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The Wellhead Protection Committee (WPC) would like to communicate to the High School Building Committee the results of the Phase II Capture Zone Study of the Happy Hollow wells. We hope that this new data will be considered as the HSBC progresses in the construction of the new school, and especially in the finalization of the parking and playing field areas.

First, some definitions:

You are already well aware of the **Zone I** protected area with a radius of 400 feet around the wells. The 400 feet is a legally defined boundary, with no physical meaning beyond the recognition that the soil acts as a filter for contaminants, so any toxic substances dropped on the ground close to the wells is likely to not be adequately filtered out. The Zone I is the area in which land uses are strictly regulated by state law. The Capture Zone Study has nothing to do with Zone I.

Zone II is a much larger area which has both legal and some physical meaning. It is the area which could supply water to the wells under very extreme conditions of prolonged drought and constant pumping. These would basically constitute a worst case scenario. The entire high school property, along with about half of southern Wayland, is in the Zone II of the Happy Hollow and Meadowview wells.

The WPC is particularly interested in the intermediate area called the **Capture Zone**, which may have no legal significance but is of fundamental physical importance. This is the area which UNDER NORMAL CONDITIONS supplies water to the wells. In other words, within the capture zone every drop of water that falls on the ground will wind up in the wells, but it is hoped that there is enough soil travel distance to the wells to filter out contaminants. The WPC wanted to define this area to focus our protection efforts since, of course, no filtering is perfect. If we can minimize sources of contamination in the capture zone we will have cleaner water, reduce the probability of a catastrophic damage event for the wells, and possibly reduce the need for an expensive new water treatment plant in the future.

Now, the results:

The attached map summarizes the results of the physical pump testing carried out in June. The HSBC has previously seen the 2008 preliminary estimates shown on the map, which indicated only a small section of the baseball fields in the northwest corner of the property were outside the capture zone. The big surprise in the final results is that the entirety of the field area is located outside the capture zone. While this does not mean total isolation from the wells- in dry conditions the zone will expand- it does mean that the area is much less sensitive in terms of impact on the wells than the rest of the high school site.

The obvious implication is that the most problematic elements of the project would be most optimally sited in that area i.e. the parking lots.

As we have discussed in the past, we see the three major categories of surface area, in terms of water quality issues, as buildings, playing fields, and parking lots. You have

appropriately placed the buildings, the source of cleanest runoff, in the most sensitive spots. The parking lot placement, however, remains problematic, since parking lots are the dirtiest element. A more favorable placement considering the latest findings would be a reversal of the parking lots and the playing fields. While both the placement and the drainage design are a vast improvement over the current conditions, some contamination from the lots could still reach the wells. Furthermore, if a major accident involving a fluid spill occurs, it is possible that the wells could be destroyed.

The WPC has presented these findings to the Board of Public Works for review. Given the new data, which unfortunately was not yet available during the design of the parking lots and fields, and these considerations, the WPC urges the HSBC and your project team to consider re-optimizing the layout of the grounds as you complete the building construction and proceed to demolish the existing buildings and complete the project.

We would be happy to meet with you to discuss these issues.