Transportation Plan for Lower Route 202

PREPARED FOR WESTERN CONNECTICUT COUNCIL OF GOVERNMENTS

IN COORDINATION WITH THE TOWN OF BROOKFIELD AND CONNECTICUT DEPARTMENT OF TRANSPORTATION

September 2015

WESTERN CONNECTICUT COUNCIL OF GOVERNMENTS

MILONE & MACBROOM®

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1 INTRODUCTION

The Western Connecticut Council of Governments (WestCOG) in conjunction with the Connecticut Department of Transportation (CTDOT) and the Town of Brookfield identified the need for a comprehensive study of the Lower Route 202 corridor, which encompasses a 1.6-mile stretch from White Turkey Road to Route 133 in Brookfield. The WestCOG contracted with Milone & MacBroom, Inc. (MMI) to undertake this study and ultimately develop a Transportation Plan for Lower Route 202.

Route 202 (Federal Road) is a minor arterial that runs north-south and connects directly to both I-84 and U.S. Route 7. While this corridor is used for local and intermediate travel, it is the regional significance of the economic development along this route that makes it a vital corridor. In addition, the 2010 *"I-84 Expressway Emergency Diversion Plan"* designated this roadway as a regional emergency diversion route.

The corridor's regional significance, coupled with increased commercial development as evidenced by the recent completion of the Costco, Kohl's, and BJ's shopping centers, places significant traffic burden on this corridor. Portions of Lower Route 202 currently carry approximately 30,000 vehicles daily.

Access management continues to be an issue due to several unplanned curb cuts along the corridor. Furthermore, the need for a Complete Streets policy along Lower Route 202 has become increasingly apparent due to its mixed pattern of commercial and residential developments. Pedestrian and bicyclist facilities are virtually nonexistent while transit along the corridor can be further improved.

The existing CTDOT concept plan prepared under CTDOT Project 18-124 for future Route 202 upgrading in Brookfield is the starting point for this study. The intent of the CTDOT Project 18-124 Plan is to visually lay out a coordinated set of Lower Route 202 improvements that will include additional turn lanes at intersections, more uniform shoulders, and an organization of cross-sectional geometry to a uniform standard. Recent CTDOT-approved changes on Route 202, such as for the expanded Costco facility, conform to the CTDOT Project 18-124 Plan. In cooperation with CTDOT, WestCOG, and the Town of Brookfield, the Lower Route 202 Transportation Plan will prepare recommendations for the refinement and updating of that plan.

Additionally, the Lower Route 202 Transportation Plan will recommend one or more short-term Route 202 traffic safety improvement priority sections of the CTDOT Project 18-124 Plan that should be addressed first. And, as agreed with CTDOT in the study grant, this plan will review opportunities for improved connectivity with nearby Gray's Bridge Road.

Importantly, an additional purpose of this study is to incorporate a "Complete Streets" approach where features such as bus stops, pedestrian amenities, and bike safety become integral to the Plan. These detailed recommendations are best conveyed in the map format incorporated into the Appendix entitled "Route 202 Complete Streets Evaluation."

Furthermore, as part of this WestCOG study, the municipal 1994 Driveway Management Plan for Brookfield's Route 202 is also being updated. The detailed recommendations of this update are conveyed in the Appendix entitled "Route 202 Driveway Management Plan."

Ultimately, the intent of this Lower Route 202 Transportation Plan is to develop actionable recommendations for a safe, functional, and sustainable multimodal corridor with language that can be adopted into local and regional policy documents.

This Transportation Plan is organized as follows;

- ***Chapter 2: Design Standards for Evaluation*** – Describes general design standards that were adopted for the corridor, including lane and shoulder widths, sidewalk widths, bicycle facilities, driveway spacing, driveway widths, etc.

- ***Chapter 3: Inventory of Conditions and Identification of Issues*** – Describes conditions within the Route 202 corridor, including traffic, safety, pedestrian, and bicyclist accommodations

- ***Chapter 4: Capital Recommendations*** – Summarizes the capital recommendations for the Route 202 corridor including traffic, safety, and Complete Streets improvements

- ***Chapter 5: Administrative Recommendations*** – Summarizes the policy recommendations for the update of CTDOT Project 18-124 as well as amendments to the Brookfield Zoning Regulations with regard to driveway access management

- ***Chapter 6: Record of Citizens Comments*** – Presents a documentation of citizen comments and stakeholder input

- ***Appendix*** – Is organized as follows:

    - ***Appendix A: Complete Streets Plan*** – Presents a detailed Complete Streets evaluation of the Route 202 study corridor and includes conceptual improvement plans for bicyclists, pedestrians, and transit users

    - ***Appendix B: Route 202 Driveway Management Plan*** – Presents an update of the Town of Brookfield's 1994 Driveway Management Plan. The driveway management plan extends beyond the

1.6-mile study corridor to include Route 202 from the Danbury/Brookfield town line to the Brookfield/New Milford town line.

2 DESIGN STANDARDS FOR EVALUATION

Design standards that were adopted for the Complete Streets evaluation of the Route 202 study corridor were recommended by CTDOT and include:

- 11-foot travel lanes
- 5-foot shoulders
- 5-foot sidewalks
- Bicycle detection at signalized intersections

Additionally, design standards for the update of the Town of Brookfield's 1994 Driveway Management Plan presented in Appendix B were based on the 2012 CTDOT *Highway Design Manual* (HDM)[1] and the "Technical Standards and Design Criteria, Traffic & Access" chapter of the Town of Brookfield Zoning Regulations[2]. These include:

- Driveway Alignment – Driveways and roadways should preferably intersect at 90 degrees.
- Maximum Driveway Grade – 8 percent for commercial driveways and 12 percent for residential driveways
- Driveway Width – 10 feet (for residential driveways only) to 30 feet
- Number of Driveways – No more than one combination entrance and exit driveway for any property with frontage of less than 50 feet
- Minimum Driveway Spacing – 3 feet for residential and commercial driveways and 10 feet for industrial driveways
- Driveway Connections – Provide driveway connections between parcels of similar existing or potential use where topography and other conditions such as the facilitation of fire protection allow.

[1] 2012 *CTDOT Highway Design Manual*
[2] *Technical Standards and Design Criteria*, Traffic 7 Access – Town of Brookfield Zoning Regulations

3 INVENTORY OF CONDITIONS AND IDENTIFICATION OF ISSUES

3.1 General Corridor Conditions

U.S. Route 202 is classified by the CTDOT as a minor arterial. This roadway runs north-south and connects directly to I-84 and U.S. Route 7. The Lower Route 202 study corridor is approximately 1.6 miles long and encompasses the segment from White Turkey Road to Route 133 in Brookfield.

Land use along the corridor is a mix of commercial and residential uses; however, more recent developments along this corridor have been commercial and include a Costco, Kohl's, BJ's shopping center, and Chick-fil-A fast food restaurant.

The Route 202 study corridor is generally four lanes (two lanes in each direction) but tapers down to two lanes at some locations. The posted speed limit varies between 35 miles per hour and 40 miles per hour. There are currently seven signalized intersections within the study corridor. Access management is an issue within the corridor due to several unplanned curb cuts, which invariably present traffic and safety concerns.

<u>Traffic Operations and Access</u>

This corridor carries approximately 30,000 vehicles daily and experiences congestion during peak hours. The corridor is characterized by several unplanned and redundant driveways, which is not only undesirable from an access management standpoint but also exacerbates traffic operation and safety issues within the corridor.

<u>Pedestrian Amenities</u>

Pedestrian amenities are virtually nonexistent within the corridor. There are no sidewalks and only one crosswalk within the entire 1.6-mile corridor. Only one of the seven signalized intersections within the corridor are equipped with pedestrian signal heads with walk/do not walk indications. Four of the seven signals are equipped with side street green pedestrian control, which requires pedestrians to observe a red indication for Route 202 traffic before crossing. These signals do not have pedestrian walk/do not walk indications.

No sidewalks along Route 202

Bicyclist Facilities

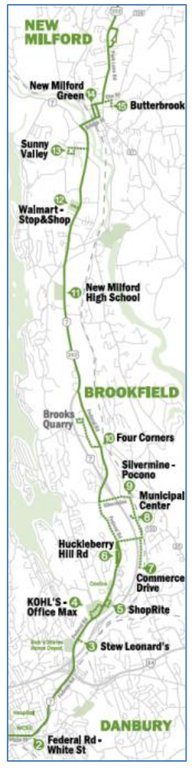
CTDOT, in its 2008 Statewide Bicycle Plan, identified long segments of Route 202, including the study corridor as unsuitable for bicycles. CTDOT classifies shoulder widths of 1 to 3 feet unsafe for roadways with average daily traffic greater than 10,000 vehicles such as Route 202. Shoulder widths along the study corridor are, for the most part, 1 to 2 feet wide and are therefore unsafe for bicyclists.

AVERAGE DAILY TRAFFIC	Shoulder Width (ft)			
	0	1-3	3-6	>6
Less than 2,500	Unsafe	Good	Best	Best
2,500 to 5,000	Unsafe	Fair	Good	Best
5,000 to 7,500	Unsafe	Poor	Good	Best
7,500 to 10,000	Unsafe	Poor	Fair	Best
Greater than 10,000	Unsafe	Poor	Fair	Good

Source: CTDOT

Transit Service

Transit service within the corridor is currently provided by the Housatonic Area Regional Transit (HARTransit) through two bus routes (Bus Routes 4 and 7). HARTransit also provides senior transportation services to elderly and handicapped Brookfield residents and surrounding communities through the SweetHART dial-a-ride service.



Based on discussions with HARTransit, there are currently no plans to expand service or increase frequency.

Accidents

Safety within the Route 202 study corridor has been a longstanding cause for concern. A total of 442 accidents was reported within the study corridor during the period 2010-2012. Of the 442 accidents, approximately 73 percent were property damage while 27 percent resulted in injuries. Table 1 summarizes accidents by type of collision during this 3-year period.

TABLE 1
2010-2012 Collision Type
Route 202 Segment from White Turkey Road to Route 133

Type of Collision	2010	2011	2012	Total	%
Turning - Same Direction	2	3	3	8	1.8
Turning - Opposite Direction	15	19	6	40	9.1
Turning - Intersecting Paths	13	13	23	49	11.1
Sideswipe - Same Direction	22	10	22	54	12.2
Sideswipe - Opposite Directions	1	0	1	2	0.5
Overturn	1	0	0	1	0.2
Angle	3	4	3	10	2.3
Rear-end	88	84	88	260	58.8
Head-on	0	1	0	1	0.2
Backing	1	0	0	1	0.2
Pedestrian	0	0	1	1	0.2
Fixed-Object	3	1	8	12	2.7
Moving Object	2	1	0	3	0.7
TOTAL	151	136	155	442	100

As illustrated in Table 1, approximately 59 percent of accidents were rear-end while 22 percent involved some form of turning maneuver. There are also seven locations within the study corridor currently listed on the latest (2010-2012) Suggested List of Surveillance Study Sites (SLOSSS), a list of high safety priority locations within the state. These seven locations are summarized in Table 2 below.

TABLE 2
Route 202 Locations on SLOSSS List (2010-2012)

Location	No. of Accidents	SLOSSS Rank
At SR 805 (Federal Road) and White Turkey Road	59	643
At Kohl's Driveway	20	182
At Shop Rite/Chick-fil-A Driveway	22	565
Between Shop Rite - Firestone Driveway	26	473
Between Beverly Drive and Sandy Lane	24	898
At Sandy Lane	32	843
At Old New Milford Road South Junction	48	11

3.2 Route 202 Segment-by-Segment Conditions

In order to fully understand existing corridor conditions, MMI undertook a field walk of the entire study corridor on August 15, 2014. The findings from this field walk are described below in four corridor segments traveling from White Turkey Road to Route 133. These segments are illustrated in **Figures 1 and 2**.

3.2.1 Corridor Segment 1: White Turkey Road to Shop Rite Driveway/Chick-fil-A Driveway

The segment from White Turkey Road to the Shop Rite driveway, illustrated in Figure 1, is approximately 0.4 miles long. Some of the developments along this stretch include a Kohl's, BJ's wholesale, Shop Rite and, more recently, a Chick-fil-A fast food restaurant. Route 202 within this segment is four lanes (two lanes in each direction) but widens to include dedicated turn lanes at some intersections. There are three signalized intersections within this segment of the study corridor including the intersections of Route 202 with White Turkey Road, the Kohl's driveway, and the Shop Rite/Chick-fil-A driveway. HARTransit currently has four bus stops on this segment of Route 202, two in vicinity of the Kohl's driveway and the remaining two in vicinity of Shop Rite.
There are no sidewalks or crosswalks while shoulder widths are approximately 1 to 2 feet, making this segment unsafe and uninviting to both pedestrians and bicyclists.

As previously indicated in Table 2, all three signalized intersections along this stretch of Route 202 are listed on the 2010-2012 SLOSSS and are therefore high safety priority locations.

Intersection of Route 202 and White Turkey Road

The intersection of Route 202 and White Turkey Road is listed on the SLOSSS as a high safety priority location. This intersection recorded 59 accidents during the 2010-2012 period on record. The Route 202/White Turkey Road intersection is signalized and characterized by multiple lanes on all approaches. Recent improvements including widening for additional turn lanes were aimed at addressing traffic congestion and did not address pedestrian and bicyclist needs. Roadway shoulders remain 1 to 2 feet wide while sidewalks are nonexistent. The wide cross section, lack of sidewalks, and limited shoulders make this intersection quite imposing and unfriendly to bicyclists and pedestrians.

Intersection of Route 202 and Gray's Bridge Road

Raised median on Route 202 in the vicinity of Gray's Bridge Road

Route 202 intersects with Gray's Bridge Road just north of White Turkey Road. This intersection is characterized by poor geometry, very wide corner radii, and pavement width on Gray's Bridge Road that invariably encourages high speed right turns from Route 202 into Gray's Bridge Road. In addition, there are two driveways on Gray's Bridge Road, one to a Mobil gas station and the other to the property at 67 Federal Road in close proximity to the intersection, which exacerbate the issue and present additional safety concerns at this intersection. Currently, left turns in and out of Gray's Bridge Road are prohibited by a raised median on Route 202.

In 2007, the CTDOT, as part of CTDOT Project 18-124 developed for internal scoping review, a conceptual improvement plan for Gray's Bridge Road. The proposed improvements would include a new two-way roadway connection from Gray's Bridge Road to Route 202 at its intersection with the Kohl's driveway. This new roadway connection would involve the taking of the dentist office building at 107 Federal Road. The segment of Gray's Bridge Road south of the new roadway connection would be converted to one-way southbound. In addition, the existing traffic signal at the Kohl's driveway would be upgraded while a new traffic signal would be installed at the intersection of Route 202 at Beverly Drive, further to the north.

CTDOT indicated during the preparation of this transportation plan that the Gray's Bridge Road improvement concept was not further developed to any meaningful degree and would for all intents and purposes not likely be pursued under CTDOT Project 18-124. However, in line with the grant application for this transportation plan, a review of the Gray's Bridge Road realignment was undertaken as part of this study. The findings and recommendations from this review are presented in Chapter 4 of this report.

Intersection of Route 202 and Shop Rite/Chick–fil–A Driveway

The intersection of Route 202 and the Shop Rite/Chick–fil–A driveway is listed on the SLOSSS as a high safety priority location. This intersection recorded 22 accidents during the latest 3-year period on record (2010-2012).

This intersection is signalized and experiences significant congestion and operational issues due to heavy left turns into both Shop Rite and Chick-fil–A. Currently, there are no dedicated left-turn lanes on Route 202 at this intersection. The Town of Brookfield has indicated that it is in support of dedicated left turn lanes on Route 202 while CTDOT has also indicated that the most effective way to accommodate left turns at this intersection is through dedicated turn lanes. Recommendations at this intersection address the need for turn lanes and are discussed in Chapter 4 of this report.

Shop Rite intersection

Figure 1: Existing Conditions (Segments 1 and 2)

Figure 2: Existing Conditions (Segments 3 and 4)

3.2.2 Corridor Segment 2: Shop Rite Driveway to Costco Driveway

Route 202 in the vicinity of the Costco driveway

This 0.4-mile stretch of Route 202, which is illustrated in Figure 1, is currently home to a McDonald's, Costco, and Rite Aid. This section of Route 202 generally remains four lanes (two lanes in each direction) with 1- to 2-foot shoulders and dedicated turn lanes at Sandy Lane as well as the Costco driveway. These two intersections (Route 202/Sandy Lane and Route 202/Costco driveway) are signalized. Both signals are equipped with side street green pedestrian control, which requires pedestrians to observe a red indication for Route 202 traffic before crossing. There are no dedicated pedestrian signals with walk/do not walk indications at these intersections. Neither signalized intersection has crosswalks even though both traffic signals are new. Also, there are no sidewalks within the area.

HARTransit has two bus stops (one on each side of Route 202) within this segment just south of Beverly Drive.

The following locations within this segment of Route 202 are listed on the 2010-2012 SLOSSS and are therefore high safety priority locations:

- Segment between Shop Rite and Firestone driveway – 26 accidents (SLOSSS Rank: 473)
- Segment between Beverly Drive and Sandy Lane – 24 accidents (SLOSSS Rank: 898)
- Route 202 at Sandy Lane – 32 accidents (SLOSSS Rank: 843)

<u>Intersection of Route 202 and Beverly Drive/Hardscrabble Road</u>

This intersection, which is located just north of the Shop Rite driveway, was identified in CTDOT Project 18-124 for signalization. Hardscrabble Road connects to Old State Road, which is a parallel alternate back route from Gray's Bridge Road to the developments within this segment of Route 202. Just north of this intersection is a McDonald's driveway. Public comments received in the course of this study indicate that several drivers use the McDonald's driveway as a cut through to Costco, which is located directly adjacent the McDonald's site. Recommendations for the Route 202 and Beverly Drive intersection are discussed in Chapter 4 of this report.

3.2.3 Corridor Segment 3: Costco Driveway to Old New Milford Road South Junction

Traveling north from the Costco driveway, Route 202 remains four lanes (two lanes in each direction) until just past Rollingwood Drive where it tapers down to two lanes (one lane in each direction) to the Old New Milford Road intersection. There are no sidewalks within this segment of the study corridor while shoulder widths are approximately 1 to 2 feet.

Land use along this segment is a mix of commercial and residential including the 246 unit Rollingwood Condominiums, Brookfield Commons shopping center, and Layla's Bakery. There are two HARTransit bus stops within this segment; the first one just north of Rollingwood Drive and the second in vicinity of Old New Milford Road.

Rollingwood Drive is signalized at its intersection with Route 202 and the Brookfield Commons driveway. This signalized intersection has one crosswalk with pedestrian signals that have walk/do not walk indications at both ends of the crosswalk. However, there are no handicap ramps or connecting sidewalks, in particular, along Rollingwood Drive, which provides direct access to the Rollingwood Condominiums.

<u>Intersection of Route 202 and Old New Milford Road South Junction</u>

This intersection is the highest safety priority location within the study corridor. This intersection recorded 48 accidents during the 2010-2012 period and has an overall SLOSSS rank of 11 in terms of safety priority in the state.

Route 202 and Old New Milford Road intersection

One of the main issues at this intersection is its problematic configuration. Old New Milford Road intersects Route 202 at an acute angle and is stop sign controlled. Due to the intersection configuration, sightlines looking left from Old New Milford Road are constricted, which causes drivers to hesitate as they enter Route 202 and invariably leads to rear-end collisions. An intersection improvement concept that involved reconfiguring Old New Milford Road was developed under CTDOT Project 18-124. This initial concept realigned Old New Milford Road north of its current location to intersect with the driveway at 317 Federal Road. This concept would result in impacts to the existing Layla's Bakery located within the northwest quadrant of the intersection. Alternatives have been reviewed, but non meet CTDOT criteria. CTDOT has indicated that due to the complexity of the intersection and anticipated impacts, this improvement need not be necessarily implemented with the other Route 202 safety improvements.

3.2.4 Corridor Segment 4: Old New Milford Road South Junction to Route 133

Traveling north from Old New Milford Road (south junction) to Route 133, Route 202 remains two lanes (one lane in each direction) as illustrated in **Figure 2**. Land use along this Route 202 segment is a mix of businesses and religious institutions. There are currently three HARTransit bus stops within this segment. The first is located on the east side of Route 202 just south of Delmar Drive while the remaining two are located on each side of Route 133 at its intersection with Route 202. There are two signals on this stretch of Route 202, one at the northern junction with Old New Milford Road and the other at the intersection with Route 133. The two traffic signals are in close proximity to each other and operate on one controller. The 165-unit Barnbeck Place residential development is currently being constructed directly opposite Route 133.

Currently, there are no sidewalks along this segment of Route 202. Shoulder widths vary greatly from 2 feet north of Delmar Drive to 6 feet on the west side of Route 202 south of Delmar Drive.

This area was not identified on the SLOSSS list and is therefore not a high safety priority location within the corridor.

Intersections of Route 202 and Old New Milford Road North Junction and Route 133

These two intersections are slated to be improved under CTDOT Project 18-124 including the elimination of the traffic signal at Old New Milford Road and the conversion of Old New Milford Road to one-way southbound. These improvements are discussed further in Chapter 4 of this report.

4 CAPITAL RECOMMENDATIONS

A set of capital improvement recommendations to address existing needs and deficiencies was developed for the Route 202 corridor. MMI's approach/philosophy centered on developing a set of actionable strategies that could be implemented as funding becomes available. The recommendations were identified as either near to midterm or long-term improvements. The near to midterm recommendations are those improvements that could be implemented within a 1- to 5-year time frame and include high safety priority improvements identified in this study as well as other improvements that would most likely not involve or have minimal right-of-way/property or utility impacts. It should be noted that while some of the safety priority improvements could result in right-of-way (ROW)/property impacts, they were identified as near to midterm due to the urgency of these improvements. The long-term recommendations are those improvements that could be implemented beyond a 5-year time frame. These are improvements that are not a high safety priority and could potentially involve right-of-way/property or utility impacts.

Conceptual improvement plans were developed in GIS format using the Town of Brookfield's 2013-2014 GIS data, 2011 *Microsoft* virtual earth aerial mapping, and Google map aerials at locations where the *Microsoft* aerials were not up to date. These improvements are discussed in the sections below while the plans are presented in more detail in Appendix A: Route 202 Complete Streets Evaluation. An update of the town's 1994 Driveway Management Plan is also presented in Appendix B.

4.1 Safety Priority Intersection/Roadway Improvements

The safety priority improvements were identified as improvements that should be implemented within the near to midterm. These safety recommendations involve the Route 202 segment from Shop Rite to Beverly Drive as well as the intersection of Route 202 and Old New Milford Road. The recommendations are described below.

4.1.1 Safety Improvement Project I – Shop Rite Driveway to Beverly Drive

Safety Improvement Project I would involve roadway and traffic signal improvements on Route 202 from the Shop Rite and Chick-fil-A driveways northerly to the intersection of Beverly Drive with Hardscrabble Road. At the intersection of Route 202 at the Shop Rite and Chick fil-A driveways, Route 202 would be widened along its east side to provide dedicated left-turn lanes into both Shop Rite and Chick-fil-A and 5-foot shoulders in addition to the existing four travel lanes on Route 202. The existing traffic signal will be upgraded to accommodate the widening changes as well as provide bicycle detection. New sidewalks and crosswalks would also be provided.

The intersection of Route 202 and Beverley Drive and Hardscrabble Road would be signalized and widened to provide dedicated left-turn lanes into both Beverly Drive and Hardscrabble Road. Five-foot shoulders and sidewalks would also be constructed along Route 202.

A driveway connection from McDonald's to Beverly Drive is also recommended to encourage patrons of McDonald's to utilize the intersection of Beverly Drive and Route 202, which is proposed to be signalized. The proposed improvements are illustrated in **Figure 3.**

4.1.2 Safety Improvement Project II – Route 202 and Old New Milford Road Intersection

Safety Improvement Project II, which was developed under CTDOT project 18-124 and illustrated in **Figure 4,** would involve the realignment of the south junction of Old New Milford Road at Route 202. The realigned Old New Milford Road would intersect Route 202 at a roughly 90 degree angle opposite the shopping center driveway and would be signalized. The Route 202 northbound approach would be widened to provide a dedicated left-turn lane in addition to the single through/right-turn lane. This improvement would involve impacts to Layla's Bakery location within the northwest quadrant of the intersection. Other improvements include restricting the segment of Old New Milford Road from its north junction with Route 202 to Huckleberry Hill Road to one-way southbound and eliminating the signal at the intersection Old New Milford Road (north junction) and Route 202. Due to the anticipated impacts, CTDOT has indicated that this improvement need not necessarily be implemented with the other safety improvements within the corridor.

Figure 3: Safety Priority Improvement I (Sheet 1 of 2)

Figure 3: Safety Priority Improvement I (Sheet 2 of 2)

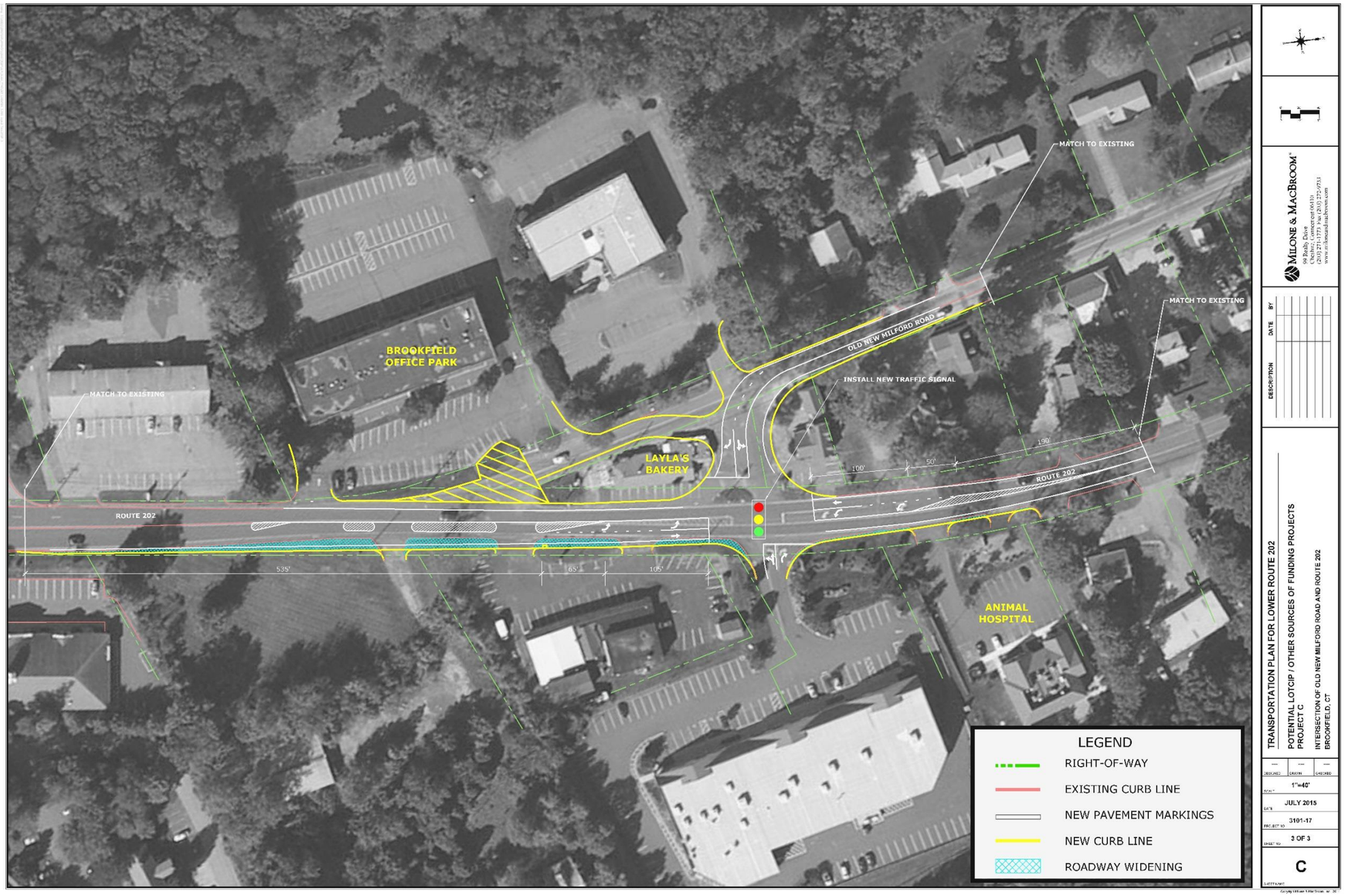


Figure 4: Safety Priority Improvement II – Route 202 at Old New Milford Road Intersection

There were some initial concerns from the town public safety officials that the conversion of the northern terminus to one-way southbound may encourage motorists cutting through private property along Old New Milford Road to get to Route 202; however, feedback received from the public information meeting held on September 10, 2015 indicated that the public was generally in favor of this improvement.

4.2 Pedestrian Recommendations

Pedestrian recommendations would generally be implemented within the near to midterm time frame. These are illustrated in Appendix A and include:

- Install 5-foot sidewalks along the corridor, particularly at locations where high pedestrian activity may be expected such as in the vicinity of residential developments and commercial centers.
- Install crosswalks at all signalized intersections within the corridor. Crosswalks should be installed to connect to sidewalks.
- Install new handicap ramps at intersections where sidewalks and crosswalks are to be installed.
- Install new pedestrian signals at signalized intersections without pedestrian signals. Where pedestrian signals exist, these signals should be upgraded to the countdown or audible type.

4.3 Bicyclist Recommendations

Bicyclist recommendations were identified as both near to midterm and long term. Near to midterm bicyclist improvements are those to be implemented as part of the safety priority improvements described in Section 4.1 or improvements that would not have any ROW/property impacts while the long- term improvements are the nonsafety priority improvements that most likely involve ROW/property impacts. Recommendations for bicyclists are illustrated in detail in Appendix A.

Near to Midterm Recommendations

- Widen Route 202 at high safety priority locations to provide 5-foot shoulders.
- At locations where adequate roadway pavement width is available, restripe Route 202 to provide 11-foot travel lanes and minimum 5-foot shoulders to accommodate bicyclists. No bike lanes are proposed, as the relatively wide shoulders recommended meet CTDOT guidelines to safely accommodate bikes.
- Retrofit existing signals with bicyclist detection.

Long-Term Recommendations

- At non-high safety priority locations, widen Route 202 to provide 11-foot lanes and minimum 5-foot shoulders to accommodate bicyclists. Again, no bike lanes are proposed. This improvement could result in right-of-way and adjacent property impacts.
- Retrofit existing signals with bicyclist detection.

4.4 Transit Recommendations

The following improvements are recommended for transit:

Near to Midterm Recommendations

- Where necessary, relocate existing bus stops to ensure that spacing between stops is reasonable. Proposed locations are illustrated in Appendix A.
- Install new bus stops close to residential and commercial centers such as the Rollingwood Condominiums and Costco. Proposed locations are illustrated in Appendix A

Long-Term Recommendations

- Install bus pull-off and shelter at locations where topography and right-of-way will allow including the bus stop between Shop Rite and Hardscrabble Road as well as the bus stop located just north of Rollingwood Drive. Please refer to Appendix A.

4.5 Gray's Bridge Road Realignment Recommendations

In line with the grant application for this study, the proposed realignment of Gray's Bridge Road was reviewed during the preparation of this transportation plan based on five performance criteria, namely:

- Safety
- Traffic Operations/Access Improvements
- Multimodal Considerations
- ROW Impacts
- Constructability

Each performance criterial was graded as either a significant benefit, partial benefit, or presenting concerns/issues. Based on this evaluation, it was determined that the realignment of Gray's Bridge Road would generally provide significant traffic operations/access benefits, partial safety and environmental benefits with some concerns/issues relating to multimodal considerations, ROW and constructability. These findings are illustrated in **Figure 5.**

While the Gray's Bridge Road realignment offers tangible benefits from a traffic operations, safety, and environmental perspective, constructability challenges due to steep grades and likely taking of the dentist office building at 109 Federal Road makes this project a high cost improvement. Furthermore, CTDOT has indicated that this project is unlikely to be included in CTDOT Project 18-124.

Based on these reasons as well as discussions with WestCOG and the Town of Brookfield, it is recommended that this roadway realignment should not be pursued. A more favorable improvement option serving much the same objective will be to enhance the existing connection from Gray's Bridge Road through Old State Road to the intersection of Route 202 and Hardscrabble Road, which is to be signalized under CTDOT Project 18-124.

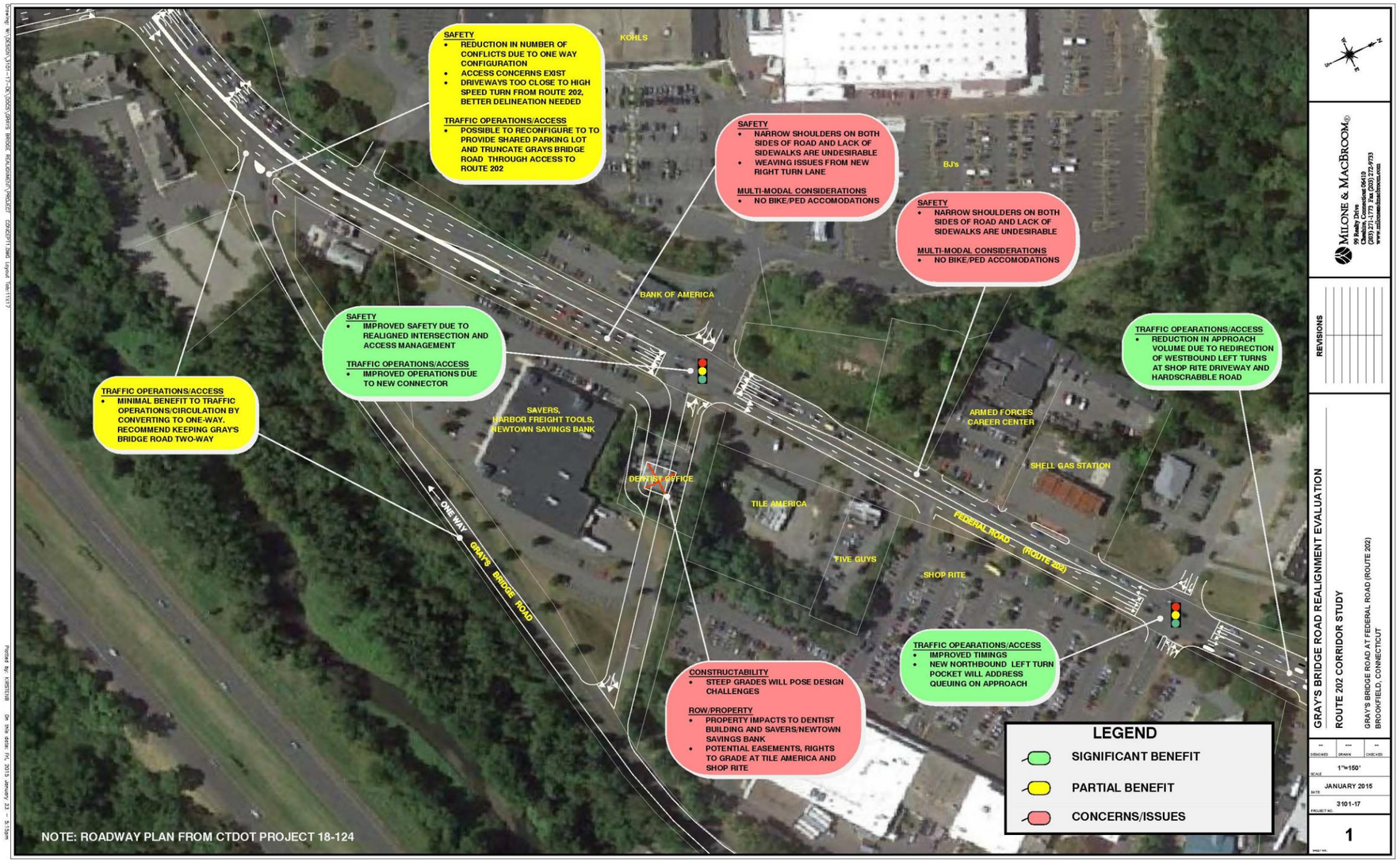


Figure 5: Gray's Bridge Road Recommendations

5 ADMINISTRATIVE RECOMMENDATIONS

We recognize that while this transportation plan has outlined clear improvements strategies that can be implemented, a crucial first step is to have in place the necessary policy changes and legislative action to back corridor recommendations. Therefore, the following administrative actions are recommended:

1. As a key first step, WestCOG and the Town of Brookfield should make a request to CTDOT to update its CTDOT Project 18-124 Plan to incorporate the policy elements of this report, including the detailed recommendations in the two appendices.

2. This Lower Route 202 study document should be considered for adoption by the Brookfield Planning Commission as a supplement to the Brookfield Plan of Conservation and Development (POCD).

3. The Route 202 Driveway Management Plan component should be considered as an amendment to the Brookfield Zoning Regulations, replacing the now 20-year-old Route 202 Driveway Management Plan currently cited in those regulations.

4. The Town of Brookfield should update its POCD to include language that the proposed realignment of Gray's Bridge Road not be pursued. The updated POCD should indicate that a more favorable improvement option would be to enhance the existing connection from Gray's Bridge Road through Old State Road to the intersection of Route 202 and Hardscrabble Road, which is to be signalized under CTDOT Project 18-124.

6 RECORD OF CITIZENS COMMENTS

Stakeholder and public involvement was a key component of this study. Throughout this study, stakeholders including WestCOG, Town of Brookfield, and CTDOT remained engaged and provided input that was critical in guiding and refining the recommendations presented in this report. In addition, a public informational meeting was held on September 10, 2015 to obtain feedback and direction from the general public. The stakeholder and public input received throughout the study are presented below.

Katherine D Rattan., CTDOT
Date: Friday, December 19, 2014, 3:26 p.m.

Bike and Ped:

- The analysis never describes the current cross section. The consultant needs to provide this information to be of any use, it is not possible to see potential impacts without this information
- 4' is indicated as a bike lane in the cross section on page CS-1. AASHTO has a standard of 5' for a bike lane, a reduced bike lane width would have to be evaluated further by the department. This study should be submitted to traffic for comment. Additionally, 5' shoulders might be more appropriate as they will provide more appropriate facility given the speeds on 202, and they would be in-line with the standard for a bike lane.
- There is a difference between a wide shoulder and a bike lane. If a bike lane is pursued it must be placed to the left of right turn lanes, bike boxes should be used, and appropriate bus stop pavement markings and signage should be provided (among other things). It is not clear from this document what is being proposed.
- Pg. CS-3, 3.2: actuated movements will need to be upgraded to allow bikes to trigger the phase.
- Proposed bus pull-offs will need a greater level of design showing the accommodation of the bike lane/shoulder.
- CS-1A: At unnamed road adjacent to Bank of America provide crosswalk across minor street. It also appears that the proposed crosswalk is proposed on the opposite side of the minor street from the existing pedestrian signal; obviously this would require the new major road crosswalk to either be located on the southerly end of the intersection or the signal equipment to be moved.
- General: the bus stops and turn outs should be located proximally to the intersections with crosswalks.
- General: sidewalks break only for roads, therefore at driveways the sidewalk should be carried through with the driveway ramping up and down. Redraw all new sidewalks to carry through the existing driveways.
- CS-2A, 189 Sports Café: provide an alternative that handles this dangerous pedestrian treatment with the parking lot circulation that provides no space for pedestrians to continue along the easterly side of the road.
- CS-2A, North of Costco: if this is a road, provide a crosswalk, if it is a driveway provide a sidewalk across.
- CS-3AProvide crosswalk across proposed intersection relocation of Old New Milford Rd. Provide ramp and landing on northerly leg of RT202.
- CS-1B, At McDonald's driveway: provide a sidewalk across the driveway, ramping traffic up and down across it. Since it is a driveway it is not typical that we would provide a crosswalk here.

Access Mgt.:

- What amendments to the town zoning ordinance are suggested, they are not listed.
- There appear to be greater opportunities for driveway narrowing and interconnection than are listed in the document.
- DMP-3B, Old New Milford Rd – provide plan for access for affected parcels.
- DMP-6B, Citgo- close the two entrances closest to the intersection, that still leaves them with two.

Katherine Daniel, Town of Brookfield:

Date: October 20, 2014, 2:58 p.m.

- The Complete Streets Plan does not correspond to the Driveway Management Plan in the following areas: in front of Tile America the DMP shows closing the southern driveway, but the CSP shows sidewalk across both driveways; Firestone/Pasta Garden shows consolidating driveways , but the CSP shows both; the DMP shows removal of the southern driveway at Irving Gas Station, but the CSP shows both driveways
- Bus stops – The bus stop relocated north to Irving Gas Station is about 350 feet south of a proposed bus pulloff (How close should bus stops be to one another?); with the bus pulloff change the location of the sidewalk? The bus stop located in front of Costco (much needed, in my opinion) is within 650' of the next bus stop to the north in front of Brookfield Commons. Will any shelters be proposed or does MMI envision these as signed locations for bus stops? What will the bus pulloff locations look like? The plan does not convey this.
- Crosswalks – Why are there only three crossing directions shown at the Rollingwood/Brookfield Commons signal? Same question for the Route 133 and Route 202 intersection.
- Sidewalks – perhaps this is a question of depiction only, but sidewalk directly adjacent to the roadway will not feel safe as vehicle speeds can be quite high. Suggest a grass strip between sidewalk and travel lanes.

More of a comment for the CTDOT Project 18-124 Evaluation – the lack of a north bound turning lane at the Shoprite/Chick-fil-A light appears to be a problem with recent popularity of the drive through restaurant; the length of the turn signal for the south bound turn lane has always been to short.

Rick Schreiner, HART:

Date: October 16, 2014, 3:51 p.m.

Map 1B: with regard to the proposed stop in front of Chik-Fil-A, there could be a topography issue here. We have some concern about buses in the pull off on the opposite side of the street being impacted by drivers exiting from Shop-Rite in the New Milford-Bound direction.

Map 3B: The proposed stop near Del Mar Dr. is at a location that is problematic for a very vocal property owner. We rerouted the inbound bus down old New Milford Road in a large part to keep people from standing in her driveway, almost exactly where the bus stop is proposed.

In general terms, are there any provisions for small shelters or lighting possible on the areas where pull offs are proposed? We also discussed the needs of cyclists and wondered how the overall plan addresses that user group.

Katherine Daniel [mailto:kdaniel@brookfieldct.gov]
Date: Wednesday, October 15, 2014. 2:42 p.m.

Subject: RE: Draft Complete Streets Plan - Lower Route 202 Transportation Plan

There are a number of areas where the two plans concur. The areas of discrepancy I located are as follows:

- 782 Federal Rd, E.W. Batista Family LP – MMI shows consolidation, whereas URS just narrows the driveways (this property has a drive through window and may need the additional exit)
- 786 Federal Rd., Bourdeau Porta Properties – MMI shows no change, whereas URS shows a consolidation of the two driveways
- 800-806 Federal Rd, Brookfield Village – MMI did not have the benefit of the approved site plan, whereas URS did incorporate it
- Mobile, Ralph J. Gulliver Jr – MMI did not show any change, URS shows two (one on Station Rd, the southern one on Federal) of the three current driveways.
- 779 Federal, J&C Matos LLC – MMI and URS concur; the marking denoting improved interconnection should remain.
- 797 & 801 Federal, Hensal Hoyt and Richard Barchi – MMI shows no change; URS consolidates access to both properties
- 801-813 Federal – MMI shows close driveway; URS plans show on street parking and driveway narrowing
- 834 Federal Rd – MMI shows no change; URS shows narrowing existing driveway
- The MMI plans do not include Station Rd or Whisconier. I think the remainder of the changes in the MMI plan are similar in the URS plans.

ROUTE 202 STUDY COMMITTEE COMMENTS

The following comments are the result of a meeting of the Brookfield Route 202 Study Committee held on 11/13/2014 to review recent draft project documents.

1. MEDIAN AT SOUTHERNMOST LIMIT OF STUDY AREA- BJ's & KOHLS
   VHB is preparing a plan for its client (believed to be BJs) to slightly revise the location of the Route 202 median in this area. Dave Hannon will provide MMI with a copy of this plan.

2. BJ's DRIVEWAY
   Southbound Route 202 approach to this driveway has an STC required right turn only lane now. Why is this lane now proposed for removal, or is this just a graphics mistake?

3. NORTHBOUND RT 202 BETWEEN BJ's DRIVE AND SHOPRITE'S NORTH DRIVE
   The length of the stacking lane for the northbound left turn queue at the signal into Chick fil A seems excessive. Would some of this length not be better utilized facilitating sidewalk or widened shoulder and sharrows for bicycle travel along this segment?

4. VIABILITY OF GRAYS BRIDGE RD CONNECTOR TO RT 202 AT KOHLS AND BJs
   Under this potential connector scenario, the "one way" designation of Gray's Bridge Road south of the connector road will decrease access to significant commercial properties at southern end near Route 202.

   Unclear as to why the one way change would be worthwhile. It does not seem necessary to make the nearby proposed new connector viable. Perhaps this change was made to facilitate a bicycle bypass that parallels Route 202? Committee agreed that if no compelling reasons for this change, due to high impacts to commercial businesses, delete proposed Grays Bridge one way designation from plan.

   The Committee agreed the consideration here is not to simply include this connector option in the plan or to remove it. Another alternative to improving circulation with Gray's Bridge Road is discussed below. If the analysis of this new option proves positive, than the Gray's Bridge Road to Route 202 at BJs Driveway connector option can be removed from the plan. If, after that review, the Gray's Bridge Road connector to Route 202 at the BJs driveway stays in the plan, set it as a lower priority than other key safety improvements on Route 202. This latter request is due to the anticipated negative impacts to existing businesses and the expected high cost of this connection due to topo and ROW costs.

5. ALTERNATIVE CONCEPT FOR GRAY'S BRIDGE CONNECTION TO ROUTE 202
   The Committee requests an evaluation of the following circulation concept; Gray's Bridge Road south to Old State Road, then Old State Road north to the former Hardscrabble Road, with Hardscrabble then aligning at Route 202 across from Beverly Drive, with signalization added to this location.

   A new signal on Route 202 at this location would reduce the current circuitous access for Old State Road properties, and also possibly reduce the need for the major expense and dislocation associated with the Gray's Bridge connector to Route 202 at BJ's driveway.

   Beverly Drive is a small residential subdivision. Left turns out of Beverly Drive onto Route 202 northbound are very difficult. And while there are grade problems on Beverly Drive, perhaps the adjacent McDonalds driveway could be relocated from Route 202 to adjacent Beverly Drive to access the new signal. This would reduce northbound Route 202 queues of drivers headed to McDonald's.

   We recognize that alternative access from Grays Bridge Road to Route 202 is available via nearby Sandy Lane, but that option does not address the problems cited above. What is the general cost benefit and practicality of this circulation and signalization concept?

6. ROUTE 202 INTERSECTION WITH OLD NEW MILFORD ROAD
   The closing of this intersection and relocation of traffic to a new signalized location creates the potential to provide much needed replacement parking for Layla's Bakery.

   To facilitate, can the "T" intersection be modified, and can access to the two office buildings across Old New Milford Road be reorganized to make additional land available for parking from the (potentially) former Old New Milford Road right of way? This issue needs evaluation.

   For consideration, could the two office buildings on the west side of Old New Milford Road share access, such that the northern drive of the northern building provides access to the new signal for all movements? Alternatively, or in addition, could the southern access of the southern building retain southbound access only to Route 202?

From: Veronesi, Daniel J. [mailto:Daniel.Veronesi@ct.gov]
Date: Monday, February 23, 2015, 8:32 a.m.
To: mpro38@hotmail.com
Subject: RE: Public Inquiry RE: Federal Road, Brookfield

Mr. Propper,

The Department of Transportation's Division of Traffic Engineering has reviewed the intersection of US Route 202 at the Shop-Rite Driveway and the Boulevard Plaza Driveway (Chik-Fil-A). US Route 202 is a four lane, bi-directional roadway with no exclusive left turn lanes provided on the roadway. The left turn movement into the Shop Rite Plaza is considered the majority movement at this location and receives a protected left turn advance.

The Department has previously evaluated alternative left turn treatments at the subject location. It is not possible to provide a concurrent northbound/southbound protected left turn signal phase without significant geometry improvements. Alternative protected left turn phasings, such as lead/lag phasing is not considered feasible at this location due to safety concerns.

The US Route 202 corridor in Brookfield is in a coordinated system that promotes continuous movements along Federal Road. To increase the signal timing for the left turn advance for southbound US Route 202 would have a detrimental impact to the northbound and side street traffic by increasing delay on these approaches.

Regarding the U.S. Route 202 and McDonald's intersection, the intention to provide a connection between Costco and McDonalds is to provide motorists the option to use the adjacent Costco traffic control signal. The Department cannot limit movements at the McDonalds Driveway. The Department also does not have the authority to limit or remove internal connections between the two properties.

The Western Connecticut Council of Governments is currently performing a corridor study of US Route 202. The Department and Town of Brookfield are active participants providing input to the study. Left turn lanes should be recommended in the corridor study to remain consistent with adjacent signalized intersections. Mr. David Hannon of the Western Connecticut Council of Governments and Major James Purcell of the Brookfield Police Department have been copied on this response so that your concerns are shared with those involved in the study. Participation is encouraged at information meetings that may be held in the future.

Should you wish to discuss anything further, or have any questions, please contact me at (860) 594-2766.

-Dan

From: mpro38@hotmail.com
To: kenneth.fargnoli@ct.gov
CC: taryn.yopp@ct.gov; charles.harlow@ct.gov
Subject: RE: Public Inquiry RE: Federal Road, Brookfield
Date: Fri, 23 Jan 2015 16:15:11 -0500

Thanks very much for getting back on the call. The issue is essentially correct as outlined below but I wanted to add a couple of things that will hopefully help;

The light where cars attempt to make a left, going north, on Federal Rd, is the Chick Fil A at 156 Federal. It is very busy because cars are also entering the Shoprite Shopping Center directly across from Chick Fil A, which gets a lot of traffic.
The other matter regarding MDonalds, 178 Federal Rd, is that people make a left into MCd as a short cut to Costco which is next door to the north, which exacerbates matters. MCd does have a left hand turn lane up further north.

The Chick Fila used to be a Burger King and it did not have a left hand turn lane. However, the car volume is much higher.

Thanks

From: Katherine Daniel [mailto:kdaniel@brookfieldct.gov]
Date: Tuesday, June 02, 2015 11:57 AM
Subject: RE: Rt. 202 Plan Comments
Hi Dave,
I thought it important to note that the plan does not address the White Turkey Road/Candlewood Lake Road/Federal Rd intersection at all, even though it has a high accident count. It has been noted by cyclists as a dangerous section of road. We recognize that this plan was not intended to address the condition at the intersection, but due to the ranking on the SLOSSS list at the beginning of the document, we thought it bore mentioning.
On the proposed new light at Beverly Drive, we noted that this provides a method for traffic originating on Gray's Bridge Rd for turning left to go south, but the light may create problems for traffic bound for MacDonald's. Jay is concerned about the possibility for traffic back up behind NB traffic turning left into Mac Donald's. A similar concern was noted by the CTDOT reviewer relative to NB traffic turning left into Layla's with the latest revision to the light location up at that end of the corridor. Not sure if CTDOT didn't notice that issue at the Beverly Drive proposed signalized intersection. Redesigning MacDonald's traffic flow appears to be possible, and unlike the Layla's intersection, only involves one property owner, a corporate one, but a single property owner, nonetheless.
These were the topics we discussed this morning. I suggest Jay add anything else he comes across after reviewing your redlined version. I will get in touch with Mr. Lavelle and find a time soon that we can all discuss the situation.

Thanks.

Katherine

August 10, 2015
Dear Mr. Britnell:

I am writing to you concerning a proposed traffic improvement in Brookfield, CT at the intersection of Route 202 and Old New Milford Road.

A redesign of this intersection is being proposed by a Route 202 traffic study currently being completed by the Western CT Council of Governments. As a property owner at this intersection, my business, Layla's Bakery, would be significantly impacted.

I may be open to a buy-out and relocation. However I would like to know how generous any CT DOT relocation offer is and how we can go about exploring that option.

I can be reached by email or my cell phone.

Thank you,

James Nejati
427 Ridgebury Road
Ridgefield, CT 06877-1412
Cell: 203-313-4600
jamesnejati@sbcglobal.net

From: Britnell, William W
Sent: Friday, August 14, 2015 12:35 PM
To: Bushee, Scott; Lindeberg, Erika B.; Bergeron, Anna; Obey, Terry J.
Subject: Rte 202 Brookfield, Layla's Bakery

FYI, I received this letter from the owner of Layla's Bakery, which to refresh everyone's memory is the property at the intersection of Route 202 and Old New Milford Road that we have been saying would have to be taken if we ever improve this intersection.

The town and region have indicated (through the consultant doing the study on Route 202) that this property is a local landmark and cannot be taken, to which our response has essentially been OK, then we won't bother pursuing the improvement. The owner seems much more willing to be taken, if the price is right.

Terry – I was going to reply and let him know there is currently no project and therefore no avenue to acquire his property or even have discussions about acquiring his property. However, maybe you or your staff should have that conversation. Be aware that his parking is currently located within our ROW and they have to back out into the road to exit the spaces.

We might not need to actually take the building but there is no way that we could do anything at this location and let that situation remain and also no way (that we can think of at least) that we can provide him with alternate locations for parking, so we have always said that we would need to take the property in total. No one from DOT has spoken to him, to my knowledge. The building is in the center of the picture below. If you'd like to discuss further, let me know.

Erika – as a minor side issue – I have always been bothered by the fact that there is a stop bar on Route 202 at the driveway to the plaza on the east side across from the bakery (see photo below). There is no signal there, so there shouldn't be a stop bar, unless I'm missing something.

I think the plaza builder painted it when they built it and I assume the District just keeps repainting it. Can we speak with the District and tell them not to repaint that stop bar? (eradicating it would be better but I'm sure they won't do that).
Will

On Aug 14, 2015, at 3:52 PM, "Britnell, William W" <William.Britnell@ct.gov> wrote:

Dear Mr. Nejati,

Thank you for your letter dated August 10, 2015 regarding possible purchase of your property and business at the intersection of Route 202 and Old New Milford Road. I appreciate you letting us know your feelings about your business being purchased.

Unfortunately it is far too early to be discussing acquisition or an offer for your property. The study you refer to is being done by the Western Connecticut Council of Governments to identify possible improvements along Route 202 to improve safety and traffic flow.

At the conclusion of the study, the various recommendations will be evaluated and prioritized against many other locations across the state that competing for funding. If it is determined to pursue a project at this intersection, a preliminary design (roughly 30% complete) would be prepared and presented to the public. Based on the comments and input from that meeting, a determination would be made whether to continue and complete the design.

If the decision was made to complete the design, the necessary rights of way would be acquired at that time, following legal requirements. An appraisal would be conducted and an offer made, which would be based on fair market value of the property and relocation expenses.

I would not be involved in those discussions but our office of rights of way would work closely with you at that time. Since I am not an appraiser, I have no idea what the offer would be and to reiterate, this would only occur if a project were actually initiated and all the other steps described occurred. If a project were to be initiated, I cannot tell you how long it would take to get to the point where an offer would be made, but it is probably safe to say it would be several years from now.

I can tell you, based on looking at alternative conceptual designs, that if a project were to be initiated at this intersection, it is highly likely that your business would have to be acquired, due to the lack of space available for your parking, but we would look at all options to retain the business and provide alternative parking locations.

However, in my opinion, that seems unlikely. The cost of the property acquisitions, your property and possibly others, would have to be factored into the decision whether to initiate a project here and weighed against the benefits of the proposed improvements. At this time, based on the information available, I would have to say the likelihood a project being initiated at this location any time soon is questionable, but that is just my opinion.

I'm sorry if anyone gave you the impression that a project might be imminent and also that I cannot be more definitive with the status of the proposals here. I know uncertainty is not conducive to running a business but at this time this is the best information I can provide you.

I hope it has been helpful. Feel free to contact me if you have any further questions or would like to contact me periodically for an update on the progress of the study and possible project initiation.

William Britnell, P.E.
Principal Engineer
State Highway Design Unit
Connecticut Department of Transportation
(860) 594-3274

Notes of Public Meeting: Brookfield Route 202
September 10, 2015

Comment 1: Concerned that 5 foot shoulders will encourage bicyclist to use Route 202 corridor, which he is worried will be unsafe with motorists exiting driveways on Route 202.

Comment 2: Frequently uses Route 202 as a bike route. He proposes raised bike lanes as an improved safety measure for cyclists or shared sidewalks for bikes and pedestrians with appropriate signage. He also would like to see bike boxes for cyclists at intersections to assist cyclists with turning maneuvers and wants to explore the possibility of converting a single parking space at various shopping centers into an area for bike racks.

Comment 3: Concerned with where the ROW impacts will be in relation to Beverly Drive.

Comment 4: Chick-fil-A operator, would like to see these improvements implemented as soon as possible. She is concerned with the safety of the patrons of the Chick-fil-A in Brookfield pertaining to the lack of a left turn lane into the site and is willing to assist in pushing this project to design.

Comment 5: Resident of Beverly Drive who would like to see a traffic signal installed at the intersection of Beverly/Hardscrabble Road and Route 202. She is concerned that Beverly Drive will at some point become a connecting roadway to another part of Route 202. She is also concerned about a connection to the McDonald's from Beverly Drive and how that would increase non-local traffic through her neighborhood.

Comment 6: Representative of the Savings Bank of Danbury in Shop Rite plaza who would like to see a green arrow for turns into Shop Rite as well as Chick-fil-A.
Comment 7: Is excited at the opportunity for the Route 202 corridor to become a more walkable community. She would also like to see improved bus stops and shelters, and would also like these shelters to be taken care of better in the winter as she has seen users of the bus system standing on top of piles of snow while waiting for the bus.

As part of this discussion, it was noted by the zoning commission that business owners along Route 202 will be responsible for clearing snow from sidewalks along their site frontage.

Comment 8: The state representative for Brookfield attended and expressed his support for the report's recommendations.

Comment 9: First selectman of Brookfield, is in agreement with the recommendations and indicated that he would put in the necessary steps for the town to adopt the findings of the report. He is also in agreement that the 1994 transportation plan in the Brookfield Zoning regulations be replaced with the updated driveway management plan.

From: Dave Fine <dave@finetastic.com>
Date: Mon, Sep 14, 2015 at 7:02 PM
Subject: Feedback Route 202 Presentation
To: Jonathan Chew <director@hvceo.org>, David Hannon <dhannon@hvceo.org>
Cc: Francis Pickering <fpickering@westernctcog.org>, Neil Pade <Neil.pade@gmail.com>,
Katherine Rattan <katherine.rattan@ct.gov>, Tom O'Brien <tomob98@gmail.com>,
Farrell, Maureen <mfarrell@regionalymca.org>

I wanted to thank you for encouraging my attendance at the '202' meeting. It was the best meeting I have attended for providing a Complete Streets approach in CT.

Having said that, I would like to provide some thoughts that maybe helpful in future presentations/projects. I am making the comments short. If you want/need some clarity, let me know.

The Good
It was clear that bike/ped infrastructure was a thought our and important part of the plan. There was no doubt that the intention is to build infrastructure for motor vehicles, bikes and peds along 202. When the plan gets executed, it will make a big difference for bike/ped users. That is great news!

The Bad
The refusal to call a 5 foot shoulder a bike lane seems to be a gap in the Complete Streets plan. I really did not understood the explanation for the lack of an actual bike lane. And while specific bike/ped traffic control lights was included (an AMAZING & much appreciated design), other road marking features which could be part of a bike lane design were not included. Given this, it still feels CTDOT just has not moved 100% to a full Complete Streets approach.

The Ugly
It would be helpful if presenters and members of the COG became more aggressive addressing audience members who are uninformed about bike/ped needs and current situation. The one comment in this meeting that stood out to me was something like - why are we worrying about bikes on 202, I have never seen one there. A member of the planning board, shouted out agreement with his comment.

Obviously, there are many ways to handle this. Often it becomes a discussion between an advocate and the objector of the road change. This is never useful as both sides discount the other.

In my experience the most effective approach to this type of comment is for a respected project leader, a COG member for example, responds to the objector, obviously when the comment requires clarity.

In the best example I am familiar was when a bike/ped path was being proposed near peoples backyards. The neighbors raised the usual objections about rising crime rates, noise, and simply unwanted people entering "their" areas that were now private.

The County employee was prepared for these objections and discussed the evidence of higher property values, improved health of residents close to the trail, and his experience of gates being added so people closest to the path had easier path access. When this information came from a trusted leader, the discussion moved on and the path had greater support

Thanks again for the 202 plan. I am hoping the project gets funding soon.

Thanks,

Dave

Town of Brookfield CT
Joint Resolution – September 25, 2015
RE: Transportation Plan for Lower Route 202 (Brookfield, CT)
CTDOT PROJECT 18-124

WHEREAS: The Town of Brookfield and the Western Connecticut Council of Governments (WestCOG), in conjunction with the Connecticut Department of Transportation (CTDOT), identified the need for a comprehensive study of Brookfield's Lower Route 202 corridor, which encompasses a 1.6 mile stretch from White Turkey Road to Route 133 in Brookfield. And,

WHEREAS: Milone & MacBroom, Inc. (MMI) was engaged to conduct the study using CT-DOT Project 18-124 as a starting point; and completed its work, THE TRANSPORTATION PLAN FOR LOWER ROUTE 202 (the Plan) ,in July 2015. And,

WHEREAS: Town of Brookfield officials have reviewed the Plan, which review included a well-attended Public Hearing of the Zoning and Planning Commissions on Thursday, September 10th, 2015. And,

WHEREAS: Improvements to the Lower Route 202 corridor are needed to provide for better resident, motorist, pedestrian, and cyclist safety along the corridor. And,

WHERAS: Improvements to the Lower Route 202 corridor are needed to promote the economic welfare of the businesses along the corridor. Now,

THEREFORE: Brookfield officials request that CTDOT project 18-124 be modified to incorporate the policy elements of the PLAN, including the detailed recommendations in the two appendices, including the recommendation that the proposed realignment of Gray's Bridge Road **not** be pursued. And,

WE RESPECTFULLY REQUEST that the CTDOT give special and priority emphasis for planning, engineering, funding, and construction to:

- Safety Improvement Project I – (Shop Rite Driveway to Beverly Drive). And,
- Safety Improvement Project 2 – (Route 202 and Old New Milford Road Intersection).

For the Board of Selectman _____ 9/25/2015 William N. Tinsley, First Selectman

For the Zoning Commission _____ 9/28/15 Ryan B. Blessey, Chairman

For the Planning Commission _____ 9/7/15 Jon A. Van Hise, Chairman

For the Legal Traffic Authority _____ 9/25/15 James Purcell, Major BPD, Agent

3101-17-s3015-rpt

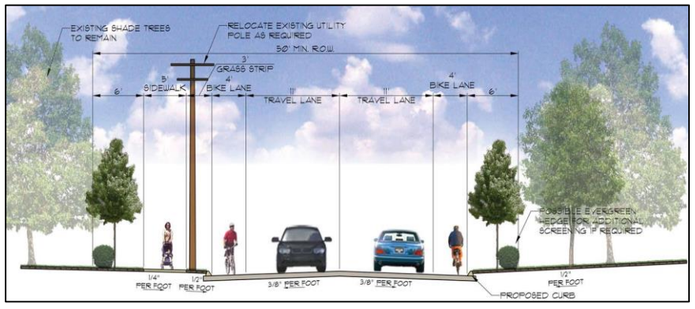
APPENDIX

Appendix A: Route 202 Complete Streets Evaluation

TABLE OF CONTENTS - COMPLETE STREETS EVALUATION

1 INTRODUCTION

The Western Connecticut Council of Governments (WestCOG) in conjunction with the Connecticut Department of Transportation (CTDOT) and the Town of Brookfield, as part of a Transportation Plan for the Lower Route 202 corridor, identified the need to undertake a Complete Streets evaluation of the segment of U.S. Route 202 from White Turkey Road to Route 133 in Brookfield.



Complete Streets design is a philosophy where the road accommodates all potential users of that facility. This includes bicyclists, pedestrians, and transit users.

The WestCOG has over the years, through policy formulation and the development of various transportation plans, made Complete Streets a priority as evidenced by the recent update of its 1996 Regional Bicycle Plan while the Town of Brookfield's Plan of Conservation and Development (POCD) clearly identifies, as one of its strategies, the need to expand transit and enhance facilities for bicyclists and pedestrians.

Furthermore, initiatives such as the Still River Greenway project slated to be completed in 2014 present tremendous opportunities for multimodal connections within the study corridor and the region as a whole.

This section of the Transportation Plan for Lower Route 202 focuses on Complete Streets recommendations to improve functionality and interconnection of the various modes.

2 COMPLETE STREETS RECOMMENDATIONS

A set of Complete Streets improvement recommendations to address existing needs and deficiencies was developed. MMI's approach/philosophy centered on developing a set of strategies that was practical from an engineering perspective and could be implemented as funding becomes available. The recommendations were identified as either near to midterm or long term. The near to midterm recommendations are those improvements that could be implemented within a 1- to 5-year time frame. These improvements would most likely not involve or have minimal right-of-way/property, utility, or environmental impacts. The long-term recommendations are those improvements that could be implemented beyond a 5-year time frame. These improvements could potentially involve right-of-way/property, utility, or environmental impacts.

2.1 Pedestrian Recommendations

Pedestrian recommendations would generally be implemented within the near to midterm time frame. These are illustrated in Appendix A and include:

- Install 5-foot sidewalks along the corridor, particularly at locations where high pedestrian activity may be expected such as in the vicinity of residential developments and commercial centers.
- Install crosswalks at all signalized intersections within the corridor. Crosswalks should be installed to connect to sidewalks.
- Install new handicap ramps at intersections where sidewalks and crosswalks are to be installed.
- Install new pedestrian signals at signalized intersections without pedestrian signals. Where pedestrian signals exist, these signals should be upgraded to the countdown or audible type.

2.2 Bicyclist Recommendations

Bicyclist recommendations were identified as both near to mid-term and long term. Near to mid-term bicyclist improvements are those to be implemented as part of the safety priority improvements described in Section 4.1 or improvements that would not have any right of way/property impacts, while the long term improvements are the non-safety priority improvements that most likely involve right of way/property impacts. Recommendations for bicyclists are illustrated in detail in Appendix A.

<u>Near to Midterm Recommendations</u>

- Widen Route 202 at high safety priority locations to provide 5 foot shoulders.
- At locations where adequate roadway pavement width is available, restripe Route 202 to provide 11-foot travel lanes and minimum 5-foot shoulders to accommodate bicyclists. No bike lanes are proposed as the ample shoulders will serve bicyclists.
- Retrofit existing signals with bicyclist detection.

<u>Long Term Recommendations</u>

- At non high safety priority locations, widen Route 202 to provide 11-foot lanes and minimum 5-foot shoulders to accommodate bicyclists. No bike lanes are proposed. This improvement could result in right-of-way and adjacent property impacts.
- Retrofit existing signals with bicyclist detection.

2.3 Transit Recommendations

The following improvements are recommended for transit:

Near to Midterm Recommendations

- Where necessary, relocate existing bus stops to ensure that spacing between stops is more efficient.
- Install new bus stops close to residential and commercial centers such as the Rollingwood Condominiums and COSTCO.

Long Term Recommendations

- Install bus pull-off and shelter at locations where topography and right-of-way will allow including the bus stop between Shop Rite and Hardscrabble Road as well as the bus stop located just north of Rollingwood Drive.

2.4 Improvement Plan

Plans illustrating Complete Streets strategies were developed in Geographic Information Systems (GIS) format using the Town of Brookfield's 2013-2014 GIS data, 2011 Microsoft virtual earth aerial mapping, and Google map aerials at locations where the Microsoft aerials were not up to date. A map symbology of improvement strategies was developed and used to illustrate recommendations at various locations along the Route 202 study corridor. The map symbology is described below.

Near to midterm Complete Streets recommendations are presented in Figures CS-1A through CS-4A while long-term recommendations are presented in Figures CS-LT1A through CS-LT4A. Typical cross sections and conceptual bus stop perspective and amenities are illustrated in Figures CS-5 and CS-6. respectively.

SYMBOL	DESCRIPTION
	**Existing Bus Stop:** Existing bus stop to remain or be relocated.
	**Existing Pedestrian Signal:** Existing pedestrian signal to remain.
	**Proposed Bus Pull-off:** Proposed bus pull-off and shelter at locations where right-of-way and topography will allow.
	**Proposed Bus Stop:** Proposed bus stop at locations where right-of-way and topography will not allow for a pull-off.
	**Proposed Pedestrian Signal:** Proposed countdown pedestrian signal to facilitate safe crossing of Route 202.
	**Proposed Traffic Signal:** Proposed traffic signal to provide better traffic control at an intersection. New signals should include bicycle detection.
	**Existing Traffic Signal:** Existing traffic signal to remain or be upgraded. Upgraded signals to include bicycle detection.
	**Existing Crosswalk:** Existing crosswalk to remain. Restripe if required.
	**Proposed Crosswalk:** Install new crosswalk to facilitate safe crossing of roads. These are proposed at signalized intersections and areas with proposed sidewalks and close to residential developments.
	**Proposed Sidewalk:** Proposed 5-foot sidewalks to provide for walkable, pedestrian-friendly environment. These are proposed in residential areas and at locations with bus stops in close proximity to commercial and residential centers.
	**Restripe Road to Provide Minimum 5-foot Shoulder:** Restripe roadway at locations where pavement width is available to provide 11-foot travel lanes and wider shoulders (5-foot minimum). No roadway widening will be required.
	**Widen Road to Provide Minimum 5-foot Shoulder:** Widen roadway to provide 11-foot travel lanes and wider shoulders (5-foot minimum). Improvement may include right-of-way/property impacts.

appendix a 3101-17-s3015-rpt

CS-1A

Kohls

Bank of America

SECTION B

Armed Forces Career Center

Shell Station

MATCH TO MAP 1B

202

EXISTING PEDESTRIAN PUSH BUTTON

Savers,
Harbor Freight Tools,
Newtown Savings Bank

Dentist

SECTION B

Tile America

Five Guys

PRIORITY SAFETY IMPROVEMENTS (CTDOT 18-124)

CS-1B

EXISTING PEDESTRIAN PUSH BUTTON

Chick-Fil-A

Firestone

BEVERLY DR

McDonalds

SECTION D

RELOCATE

MATCH TO MAP 1A

MATCH TO MAP 2A

202

PARK RD

HARDSCRABBLE RD

RELOCATE

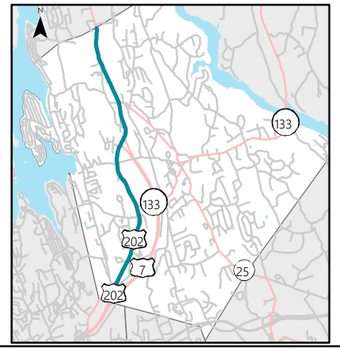
Shop Rite

EXISTING PEDESTRIAN PUSH BUTTON

PRIORITY SAFETY IMPROVEMENTS (CTDOT 18-124)

PETCO

Irving Gas Station



Lower Route 202 Complete Streets Improvement Plan (Near to Mid Term)

- Existing Bus Stop
- Existing Pedestrian Signal
- Proposed Bus Pulloff
- Proposed Bus Stop
- Proposed Pedestrian Signal
- Proposed Traffic Signal
- Existing Traffic Signal
- Widen Road to Provide Min. 5 Foot Shoulder
- Restripe Road to Provide Min. 5 Foot Shoulder
- Existing Crosswalk
- Proposed Crosswalk
- Proposed Sidewalk
- Approximate Parcel Lines

Figures CS-1A and CS-1B Sheet 1 of 4

MILONE & MACBROOM

WESTCOG

TOWN OF BROOKFIELD CONNECTICUT SEAL

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)

CS-2A

MATCH TO MAP 1B

COSTCO

EXISTING PEDESTRIAN PUSH BUTTON

202

189 Sports Cafe

ELIMINATE ONE WAY LOOP & PARKING IN FRONT OF BUILDING

PRIORITY SAFETY IMPROVEMENTS (CTDOT 18-124)

SANDY LN

EXISTING PEDESTRIAN PUSH BUTTON

SECTION B

NEW SIDEWALK TO SANDY LANE VILLAGE CONDOS (106 UNITS)

Rite Aid

Lazy Boy

MATCH TO MAP 2B

CS-2B

MATCH TO MAP 2A

Brookfield Commons

202

SECTION B

ROLLINGWOOD DR

EDEN CT

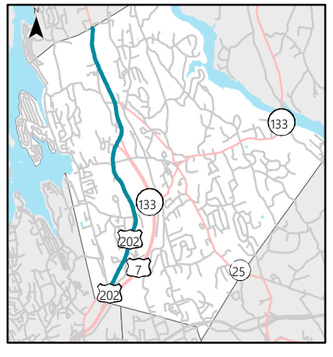
Hudson City Bank

NEW SIDEWALK TO ROLLINGWOOD CONDOS (246 UNITS)

ROLLINGWOOD DR

LJ Edwards

MATCH TO MAP 3A



Lower Route 202 Complete Streets Improvement Plan (Near to Mid Term)

- Existing Bus Stop
- Existing Pedestrian Signal
- Proposed Bus Pulloff
- Proposed Bus Stop
- Proposed Pedestrian Signal
- Proposed Traffic Signal
- Existing Traffic Signal
- Widen Road to Provide Min. 5 Foot Shoulder
- Restripe Road to Provide Min. 5 Foot Shoulder
- Existing Crosswalk
- Proposed Crosswalk
- Proposed Sidewalk
- Approximate Parcel Lines

Figures CS-2A and CS-2B Sheet 2 of 4

MILONE & MACBROOM WEST COG

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)

CS-3A

MATCH TO MAP 2B

OLD NEW MILFORD RD

SECTION B

Layla's Bakery

POSSIBLE TO BE REALIGNED AND SIGNALIZED PER CTDOT PROJECT 18-124

MATCH TO MAP 3B

202

SECTION B

RELOCATE

Animal Hospital

CS-3B

MATCH TO MAP 3A

OLD NEW MILFORD RD

SECTION B

CHALLENGES

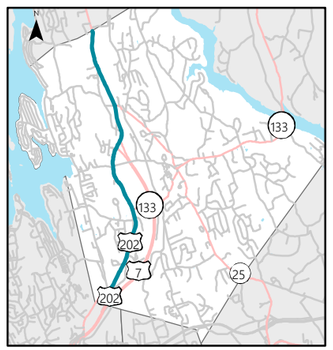
MATCH TO MAP 4A

202

SECTION A

SECTION C

DEL MAR DR



Lower Route 202 Complete Streets Improvement Plan (Near to Mid Term)

- Existing Bus Stop
- Existing Pedestrian Signal
- Proposed Bus Pulloff
- Proposed Bus Stop
- Proposed Pedestrian Signal
- Proposed Traffic Signal
- Existing Traffic Signal
- Widen Road to Provide Min. 5 Foot Shoulder
- Restripe Road to Provide Min. 5 Foot Shoulder
- Existing Crosswalk
- Proposed Crosswalk
- Proposed Sidewalk
- Approximate Parcel Lines

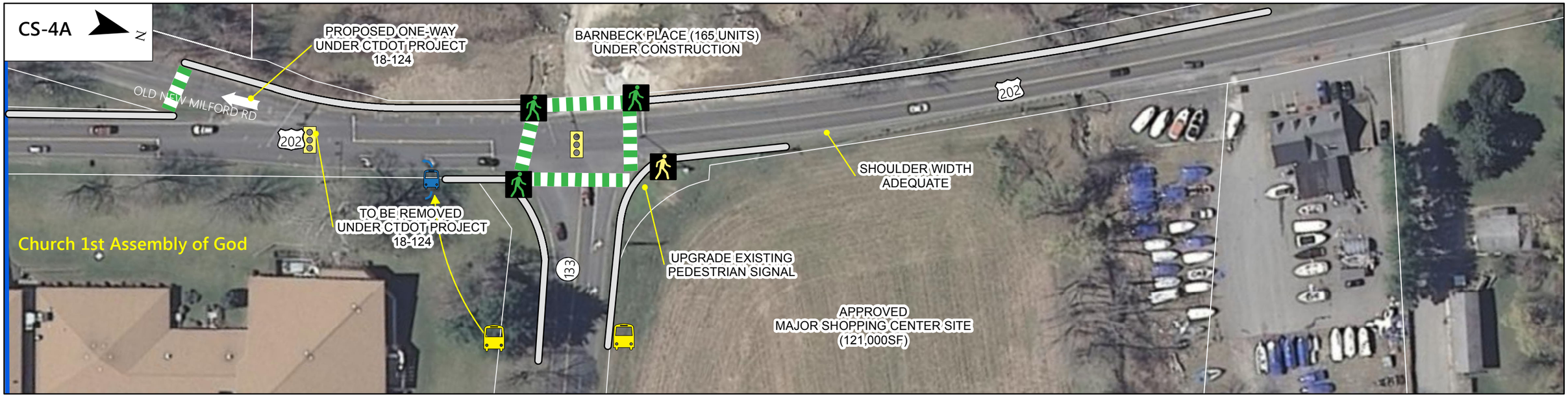
Figures CS-3A and CS-3B Sheet 3 of 4

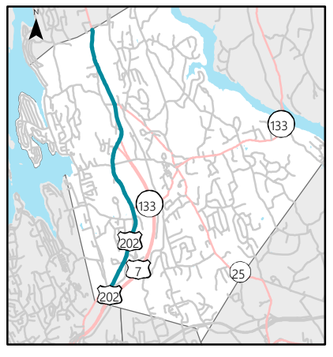
MILONE & MACBROOM

WEST COG

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)





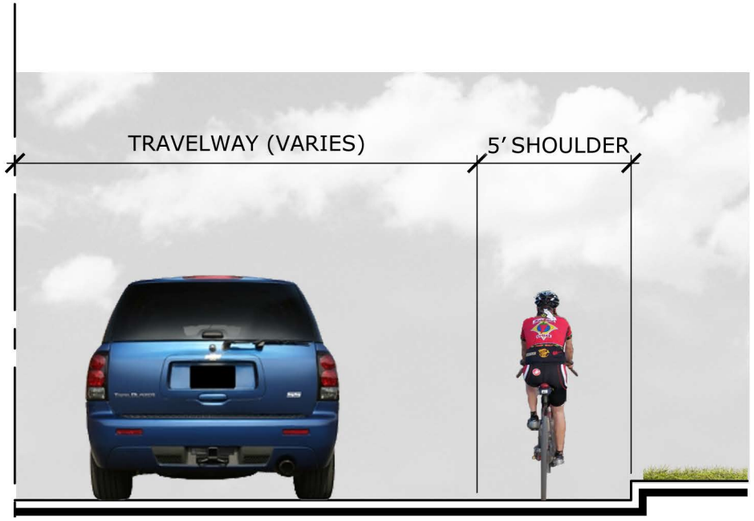
Lower Route 202 Complete Streets Improvement Plan (Near to Mid Term)

Existing Bus Stop
Existing Pedestrian Signal
Proposed Bus Pulloff
Proposed Bus Stop
Proposed Pedestrian Signal
Proposed Traffic Signal
Existing Traffic Signal
Widen Road to Provide Min. 5 Foot Shoulder
Restripe Road to Provide Min. 5 Foot Shoulder
Existing Crosswalk
Proposed Crosswalk
Proposed Sidewalk
Approximate Parcel Lines

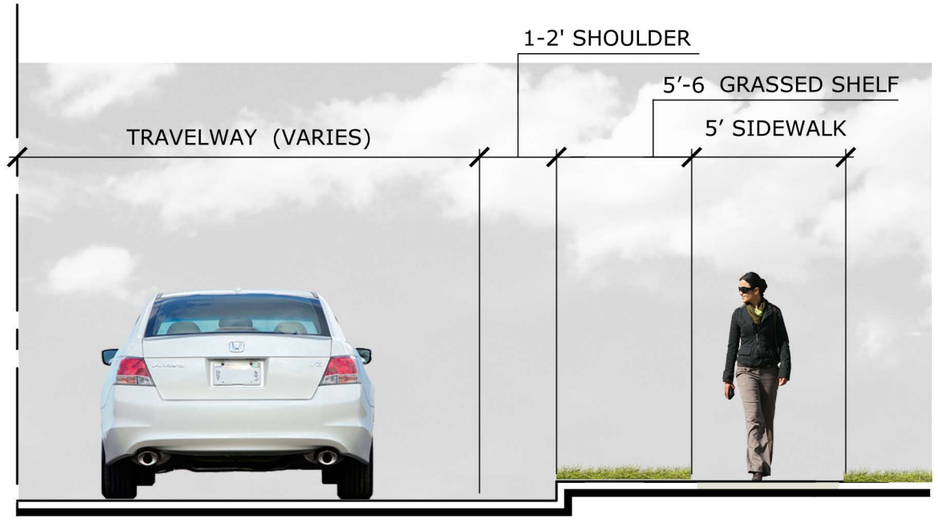
Figure CS-4A Sheet 4 of 4

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)



SECTION - A



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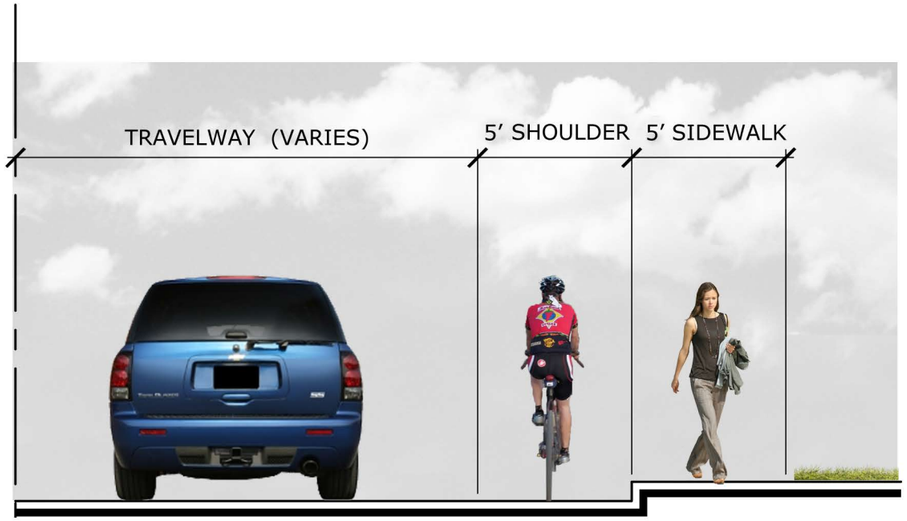
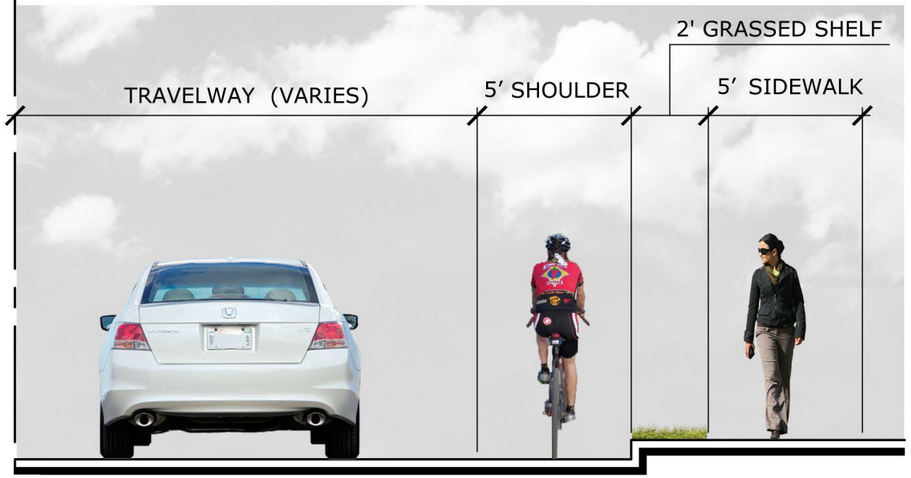


SECTION - C



SECTION - D

Cross - Sections
Lower Route 202 Complete Streets Improvement Plan

Figure CS-5

MILONE & MACBROOM

WEST COG

EXAMPLE SHELTER OPTIONS

SITE AMENITIES

Conceptual Bus Stop & Shelter Perspective
Lower Route 202 Complete Streets Improvement Plan

Figure CS-6

MILONE & MACBROOM

WEST COG

CS-LT1A

Kohls

Bank of America

SECTION D

202

SECTION D

Armed Forces Career Center

Shell Station

MATCH TO MAP 1B

EXISTING PEDESTRIAN PUSH BUTTON

Savers,
Harbor Freight Tools,
Newtown Savings Bank

Dentist

Tile America

Five Guys

PRIORITY SAFETY IMPROVEMENTS (CTDOT 18-124)

CS-LT1B

MATCH TO MAP 1A

EXISTING PEDESTRIAN PUSH BUTTON

Chick-Fil-A

Firestone

SECTION D

McDonalds

MATCH TO MAP 2A

Shop Rite

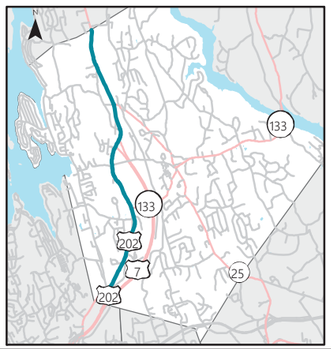
EXISTING PEDESTRIAN PUSH BUTTON

PRIORITY SAFETY IMPROVEMENTS (CTDOT 18-124)

SECTION D

PETCO

Irving Gas Station



Lower Route 202 Complete Streets Long Term Improvement Plan

- Existing Bus Stop
- Existing Pedestrian Signal
- Proposed Bus Pulloff
- Proposed Bus Stop
- Proposed Pedestrian Signal
- Proposed Traffic Signal
- Existing Traffic Signal
- Widen Road to Provide Min. 5 Foot Shoulder
- Restripe Road to Provide Min. 5 Foot Shoulder
- Existing Crosswalk
- Proposed Crosswalk
- Proposed Sidewalk
- Short Term Improvements
- Approximate Parcel Lines

Figures CS-LT1A and CS-LT1B Sheet 1 of 4

MILONE & MACBROOM

WESTCOG

TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)

CS-LT2A

MATCH TO MAP 1B

COSTCO

EXISTING PEDESTRIAN PUSH BUTTON

SECTION A

202

SECTION D

EXISTING PEDESTRIAN PUSH BUTTON

SANDY LN

189 Sports Cafe

PRIORITY SAFETY IMPROVEMENTS (CTDOT 18-124)

Rite Aid

Lazy Boy

NEW CROSSWALK TO SANDY LANE VILLAGE CONDOS (106 UNITS)

MATCH TO MAP 2B

CS-LT2B

MATCH TO MAP 2A

Brookfield Commons

SECTION A

202

SECTION D

ROLLINGWOOD DR

ROLLINGWOOD DR

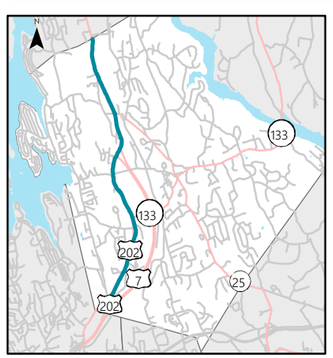
LJ Edwards

MATCH TO MAP 3A

Hudson City Bank

EDEN CT

NEW SIDEWALK TO ROLLINGWOOD CONDOS (246 UNITS)



Lower Route 202 Complete Streets Long Term Improvement Plan

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- Proposed Crosswalk
- Proposed Sidewalk
- Short Term Improvements
- Approximate Parcel Lines

Figures CS-LT2A and CS-LT2B Sheet 2 of 4

MILONE & MACBROOM WESTCOG TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)

CS-LT3A

MATCH TO MAP 2B

OLD NEW MILFORD RD

SECTION D

Layla's Bakery

POSSIBLE TO BE REALIGNED AND SIGNALIZED PER CTDOT PROJECT 18-124

MATCH TO MAP 3B

202

SECTION D

Animal Hospital

CS-LT3B

MATCH TO MAP 3A

OLD NEW MILFORD RD

SECTION B

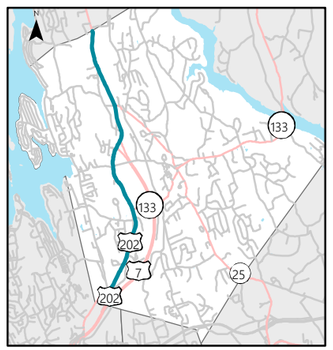
MATCH TO MAP 4A

202

SECTION A

SECTION C

DEL MAR DR



Lower Route 202 Complete Streets Long Term Improvement Plan

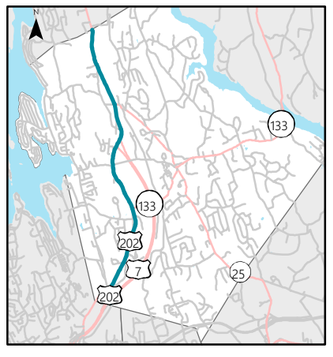
- Existing Bus Stop
- Existing Pedestrian Signal
- Proposed Bus Pulloff
- Proposed Bus Stop
- Proposed Pedestrian Signal
- Proposed Traffic Signal
- Existing Traffic Signal
- Widen Road to Provide Min. 5 Foot Shoulder
- Restripe Road to Provide Min. 5 Foot Shoulder
- Existing Crosswalk
- Proposed Crosswalk
- Proposed Sidewalk
- Short Term Improvements
- Approximate Parcel Lines

Figures CS-LT3A and CS-LT3B Sheet 3 of 4

MILONE & MACBROOM WESTCOG TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)



Lower Route 202 Complete Streets Long Term Improvement Plan

- Existing Bus Stop
- Existing Pedestrian Signal
- Proposed Bus Pulloff
- Proposed Bus Stop
- Proposed Pedestrian Signal
- Proposed Traffic Signal
- Existing Traffic Signal
- Widen Road to Provide Min. 5 Foot Shoulder
- Restripe Road to Provide Min. 5 Foot Shoulder
- Existing Crosswalk
- Proposed Crosswalk
- Proposed Sidewalk
- Short Term Improvements
- Approximate Parcel Lines

Figure CS-LT4A Sheet 4 of 4

MILONE & MACBROOM WESTCOG TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 80 160 240 320 Feet

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)

Appendix B: Route 202 Driveway Management Plan

TABLE OF CONTENTS - DRIVEWAY MANAGEMENT PLAN

1 INTRODUCTION

The Western Connecticut Council of Governments (WestCOG) in conjunction with the Connecticut Department of Transportation (CTDOT) and the Town of Brookfield identified the need, as part of a Transportation Plan for the Lower Route 202 corridor, to update WestCOG's existing 1994 Driveway Management Plan for the segment of Route 202 from the Danbury/Brookfield town line to the Brookfield/New Milford town line, a distance of approximately 5.4 miles.

This section of the Transportation Plan for Lower Route 202 focuses on driveway management along Route 202 and presents an evaluation of existing driveway access as well as improvement recommendations.

2 EXISTING ROADWAY CONDITIONS

The study corridor is approximately 5.4 miles long and encompasses the segment of U.S. Route 202 from the Danbury/Brookfield town line to the Brookfield/New Milford town line.

U.S. Route 202 is classified by the CTDOT as a minor arterial. This roadway runs north-south and connects directly to both Interstate 84 (I-84) and U.S. Route 7. This corridor more recently has seen a significant increase in commercial development as evidenced by the completion of the COSTCO, Kohl's, and BJ's shopping centers and Chick-Fil-A as well as a number of residential developments. Portions of Lower Route 202 currently carry approximately 30,000 vehicles daily.

The roadway cross section varies along the Route 202 study corridor. The segment from the Danbury/Brookfield town line to Old New Milford Road in Brookfield is generally a four-lane cross section with additional dedicated turn lanes at some intersections. The roadway cross section then transitions to two lanes (one lane in each direction) in the vicinity of Old New Milford Road and remains two lanes for the most part, north to the Brookfield/New Milford town line. The posted speed limit varies between 35 miles per hour to 40 miles per hour.

Sidewalks are virtually nonexistent along this corridor while shoulder widths are usually narrow and undesirable. Access management is an issue/concern due to several unplanned curb cuts along the corridor, which invariably present traffic and safety concerns.

3 EVALUATION OF DRIVEWAY ACCESS

3.1 Field Walk

Milone & MacBroom, Inc. (MMI) conducted a field walk on August 15, 2014 to assess existing driveway access and identify needs and deficiencies. Furthermore, the field visit presented an opportunity to confirm which recommendations from the 1994 Driveway Management Plan have been implemented.

The following were assessed during the field walk:

- Driveway location
- Driveway spacing
- Driveway redundancy
- Driveway connections
- Access restrictions
- Sightlines
- Signage and pavement markings

3.2 Driveway Design Criteria

The evaluation of driveway access was based on driveway design guidelines published in the 2012 CTDOT *Highway Design Manual* (HDM)[1] and the "Technical Standards and Design Criteria, Traffic & Access" chapter of the Town of Brookfield Zoning Regulations[2]. Since Route 202 is a state highway, design criteria from the CTDOT *Highway Design Manual* governed for the most part.

The following general design guidelines were considered in the evaluation of existing driveway access and in formulating recommendations for the Route 202 corridor.

- ***Driveway Alignment*** – Driveways and roadways should preferably intersect at 90 degrees.
- ***Maximum Driveway Grade*** – 8 percent for commercial driveways and 12 percent for residential driveways
- ***Driveway Width*** – 10 feet (for residential driveways only) to 30 feet
- ***Number of Driveways*** – No more than one combination entrance and exit driveway for any property with frontage of less than 50 feet
- ***Minimum Driveway Spacing*** – 3 feet for residential and commercial driveways and 10 feet for industrial driveways
- ***Driveway Connections*** – Provide driveway connections between parcels of similar existing or potential use where topography and other conditions such as the facilitation of fire protection allow.

[1] 2012 *CTDOT Highway Design Manual*
[2] *Technical Standards and Design Criteria*, Traffic 7 Access – Town of Brookfield Zoning Regulations

4 DRIVEWAY MANAGEMENT RECOMMENDATIONS

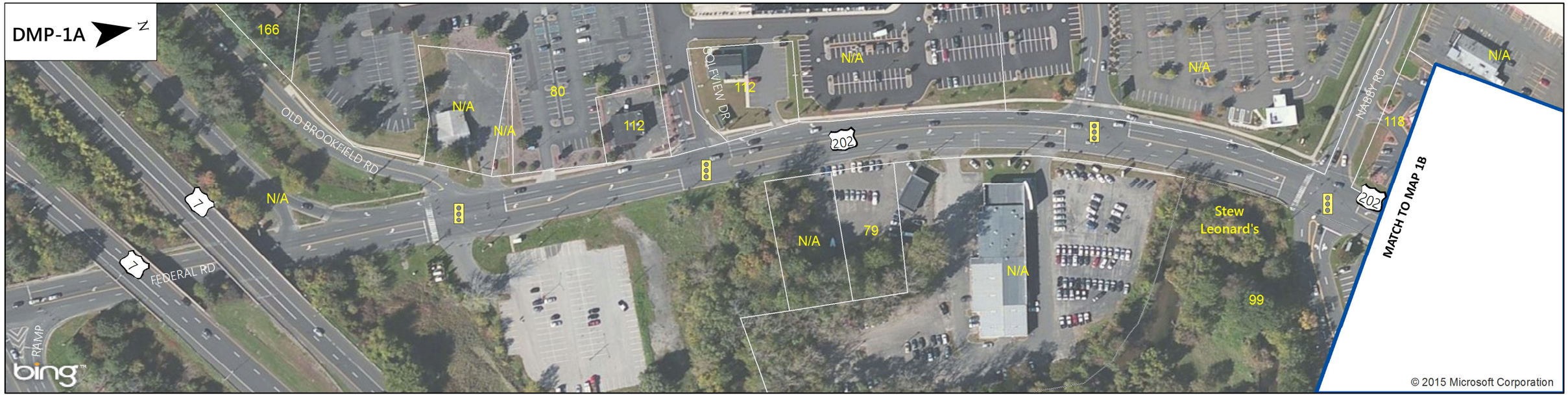
Based on the field assessment and driveway design criteria from the CTDOT *Highway Design Manual* and the Town of Brookfield Zoning Regulations, driveway management strategies were identified and formulated into a Driveway Management Plan. Our approach/philosophy centered on developing a set of strategies that were practical and could be implemented given the availability of funding.

4.1 Geographic Information Systems (GIS) Mapping

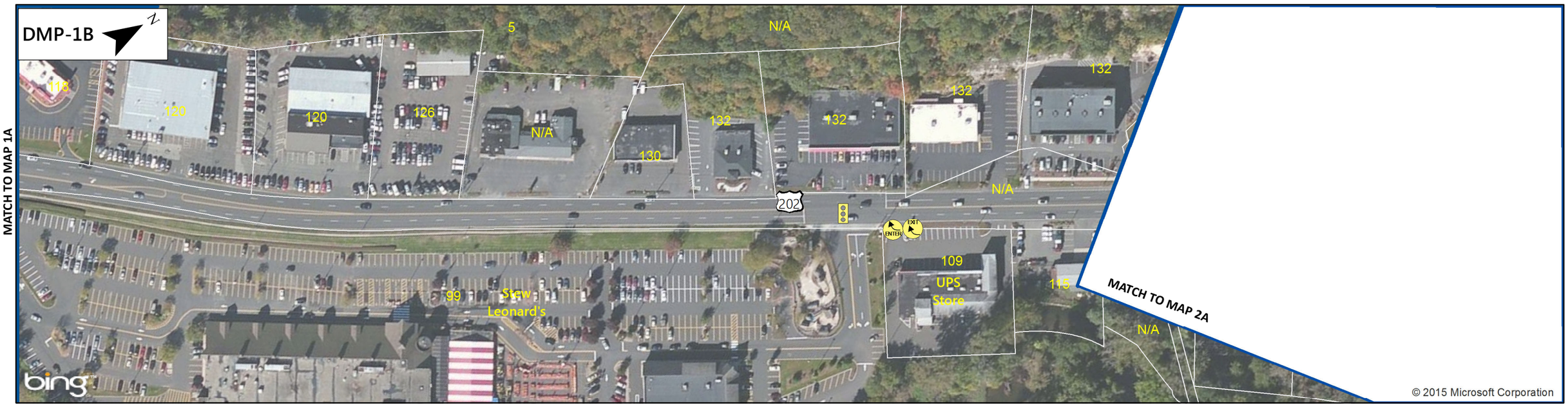
Plans illustrating driveway management strategies were developed in GIS format using the Town of Brookfield's 2013-2014 GIS data, 2011 Microsoft virtual earth aerial mapping, and Google map aerials at locations where the Microsoft aerials were not up to date. A map symbology of improvement strategies was developed and used to illustrate driveway improvement recommendations at various locations along the Route 202 study corridor. The map symbology is described below while the driveway access management recommendations are presented in Figures 1A through 8B.

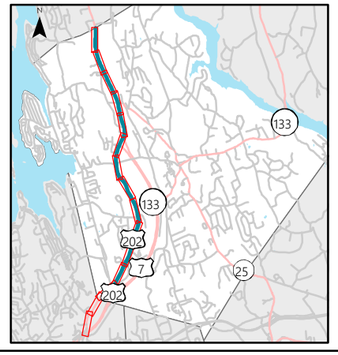
SYMBOL	DESCRIPTION
	Close Driveway: Close existing driveway to reduce the number of driveways for a single parcel or to facilitate interconnection between adjacent parcels.
S	**Continue Sidewalk Across Driveway:** Continue sidewalk across driveways where there are gaps to indicate to motorists the potential for pedestrians crossing the driveway.
P	**Prohibit Parking:** Prohibit parking through curbing, pavement markings, and signage.
D	**Define Driveway:** Better define driveway through geometric, signing, and pavement markings.
	Create or Improve Interconnection: Create connections between adjacent parcels to eliminate driveway redundancy and reduce curb cuts along Route 202.
	Improve Signage and Pavement Markings on One-Way Street: Provide signage and pavement markings such that direction of traffic flow is clear to drivers.
	Narrow Existing Driveway: Narrow wide driveways through new curbing or removal of pavement to conform to driveway width guidelines.
N	**Consolidate Driveway:** Consolidate two or more driveways to eliminate redundant driveways.
EXIT	**Prohibit Left-Turn Exit:** Install a no-left-turn sign on driveway exit to improve traffic operations and safety.
ENTER	**Convert Two-Way to One-Way Entry:** Convert existing driveway to one-way entry only through signing and pavement markings to improve traffic circulation and safety.
EXIT	**Convert Two-Way to One-Way Exit:** Convert existing driveway to one-way exit only through signing and pavement markings to improve traffic circulation and safety.
ENTER	**Convert to Right-Turn Entry Only:** Convert existing driveway to a right-turn entry only through driveway geometry modifications and signing and pavement markings to improve traffic circulation and safety.
EXIT	**Convert to Right-Turn Exit Only:** Convert existing driveway to a right-turn exit only through driveway geometry modifications and signing and pavement markings to improve traffic circulation and safety.
LEFT RIGHT	**Improve Sightlines:** Improve sightlines from existing driveways through the clearing of parcel frontage vegetation or the relocation of obstacles. Consider relocating driveway to improve sightlines where Route 202 geometry restricts sightlines.

DMP-1A



DMP-1B





- Approximate Parcel Lines
- Potential Roadway or Driveway Configuration
- Existing Driveway Direction
- Existing Traffic Signal
- Close Existing Driveway or Roadway
- Continue Sidewalk Across Driveway
- Prohibit Parking
- Define Driveway
- Create or Improve Interconnection
- Improve Signing and Pavement Markings for One-Way Driveway
- Narrow Existing Driveway
- Consolidate Driveway
- Prohibit Left-Turn Exit
- Convert Two-Way to One-Way Entry
- Convert Two-Way to One-Way Exit
- Convert to Right-Turn Entry Only
- Convert to Right-Turn Exit Only
- Improve Sight Line Looking Left from Driveway
- Improve Sight Line Looking Right from Driveway

Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14)
Roads: Streetmap USA (2011) Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)

Route 202 Driveway Management Plan

Figures DMP-1A and DMP-1B Sheet 1 of 8

MILONE & MACBROOM WESTCOG TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 125 250 375 500 Feet

DMP-2A

MATCH TO MAP 1B

MATCH TO MAP 2B

Webster Bank

Wendy's

Verizon Wireless and Vitamin Shoppe

Pizza Hut

Gym Source

Town Fair Tire

KFC

CANDLEWOOD LAKE RD

202

DMP-2B

MATCH TO MAP 2A

MATCH TO MAP 3A

BJ's

Kohls

Bank of America

Armed Forces Career Center

Shell Station

Chick-Fil-A

Savers, Harbor Freight Tools, Newtown Savings Bank

Tile America

Shop Rite

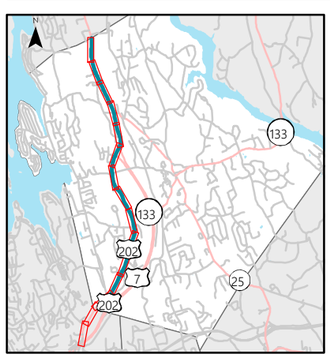
Five Guys

Dentist

Mobil

FUTURE CONVERSION TO ONE-WAY NB PER CTDOT PROJECT 18-124

202



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Data Sources | Parcels, Utilities, Pavement Boundaries, Sidewalks: Town of Brookfield (2013-14) Roads: Streetmap USA (2011)
Aerial: Microsoft (2011) Field Observations: Milone & MacBroom (2014)

Route 202 Driveway Management Plan

Figures DMP-2A and DMP-2B Sheet 2 of 8

MILONE & MACBROOM

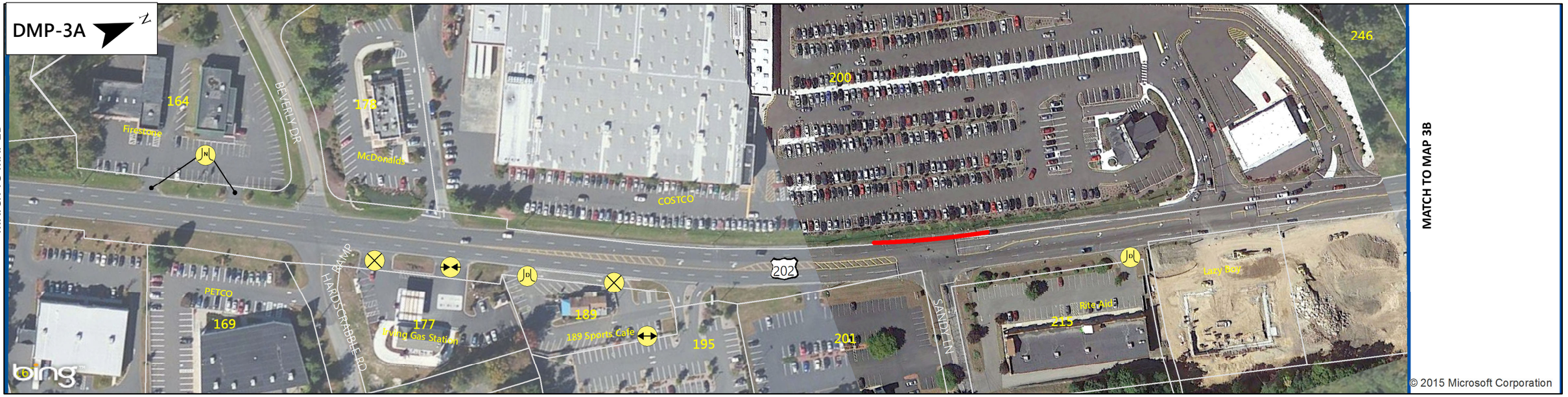
WEST COG

0 125 250 375 500 Feet

DMP-3A

MATCH TO MAP 2B

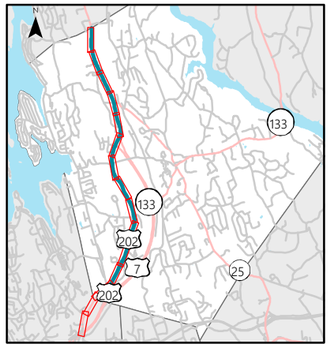
MATCH TO MAP 3B



DMP-3B

MATCH TO MAP 3A

MATCH TO MAP 4A



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Route 202 Driveway Management Plan

Figures DMP-3A and DMP-3B Sheet 3 of 8

MILONE & MACBROOM WESTCOG TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 125 250 375 500 Feet

DMP-4A

N

MATCH TO MAP 3B

MATCH TO MAP 4B

OLD NEW MILFORD RD

HUCKLEBERRY HILL RD

DEL MAR DR

ONE-WAY SB PER CTDOT PROJECT 18-124

Church 1st Assembly of God

202

133

328

332

336

331

337

355

360

366

398

426

425

419

401

ENTER

DMP-4B

N

MATCH TO MAP 4A

MATCH TO MAP 5A

426

434

450

460

470

468

490

500

518

508

500

433

Hollee Insurance

425

439

457

BMW

465

475

487

491

499

515

202

bing™

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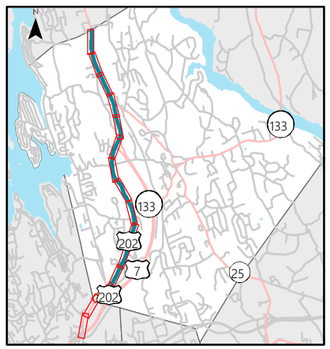

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Route 202 Driveway Management Plan

Figures DMP-4A and DMP-4B Sheet 4 of 8

MILONE & MACBROOM

WEST COG

TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 125 250 375 500 Feet

DMP-5A

MATCH TO MAP 4B

MATCH TO MAP 5B

518
536
540
558
IMS Self Storage
578
ELBOW HILL RD
594
604
PINE RIDGE
202
549
537
559
SILVERMINE RD
533
527
515
595

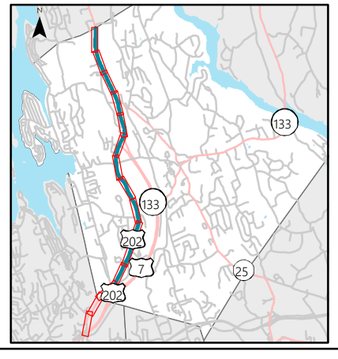
DMP-5B

MATCH TO MAP 5A

MATCH TO MAP 6A

Iron Works
636
ORCHARD ST
616
202
7
RESTRIPE ANGULAR PARKING
625
635
595
673

bing™



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Route 202 Driveway Management Plan

Figures DMP-5A and DMP-5B Sheet 5 of 8

MILONE & MACBROOM WESTCOG TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 125 250 375 500 Feet

DMP-6A

MATCH TO MAP 5B

MATCH TO MAP 6B

OLD US 7

LAUREL HILL RD

Hearth Restaurant
756

766

730

768

777

777

673

701

731

166

168

DMP-6B

MATCH TO MAP 6A

MATCH TO MAP 7A

774

782

786

Discount Tires
794

800

802

806

818

Mobil

STATION RD

820

Citgo

834

840

846

850

854

839

843

849

857

779

789

797

801

807

813

BP

Shell

823

825

831

833

837

777

793

bing

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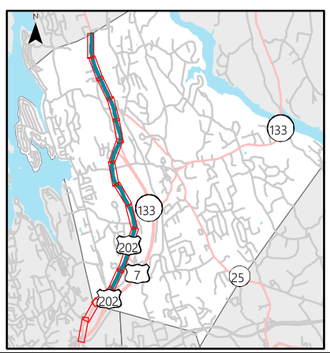

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Route 202 Driveway Management Plan

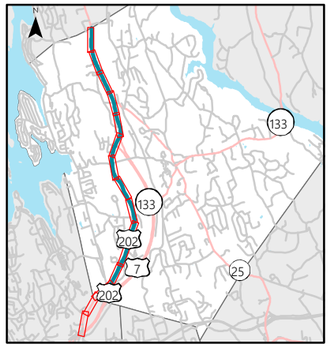
Figures DMP-6A and DMP-6B Sheet 6 of 8

MILONE & MACBROOM

WEST COG

TOWN OF BROOKFIELD, CONNECTICUT SEAL

0 125 250 375 500 Feet



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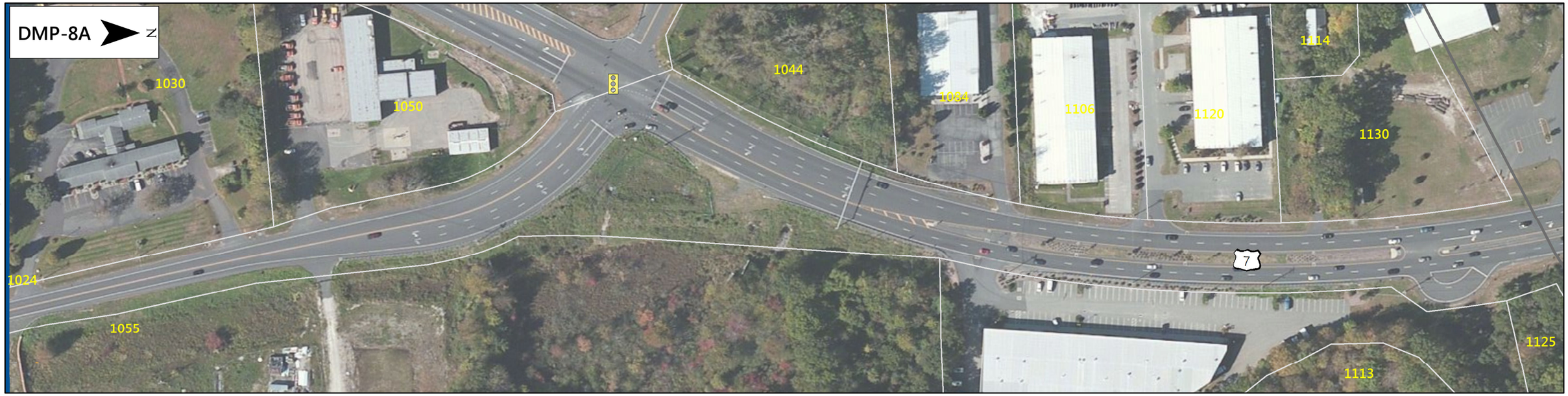
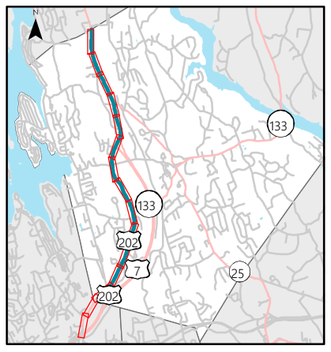
Route 202 Driveway Management Plan

Figures DMP-7A and DMP-7B Sheet 7 of 8

MILONE & MACBROOM WESTCOG TOWN OF BROOKFIELD CONNECTICUT SEAL

0 125 250 375 500 Feet





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Route 202 Driveway Management Plan

Figure DMP-8A Sheet 8 of 8

MILONE & MACBROOM WEST COG

0 125 250 375 500 Feet