



**CLOUGH, HARBOUR  
& ASSOCIATES LLP**  
ENGINEERS, SURVEYORS, PLANNERS  
& LANDSCAPE ARCHITECTS

## **SUMMARY OF MEETING ISSUES AND CONCERNS**

**Project: I-95 Branford to Rhode Island Feasibility Study  
Connecticut Department of Transportation**

**Location of Meeting: Waterford Town Hall**

**Date of Meeting: February 18, 2004**

**Subject of Meeting: Study Advisory Committee (AC) Meeting No. 5**

### **In Attendance:**

Rod Bascom – Clough, Harbour & Associates LLP (CHA)  
Robert Faulkner – CHA  
Jeff Parker – CHA  
Jim Andrini – Connecticut Department of Transportation (ConnDOT)  
Ned Hurle – ConnDOT  
Jim Morrin – ConnDOT  
Sharon Okoye – ConnDOT  
Jill Barrett – Fitzgerald & Halliday Inc. (FHI)  
T. Gerry Dyar – I-91 TIA  
Jim Butler – Southeast CT Council of Governments (SECCOG)  
Nicholas Mullane – Town of North Stonington  
Judy Gott – So. Central Regional Council of Governments (SCRCOG)  
Stephen Dudley – City of Branford  
Stewart MacMillan – Town of Madison  
Joe Bragaw – Town of Stonington  
Dennis Popp – City of Groton  
Mark Oefinger – Town of Groton  
Jeffrey Heser – Town of Clinton  
Mark Damiani – Town of Guilford  
Wayne Fraser – Town of East Lyme  
Mike Giannattasio – Town of East Lyme  
Paul Eccard – Town of Waterford  
Ed Steward – City of New London  
Fred Riese – CT Department of Environmental Protection (ConnDEP)  
Ed Dombroskas – CT Dept. of Community and Economic Development (DECD)  
Jean Davies – CT River Estuary Regional Planning Agency (CRERPA)  
Jean Stimolo – Rideworks of Greater New Haven  
Bill Peace – Town of Old Saybrook  
Linda Krause – CRERPA  
Robert Blaikie – FedEx  
Tony Palermo – Town of Westbrook

## **Summary of Discussions:**

### **I. Purpose of Meeting**

The purpose of this Advisory Committee (AC) Meeting was to present and discuss with the committee members the I-95 interchange improvement concept revisions and potential near-term improvements that have been developed since the October 28, 2003 AC Meeting.

J. Barrett began the meeting with introductions of the Advisory Committee members and representatives from ConnDOT and the consultant team.

### **II. Project Status**

R. Bascom gave an overview of the project status:

- The mainline typical section used as the basis for this Study has been revised based on internal reviews by ConnDOT. The revised section incorporates 14 ft interior and exterior shoulders instead of 12 ft shoulders as previously presented. The revised section therefore utilizes three northbound and southbound travel lanes with 14 ft shoulders separated by a 10 ft concrete median barrier.
- J. Andrini noted the primary reason for the revised shoulder width is to ensure public safety by facilitating incident management response of emergency vehicles. The revised section also provides an opportunity to utilize the additional width for a fourth lane in the future without creating additional environmental or right-of-way impacts.
- The study schedule has been revised to reflect the change to the mainline typical section. The project completion date has been extended from June 10, 2004 to September 10, 2004. It is anticipated the Draft Final Report will be posted to the project website and available for public review in the town libraries and town halls by mid-June, 2004. Public information meetings in each of the project's three geographic areas are tentatively scheduled for late-June or early-July.

An AC member asked if the bridge structure being constructed as part of the Cross Road project at Interchange 81 accommodates the revised typical section. It was also asked if the Route 11 project incorporates 14 ft shoulders. R. Bascom noted ConnDOT's specific direction regarding the revised shoulder width was to provide 14 ft shoulders where possible. Consequently, it may be necessary to transition to a narrower shoulder in certain locations due to existing site constraints or to match the typical section of an adjacent construction project. This may be the case at the Cross Road overpass and Route 11 project limits. R. Bascom also noted the Baldwin Bridge and Gold Star Bridge will not be reconstructed in order to provide 14 ft shoulders.

An AC member noted it will be critical to explicitly document the reasoning behind the utilization of 14 ft shoulders in order to address potential criticism of the additional width. R. Bascom noted the revised shoulder is not substantially wider than the standard

12 ft shoulder width required for this corridor based on 2025 truck volumes. R. Bascom also noted this issue will be documented in the Final Report.

An AC member asked whether the proposed improvements incorporated the recent design improvements proposed by ConnDOT in the Exit 54 Interchange area at the intersection of Cedar Street and Main Street (Route 1). The proposed design eliminates the Todds Hill Road leg of the intersection. The Study Team will review the proposed design and update the figures to reflect the improvement.

### III. Interchange Improvement Concept Revisions

- R. Bascom presented the revised interchange improvement concepts that incorporate both comments received from ConnDOT, FHWA, and input from several local outreach meetings held subsequent to AC Meeting No. 4 on October 28, 2003.
- Potential near-term improvement projects were also presented for several interchanges. Candidate interchanges for near-term improvements were those having limited environmental and right-of-way impacts and those having no impacts to mainline bridge structures. These limitations are intended to minimize construction costs and maximize the near-term potential of the project.
- Near-term improvement projects are designed to match the existing two-lane mainline section and consist of constructing a portion of the ultimate interchange improvement in order to address a specific need. These improvements will require minimal reconstruction when adapted to the ultimate three-lane mainline section.

**Interchange 59:** The ultimate improvement concept provides a buttonhook configuration for the northbound on and off-ramps. The ramps intersect Route 1 approximately 800 feet west of the existing Route 1/Goose Lane/Soundview Road intersection. The ConnDOT salt shed is taken under this improvement concept.

The near-term improvement concept consists of relocating the northbound off-ramp to its ultimate location while maintaining the existing northbound on-ramp. This near-term improvement is considered high priority due to the identified immediate need to relocate the northbound off-ramp currently located within approximately 100 ft of the Route 1/Goose Lane/Soundview Road intersection.

An AC member noted that a 400 acre residential development is proposed for construction on Goose Lane north of Interchange 59 within the next five years. R. Bascom noted this development would have a negligible impact on the design traffic volumes at this interchange.

**Interchange 62:** This improvement concept provides a buttonhook configuration for the southbound ramps connecting with Duck Hole Road east of the existing Duck Hole Road/Hammonsett Connector intersection. This concept also includes an operational lane in both directions along I-95 between the rest areas and the interchange ramps. There is no near-term improvement project proposed at this location.

**Interchange 63:** Two improvement concepts were presented for this interchange. Concept A relocates the northbound off-ramp approximately 200 ft west from its existing location along North High Street in order to increase the available queuing distance at the

Route 81/North High Street intersection. This concept impacts at least two residential dwellings, one of which is potentially historic.

Concept B incorporates a five-legged, two-lane roundabout at the North High Street/Route 81/northbound ramps intersection. A wider structure on Route 81 over I-95 is required to accommodate an additional lane in Concept B that is not required in Concept A. Concept B does not impact any residential dwellings.

There are no near-term improvements proposed for either of these two concepts.

An AC member questioned what pedestrian accommodations would be provided at the roundabout considering the heavy pedestrian traffic created by the nearby school. R. Faulkner explained that pedestrians are able to cross each approach leg by utilizing splitter islands as temporary refuge. R. Faulkner also noted separate pedestrian signals are not provided at roundabouts to facilitate crossing.

The study team requests the Town of Clinton and any other interested AC members review the two concepts and provide a recommendation for a preferred concept at this location.

**Interchange 67 (Elm Street):** This improvement concept provides a northbound off-ramp and southbound on-ramp to complete the existing half-diamond and create a full-service interchange at Elm Street. The northbound off-ramp intersects Ingham Hill Road approximately 700 ft west of the Ingham Hill Road/Elm Street/northbound on-ramp intersection. There is no near-term improvement project proposed at this location.

**Interchanges 67 (Route 154), 68 and 69:** This improvement concept provides a full-service diamond interchange at Interchange 67 (Route 154). The southbound off-ramp and northbound on ramp at Interchange 68 are eliminated due to site constraints created by the addition of a third lane and due to the proximity of Interchange 69. Improvements at Interchange 69 will be limited to providing standard acceleration and deceleration lanes for each of the ramps. There is no near-term improvement project proposed at this location.

**Interchange 70:** The improvement concept at this location realigns the southbound on-ramp with Halls Road to create a four-legged intersection with Route 156. The existing bike path has been relocated to the north side of the southbound ramp. The existing northbound on-ramp and southbound off-ramp at Lyme Street will be maintained near their existing locations to minimize impacts to the surrounding historic district. There is no near-term improvement project proposed at this interchange.

**Interchange 71 and 72:** Two improvement concepts were presented for this interchange system. Both concepts utilize the same “scissors ramps” configuration in the northbound direction to eliminate the mainline weave between Interchanges 71 and 72. In this configuration, northbound traffic to Rocky Neck Connector exits with northbound traffic to Four Mile River Road west/south of Interchange 71 and crosses over the northbound on-ramp from Four Mile River Road thus separating individual traffic movements.

Concept A utilizes a collector-distributor (CD) road in the southbound direction to eliminate the mainline weave between Interchanges 71 and 72. The southbound ramps at

Interchange 72 are relocated north and east of Rocky Neck Connector to maximize the weaving distance between interchanges along the CD road.

Concept B incorporates a “scissors ramps” configuration in the southbound direction similar to the northbound ramps configuration. Southbound traffic to Four Mile River Road exits with southbound traffic to Rocky Neck Connector east/north of Interchange 72 and crosses over the southbound on-ramp from Rocky Neck Connector.

There are no near-term improvements proposed for either of the two concepts.

J. Andrini noted the overall construction cost of the two concepts are comparable, however right-of-way and environmental impacts are greater with Concept A than with Concept B.

The study team requests the towns of East Lyme and Old Lyme and any other interested AC members review the two concepts and provide a recommendation for a preferred concept at this location.

An AC member asked if closing Interchange 71 is a potential alternative. R. Bascom noted this is not feasible due to the considerable truck traffic that accesses a local industrial park via Interchange 71.

**Interchange 73:** This improvement concept relocates the northbound off-ramp to a location west/south of the Society Road overpass due to site constraints created by the addition of a third lane at its existing location. There is no near-term improvement project proposed at this interchange.

**Interchange 74:** The improvement concept at this location provides standard horizontal curvature for the southbound ramps. The alignment of the ramps and their intersection with Route 161 correspond to the Town’s plan for future development. The northbound off-ramp is maintained at its existing location and the northbound on-ramp intersection has been shifted approximately 50 ft south to accommodate the third mainline lane. No near-term improvement project is proposed at this interchange.

**Interchanges 81/82/82A:** The ultimate improvement concept eliminates the existing northbound and southbound mainline weaves between Interchanges 82 and 82A by extending the frontage road system to Route 85. The northbound frontage road off-ramp is relocated upstream to a point west/south of Route 85 such that traffic is removed from the freeway onto a frontage road serving Route 85 and Vauxhall Street. Buttonhook ramps are provided at Vauxhall Street to the southbound frontage road system, which intersects Route 85 at grade. A two-way frontage road is provided west of Route 85 connecting to the existing Parkway North. A pair of buttonhook ramps located between existing Interchange 81 and Route 85 replaces the southbound off-ramp to Parkway North and the southbound on-ramp from Route 85. Access to Vauxhall Street from the northbound frontage road is eliminated because it is not warranted by design traffic volumes. Slip ramps to and from southbound I-95 and a slip ramp to northbound I-95 are located along the southbound and northbound frontage roads to control traffic volumes along the frontage road system.

The near-term improvement concept in this area consists of extending Parkway North easterly to Route 85 and providing southbound buttonhook ramps to Parkway North located between Interchange 81 and Route 85. This near-term improvement is designed to eliminate the existing non-standard southbound off-ramp to Parkway North. Currently this improvement is considered a low priority; however the actual prioritization is dependent upon the Town's plan to provide an access road to Parkway North via Route 85. Implementation of the Town's improvement plan will create an immediate need for this near-term improvement to be implemented as well due to the influx of traffic it will bring to the area.

**Interchange 90:** The ultimate improvement concept provides an operational lane between the Interchange 89 northbound on-ramp and the scenic overlook and an operational lane between the scenic overlook and the Interchange 90 northbound off-ramp. The operational lane at Interchange 90 is dropped as a two-lane off-ramp. Improved advanced destination signage along the exit only operational lane combined with the two-lane off-ramp is designed to better direct travelers to their destinations including Mystic Seaport and Mystic Aquarium.

It is recommended that the existing destination signage for Mystic Seaport and Mystic Aquarium be reviewed as part of a high priority near-term improvement project.

**Interchange 93:** The near-term improvement concept at this interchange realigns the southbound off-ramp approximately 50 ft south along Route 216 to increase the queuing distance between the ramp and Route 184/Route 216 intersections. An improved intersection radius at the Route 184/Route 216 intersection is also provided for right turning tractor trailers.

There is no long-term improvement concept proposed at this location.

An AC member asked what the dispositions are of the other interchanges that do not have long-term or near-term improvements shown for them. R. Bascom explained that all interchanges that are not being reconfigured will be designed to match the widened mainline section and will incorporate standard acceleration and deceleration lanes.

#### **IV. Other Near-Term Improvements**

##### **a. Acceleration/Deceleration Lanes**

R. Faulkner presented potential near-term improvements for non-standard acceleration and deceleration lanes along the project corridor.

- The study team determined that an existing non-standard acceleration or deceleration lane is a candidate for a near-term improvement project if the required improvements cause no impacts to existing bridge structures and create limited right-of-way and environmental impacts.
- Candidate acceleration and deceleration lanes are prioritized as high, medium and low priority near-term improvement projects. The prioritization criteria are as follows: high priority improvements are in high accident locations; medium priority improvements are located where existing mainline level of service (LOS) is E/F and

the ramp merge or diverge is an E/F LOS; low priority improvements are in all other locations.

- Any acceleration or deceleration lanes experiencing significant operational problems as identified by the AC members are automatically categorized as high priority. Locations previously identified through public outreach include the southbound on-ramps at Interchanges 74 and 90.

The study team solicited input from the AC members regarding other interchanges with perceived operational problems that should be considered high priority improvements.

W. Fraser noted that the Interchange 75 southbound on-ramp should be considered a high priority.

An AC member asked, as an example, what type of improvements would be associated with a near-term project at the Interchange 54 southbound on-ramp. R. Bascom noted that near-term improvements at all interchange ramp junctions would be limited to providing standard acceleration or deceleration lanes.

#### **b. Intersections**

R. Faulkner presented potential near-term improvements for signalized and unsignalized intersections along the project corridor.

- The study team determined that an existing intersection is a candidate for a near-term improvement project if the intersection is a high accident location and/or operates at an existing LOS of E/F.
- Candidate intersections are prioritized as high and low priority near-term improvement projects. High priority improvements are in high accident locations and low priority improvements are in locations where the existing level of service is E/F.
- Near-term improvements would potentially consist of modifying signalization timings, re-striping turn lanes and/or adding additional turn lanes at signalized intersections, and signalizing existing unsignalized intersections.
- Any intersections experiencing significant operational problems as identified by the AC members are automatically categorized as high priority.

R. Faulkner noted that the Study Team has only identified the intersections based on the criteria noted above and that the necessary traffic engineering to determine the feasibility or practicality of an improvement still needs to be performed. The study team solicited input from the AC members regarding intersections with perceived operational problems that should be considered high priority improvements.

An AC member noted that the southbound left turn movement from Route 85 to the northbound on-ramp at Interchange 82 is causing significant delays. R. Bascom noted the study team considered a possible near-term interchange improvement at this location that incorporated a trumpet configuration for the northbound ramps to eliminate the left turn onto the northbound on-ramp. However, this improvement did not meet the near-term project criteria set by the study team due to significant right-of-way acquisition needs. This improvement will remain a component of the long-term improvement concept at this interchange.

## V. Questions/Comments

An AC member suggested presenting the final recommendations and findings of the Feasibility Study to the Transportation Strategy Board.

An AC member asked about the realistic feasibility of implementing the long-term improvements considering the overall construction cost and projected time frame for completion. J. Andrini noted that a component of the Final Report is an implementation plan that will break the long-term improvement concept into smaller construction projects and prioritize these projects based on need and logical sequencing of construction. These smaller projects will be advanced through design according to the implementation plan as funding becomes available.

B. Peace questioned what the interim solution will be in the corridor until construction is completed and what roll enhanced transit services will play in the overall solution. R. Bascom noted that although the transit analysis showed that enhanced transit services will not eliminate the need for a third mainline lane in the design year, transit will be an important component of the overall system, particularly during construction.

An AC member suggested that electronic toll collection not be ruled out as a possible funding source for improvements along the corridor. The importance of contacting state representatives in Congress to promote this issue was also stressed.

An AC member asked if the study will recommend additional park and ride facilities within the project corridor. J. Andrini noted that this will not be a component of the study, however there is an ongoing operation within ConnDOT that assesses the need for park and ride facilities.

An AC member suggested copies of the interchange improvement concepts be provided to the towns for public display in the town halls. J. Andrini responded that the improvement concepts will be not presented to the public until the Draft Final Report is posted to the project website and made available for public review in the town libraries and town halls in mid-June.

A citizen representing the Town of Mystic requested a review of the misleading existing destination signage for Mystic Seaport and Mystic Village in the vicinity of Interchange 90 be conducted as part of study. J. Andrini noted a review of the existing destination signage in this area will be recommended by this study as a high priority near-term improvement.

A citizen noted that traffic on the existing southbound off-ramp at Interchange 82 often queues back on to the mainline due to increased traffic volumes generated by the mall located north on Route 85. N. Hurle stated that ConnDOT's traffic department will look into this matter.

J. Barrett requested that any formal comments regarding material presented and/or discussed at this meeting be submitted to the study team by Wednesday, March 2, 2004.