Wastewater Task Force Meeting – October 28, 2008

DRAFT

Wastewater Task Force Attendees:

Jeff Adams
Alan Cathcart
Toby Kramer
Paul Mahoney
Kent Nichols (Weston and Sampson)
Elena Proakis Ellis
Marcia Rasmussen
Richard Reine
Laurie Toscano (Weston and Sampson)
Fred Watriss
Chris Whelan
Jeff Wieand

Public Attendees
Sue Felshin (West Concord Task Force)
Betsy Stokey (West Concord Task Force)

Richard Reine explained that an executive summary was distributed for review. The September 2 meeting minutes were also distributed – any comments should be sent to him.

Planning Model Review –
Three models were put together for the villages as well as some areas outside the village centers including Baker Avenue. Laurie Toscano ran through this looking at the various scenarios for build-out, with some minor modifications to zoning, to see how that affects square footage and associated wastewater flows.

Laurie Toscano explained that the folders that she distributed contained all the information that she discussed. This process started with a planning sub-committee including Marcia, Fred and Toby who worked with Juliet Walker to generate changes in land use that might occur in each of the village centers. This group determined that not all of the parcels within each village center had a likely chance of developing or redeveloping. The parcels that are included in this analysis are focus area parcels – not the whole village center area. The build-out projections were done based upon land use. Wastewater flow was determined based on those projections using Title 5. A two-page summary including an 11" x 17" map was included to summarize the resulting wastewater flows from two of the scenarios for each focus area (build-out under existing zoning, and one redevelopment scenario). The West Concord area was looked at first,

with four different redevelopment scenarios. It was determined that the changes in land use between those scenarios were not enough to make a significant difference in the wastewater flows generated. Therefore, when the Concord Center and Thoreau Street focus areas were looked at, only one or two scenarios were applied. In order to compare the three areas consistently, a map was generated, changing the zoning specifically for each area. The details are outlined in the attachments also provided by Laurie, which were generated by Taintor and Associates.

West Concord:

The summary maps showing the resulting flows were discussed. Figure WC-1 is the map that depicts the increase in wastewater flow with build out based on existing zoning, without any limitations in wastewater on or off site (which is not the case). However this is how a determination was made on what the flows may be in the future if wastewater was not a constraint. The table on the left side of the map indicates the existing wastewater flow information. The different aspect of this focus area is that most of the Baker Ave. parcels (all except for 300 Baker Ave.) are currently served by on-site wastewater systems, not connected to the existing sewer system. If the town were to decide to change that and connect them to the sewer, then the current and projected flows would go to the sewer.

Build-out flows were subtracted from the existing flow to generate the last two columns shown as shaded. The increased wastewater flow to the sewer from build-out is assuming that only the parcels that are currently connected to the sewer will be connected in the future. The last column shows the increased wastewater flow to onsite systems from build-out. That increased flow column, which results in about 40,000 gallons per day would have to, under this scenario, go to their existing onsite systems which likely could not handle them, or some other system that is created by the town or individual property owners. The increased wastewater flow to the sewer from build-out under existing zoning is just about 27,000 or 28,000 gallons per day, if you do not consider the Baker Ave. parcels that aren't connected to the sewer. If the town decided to connect all the Baker Ave. parcels to the sewer and build-out under existing zoning occurred, the increased flow to the sewer would be 28,000 plus the 57,000 gpd from the unsewered Baker Ave. parcels (which includes existing flows and build-out flow additions). The total flow from this area depends upon whether the town decides to connect those unsewered parcels to the sewer.

The increased sewer flow from build out could potentially occur now, because the parcels are already connected to the sewer and under existing zoning these parcels could develop to this potential. However, Alan Cathcart explained that right now there is a constraint on wastewater. Changes in use or redevelopment could be approved through zoning, but because of the capacity constraints at the treatment plant, a change could not be accepted by the Public Works Commission.

There is currently an administrative process in place to handle increases in flow under 1,000 gallons per day. These are monitored and reported to the Public Works Commission on a monthly basis.

Laurie went on to explain that Map WC-2 is similar to WC-1 except that the build out projections and associated wastewater flows are contingent on a change in zoning to meet the Scenario 1 criteria outlined in the build-out report done by Taintor and Associates. The increased wastewater flow to sewer from Scenario 1 jumps from an incremental value of 28,000 to 108,000.

Scenario 1 is not consistent across the different focus areas. Page 4 of 11 of the Taintor report for West Concord outlines Scenario 1 build out under revised zoning. It assumes the two Bradford Street properties would be developed at moderate density multi-family residential with a minimum area per unit of 2,000 square feet and 15% of the property reserved for parking access and open areas. It makes different assumptions for the various focus area parcels. It assumes the Commonwealth Dept. of Corrections property would be converted to moderate density multi-family units with a maximum area of 2,000 square feet and 15% of the property for parking and open areas. The 20 properties in the proposed village overlay district, other than the Bradford Street properties, would have mixed use, 75% non-residential and 25% residential, with a height of three stories, a maximum lot coverage of 75%, and a minimum open space of 10 percent, all built with the restrictions of existing zoning.

The biggest contributor to the flow is the Correctional Facility. That property is currently undeveloped, so it would go from zero flow to a dense residential development which generates a significant amount of flow under Title 5. It was noted that the development on this site could potentially be less dense, though, depending on the developer and the process used to develop the property.

The various scenarios are summarized on pages 4 & 5 of 11 of the West Concord packet. These scenarios are shown as possibilities as opposed to recommendations. Scenario 1 generated the highest flows, which is why it was shown on Map WC-2. The differential of flow between the four scenarios under revised zoning is only 10,000 gallons per day from the lowest to the highest. Individual differences in non-residential uses don't change the flows that much, unless a water intensive use such as a restaurant is proposed.

Concord Center:

A much shorter build out analysis was done for this area, because there are fewer parcels to analyze. The only parcels that were looked at were areas where change was anticipated, or thought to be probable. The majority of Concord Center is not likely to have much change. There are no on-site systems in Concord Center or the Thoreau Street area. All the parcels that were considered in the analysis are currently connected to the sewer.

Map CC-1 shows build-out under existing zoning, at about 6,000 gallons per day increase over present flows. This would include changing the use of some existing non-residential areas to different types of uses that generate slightly more flow. This analysis included the Keyes Road properties which are currently municipal offices.

Map CC-2 shows a more significant difference based on a revised zoning scenario that adds a larger residential component to an area that is currently not residential. There is a potential jump of almost 7,000 gallons per day under this scenario. This would include the addition of 177 dwelling units. On top of that, an additional 200 square feet of non-residential space would be included. The current non-residential square footage is 66,000 and this would jump up to 311,000. This assumes a mixed use, multi-level residential on the top, commercial on the bottom, village style development.

A similar analysis showing existing zoning and one development scenario was presented for the Thoreau Street/Sudbury Road area, as shown on Maps TS-1 and TS-2.

Smart growth was considered heavily in this analysis, combining development with a residential component. The numbers appear rather dramatic, but if you look at the whole of the village center there needs to be some flexibility in these numbers.

Public Comment

Sue Felshin, 19 Sunnyside Lane (member of the West Concord Task Force)**:** There seem to be some ideas about building wastewater capacity at the W.R. Grace site. 200 acres of this property is in Acton, another 100+/- acres is located in Concord. The Town Manager stated that this has been brought up but not really discussed by the Wastewater Task Force in any detail, and these concepts would be part of a future alternatives analysis if the Town agrees additional wastewater capacity is needed. Sue Felshin also inquired about documents not being posted on the web. She was informed that the documents referred to in the previous minutes were the tables and analysis being discussed today and once they are completed they would also be posted along with the minutes, plans, and summary report.

Sue Felshin also discussed private property owners on Baker Ave. who may have been discussing the possibility of a package treatment plant for that area. The 10,000 gallon per day threshold is what triggers a system where you're required to have a package treatment system with a groundwater discharge permit, as opposed to a septic system.

Betsy Stokey asked how much of a change of use occurs when an establishment becomes a restaurant as opposed to a dry-goods store. Fred Watriss explained that there is a significant difference, and this is why four different scenarios were shown.

When it was asked how long it would take to create a new wastewater treatment system, the response was about 5-10 years.

Chris Whelan stated that he would encourage the West Concord Task Force to contact the staff if they have any questions. If they relate to planning or zoning, Marcia is available; Alan Cathcart is the Water Superintendent; Elena can answer any engineering questions on Water/Sewer; Rich can also answer questions. Most of these questions can be answered offline. This committee only gets together every 4 weeks for one and a half hours. Factual, technical or scheduling questions can probably best be addressed by sending an email to a staff person. They would be able to respond and provide the appropriate level of detail without any time constraints

Large Sewer Users

Alan Cathcart explained that the larger users have been contacted by him and Elena Proakis Ellis to provide input. There are a dozen or so large customers such as Emerson Hospital, Concord Academy and property developers on Baker Ave. that have been called and/or emailed. Developers generally prefer not to have their own package treatment plants. It makes the property harder to sell. They would much rather pay a fee to get on the sewer. So far Baker Ave. is the only area not included in the Comprehensive Wastewater Management Plan that has been included in this analysis. A map has been prepared which does not yet include the large users.

The total increased flow from the village center areas, assuming that the Baker Ave. portions that are not currently sewered stay that way, is 227,000 gallons per day.

Ex. Summary

The executive summary and an outline should be prepared for approval by the committee. The outline should include background and explain why the Task Force was assembled, what happened before and why the integrated planning initiative started. The whole Status of Municipal Wastewater in Concord report identified the issue - that there is insufficient wastewater capacity currently to support the build-out that might occur in the future.

An introduction of how the Task Force will go about their mission would be explained next. Consultants would provide more detail on the wastewater status summary and the land use planning that needs to be done. An explanation of the focus area properties would be included. The village overlay committee process would be explained as background.

The format would be similar to what was presented at the public outreach meeting, combining the slides into an outline.

The next section, which is the main point of this project, would be to quantify the gap as far as wastewater flow projections, to summarize the results of the spreadsheets that have been created. These would be appended to the report. Each individual area would be discussed. The village center flows would be totaled, before going into the large user

flow information. This would need to be a lot more general, expressing an aggregate flow range for what's expected for large user increase in the future.

Chris Whelan stated that in section 3.0, the term quantifying the need would be better than using the word "gap." It may even be worded to say "future wastewater needs."

Section 4 is the transition into the next phase. The wastewater management alternatives have been talked about briefly. More detail will be put to these alternatives once flow numbers can be determined. Alan Cathcart added that at this stage conceptual information is the best that can be provided.

Rich Reine suggested that it may be helpful to quantify the gallons and explain if it is a new plant, or a NPDES permit renegotiation, groundwater discharge at the plant, etc. at a very high level. The executive summary can include the exploration of conservation measures and demand management.

The no build-out alternative was also suggested to be explained – that if a public solution is not addressed the private developers who have land may undertake alternatives of their own. There should be some understanding in the "no-build" summary of what the other consequences are: consent order, potential legal challenges, etc.

There will most likely be more conclusions in this report than recommendations. The recommendation will basically be to proceed to the next phase and further evaluate the alternatives that the town deems viable. The task force agreed on the structure of the report from the outline presented. The goal will be to bring a draft report to the next WWTF meeting for review and comment.

Town Meeting Warrant Article:

It might make sense to ask for funding for planning money for further evaluation and preliminary design. The committee will need to obtain a consensus on volume, based on the data collected.

Elena explained that it would be helpful to think about what should be available as a public document for people who are trying to prepare for what they will vote on at town meeting. It might be helpful to have a small summarized synopsis document.

Marcia explained that if people say they wish to do nothing, they will not be able to add on to their homes.

The various phases of the wastewater treatment hookups that were planned should be reviewed, and an explanation provided that you may not be able to hookup if this problem is not solved.

Two more meetings of this task force are planned before the Town Meeting coordination meeting. If the Task Force wants to talk about a warrant article, it could be presented generally, without the specifics.

The next meeting will be on November 18 at 7:30 A.M., where a draft version of the report will be prepared for review, and a draft of the warrant article will be presented.