## ATTACHMENT B

Summary of DPW's reasons for "NOT" moving the Water Works Division's design and engineering functions into the Infrastructure Services Division as recommended in the Matrix audit report on DPW's Capital Project Management Process.

First, it is essential to understand that water engineering staff is not only fully utilized with Water Works Division (MW) projects, but there is a backlog of work and there likely always will be. Technology of water treatment and distribution is always changing, regulations are becoming more stringent, and the machinery and equipment at the plants and pumping stations are aging. There is no varying workload that would make excess productivity available to allocate to other sections of DPW.

Second, water engineering works on both capital-funded and operations and maintenance (O&M) - funded projects with full time equivalents (FTEs) split approximately equally between the two funding sources. The capital projects preserve the integrity of the critical infrastructure that directly affects the public health and safety of Milwaukee and 15 surrounding communities. In addition to funds budgeted by WW, the capital portion includes work on upwards of \$3 million annually of developer, suburban retail community, and MMSD projects funded by those agencies. The O&M projects involve the operation and optimization of complex, interrelated systems of water treatment processes and the distribution system that have significant consequences of error or malfunction. O&M work also includes hydraulic modeling, maintaining and updating maps, reviewing paving projects, and special studies.

Some engineering staff is stationed at the water treatment plants. The projects undertaken at the plants that utilize WW engineering staff are complex and interlinked to each other and to the stability of the water treatment processes and function of the distribution system. These projects cannot be implemented and managed in isolation but require a coordinated effort from those who understand the nuances and possible complications. Being on site and available for immediate response to day-to-day concerns, engineers have firsthand interaction with the operational considerations of the various systems that they are designing and of the projects that they are managing. This results in better designs, projects that more fully meet the needs of the utility and better oversight of projects that are contracted out. Engineers also provide input and support on numerous specialized and complex O&M projects that come up during normal plant operations.

## ATTACHMENT B (Continued)

The water engineering staff was moved to WW from the Division of Engineers (ENG) about ten years ago. It had become clear that the combined engineering staffs of water and sewer were not a benefit to either WW or ENG. The work loads for sewer and water never provided an opportunity to share in any assignments. It was also evident that the sewer and water engineering functions were distinct specialties that required different expertise, both for staff and management.

The benefits of moving water engineering back to Water Works have been enormous and a significant value added for the utility. There is strong project ownership, an improved understanding of the interrelationships of various projects, and the effectiveness of completed projects has never been better.

Without a high degree of planning, oversight and coordination of WW projects, there is significant risk of catastrophic results. Water engineering must remain a part of WW to maximize the productivity and minimize these high consequence risks to public health and safety that would occur with failures of our infrastructure and water treatment processes.

These facts are further emphasized by the other changes that have taken place within the last ten years within the Infrastructures Services Division. We have moved staff and offices around to combine designers with maintenance staff under shared management within the areas of sewers, bridges and paving. These have all allowed for the reduction of staff while providing a more cohesive work force within these areas.