



PRINCETON
DEPARTMENT OF INFRASTRUCTURE
AND OPERATIONS
PRINCETON SEWER COMMITTEE
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MINUTES OF THE MEETING
of the
PRINCETON SEWER COMMITTEE

April 5, 2023

The meeting of the Princeton Sewer Committee (PSC) was convened at 9:00 a.m. on Wednesday, April 5, 2023 via Virtual Meeting/Zoom Conference. D. Goldfarb opened the meeting in accordance with the New Jersey Open Public Meetings Act, Section 5, Chapter 231, P.L. 275. In conformance with the requirements of the Law, Notice was provided of the date, time, and location of this regular meeting by posting a copy of the adopted Schedule of Regular Meetings in Monument Hall and Witherspoon Building and by mailing copies to the Trenton Times, Princeton Packet, Town Topics and by filing a copy in the Office of the Clerk of Princeton. Adequate notice was provided to the public and to all parties concerned.

MEMBERS PRESENT: David Goldfarb, Valerie Haynes, Eve Niedergang

ALSO PRESENT: Deanna Stockton, Deputy Administrator/Engineer; Andrew Filippi, Sewer Design Engineer; Jeff Hughes, SOC Foreman; Dominick Itzi, Sewer Operations Manager; Janice Most, Secretary

ABSENT: Jim Purcell, Assistant Engineer;

PUBLIC:

AMENDMENTS TO THE AGENDA

No amendments to the Agenda.

APPROVAL OF MINUTES

V. Haynes moved to approve the February 16, 2023 Minutes as presented. E. Niedergang seconded. The Motion passed unanimously.

TRUNK LINE REHABILITATION PROGRAM

D. Itzi stated that the proposal from H2M has been received for engineering services to clean and televise portions of the trunk lines; the proposal is under review.

Discussion: Consultant was hired to tell where to televise and where to repair; this will be areas we are not able to access with our equipment and our cameras are not suitable; Consultant will do laser profiling and sonar for portions under water to see the bottom of pipe where sewage block view; sonar attached to the camera will show defects and sedimentation in pipe; sonar will pick up fractures, not cracks; the difference of cracks and fractures – a crack is not a significant defect, cracks are very thin with no separation of pipe wall and not high leakage and cannot be repaired or grouted – a crack is where there is a gap that leaks and can be repaired and grouted.

A. Filippi stated that the same Consultant will be used that did the initial 30 maintenance hole checks using Go Pro to figure out what areas are in good and bad condition. The focus will be to CCTV the bad condition pipe to inform where repairs can be made using various technologies based on the condition of the pipe. He also stated that the same Consultant will be used for CCTV planning work as the project scope is too large for the Municipality to handle. Contract documents and Bid Specifications are required then a separate Contractor will do the inspection. The next step is for the Consultant to put together the Bid Specifications for the CCTV work.

PUMP STATION DESIGN AND RECONSTRUCTION UPDATE

A. Filippi stated that Arcadis provided a draft basis of design report stating what technologies to use and why certain technologies are better. We now know where to focus the design work to have a sustainable, energy conscious, and safety conscious design plan for all stations so technology and equipment can be used at all stations that will simplify operations and have a smaller set of repair replacement parts on hand. The report did lack backup information which the Consultant will include in the final report in mid-April.

Discussion: timeline: basis of design report by mid-April - end of April will be a presentation for PSC/Council/IO Committee Members - next six to nine months will be the design phase - construction slated for late 2024; Consultant will do design work and prepare bid specifications and complete needed permits; can use the Consultants model approach for future work to address all issues of the sewer system; can use Capital Budget for sewer infrastructure as monies will be spent responsibility.

INFILTRATION AND INFLOW (I&I) PROGRAM

D. Goldfarb stated that he prepared a cost saving estimate of eliminated I&I (he will share the spreadsheet post meeting); he stated that if there was a 10% reduction in flow this will save more than \$350,000/year as long as the flow is reduced by the 10%; with this annual saving Capital Projects can be funded for over twenty years; additionally, if I&I is reduced than expanding Stony Brook can be delayed or eliminated; there is a payback for successful I&I reduction as seen 10-15 years ago when there was reduction without a formal strategic plan; if the leakiest areas are prioritized there are immediate results in savings from Stony Brook.

A. Filippi shared the Chart Anticipated Annual Sewer Fee for Average Single-Family Home Using 135 GPD depicting the Average Residential Annual Fee/Annual Fee with I&I Reduction/Year-to- Year Change/Previously Projected Annual Fee. He explained the Chart of User Fees including the financial analysis including 2019 Water Usage/Capital Plan/I&I Savings/Other Expenses/Rate Calculation/Graph/Rate Calculation with I&I Reduction.

D. Itzi stated that he and A. Filippi made a presentation at the NJWEA Conference; while there, they spoke with representatives from Dukes, a professional services information and data gathering company, Dukes has an I&I identification component (flow metering with a GIS component); this can do metering to show largest offenders of I&I and to target in house inspection to find and actively identify offenders of I&I. The system can be less accurate from a technical perspective but shines when looking in tighter areas to assess flow - not all areas will need camering. Duke will be hired for the initial assessment by end of 2023; metering will be late winter to early spring.

Discussion: benefit from this dry winter was not having high spring flows; using a disciplined strategy for I&I reduction; current actions used to reduce I&I; areas of Princeton with dense rock and low elevation e.g., between Wiggins and Prospect, from Bayard to Riverside; doing more research on the geology of Princeton; University program of multi-faceted hydraulic groundwater modeling; the Watershed digital model of geologic structures; D. Goldfarb stated history of Nassau Street, which was called Kings Highway because of the high ground which did not erode rapidly because of dense rock; Hopewell Township and Pennington have significant I&I issues although they contribute less to Stony Brook.

COLLECTION SYSTEM

D. Itzi stated that staff are cleaning easements and doing small repairs; and, inspection work for resurfacing projects routine maintenance.

Discussion: Princeton University dining facility sewer backup; hazards of disposing liquids, no matter of volume, and “disposable” wipes down drains and toilets; distribution of literature of hazards of difference types of disposals to residents via mail, community and University events; educate university students.

J. Hughes stated that grease trap inspections for businesses and schools are more aggressive as inspections are taking place as the grease trap is being cleaned by the establishment.

D. Itzi stated that detailed monthly collection reports are being sent to Stony Brook of monthly maintenance, inspections, backup, and maintenance issues. These reports will be shared with the Committee.

MEETING SCHEDULE

Via consensus:

The May 3, 2023 meeting is cancelled. The next meeting will be the regularly scheduled meeting of June 7, 2023 at 9:00 a.m. via Virtual Meeting/Zoom.

PUBLIC COMMENT

No public comment.

OTHER

No further topics.

ADJOURN

At 10:15 a.m. V. Haynes moved to adjourn. E. Niedergang seconded.
The Motion passed unanimously.

The next meeting is scheduled for June 7, 2023 at 9:00 a.m. via Virtual Meeting/Zoom.

Respectfully Submitted,

Janice Most, Secretary
Princeton Sewer Committee

Adopted: June 7, 2023