	0	73	20%	639,642	50%	9,595	159,910	118,334	15,991	15,991
14	319A	152	31	80%	0	2	0	29	1	0	28	20%	240,595	50%	3,609	60,149	44,510	6,015	6,015
15	319B	217	202	7%	59	10	0	133	7	0	126	20%	1,099,623	50%	16,494	274,906	203,430	27,491	27,491
16	319C	78	35	55%	5	2	0	28	1	0	26	20%	230,597	50%	3,459	57,649	42,660	5,765	5,765
17	320A	267	173	35%	67	9	11	87	4	0	82	20%	716,761	50%	10,751	179,190	132,601	17,919	17,919
18	320B	147	126	14%	59	6	40	21	1	0	20	20%	174,727	50%	2,621	43,682	32,325	4,368	4,368
19	321B	208	149	28%	52	7	0	90	4	0	85	20%	743,448	50%	11,152	185,862	137,538	18,586	18,586
20	954A	105	99	5%	88	5	0	7	0	0	6	20%	55,497	50%	832	13,874	10,267	1,387	1,387
21	316A ¹	44	44	0%	0	2	0	42	2	0	40	20%	345,954	50%	57,653	0	0	57,653	57,653
22	Land Totals	2,445	1,694	31%	454	85	100	1,055	53	0	1,003	-	8,734,441	-	289,159	1,922,908	1,422,952	366,075	366,075
23																			
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Total Build-out by Year 2030 (from above)
 4,367,168 sq. ft (sum of area from Columns P, Q, R, S, T)
 501 ac. (area derived from Column L x O)

Resultant Mix of Land Uses¹

Retail (Column P / P31)	6.6%
Warehouse/ Light Industry (Column Q / P31)	44.0%
General Office/ Commercial (Column R / P31)	32.6%
Corporate Office/ R&D (Column S / P31)	8.4%
Residential (Column T / P31)	8.4%

¹ Assumptions regarding the mix of land uses that could comprise the Year 2030 build-out were developed in consultation with Bloomfield town staff and study advisory committee.

Appendix 4

Transportation Improvement Concepts

Alternative Concepts A4-2

- Sheffield Drive and Brewster Road A4-2
- East Newberry Road A4-3
- Alternative Concept for Asymmetric Four Lane Roadway with Wide Median A4-4
- Pigeon Hill Road Interchange A4-5
- Day Hill Road Access Concepts A4-6
- Extension of Route 305 A4-7
- Grade-separated Railroad Crossing Alternative Concepts A4-8

At-grade Crossing Details A4-10

- Existing Rail Operations and Potential Siding Improvements A4-10

Access Management..... A4-13

- Overview..... A4-13
- Site-specific Commercial Access Drive Deficiencies and Recommendations A4-13
- General Access Management Recommendations and Considerations A4-22

Northwest Corridor Study Recommendations A4-24

Alternative Concepts

The Route 305 Corridor Study Advisory Committee and Project Team have reviewed several potential improvement concept alternatives throughout the corridor prior to developing the concepts identified in the Corridor Improvement Plan. Alternative concepts that were reviewed but not included in the final plan are summarized in this appendix.

Sheffield Drive and Brewster Road – Windsor

Sheffield Drive and Brewster Road intersect Route 305 within approximately 300 ft of each other. Concepts that realign the existing roadways opposite each other were considered within this study and are identified below.

- Option A, shown in Figure A4-1, relocates Brewster Road easterly to meet Sheffield Drive at Route 305. An existing segment of Brewster Road terminates in a cul-de-sac.



Figure A4-1. Sheffield Drive and Brewster Rd Option A

- Option B, shown in Figure A4-2, relocates Sheffield Drive westerly to meet Brewster Road at Route 305. Stratford Court is extended and terminates in a cul-de-sac in an existing section of Sheffield Drive.



Figure A4-2. Sheffield Drive and Brewster Rd Option B

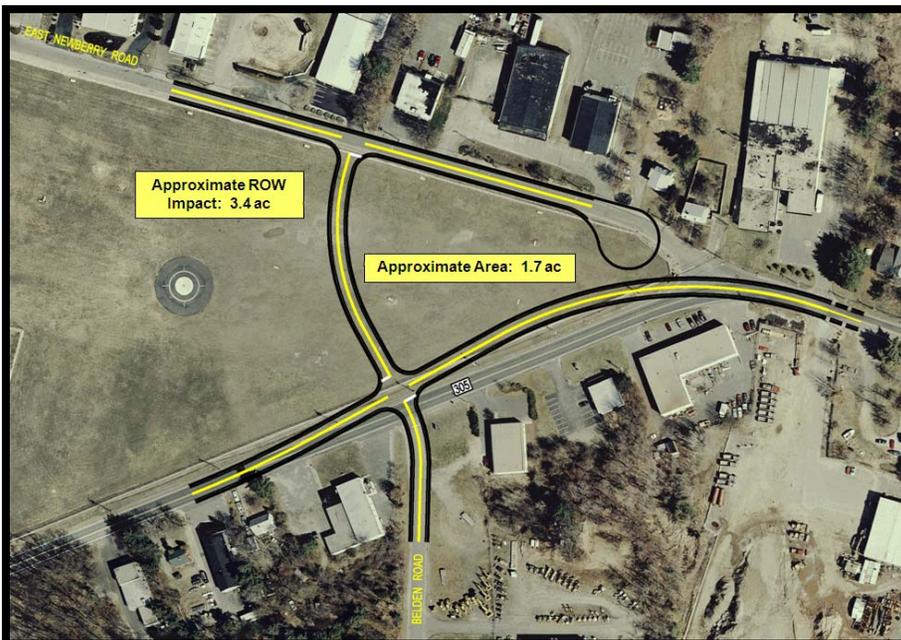
Concepts A and B are envisioned to be longer-term concepts which would require further discussions and coordination with property owners. Warrants for a traffic signal at the intersection would have to be further investigated under subsequent study phases.

East Newberry Road Intersection – Bloomfield

Alternative concepts developed for the East Newberry Road intersection with Route 305 include the relocation of East Newberry Road westerly and the termination of the existing East Newberry Road segment in a cul-de-sac. Two options for this concept were developed which vary based on the alignment of East Newberry Road and the right-of-way impacts. Options A and B are illustrated in Figures A4-3 and A4-4.



**Figure A4-3
East Newberry Road
Option A**



**Figure A4-4
East Newberry Road
Option B**

Alternative Concept for Asymmetric Four Lane Roadway with Wide Median – Windsor

An alternative concept for an asymmetric four lane roadway with wide median was developed for Route 305 between Addison Road and Mountain Road to illustrate the potential reuse of land along the south side of Route 305 for a shared-use path or recreational trail should an asymmetric widening concept be pursued in the future. Details of this concept are shown in Figure A4-5. As shown in the figure, the concept also illustrates the potential realignment of Brewster Road with Sheffield Drive and the potential incorporation of a frontage street along the north side of Route 305 to help consolidate local access to Route 305.

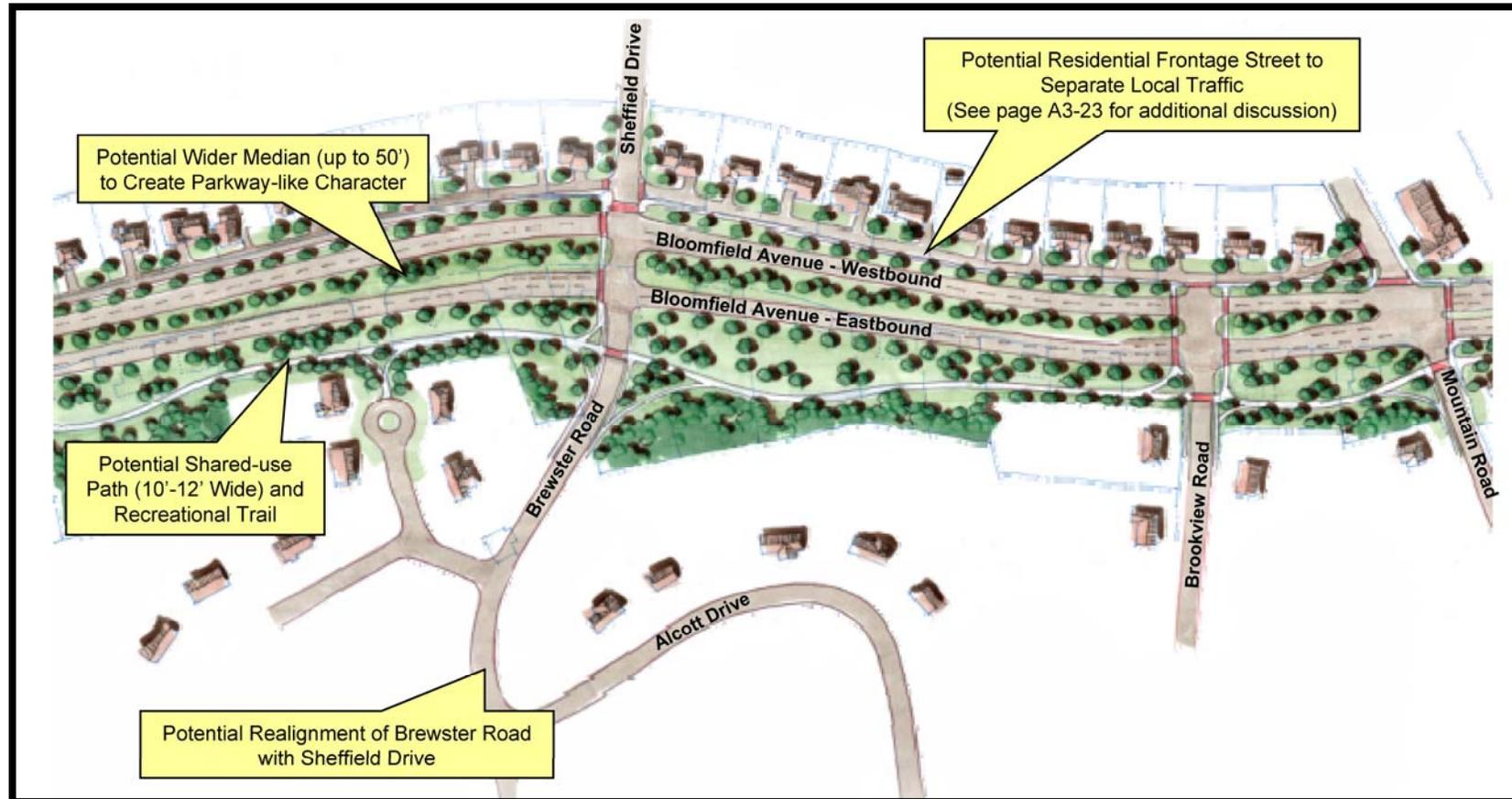
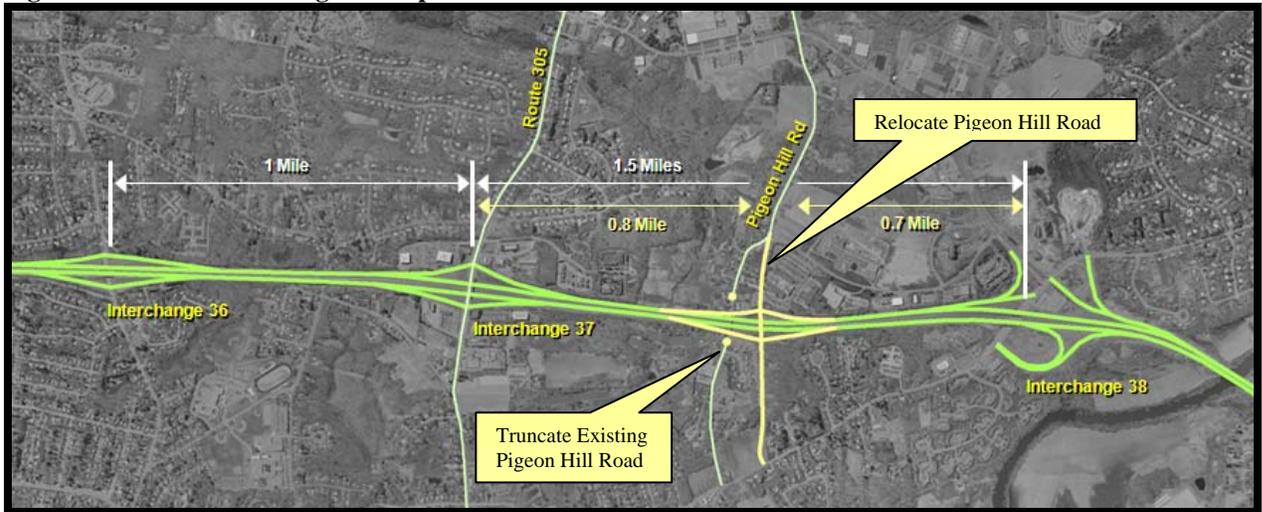


Figure A4-5 Alternative Concept for Asymmetric Four Lane Roadway with Wide Median – Windsor

Pigeon Hill Road Interchange Concept – Windsor

A possible new interchange on I-91 between Interchange 37 at Route 305 and Interchange 38 at Day Hill Road was considered in this study. This new diamond interchange would provide access to a relocated Pigeon Hill Road with the intent of facilitating more direct access to the Day Hill Corporate Area than is currently provided by Route 305 and Day Hill Road. Figure A4-6 illustrates this concept.

**Figure A4-6
Pigeon Hill Road Interchange Concept**



Day Hill Road Access Concepts – Windsor

A new I-91 northbound off ramp directly serving Day Hill Road was assessed in two forms:

- Concept 1 provided new northbound access to Lamberton Road and maintained the existing access from northbound I-91 to Route 75. This concept is illustrated in Figure A4-7.



Figure A4-7 Day Hill Road Access Ramp Concept 1

- Concept 2 provided new northbound access to Lamberton Road and removed the existing access from northbound I-91 to Route 75. This concept is illustrated in Figure A4-8.

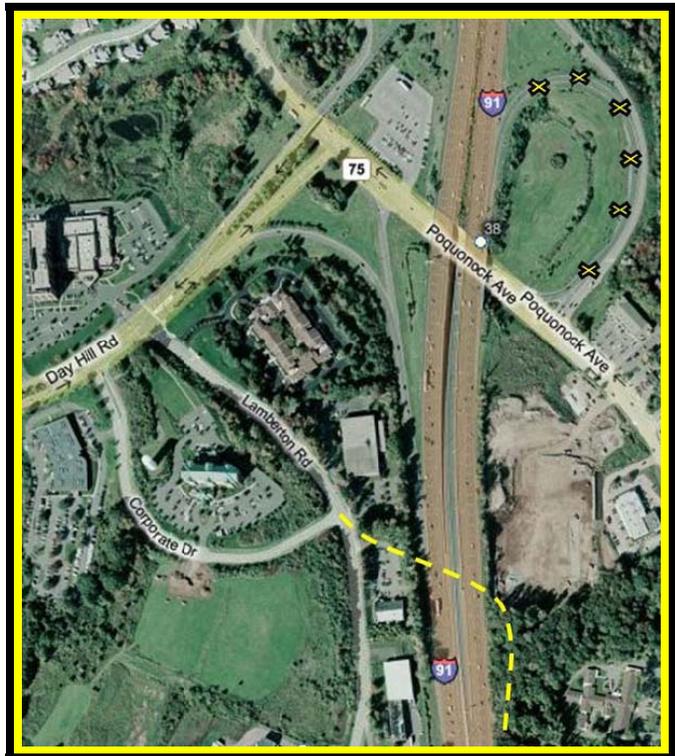


Figure A4-8 Day Hill Road Access Ramp Concept 2

Extension of Route 305 – Bloomfield

Preliminary planning to determine the most feasible alignment for an extension of Route 305 was conducted early in the planning process. Figures A4-9 and A4-10 illustrate two concepts that were not advanced further primarily because of input from Advisory Committee members and the anticipated property impacts and environmental impacts. The Advisory Committee also preferred that a potential extension of Route 305 provide the most direct connection between Route 187 and Route 189.

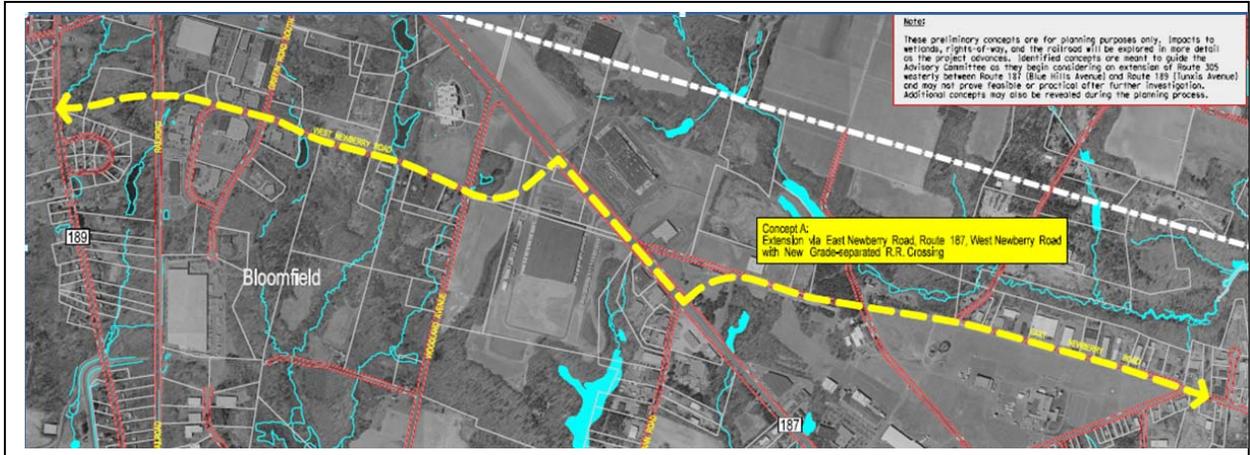


Figure A4-9



Figure A4-10

Extension of Route 305: Grade-separated Railroad Crossing Alternative Concepts – Bloomfield

Multiple grade-separated concepts were developed during this study. In addition to the concept presented in the Plan (described in Section 4.2.3.d and shown in Figure 4-19), the following three alternatives listed below were reviewed. These alternatives are less feasible than the selected concept due to less desirable roadway geometry, higher costs, and/or higher degree of environmental and property impacts.

- Alternative Concept 1, shown in Figure A4-11, includes a grade separated structure approximately 240 feet long and approximate grades of 7%. The alignment would utilize segments of existing Peters Road and Highland Park Road.

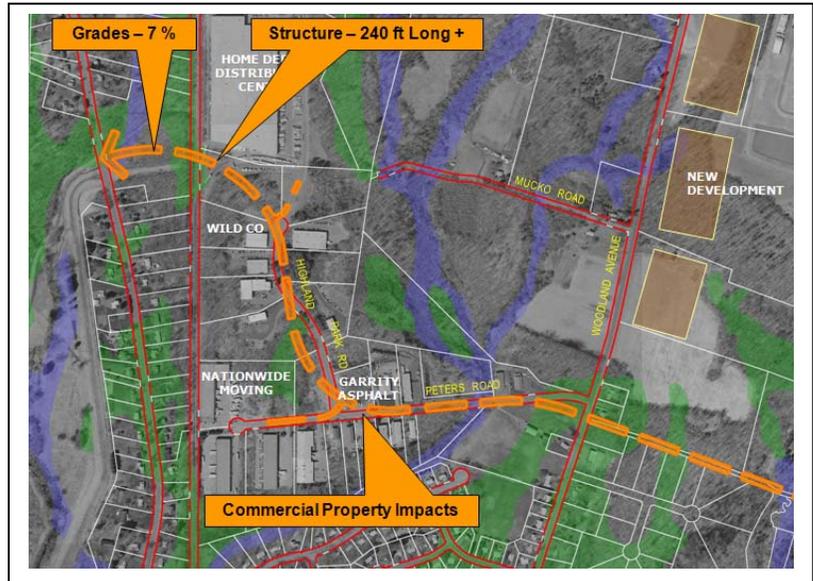


Figure A4-11
Grade-separated Railroad Crossing Alternative Concept 1

- Alternative Concept 2, shown in Figure A4-12, includes a grade separated structure approximately 120 feet long and approximate grades of 5.5%. The alignment would utilize segments of existing Peters Road and Highland Park Road, but creates additional commercial property impacts to reduce the length of the bridge structure.

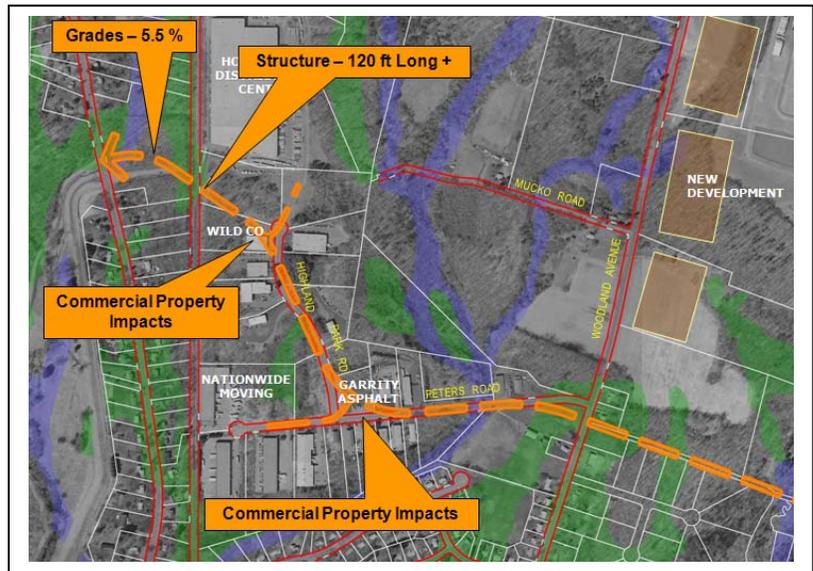


Figure A4-12
Grade-separated Railroad Crossing Alternative Concept 2

- Alternative Concept 3, shown in Figure A4-13, includes a grade separated structure approximately 120 feet long and approximate grades of 5.5%. The alignment would utilize segments of existing Woodland Avenue and Mucko Road to minimize impacts to commercial properties. bridge structure.

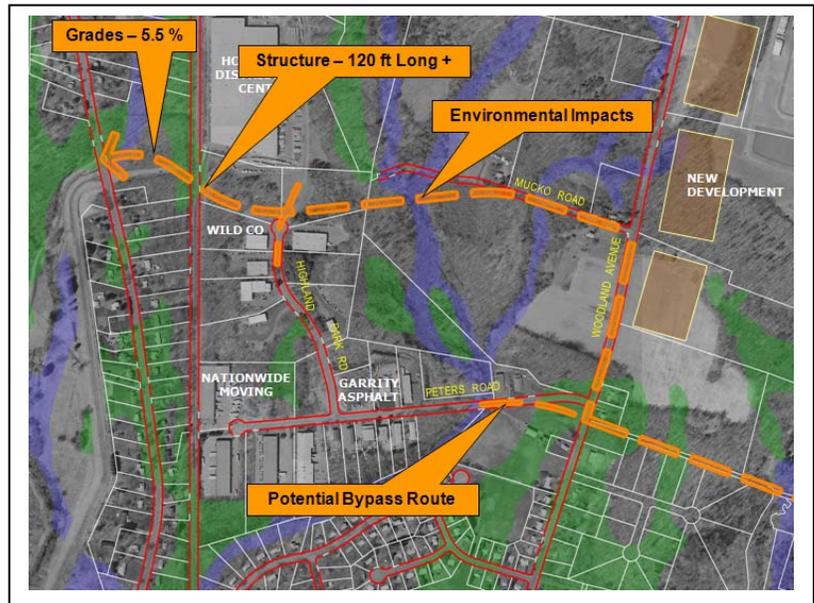


Figure A4-13
Grade Separated Railroad Crossing Alternative Concept 3

At-grade Crossing Details for Extension of Route 305

Existing Rail Operations and Potential Siding Improvements

Central New England Railroad (CNZR) operates freight service on the ConnDOT-owned Griffin Line that runs north-south between Hartford and Bloomfield. The line parallels Route 189 in the study area and terminates just north of Day Hill Road. According to the operator, the line accommodates approximately 12 to 20 train movements per day in the study area, primarily in service to the Home Depot distribution center located north of Peters Road at the end of Highland Park Road.

As shown in Figure A4-14, the Home Depot distribution center site can accommodate up to 24 rail cars – 8 cars on the spur located along the south side of the distribution center and 16 cars on the siding located along the west side. The spur and the siding are only accessible from the south and approximately 1800 ft of mainline track is required to maneuver 24 rail cars into the site.

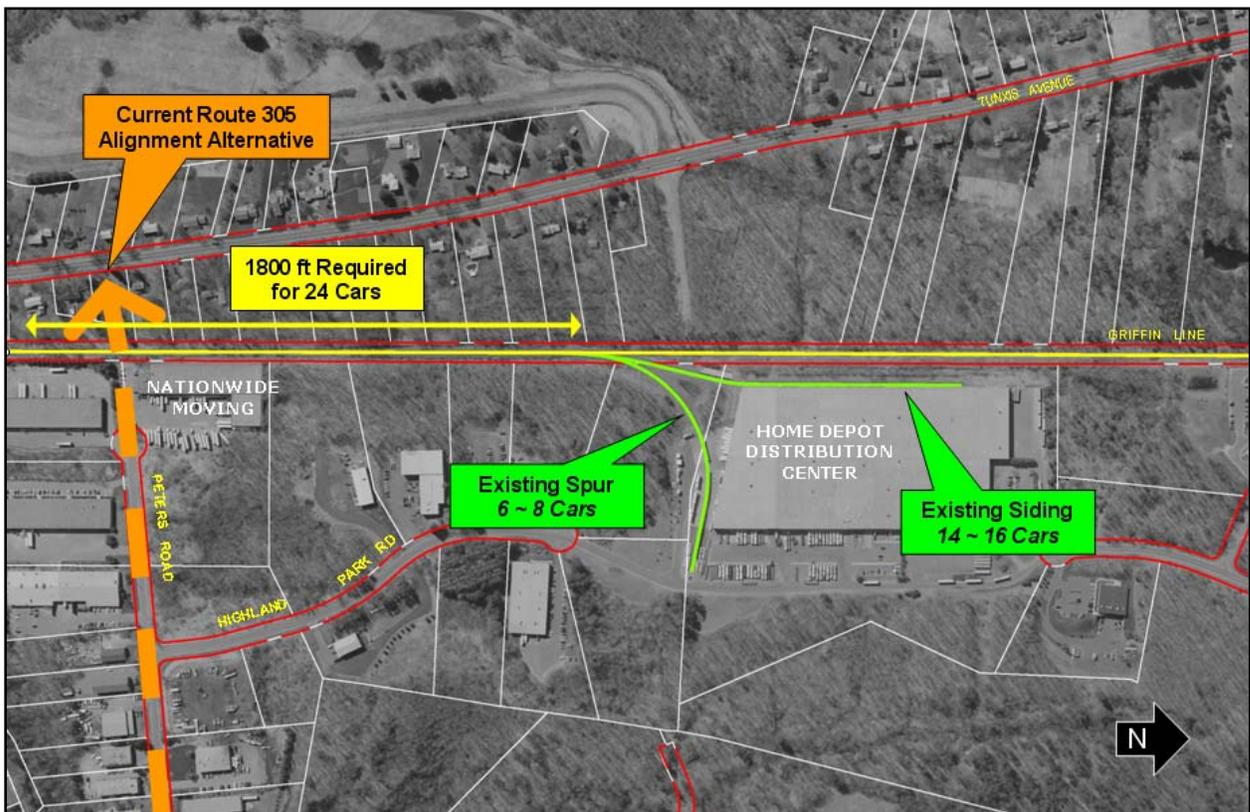


Figure A4-14

The current Route 305 at-grade crossing concept shown in Figure A4-14 for the possible extension of Route 305 utilizes Peters Road and extends westerly across the Griffin Line to intersect Route 189 (Tunxis Avenue) approximately 300 ft west of the railroad. The new at-grade crossing created by the extension would be located approximately 1500 ft south of the existing spur for the Home Depot site and within the 1800-ft limits of track required to maneuver

cars into the site. Consequently, rail operations at the site would extend through the crossing and would delay vehicular traffic operations on Route 305 while continuously activating the signals and gates for the active warning system.

The study team identified a possible siding improvement that would maintain existing rail operations in the study area and eliminate operational conflicts with a new at-grade crossing near Peters Road. As shown in Figure A4-15, the measure consists of improving the existing Home Depot siding by extending it approximately 850 ft to the north and connecting the siding back to the mainline track.

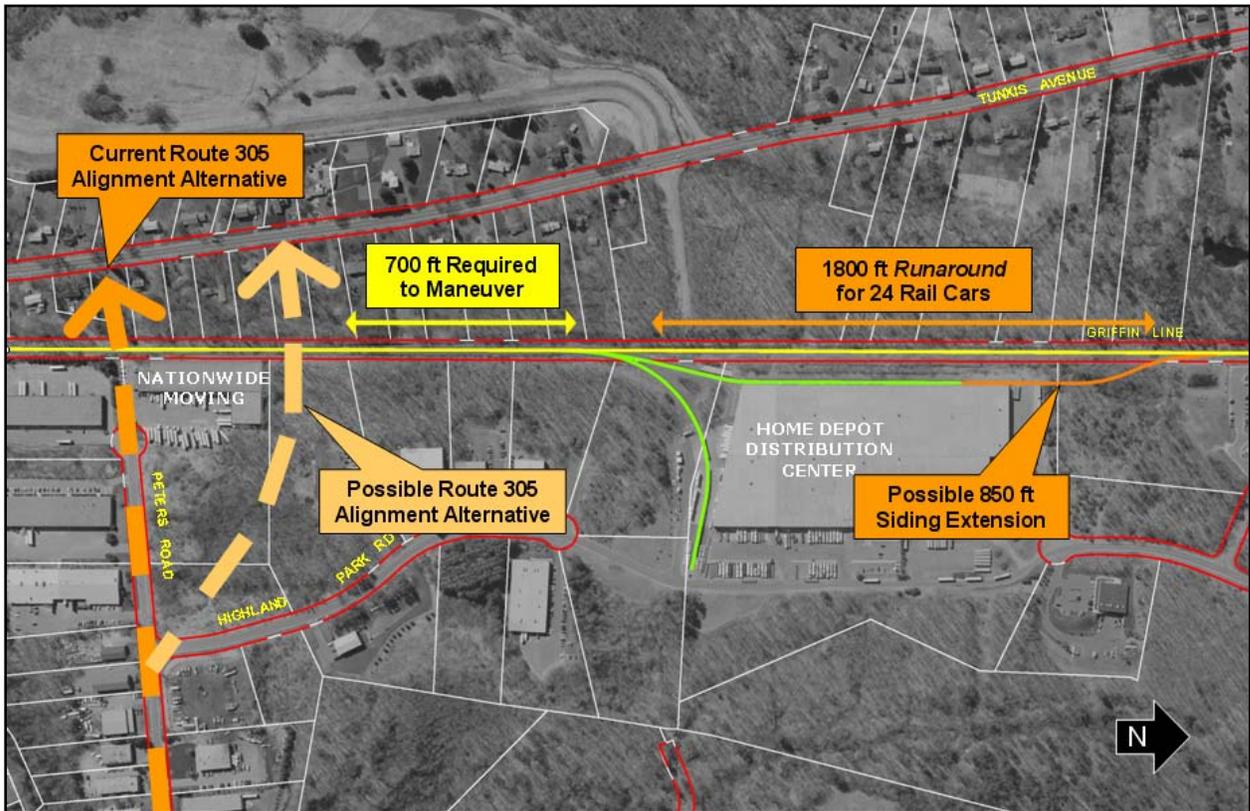


Figure A4-15

The siding improvement would provide approximately 1800 ft of track on which to pull 24 rail cars and would provide the operator the ability to run the engine around these cars. By creating a *runaround*, the operator would be able to detach 8 cars from the train on the south end of the siding and maneuver these 8 cars onto the existing spur. With this improvement, the length of mainline track south of the spur required to maneuver 24 rail cars into the Home Depot site would be reduced from approximately 1800 ft to 700 ft. The reduced space requirement would allow the operator to maintain existing service to the Home Depot site while eliminating possible operational conflicts with an at-grade crossing near Peters Road.

In addition to maintaining operations at the Home Depot site, the siding improvements and resulting runaround would benefit the operator by increasing the existing runaround capability that is currently provided by an existing 950 ft siding located just south of Day Hill Road.

One possible alternative concept for the at-grade railroad crossing (shown in Figure A4-15) includes a slight modification to the concept presented in the Plan (described in Section 4.2.3.c and shown in Figure 4-18). A portion of Peters Road would be relocated northerly – to avoid parking and access impacts to the existing commercial developments located at the end of Peters Road – and extended west to meet Route 189/Tunxis Avenue. This concept also allows for rail siding improvements resulting in an 1800 ft runaround, but reduces the track south of the spur that would be available to maneuver rail cars from approximately 1500 ft to 9000 ft. Although 900 ft is greater than the estimated 700 ft of track required to maintain operations, discussions with Connecticut Department of Transportation Rail Regulatory officials indicate that this alternative may not provide sufficient room for maneuvering and switching; providing the greatest distance between the existing operations at the Home Depot distribution center and any at-grade railroad crossing is preferred.

Access Management

Overview

The goal of the access management components of this study is to encourage private property owners, the towns, and Connecticut Department of Transportation (ConnDOT) to pursue and implement practical and feasible access management improvements to the benefit of traffic operations and overall safety in the Route 305 corridor. The access management improvement concepts presented in this section include site-specific recommendations for commercial access drives and general recommendations for both commercial and residential access drives.

The recommendations are intended to highlight access management improvement opportunities and are not being suggested with a mandate by the or the towns of Windsor or Bloomfield for any private property owner to modify access. It is recommended that the zoning commissions in each town use these recommendations as a guide so that when an application is made for site plan or other zoning approval to change the use, intensity, or character of a site, that the applicant is strongly encouraged to also improve access location and design.

Some of the recommendations can be coordinated or implemented with other localized or long-term improvement recommendations of this study. However, the process to improve access management will be initiated by individual property owners under most circumstances. The process will typically begin with the individual property owner seeking approval for their site access improvements from their respective town zoning commission. Once local approval is obtained, the owner will have to obtain approval from ConnDOT through the State Traffic Commission (STC) or through a DOT Encroachment Permit. It should be noted that STC approval is required for major traffic generators and will not apply to the majority of properties in the corridor. A DOT Encroachment Permit is required for any new driveway on a state road.

In all cases, the access management recommendations of this study will require additional planning and coordination with ConnDOT, the town, and adjacent property owners (in the case of joint/shared access) prior to implementation.

Site-specific Commercial Access Drive Deficiencies and Recommendations

As discussed in Section 2.1.3, many of the deficiencies in the existing access drive configurations in the Route 305 corridor currently pose limited problems because the associated land uses are typically low traffic generators and/or are manufacturing uses where traffic generation to and from the sites is only substantial when work shifts change. If the future use on any of these sites changes to a more intense use resulting in greater traffic generation, then the existing access drive deficiencies could become more problematic. Existing commercial access drive deficiencies and the recommendations for potential improvements that were developed by the study team are discussed below.

Windsor

- **500 Bloomfield Avenue – River of Life Christian Church:** The church has one drive on Bloomfield Avenue and four drives on Mountain Road, one of which is located within the functional area of the Mountain Road intersection.



- Recommendations include potentially limiting access from Route 305 to ingress only and closing the southern access on Mountain Road.

- **620 Bloomfield Avenue – Connecticut Veterinary Center:** This site has a wide access drive onto Sheffield Drive, which is within 50 feet of the intersection with Route 305. There is a second access drive onto Route 305, which is situated less than 100 feet from the intersection with Sheffield Drive.

- Recommendation includes potentially relocating the Sheffield Drive access to the northern part of the property. The study team notes that the implementation of a raised median on Route 305 would make the Route 305 access drive to this property right-in/right-out.

- **739 Bloomfield Avenue – D’Agata Granite & Bronze:** The access drive for this business directs vehicles to the location where the eastbound lane merge ends and the westbound right turn lane begins.

- Study team notes that potential future widening of Route 305 would alleviate concerns over the location of this driveway in the eastbound merge area. Implementation of a raised median on Route 305 would make the driveway right-in/right-out.

- **777/779/801 Bloomfield Avenue – Shared Residential Drives/Bill Selig Ford:** The driveways for these adjacent uses are about 10 feet apart, separated by a line of parked cars. These drives are approximately 150 feet from the Addison Road intersection. In the peak hour, queuing on Route 305 could block egress from both of these driveways.

- Recommendations shown in Figure A4-16 include the potential relocation of the primary access drive to the Selig Ford property approximately 275 feet westerly along Route 305 and consolidation of this drive with the adjacent Carmon Funeral Home to create a shared access. Improvements would require lowering the profile of



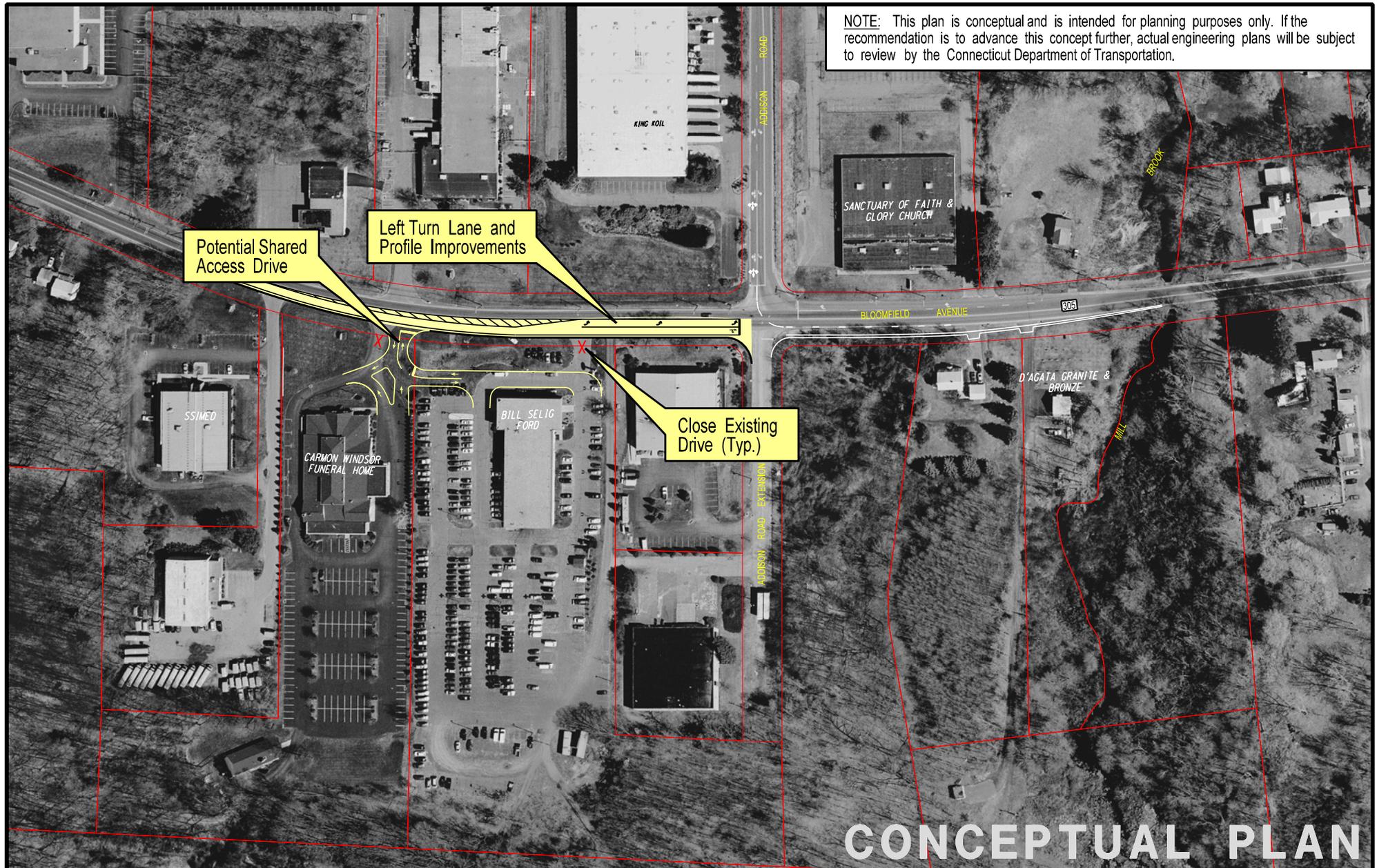
Route 305 approximately four to five feet to provide the standard intersection sight distance from the new drive. The improvements could be provided in conjunction with the localized eastbound left turn lane improvements at Addison Road.

- o Alternatively, recommendations shown in Figure A4-17 include a potential new access drive off of Addison Road Extension. This improvement would be contingent upon extending the existing Addison Road Extension approximately 300 feet to the south such that the access drive could be provided on Selig Ford property. The implementation of these improvements would allow the closure of the residential drive on Route 305 with access provided from Addison Road Extension via the Selig Ford access drive. A connection could be provided between the parking lots of the Selig Ford and Carmon Funeral Home. The primary Selig Ford site drive on Route 305 could also be restricted to a right-in/right-out condition.

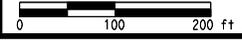
- **858 Bloomfield Avenue – Airport Ground Equipment:** This business has two access drives. The eastern drive has poor sight lines to the east. The eastern drive is also redundant as there is cross-access internally on the site between this site and the adjacent industrial sites to the east. The study team notes that the redundant drive could be necessary due to the existing use and functional layout of the site.
 - o Recommendation includes consideration of closing the redundant eastern drive if and when the use or function of the site changes.



NOTE: This plan is conceptual and is intended for planning purposes only. If the recommendation is to advance this concept further, actual engineering plans will be subject to review by the Connecticut Department of Transportation.



CONCEPTUAL PLAN



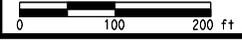
Route 305 Corridor Study

Figure A4-16.
Potential Access Management Improvements
Shared Access Drive

NOTE: This plan is conceptual and is intended for planning purposes only. If the recommendation is to advance this concept further, actual engineering plans will be subject to review by the Connecticut Department of Transportation.



CONCEPTUAL PLAN



Route 305 Corridor Study

Figure A4-17.
Potential Access Management Improvements
Alternate Access Drive

Bloomfield

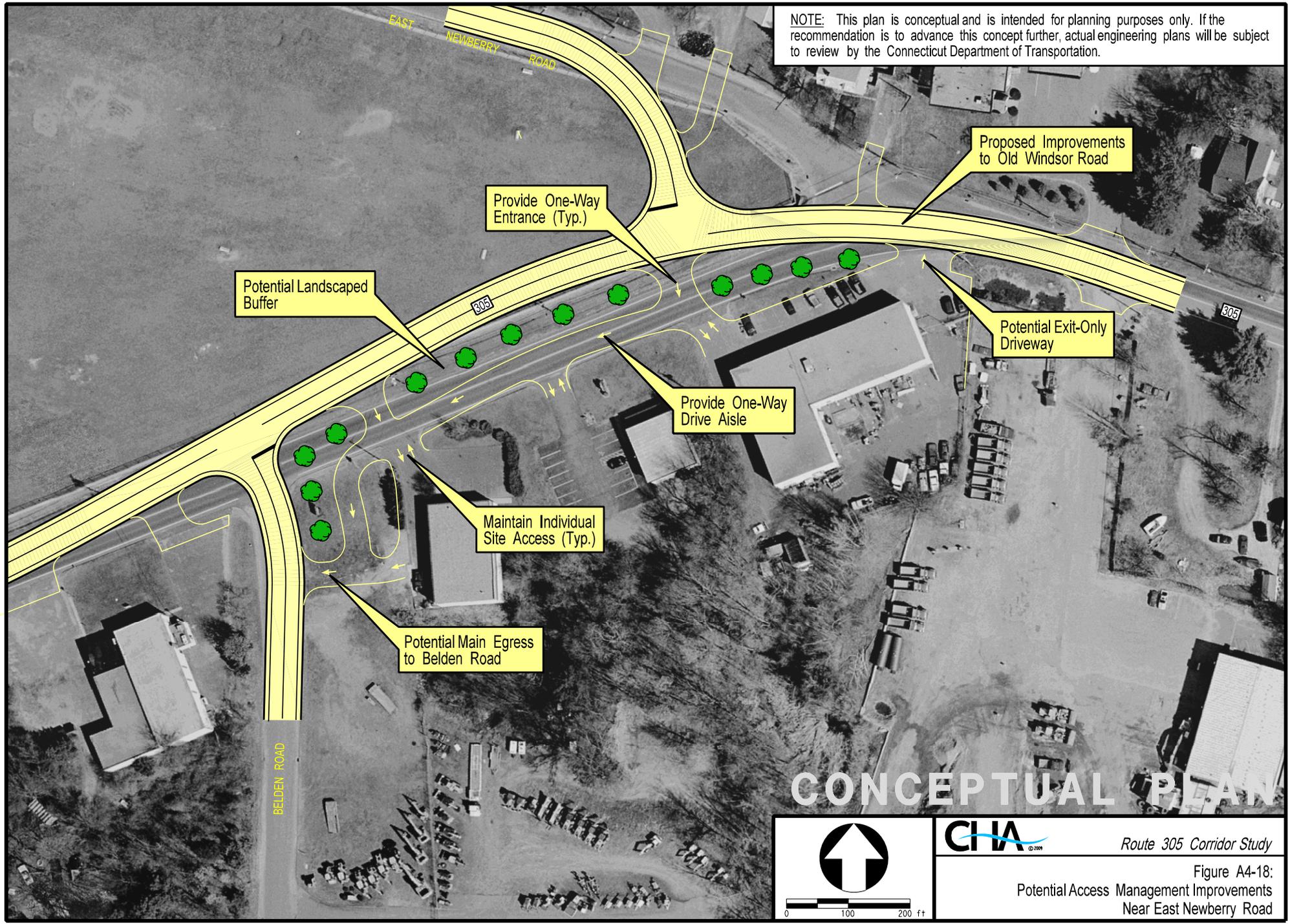
- **105 Old Windsor Road – Gold’s Gym:** The location of this drive in proximity to the Mill Brook crossing creates unsafe conditions for westbound vehicles turning left from Route 305 to this drive due to the narrow roadway section that prevents vehicles from safely bypassing the turning vehicles on Route 305. Additionally, the drive is located about 75 feet from the adjacent access drive to a drilling company. Relocating the drive to the gym would be difficult due to the site configuration and presence of Mill Brook running along the western property boundary.
 - Recommendations shown in Figure 4-6 include the addition of a dedicated left turn lane on Route 305 that would improve safety and operations at this location.

- **83/79 Old Windsor Road – Modern Materials Corp. and Fastenal Co.:** These businesses are located on the inside of a sharp curve at the intersection of Route 305 and East Newberry Road. The Modern Materials driveway has very poor sight distance to the west as vehicles travel the curve at high rates of speed. This is of particular concern, as most traffic consists of large trucks that emerge slowly from the site. The Fastenal site has two driveways, one that appears to predominantly serve truck access. The sight lines from the easternmost driveway are poor.



- Recommendations shown in Figure A4-18 illustrate a potential shared access drive for the adjacent businesses that could be implemented in conjunction with the localized curve improvements on Route 305 (see Figure 4-7 and 4-8). The curve improvements would leave additional space along the frontage of these properties that could be used to create a frontage road/shared access drive connecting to Belden Road to the west. The goal of this access management improvement would be to minimize curb cuts on Route 305 and to relocate egress to Belden Road where intersection sight distance would be maximized.
- Warning signs with flashing beacons could be provided on the Route 305 approaches to this area to warn drivers of hidden driveways and/or trucks entering from these sites.

NOTE: This plan is conceptual and is intended for planning purposes only. If the recommendation is to advance this concept further, actual engineering plans will be subject to review by the Connecticut Department of Transportation.



CONCEPTUAL PLAN



0 100 200 ft



Route 305 Corridor Study

Figure A4-18:
Potential Access Management Improvements
Near East Newberry Road

- **67 Old Windsor Road – Scoabar Electrical Contractors:** This business has two access drives within 100 feet of one another. The entire frontage for the parcel is less than 150 feet. The eastern access appears to be for trucks and has no connection to the western parking area and driveway that appears to serve visitors and employees. The truck access is about 20 feet from the intersection of Route 305 with Belden Road and has a connection to Belden Road.



- Recommendations include potentially closing the eastern access to Route 305 and maintaining the connection to Belden Road.

- **29 Old Windsor Road – Blue Cube Self-storage:** This business has two access points – one to Route 305 and one to Old Iron Ore Road. The Route 305 access drive is situated about 20 feet from the driveway to a manufacturing business. There is a Kaman Corporation access drive across Route 305 (and offset somewhat) with a very large employee parking lot (approximately 400 spaces). The driveway to the manufacturing business is signed for ‘exit only’ for 3:15 to 5 p.m. (presumably for employees leaving at shift changes). The sight distance to the east from these three driveways is poor due to the grade and curvature of Route 305.
 - Recommendations shown in Figure 4-9 provide realignment of the Kaman Corporation driveway with Old Iron Ore Road. This realignment would improve safety and eliminate the driver confusion at the existing alignment.
 - Consider potential closure of access to Route 305 from Blue Cube Self-Storage.

- **9/7 Old Windsor Road – Bochman of Bloomfield/S & S Centerless Grinding:** The three buildings of these two businesses have a total of three access drives. The two western drives are in close proximity to one another (less than 50 feet apart). The two western drives also direct vehicles to Route 305 where the lanes merge and split in transition from the signalized Blue Hills Avenue intersection.
 - These parcels and those surrounding could benefit from joint or cross access. If the uses of these sites change or traffic on Route 305 warrants such a switch, cross access or rear access should be evaluated. The site layouts of these properties could lend themselves to a rear access drive potentially on Old Iron Ore Road, and consolidating access to/from Route 305.

- **5 Old Windsor Road – Three Brothers Restaurant:** This business is located on the corner of Blue Hills Avenue and Route 305. The site has one access drive onto each road with wide openings allowing turns in and out in all directions. Route 305 is one lane eastbound and westbound but has two long turning lanes for turns onto Blue Hills Avenue north and south. Left turns out of the restaurant driveway could be challenging for vehicles attempting to merge into the westbound traffic stream. The gas stations on two of the other corners of this intersection have similar egress issues.
 - Recommendations include potentially restricting driveway access to Route 305 to right-in/right-out only and potentially narrowing and more clearly defining driveways with landscaping.

- **3 Old Windsor Road – Birken Manufacturing:** This large manufacturer has two driveways separated by about 25 feet of landscaping which serve a single, open parking lot. There are no signs to define ingress or egress at either of these drives. This can lead to driver confusion and turning conflicts when two vehicles are simultaneously exiting these driveways.
 - Recommend limiting one driveway to egress and the other driveway to ingress via signing and/or pavement markings.



General Access Management Recommendations and Considerations

The study team recommends that the following access management improvements be considered in locations throughout the corridor where appropriate to improve traffic operations and safety for roadway users. These improvements could be implemented as standalone improvements or in conjunction with the other recommended localized and long-term improvements, particularly where impacts to existing access will be unavoidable and some level of access modification will nonetheless be required.

- Raised Medians:** Raised medians reduce the number of vehicular conflict points by restricting left turn movements to and from the through roadway at mid-block locations and concentrating the left turns at side road intersections where turns are expected by motorists. A study of accidents on four lane roadways showed that roadways with restrictive medians can provide a 53% reduction in accidents compared to undivided roads¹. In addition to improved vehicular safety, other benefits of raised medians include providing pedestrian refuge and reducing crossing distances, and providing a visual setting and corridor character that can calm traffic and make the roadway more aesthetically pleasing.
- Left Turn Bays/Lanes:** Dedicated turn bays/lanes for left-turning vehicles provide refuge for vehicles stopped in traffic while waiting for gaps in opposing traffic and allow through traffic to safely bypass these left-turning vehicles. New left turn bays are recommended on Route 305 at Addison Road, Brewster Road, Sheffield Drive, Dunfey Lane, and Mountain Road in conjunction with the localized and long-term improvement concepts. Left turn lanes at raised median openings can be designed to accommodate u-turn movements.
- Residential Driveway Turnarounds:** It is suggested that all residential drives abutting Route 305 be outfitted with turnarounds where feasible. Given the expressed concerns of residents along Route 305 relative to speeds, truck traffic, and overall traffic volumes, vehicles should enter the roadway in the forward direction whenever possible. The Town of Windsor Zoning Regulations allow for a driveway turnaround area measuring 12' x 14'. Typically, turnarounds would be constructed by individual property owners at their own expense. However, it is suggested that residential turnarounds be considered in the design of localized or long-term improvements that will require modification of the existing access, particularly where an existing turnaround will be impacted.



Day Hill Road in Windsor, CT



Existing Turnarounds on Route 305 in Windsor

¹ Utah Department of Transportation, “Crash Comparisons – Median Treatments.”
Source website: <http://www.udot.utah.gov/main/uconowner.gf?n=200704111451001>

- **Corner Clearance:** Corner clearance should be as great as possible at each intersection. Safety is improved when conflicts to through traffic are removed, especially in the area of an intersection.
- **Driveway Channelizing Islands:** Channelization can be used in a variety of ways to restrict traffic maneuvers to only allow movements such as right-in/right-out; right-in/right-out and left-in; and right-in/right-out and left-out. Access management improvements that include driveway channelization could be implemented at the primary access to Selig Ford on Bloomfield Avenue (see Figure A4-16).
- **Frontage Streets/Roads:** Frontage streets or roads can optimize access management by providing direct access to properties via the frontage street while limiting access to the major road. Local residential traffic is directed to intersections where mainline drivers are better prepared for turning traffic. It could be possible to provide a frontage street along the north side of Bloomfield Avenue in conjunction with long-term Concept C that would shift the roadway widening improvements to the south. Comments provided by residents at the June 2009 public meeting in Windsor noted that adequate landscaping and screening between a frontage street and Route 305 would be an important feature to incorporate into any frontage street design.

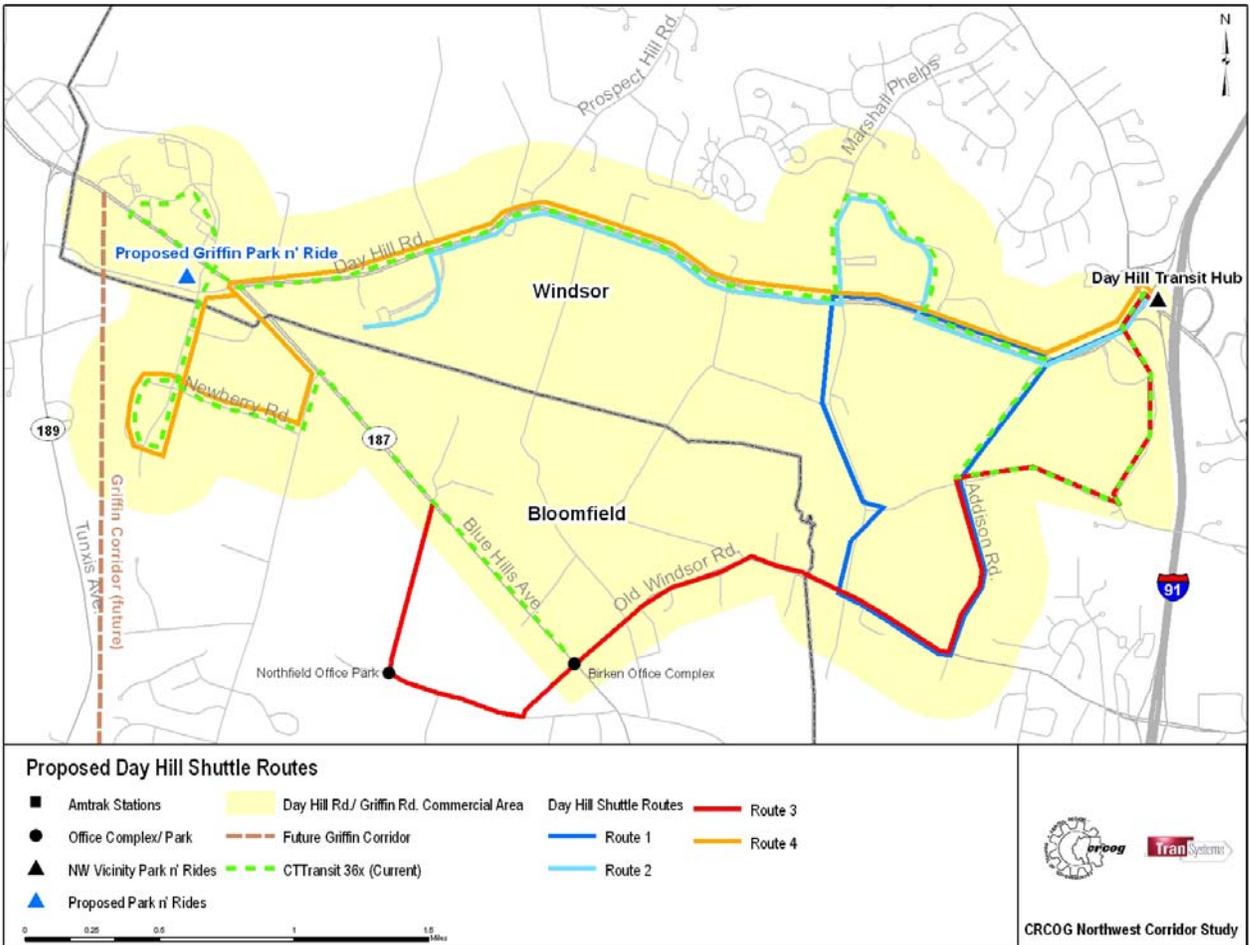


Example Frontage Street: Route 218 in Bloomfield

- **Joint and Cross Access:** Joint and cross access allows multiple parcels to condense access to one (or more) driveways and provide interconnectivity between the respective parcels. This concept increases available frontage area for landscaping and can remove short trips from major thoroughfares. The study team recommends evaluating potential joint and cross access throughout the Route 305 corridor to reduce the number of driveways abutting Route 305.

Northwest Corridor Study Recommendations

The Route 305 study supports the findings and recommendations from the *Northwest Corridor Study* including providing for a transit hub at Interchange 38; providing a Park ‘n Ride lot at the Griffin Office Park; improving transit service (including service from downtown and from other suburbs) to the transit hub and Park ‘n Ride lot; establishing a network of shuttles to employment sites; and improving transit amenities by providing bus pullouts, sidewalks and bus shelters where appropriate. The following figure illustrates these recommendations.



Appendix 5

Example Streetscaping, Landscaping, and Architectural Design Elements

Crosswalk Enhancements	A5-2
Bus Stop Amenities.....	A5-2
Raised Medians.....	A5-3
Trees in Medians.....	A5-3
Street Trees	A5-4
Trees at Interchange.....	A5-4
Gateway Treatments: Welcome Signs.....	A5-5
Gateway Treatments: Signs with Stone Walls.....	A5-5
Gateway Treatments: Landmark and Corner Buildings	A5-6
Gateway Treatments: Street Lighting	A5-6

Example Streetscaping, Landscaping, and Architectural Design Elements

Crosswalk Enhancements

Crosswalk treatments that are aesthetic and serve to improve pedestrian safety by way of improving the presence and visibility of the crosswalk, promoting the awareness of pedestrian activity, and calming traffic, should be considered at all signalized intersections and across all unsignalized cross streets in the corridor where pedestrian activity is expected. Crosswalk enhancements could include colored and textured pavements of the varieties shown here.



Colored & Textured Crosswalk with In-laid Thermoplastic



Stamped and Painted Crosswalk



Colored Brick Crosswalk

Bus Stop Amenities

Bus stops can be designed to incorporate amenities that enhance the comfort, convenience, and function of the stop with the intended result of encouraging transit ridership in the corridor. The existing bus stop located between Mountain Road and Targeting Center could be upgraded to include such design features and amenities as a bus pullout, shelter, bench, pedestrian-level lighting, and bike rack.



Traditional Bus Shelter with Bench and Pedestrian-level Street Lighting



Modern Bus Shelter with Bench and Route Information



Bike Rack at Transit Stop



Bus Pullout

Raised Medians

Provisions for raised medians should be considered for the residential sections of the Route 305 corridor, particularly between Addison Road and Interchange 37. Raised medians provide landscaping and streetscaping opportunities, create aesthetic appeal, calm traffic, and help manage roadway access. Both narrow and/or wide medians could be incorporated into a four-lane roadway concept for Route 305.



**Example Narrow Raised Median
(Farmington Avenue)**



**Example Narrow Raised Median
(Route 159, Windsor)**



**Example Wide Raised Median
(Day Hill Road, Windsor)**

Trees in Medians

Trees planted in medians not only need to be tolerant of urban conditions (i.e. tolerant of droughty soils, limited root space, salt from deicing, and vehicle emissions), they also need to be columnar in shape so that branching does not encroach on the roadway and passing of motor vehicles, especially buses and trucks. Tree species in this category include columnar forms of Norway Maple, English Oak, Ginkgo, European Hornbeam, Crabapple, and Bradford Pear.



English Oak



Ginkgo



Norway Maple



Bradford Pear



European Hornbeam

Street Trees

Street trees planted along proposed sidewalks need to be tolerant of urban conditions (i.e. tolerant of droughty soils, limited root space, salt from deicing, and vehicle emissions), and should be shade trees to provide cooling benefit and to provide a canopy that will help calm traffic.



Japanese Zelcova



American Elm



Littleleaf Linden



London Planetree



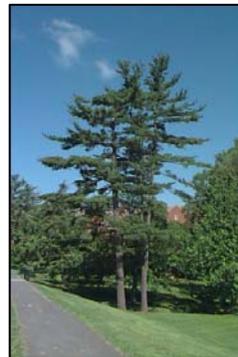
Example Street Tree Design
(Glastonbury)

Trees at Interchange

Consider planting a “forest” of trees within the triangular green spaces between the Interchange 37 ramps, I-91, and Route 305. The trees would not only provide a green, welcoming gateway, but would also help cool the air by moderating the large heat-absorbing pavement areas within the interchange. These trees could be a combination of shade trees, flowering trees, and conifers to provide year-round interest. Tree species in this category include American Holly, White Pine, American Elm, and Flowering Dogwood.



American Holly



White Pine



Flowering Dogwood



American Elm

Gateway Treatments: Welcome Signs

Gateway treatments can be used as traffic calming devices to alert motorists to a change in driving environment that requires reduced speeds and greater awareness of turning vehicles and of pedestrian and bicycle activity. Gateway treatments can take various forms including landscaped medians, textured pavements and crosswalks, and *welcome* signs that indicate the arrival at a destination. Gateway signs placed at the east and west of Interchange 37 could be an effective way to signify the transition from interstate conditions to suburban and residential conditions.



Example Gateway Sign (South Norwalk)



Example Gateway Sign (Cromwell)



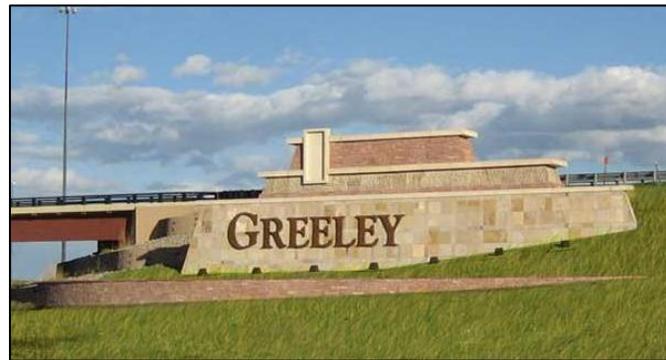
Example Gateway Sign

Gateway Treatments: Signs with Stone Walls

In addition to *welcome* signs, signs for major developments can be incorporated into landscaping elements such as stone walls to create a gateway effect. There could be an opportunity to provide a new "Kaman" sign erected on a stone retaining wall near East Newberry Road in conjunction with the roadway improvement and landscaping concepts for the area.



Example Sign with Stone Wall



Example Sign with Stone Wall



Example Sign with Stone Wall

Gateway Treatments: Landmark and Corner Buildings

Landmark and corner buildings can also be used to define gateways in the Route 305 corridor. As part of the redevelopment concepts for Neighborhood Transit Centers (NTCs) and Traditional Neighborhood Developments (TNDs) near Interchange 37 and the intersection of Route 187 and Route 305, private developers should be encouraged to incorporate unique architectural elements and buildings to attract interest and to create a sense of arrival at these gateway areas.



Example Landmark Building



Example Landmark Building



Example Corner Building



Example Corner Building

Street Lighting

Street lighting options, such as pedestrian-level decorative lighting, could be considered along residential sections of Route 305 in addition to, or in place of, the typical *cobra head* streetlighting fixtures. Decorative lighting fixtures, like the fixtures used in Windsor town center, could be used along sidewalks and/or within new medians to enhance the aesthetics of the corridor. Alternatively, pedestrian-level lighting fixtures placed along sidewalk sections could be combined with cutoff street lighting fixtures in a median, like those along Day Hill Road, to better illuminate the corridor while minimizing light pollution.



Existing Cobra Head Lighting



Pedestrian-level Lighting (Windsor)



Pedestrian-level Lighting Option



Cutoff Lighting Option