

**CITY OF CAMBRIDGE
WESTERN AVENUE RECONSTRUCTION PROJECT
ADVISORY COMMITTEE #2, March 16, 2010
MEETING NOTES**

Date, Time & Place: March 16, 2010, 6:00 PM – 8:00 PM
Cambridge Senior Center

Present

Committee Members

Lawrence Adkins	Bill August	Mertin Betts	Velmer Brooks
Caitlin Gallagher	David Gibbs	Marvin Gilmore	Erin Gullage
Marc Leuchner	Bob Nesson	Eran Segev	Anne Shuhler
Artis Spears	Rev. Lawrence Ward		

City of Cambridge

Susanne Rasmussen (CDD)	Jeff Rosenblum (CDD)	Bill Deignan (CDD)
Owen O'Riordan (DPW)	Kelly Dunn (DPW)	Susan Clippinger (TP&T)
Adam Shulman (TP&T)	Charles Sullivan (CHC)	

*CDD = Community Development Department
TP&T = Traffic, Parking & Transportation Department
CHC = Cambridge Historical Commission
DPW = Department of Public Works*

Consultant Team:

Jerry Friedman (HDR Engineering, Inc.) Rod Emery (Jacobs Engineering)

Public (signed in)

Scott Berk Councilor Ken Reeves John Clifford

*****SEE ALSO POWERPOINT SLIDES OF PRESENTATION*****

Note: Q=Question A=Answer C= Comment

1. WELCOME / GENERAL QUESTIONS (Susanne Rasmussen)

- Susanne welcomed the attendees; reviewed the agenda; and introduced City and Consultant staff.
- Meeting notes from Meeting #1 were mailed to all members, and are on the project website.
- One member of the Committee, Elizabeth Willard Thames, has resigned because she is moving out of town.

2. SLIDESHOW HISTORY OF WESTERN AVENUE (Charles Sullivan)

- Charles Sullivan presented a slideshow history of Western Avenue
 - Harvard Square was briefly the capital of Massachusetts
 - When capital was moved to Boston, Harvard Square reverted to an isolated village
 - Private roads began to be built in early 1800's to connect to Charles River Bridges
 - Western Ave was first laid out in 1824 as the "Road to Watertown". The western end is located on former tidal marshes of the Charles River
 - The eastern end of the street was developed in the 1840's.
 - The western end of the street was developed in the 1890's, after completion of the interceptor sewer along the river. Prior to the sewer, the west end of the corridor was unsuitable for development due to discharge of sewage onto the tidal flats.

- The houses in the area of Hoyt Field were built partly on the former marsh, and thus to this day foundation problems cause many of these houses to lean.
- The former Police Headquarters building was built in 1933.
- The Veteran's Memorial Park between River and Western, next to the former Police Headquarters, is the site of the former 640-seat Olympia Theatre but was torn down in the 1960's as television diminished the demand for theaters. By the 1970's, the site contained a gas station.
- Western Avenue had two-way traffic, and streetcar tracks, which were later converted to two-way trackless trolley operation. When River and Western were converted to one-way traffic in 1953, the trackless trolleys were replaced by diesel buses.
- When the street was last resurfaced in 1977, the streetcar tracks were still in place, and probably are still there today.

3. DISCUSSION OF COMMUNITY GOALS (Susanne Rasmussen)

- As a result of discussions at Committee Meeting #1, and internally at the City, two additional goals have been added for the project:
 - Provide adequate parking
 - Environmental sustainability
- The Committee was asked to review the project goals again for completeness:

Q: What about stormwater improvements?
A: That is a given for the subsurface portion of the project

Q: Parking for small businesses?
A: Could be considered part of "ensure adequate parking".

Q: Overall infrastructure upgrades?
A: This project is the first in a series of projects which will address infrastructure in the greater area

Q: Plantings/landscape?
A: Could be considered part of "Reinforce Residential Character". Will add "Increased Landscape Opportunities" as a specific goal.
- Additional Committee comments:
 - Charles River access should be a focus, including increasing access for natural and recreational amenities. Providing restrooms for the public should also be a goal
 - Important to coordinate with other agencies, including DCR which controls the river front and Memorial Drive, throughout the process.

4. INTRODUCTION OF STORMWATER COMPONENT (Owen O'Riordan)

- Over 10-inches of rain fell on the City during the past weekend. This was an extraordinary event, but highlighted the needs for stormwater improvements in this area and across the City.
- This project provides an opportunity to improve level of service for both storm and sanitary sewer functions.
- The City has built a number of successful projects in the past 10-15 years, and all of these projects worked very well during the recent storm event.
- Consultants have begun field investigations along Western Avenue, including dye testing, and building and manhole inspections. The next steps will include building a computer model of the entire 115-acre drainage area which is tributary to Western Avenue (including some areas north of Mass. Ave).
- The design will take about 8-9 months, during which there will be a number of opportunities to discuss and gain input from the Committee.

- The challenges go beyond just providing a larger pipe to separate and convey storm flows. Stormwater itself is significantly polluted by chemicals and substances picked up on roofs, roadways, sidewalks, etc. Current regulations require treatment prior to discharge to the Charles River.
- Options for treatment include Low Impact Development (LID) techniques (rain gardens, treatment units, pervious pavement, etc). The City has been experimenting with some of these recently on Brookline Street.
- Recharge to groundwater is probably not an option in this area, due to existing high groundwater table. We will need to clean and move the most polluted “first flush” of runoff to the sanitary sewer, before starting to discharge less polluted runoff to the Charles River. Phosphorous in particular is a big problem, and 65% of the phosphorous needs to be removed prior to discharge to the river.
- The problem with diverting too much flow to the sanitary sewer, is the resultant sewer back-ups which could occur. This has happened in the neighborhood and is very unpleasant. It is very important that residents report to the City any back-ups which do occur.

Q: Are there still illegal connections between house drains and the sanitary sewer?

A: All connections to the combined sewer on Western Avenue are legal, as there has only been one pipe since the 1890's. Currently, if the flows become too much for the MWRA sewer along the river to handle, the MWRA's Cottage Farm facility treats the excess flow with chlorine and discharges to the river. The goal of this project is to build a “smart” system with as much pervious surface or Low Impact Development treatments as possible to reduce these occurrences.

Q: Can the groundwater table be lowered through this project?

A: The City has never tried to control groundwater. Doing so can impact building foundations, and this happened in Boston (Beacon Hill, South End) with significant impacts. EPA/DEP promote infiltration of pre-treated runoff, but this is not done within 10-feet of a property line.

5. EXISTING CONDITIONS (J. Rosenblum / J. Friedman / R. Emery)

- Committee members received materials illustrating existing conditions related to transportation along Western Avenue (pavement markings, signage, traffic volumes, speeds, congestion, crashes, parking, etc.). The information covers all modes of travel (auto, truck, transit, pedestrian, bicycle). *NOTE: Several corrections to the plans were pointed out by Committee members, and these will be incorporated into revised graphics subsequent to this meeting and posted on the project website.*
- Traffic data was collected using a combination of automatic counters (for daily vehicle/truck volumes) and manual methods (a person standing next to an intersection taking counts) for peak hour vehicles, pedestrians and cyclists. Data was collected during May and September of 2009 on typical weekdays and Saturdays. Some key observations include:
 - Pedestrian volumes are high at certain intersections— there are about 9 pedestrian crossings per minute during a typical afternoon peak at the Western/River/Green intersection (over 350 during the peak hour). There are about 200 during the peak hour further down the western end— there are about 3 pedestrian crossings per minute during the afternoon peak at the Western/Putnam intersection.
 - Bicycle volumes are fairly consistent from one end of the corridor to the other. About 1 cyclist per minute travels on Western Avenue passing through the Western/River/Green intersection during a typical afternoon peak (about 60 cyclists per hour). When the cyclists get to the river, only about half of the cyclists appear to actually cross Memorial Drive, so many might continue their trips along the “inland” sidewalk on Memorial Drive, or disperse along other routes through the neighborhood.
 - Vehicular volumes build from east to west. There are about 9,000 vehicles per day using Western Avenue in the area of Green and Pleasant Streets; and this increases to about 15,000 vehicles per day between Putnam Ave and Memorial Drive. (For comparison, Memorial Drive

carries approximately 25,000 vehicles per day near Western Avenue; Mass Ave carries about 19,000, and Putnam Ave carries about 7,000).

- On a 24-hour basis, trucks appear to comprise about 3% of the overall daily vehicle volume (or approx 270 to 450 trucks per day, depending on location). *There was some discussion of this number including the time of day/night with the highest concentrations of trucks.*
- Municipalities do not have the right to unilaterally ban trucks from certain streets. About 10 years ago the city participated in a process with MassHighway (now MassDOT) to designate a regional network of truck routes. As part of this process, a night-time ban on non-hazardous cargo trucks on Western Avenue was proposed. Unfortunately, a final agreement was never reached and the State directed the City to remove all of it's "night truck ban" signage, or the City would be faced with the loss of millions of dollars of funding for roadway and sidewalk projects.
- Vehicle traffic has two pronounced peaks during a typical weekday, between 7:30 and 8:30 in the morning; and between 4:30 and 5:30 in the afternoon. The afternoon peak is slightly higher.
- Saturday vehicle traffic is also significant, with volumes between noon and 3:00 pm sometimes approaching those of a weekday morning peak.
- There are a number of ways to think about the vehicle data in terms of how people actually experience Western Avenue. For example, a pedestrian or resident may be focused on how much space is filled by vehicles at a particular location, and for how long. A cyclist may be focused on how fast vehicles are moving. A driver may be focused on how long it takes to get from one end of the corridor to the other. The slides shown (included in handouts) graphically illustrated some of these different measures. (link to slides)
- Queue lengths (the distance vehicles are "backed up" from a particular signal) build and then decrease during a typical afternoon peak as shown on the series of graphics. At 4:30pm, individual queues are present at the Memorial Drive, Putnam Avenue, and Howard Street signals, however these three separate queues are not connected (i.e. once the light turns green, traffic can generally make it through the intersection and proceed to the next signal). By 6:00pm, however, there is typically a continuous line of traffic from Memorial Drive to just east of Howard Street.
- In terms of travel time, it typically takes about 3 ½ minutes to drive from Green Street to Memorial Drive during the beginning and ends of the afternoon peak (i.e. at 4:30 PM and at 7:00 PM). During the "peak of the peak" (approximately 5:45-6:00 PM) this same trip will take approximately 8 ½ minutes.
- The estimates of the queue lengths and trip times shown in the graphic, are based on a combination of computer modeling, and actual field observations by members of the team driving the corridor multiple times on multiple days. Trips were made in fair weather as well as during rain events. We recognize that sometimes conditions are made worse by unique events (Red Sox games, accidents in the corridor or elsewhere, extreme weather) and we continue to try and get a better sense of what causes some of the "extreme" delays that people sometimes experience on Western Avenue.

C: Sunday "Riverbend Park" closures are a big issue. The data and design should attempt to address these issues where possible.

- The "85th percentile speed" during times of no congestion is approximately 32 mph. (This means that 85% of vehicles are traveling at, or less than 32 mph). By contrast, the posted speed is 25 mph.

6. COMMITTEE FEEDBACK and PUBLIC COMMENT (Attendees)

- In addition to Riverbend Park, the study should also be aware of other events which impact traffic, such as regattas.
- Need to verify truck data, and look at truck idling.
- The study should also look at cut-through traffic. For example, tour buses and other shuttles sometimes use Montague Street and Ballard Place to avoid the light at Putnam.
- Concerned that bike lanes do not go the entire length of the avenue (stop short at both the east and west ends).
- Would like to see bus shelters.
- Would like to see a public parking facility at the river end of the street, to facilitate visiting the river.
- Traffic does not yield to peds at Kinnaird Street or Pleasant Street, and there are not proper curb ramps. Consider raised crosswalks.
- Try to plant as many trees as possible.
- Provide parking for small businesses.
- Improve the lighting.
- Concerned about vacant storefronts in the block where Ebony Club and the Laundromat used to be.
- Consider Facebook or other means of communication for the project.

7. NEXT STEPS (J. Rosenblum)

- Community Meeting #1: March 31 (7-9 PM). A large mailing will be sent, but Committee members should help get the word out also.
- Advisory Committee meetings:
 - #3 – Thursday April 15 (6-8 PM)
 - #4 – Tuesday April 27 (6-8 PM)
 - Neighborhood Walk – Monday April 5 (6 PM). Meet at Andala Café.

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