**MEMORANDUM**

TO: Project File, Town of Plainfield, DOC Sewer Improvements, SRF Project # WW0943202

FROM: Richard J. Ziemba

DATE: September 20, 2011

RE: Green Project Reserve, Business Case

**Summary**

1. The Plainfield DOC Sewer Improvements project is based on a Guaranteed Energy Savings Performance Contract. The project includes the replacement and CIPP lining of the existing sanitary sewers in a Department of Corrections Facility in Plainfield. A majority of the sanitary sewers in this area are over 100 years old and have severe infiltration/inflow (I/I) into the existing sewer system. The estimated I/I removal is considered to be approximately 400,000 gallons per day (GPD) or approximately a 45% reduction in flow once the improvements have been conducted.
2. The Guaranteed Energy Savings Performance Contract Price = $4,260,000. Deducting the construction contingency and other fees totaling $967,500, the total construction cost is $3,292,500. The total planning and engineering costs (based on engineering contracts) is a total of $385,000. This brings the total project costs of construction and engineering to be a total of $3,677,500.
3. Based on the Guaranteed Energy Savings Performance Contract, the annual O&M savings per year for the I/I removal is $529,542.
4. The payback period is calculated as $3,677,500/$529,542 which equates to a payback period of 7 years which is far less than the useful life of the proposed improvements. Therefore, the project is cost effective.
5. A loan was closed on 6-30-11 in the amount of $6,966,000.

**Conclusions**

1. The business case was reviewed and found to be in conformance with meeting the GPR requirements for the energy efficiency category.