



March 13, 2008

Ms. Mary Young
Assistant Planning Director
Town of Westport
110 Myrtle Avenue
Westport, Connecticut 06880

**RE: Peer Review of Westport “Y”, Sunny Lane, Westport, Connecticut
Level of Service and Mitigation – Technical Review Report #5**

Dear Ms. Young:

In accord with your request, we are conducting a Peer Review of the traffic study for the Westport Weston Family “Y” proposed on Sunny Lane, near Interchange 41 on the Merritt Parkway. The existing “Y” is located in the Downtown Business District and will be relocated to the existing Mahackeno site on Sunny Lane.

Specifically, we have begun reviewing the traffic-related documents "*Traffic Impact & Access Analysis, Spring and Summer Analysis, Westport Weston Family Y – Sunny Lane, Westport, Connecticut*", *Volumes I and II, dated December 2007*, prepared by Frederick P. Clark Associates, Inc. We have also received the following documents:

- Perimeter Survey prepared by Redniss & Mead dated January 17, 2008.
- Floor Plans -Westport/Weston Family-YMCA prepared by Robert A.M. Stern Architects LLP dated March 30, 2006.
- Preliminary Landscape Plans prepared by Robert A.M. Stern Architects LLP dated November 14, 2007.
- Grading & Utilities Plans prepared by Land Tech Consultants, Inc. dated December 11, 2007.
- Erosion & Sediment Control Plan prepared by Land Tech Consultants, Inc. dated December 11, 2007.
- Improvements to Interchange 41, Merritt Parkway, Westport Weston Family Y, prepared by Land Tech Consultants, January 2008.
- Parking Requirements for Proposed Mahackeno Site, prepared by Mr. Larry Weisman dated November 2007

Our scope for this effort is to:

1. Review Traffic Impact Report(s) and the Site Plan, prepared for the planned project as submitted to the Town of Westport;
2. Assess the planned Site Plan and off-site roadway improvements, as suggested by the developer's traffic consultant to accommodate site-generated traffic volumes; recognizing existing traffic volumes and anticipated future traffic volumes generated by other land development projects approved/anticipated in the area; and,

3. Provide the Town of Westport the professional and technical assistance to enable the Town to respond to the developer's application.

Our review of the materials and Site Plan included the following disciplines and Traffic Impact Report procedures/methodologies:

- Work prepared in accord with, and using procedures generally accepted by the traffic engineering profession.
- Traffic surveys, field reconnaissance, and study area designation.
- Determination of future growth trends in traffic.
- Assessment of the existing and planned highway system and land-use development in the area as it relates to traffic.
- Traffic generation characteristics of the planned development.
- Directional distribution (approach and departure) of site-oriented traffic.
- Traffic impact/roadway adequacy analyses.
- Development of necessary site access and traffic/roadway improvements, and
- Impact of Emergency and oversized vehicles on traffic operations off site.

A field reconnaissance of the area roadways was undertaken in a manner to adequately review the roadway and traffic conditions detailed in the traffic report. In accord with Town directives, we did not conduct independent traffic counting programs, but utilized information supplied by the Town including data from the applicant for this peer review.

THE PROJECT

The existing Westport Weston Family Y will be re-located to the Mahackeno site on Sunny Lane in the Town of Westport. Access to the site is proposed via driveways on Sunny Lane. Key intersections that were studied in the applicant's traffic consultant's report include:

- ◆ Route 33 at Merritt Parkway Westbound Ramps.
- ◆ Route 33 at Redcoat Lane.
- ◆ Route 33 at Redcoat Road.
- ◆ Route 33 at Merritt Parkway Connector/Spring Hill Road.
- ◆ Route 33 at Patrick Road.
- ◆ Route 33 at Rices Lane.
- ◆ Route 33 at River Lane.
- ◆ Route 33 at State Route 57/Kings Highway North, and
- ◆ Merritt Parkway Connector/Sunny Lane at Merritt Parkway Eastbound Ramps.

This letter addresses peer review of the level of service analysis and proposed mitigation associated with the project.

LEVEL OF SERVICE ANALYSIS AND MITIGATION PEER REVIEW

Based on our review of the Traffic Study prepared by Frederick P. Clark Associates and the Roadway Improvement Plan prepared by Land-Tech Consultants, we have the following comments:

Level of Service Analysis

The following is a list of comments from the level of service analysis presented in the traffic study:

1. ***Route 33/Route 57 intersection*** – This intersection has “No Turn on Red” signs posted on Route 33 in the southbound direction. The applicant’s traffic consultant should revise the level of service analysis to incorporate the “No Turn on Red” sign.
2. ***Route 33/Rices Lane*** – The Rices Lane approach at the Route 33 intersection is a single lane. The traffic analysis assumes a two lane approach (a separate left and right turn lane). Please address.
3. ***Route 33/Red Coat Lane*** – Route 33 in the northbound direction is a two lane approach to the intersection. The inside lane is a left turn lane at the Merritt Parkway southbound on/off ramps. The applicant’s traffic consultant may use this geometry in the traffic analysis. This could alleviate the level of service problem at the Route 33/Red Coat Lane approach.
4. ***Sunny Lane/Merritt Parkway Eastbound On/Off Ramps/Merritt Parkway Connector*** – Under the improvements traffic analysis, the applicant’s traffic consultant proposes an overlap phase for the left turn movement on Merritt Parkway Connector with the Merritt Parkway southbound off-ramp right turn movement. Given, the lane geometry of the Merritt Parkway off ramp, this phasing creates a conflict between the Merritt Parkway Connector and the Merritt Parkway off ramp. The applicant should address this issue and provide a revised traffic analysis which eliminates the overlap phase.

Summary: The applicant’s traffic consultant should revise traffic analysis to address Items 1 through 4.

Storage/Queue Analysis

1. ***State Route 33/Merritt Parkway Westbound on/off ramps*** – It is our understanding that the applicant is not proposing improvements at this location. The applicant's traffic consultant should explain why the available storage lengths are different between Tables 8 and 10 for the Spring analysis and between Tables 23 and 25 for the Summer analysis.

The applicant's traffic consultant should verify the available storage length on the Merritt Parkway Westbound off ramp at the intersection. An available storage length of 450 feet in Tables 8 and 23 and 545 feet in Tables 10 and 25 seems too high.

2. ***State Route 33/Spring Hill Road/Merritt Parkway Connector*** – It is our understanding that the applicant is proposing improvements on the Merritt Parkway Connector approach only. The applicant's traffic consultant should explain why the available storage lengths are different for other intersection approaches between Tables 8 and 10 for the Spring analysis and between Tables 23 and 25 for the Summer analysis.

The applicant's traffic consultant should note that the available storage length on the Merritt Parkway Connector in Tables 10 and 25 should be 460 feet.

As indicated in Table 25, the Route 33 southbound left turn queue (513 feet) during the weekday afternoon time period exceeds the available storage length of 400 feet. The applicant should address this issue.

3. ***Merritt Parkway Eastbound On/Off Ramps/Merritt Parkway Connector/Sunny Lane*** –

The applicant's traffic consultant should verify the available storage lengths as noted below:

- The storage length in the eastbound direction on the Merritt Parkway Connector is 420 feet.
- The storage length on the Merritt Parkway eastbound off ramp is about 60 feet based on the Interchange Improvement Plan prepared by Land-Tech Consultants (please refer to Sheet 6).

Summary: The applicant's traffic consultant should explain discrepancies in available storage length and address the Route 33 southbound left turn queuing issue at the Merritt Parkway Connector/Spring Hill Road intersection.

Mitigation Plan

1. ***Route 33/Route 57 intersection*** – In the traffic study, the applicant’s traffic consultant presents traffic analysis for three intersection improvement scenarios (Tables 11 and 27). However, it appears that neither of these improvements are part of the mitigation plan.

The applicant’s traffic consultant should provide mitigation at this intersection to address traffic impact due to the proposed “Y” project.

If the proposed mitigation is shown in Figure 39, please provide level of service and queuing analysis with the proposed improvement.

2. ***Route 33/Partrick Road*** – We concur with the applicant’s traffic consultant that a traffic signal be installed at this location. Based on a speed study conducted by the applicant’s traffic consultant, an 85th percentile speed of 51 miles per hour was recorded on Route 33. Using this speed, the criteria in the Manual of Traffic Control Devices (MUTCD) could be lowered by 30 percent (70% of requirement) for Warrants 1 and 2 and therefore, the Route 33/Partrick Road intersection may meet warrants in Tables 16 and 31.
3. ***Route 33/Rices Lane*** – The applicant’s traffic consultant should re-evaluate this intersection with a single lane approach on Rices Lane and provide mitigation if necessary.
4. ***Sunny Lane/Merritt Parkway Eastbound On/Off Ramps/Merritt Parkway Connector*** – The applicant’s traffic consultant should re-evaluate the mitigation proposed at this location (Please refer to Level of Service section Comment 4).
5. ***State Route 33/Spring Hill Road/Merritt Parkway Connector*** – The applicant’s traffic consultant should address the southbound left turn queue (513 feet) on Route 33.

Summary: The applicant’s traffic consultant should revise traffic analysis and additional mitigation as detailed above. A review by the State Traffic Commission (STC) and Connecticut Department of Transportation (ConnDOT) may require additional mitigation.

Improvement Plan (prepared by Land-Tech Consultants)

1. ***Sunny Lane/Merritt Parkway Eastbound On/Off Ramps/Merritt Parkway Connector*** –
 - Please verify that a 22 feet wide receiving lane is adequate for dual right turn movements from the Merritt Parkway eastbound off ramp.
 - A “No Turn on Red” sign should be installed for the dual right turn movement from the Merritt Parkway eastbound off ramp.
 - Lane use sign “31-0222” is incorrect in the westbound direction on Sunny Lane.

- It is our understanding that this plan will be further reviewed by the STC and DOT.

Summary: The applicant should address comments as detailed above.

The comments, as listed above should be addressed, in our opinion, so that a complete understanding of the traffic impacts of the project can be made. This letter completes our review of the Traffic Study and associated documents.

Please do not hesitate to call if you have any questions relative to our review of the traffic-related issues associated with the Westport "Y" project.

Respectfully submitted,
WILBUR SMITH ASSOCIATES

A handwritten signature in cursive script that reads "Sharat". The signature is written in dark ink and is positioned above the printed name of the signatory.

Sharat K. Kalluri, P.E., P.T.O.E.
Senior Transportation Engineer

Registered Professional Engineer
Connecticut Number 21415