Sudbury Center Improvement Advisory Committee
February 27, 2014
7:30 pm
Town Hall

PRESENT: Rich Davison, Deborah Kruskal, Frank Riepe, Jim Hodder, Bill Place, Jody Kablack
VHB Engineers – Don Cooke, Tracie Lenhardt, Erin Thompson
Karen Hodder, Diana Cebra, Lyn McLean, Liz Radoski, Bill Johnson, Marge and Bruce Langmuire, Jan Hardenberg, Karen Hodder, Joshua Lalrempuia, Ramon Llamos, Andrew Roosa, Lorenzo Majno

No quorum of the committee was present.

Jody Kablack gave update on the project status. Design funds were approved in June 2013. Bill Place began getting the plans ready for bid. Requested peer review of the plans by VHB, who noticed some problems with the design that could increase construction costs. The BOS agreed to have VHB re-design. Tonight's discussion will focus on those aspects of the plan that they re-worked, as well as a discussion on the potential to use of mast arms and discussion on materials.

Don Cooke discussed how they got involved. Started with peer review of the plans, noticed some data missing that would impact construction, as well as design deficiencies:

- Route 27 is under the jurisdiction of the National Highway System, which requires design in conformance with their regulations - lanes need to be 12' wide
- Signal phasing as originally designed would create interlocking left turns on Hudson/Old Sudbury Road. There would be a conflict if both phases ran at same time (which is what the design indicated)
- VHB thinks there is more signal equipment than necessary
- VHB thinks there is more signage than necessary
- With these changes, the intersection has gotten wider and busier

Mr. Cooke also discussed the potential use of 1 mast arm which narrows the intersection and removes both islands in the east/west direction. The mast arm would be located at the corner of First Parish and would only have to be 20-25' in length (20 ft. tall). As a comparison, Wayland at Rt. 27/20 mast arms are 35-40' in length. Introducing 1 mast arm would reduce the number of signal posts from 9 to 5. Also reduces size of cross walks and eliminates the need for crosswalk timers, which would be necessary due to the width of the crosswalks.

A mast arm would also eliminate a potential issue with the high voltage NStar transmission line which is located in a shallow conduit directly under the intersection. This transmission line could affect the automatic loop detectors for new signals. Overhead vehicle detection could be mounted on a mast arm.

Mr. Cooke went over some of the specifics of the proposed mast arm:
Mast arm would be 20' high
Would need 1 mast arm, and 4 post mounted signals
Post mounted poles are 10'
There was a discussion on what the signal panels themselves would look like? Some are in black boxes, but this is not required. The SCIAC can decide which type to use.

There was a discussion if the mast arm could be located on another corner. Mr. Cooke indicated that it could, but it would need to be much longer.
6 signs could be removed if 1 mast arm is installed.
The large green signs in front of First Parish are removed with either plan, only small signs indicating 27N, etc. are necessary in that location.

SCIAC members inquired how the number of signs in our plan compares to Wayland? Wayland is a State highway, which requires many more signs than in Sudbury.

SCIAC members inquired as to what the delay will now be through the intersection with the need for separate left turn phases?
VHB indicated that the intersection is at capacity already, and we are not adding lanes. This design will not be making a big difference. But we should experience a slightly reduced queue.
The original World Tech design reduced the delay on paper, but did not solve the interlocking left turn issue. New design will be similar to existing, but vehicle detection will be more efficient mostly in off-peak periods. Signals will be programmed for peak times.

With a mast arm, we still need an island at Concord Rd north to accommodate turning truck movements, but the island can be flush. Does not need curbing.

First Parish attendees wondered if the transformers could be moved if NStar will not bury them. VHB thought yes. Jody Kablack and Bill Place will continue to discuss this with NStar.

Crosswalks were discussed, particularly from Town Hall to the common. It was decided to expand the crosswalk at this location to cover the entire driveway entrance. This will signal to vehicles that the No Name Street is a pedestrian zone. This will reduce the number of parking spaces along the common. The crosswalk can be slightly raised for traffic calming as well.

VHB recommends stamped resin as the crosswalk material. Comes in many colors, patterns. White stripe at edges of crosswalk is necessary and can also be a durable material.

Can parking at common be moved to the Town Hall side of the street? There may be a grade issue.

Some attendees thought there was a need to narrow north end of the No Name Road to discourage fast moving vehicles. Also noted the “cheater move”. VHB noted that the southern corner has been tightened, and will review the northern corner.

Walkway material will be bituminous. The SCIAC will discuss whether a different surface treatment is necessary on the Town common.

The materials of the traffic islands was also discussed. The islands are only approximately 8.5’ wide and may be difficult to plant directly in island. Planter boxes or barrels may be a better alternative. If a mast arm is used, there will only be 1 island to decide on.

It was decided to schedule another meeting of the SCIAC in order to vote on a recommendation to re-design the intersection with 1 mast arm, as well as decide on cross walk and island materials. VHB needs this information in order to finish the plans.

Meeting adjourned at 9:00 pm