

RS&W MASTER PLAN PROGRAM UPDATE

Dear Members,

We are still in the *early design* stage of our water and sewer piping replacement program. As we move forward with surveying, equipment investigations, water and sewer network modeling, and preliminary piping layout options, we will continue to use this Hideabout page to update you about our progress.

Please recognize that the program is evolving and that there will certainly be changes, at times significant changes, as we move forward. This is the nature of the design process and is particularly true of schedules, layout details, and costs.

Since our last report to you, our program-related activities include the following:

- Surveying
- Program Planning Consultation Meetings with DEP and PENNVEST
- Hydraulic models of water and low-pressure sewer systems
- Evaluations of grinder pump equipment (e.g. pump types and features)
- Preliminary piping layout options
- Design Workshop No. 4 with our consultant, BCM Engineers

INDEPENDENT REVIEW

Members have expressed perfectly understandable concerns about the recommended approach and costs of the proposed water and sewer piping replacement program. These Members want (and deserve) an independent “second opinion”. Will there be one?

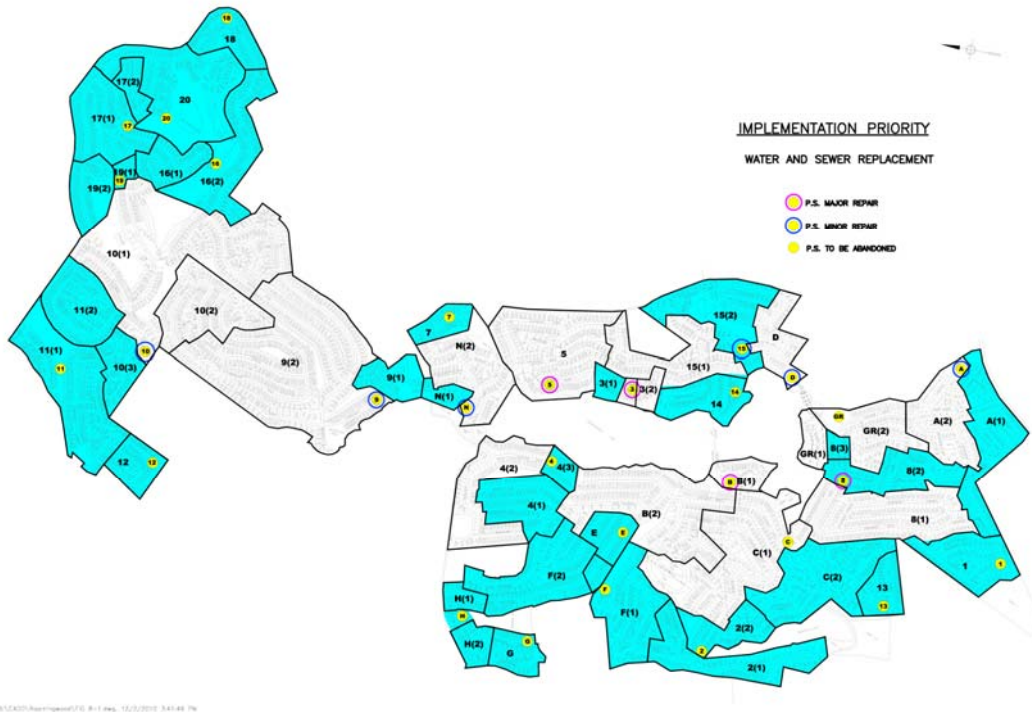
As we reported to you in the February 2011 Hideabout, the answer to this question is YES. Our response at that time is probably worth repeating.

PENNVEST, our financing authority, requires an independent review and evaluation of our proposed design by a licensed professional engineer when the design is 20- to 40-percent complete. This review must identify alternatives, if any, for achieving the basic functions of water and wastewater conveyance at lower cost. The review must also determine if we investigated all alternatives thoroughly and if our cost estimates for those alternatives are reasonable.

PROGRAM IMPLEMENTATION MAP

The staged program implementation map that we presented at our Public Meeting at the Main Lodge in December 2010 has not changed; we show it again in this article for convenience. As we explained then, we don’t have the resources to get the entire program implemented at one time, so we have to divide the work into priority stages. The financing that we can get now will cover more than half of the entire program. We call this “Stage 1”.

Low-pressure (LP) sewers will be installed first in the highest priority areas, which are generally around the periphery of the Hideout. These are the shaded areas of the map. This means that LP sewers will initially discharge to the existing gravity sewer system (white areas on map). New water mains will be installed concurrently to limit construction activities to one area at a time. After the Stage 1 work is completed, LP sewers and new water mains will be installed on a prioritized basis in the white areas of the map, section by section, as aggressively as funding permits.



RATE INCREASES ALONE WILL PAY FOR STAGE 1 PROGRAM

Some questions continue to arise about how we will pay for this program. RS&W will pay for the project in a manner similar to the way in which most homeowners purchase their home -- by establishing a “mortgage”. We will borrow the money and pay off the borrowed funds (“mortgage”) with annual payments over 20-40 years depending on our financing source(s). The money for the annual payments will come from rate increases alone, NOT from an assessment.

At this time, our best option for raising the necessary funds to pay for the work appears to be a combination of low-interest financing from PENNVEST (state authority) and USDA Rural Development (federal authority), with a tax-exempt bond issue to cover any potential shortfall. PENNVEST offers the most attractive long-term rates at this time so we hope to finance the entire project through this agency.

Fortunately for RS&W, our current annual debt service of about \$1 million (for previous major projects such as the treatment plant expansion) will be paid in full near the end of 2013. This \$1 million in “released” funds combined with our new rate increases for 2011-2013, which will generate additional funds of roughly \$1 million per year, will allow us to assume a new debt loan load capacity of about \$2 million annually. This annual \$2 million in revenue combined with a more limited annual capital program will allow us to pay debt service (PENNVEST for 20 years; USDA/RUS for 40 years, tax-exempt bond issue if necessary) for Stage 1 improvements of approximately \$23 million for sewer work and \$17 million for water work.

As we reported in the December Hideabout, and subsequently, RS&W’s rates must rise to pay for the new water and sewer systems. The new rates for 2011 shown in the table have already been implemented. The table also includes our current estimate of projected rates in 2012 and 2013. The *combined* 2011-2013 rate increases are designed to pay for the long-term financing costs of the Stage 1 improvements as described above.

| RS&W Water and Sewer Rates – Current and Anticipated (Per Quarter) | | | | | |
|---|-----------------|---------------------------|-----------------|---------------------------|-----------------|
| 2011 | | 2012 | | 2013 | |
| <i>New Rate, \$</i> | | <i>Projected Rate, \$</i> | | <i>Projected Rate, \$</i> | |
| Developed Lot | Undeveloped Lot | Developed Lot | Undeveloped Lot | Developed Lot | Undeveloped Lot |
| 222.00 | 141.50 | 244 | 156 | 269 | 171 |

SCHEDULE

This year, 2011, focuses principally on *pre-construction* activities such as surveying, preliminary and final design, updating cost estimates, and preparing permit and financing applications. The “Independent Project Review” will also take place this year when the design is sufficiently developed for a proper review to be meaningful. We expect Stage 1 construction to take place in 2012 and 2013.

GRINDER PUMP UPDATE

Although we are still evaluating grinder pump equipment and layout options, we hope the following remarks will update you about status:

- Ultimately, all homes in the Hideout will need a grinder pump station for receiving home wastewater and discharging it into a new low-pressure sewer system.
- Each grinder pump station will consist of a single grinder pump mounted at the bottom of a hard plastic tank or “wet well”. The tank will be roughly 2.5-feet in diameter and 8-feet deep. Except for the top access cover, the tank will be buried.
- Most grinder pump stations will be located in the right-of-way near the street rather than adjacent to homes.
- The contractor will re-route and connect the existing home service laterals to the new grinder pump stations.
- The electrical panel and alarm for each grinder pump will probably be mounted near the home’s existing electrical meter on the outside of each home. A shallow buried conduit will convey power from the new panel to the grinder pump.
- RS&W will pay for, install, connect, own, and maintain all grinder pumps.
- Homeowners will pay for the electricity used by the grinder pumps. Electrical costs should be no more than \$2-3 per month for a single family in full-time residence.

“TRENCHLESS TECHNOLOGIES”

Several Members have asked if some form of *trenchless technology* might be employed to *refurbish* the existing gravity system more economically than providing new low-pressure sewers. A February 2009 article published in *LJWorld.com* that described a low-cost sewer-relining project in Lawrence, Kansas, apparently prompted these questions.

The following trenchless technologies are widely available and proven for selected sewer repair applications:

- Cast In Place Pipe (CIPP) ... employed in the 2009 Lawrence, Kansas Project
- Fold and Form Pipe
- Pipe Lining
- Pipe Bursting

Trenchless Technology is NOT recommended for use in the Hideout. BCM Engineers, our Master Plan Consultant, contacted the vendors and evaluated the costs, advantages, and disadvantages of each technology thoroughly as a potential alternative to low-pressure sewers. BCM concluded: “While Trenchless Technologies for pipe repair are available and are proven to be cost effective and practical in some situations, it is clear that the sanitary sewer system in the Hideout is not a good candidate”. When all cost components of trenchless technologies are considered for our Hideout application, BCM demonstrated that “there is no saving to be gained by using trenchless technology”. CIPP, the least expensive and simplest type of trenchless technology, is not suitable for “Truss Pipe”, which exists in the vast majority of the Hideout.

The evaluations and estimated costs of the trenchless technology options noted above are beyond the scope of this article but can certainly be made available to interested Members for review.

CORRECTIVE ACTION PLAN (CAP)

On March 16, 2011, the Pennsylvania Department of Environmental Protection (PADEP) indicated it will *require* RS&W to implement a “Corrective Action Plan” (CAP) due to the severity of our sewer problems.

We have since met with the PADEP and were directed (along with the South Wayne County Water and Sewer Authority) to create the CAP and file it with local municipal officials and Wayne County. This plan will publicly document the corrections we must make to meet our permit requirements. In essence, the CAP requires us to do what we have *already been doing* through our Master Plan, which means that we are “ahead of the curve” at this point.

We sincerely hope that this information is helpful to you. Please submit any questions that you may have to RS&W and we will do our best to respond in future Hideabout articles. Please also feel welcome to question us at the RS&W Office at **9 a.m. on Saturday, May 14** (Informal Public Information Meeting) and on **Saturday, May 21** (RS&W Board Meeting). You will also find additional information on our website: www.rswanepa.com (just click on the blue “News” button).

Respectfully submitted,

RS&W General Manager:

Jack Lennox

RS&W Directors:

Nick Altomare

Kevin Clancy

John Egan

John Rockman

Betty Sullivan

RS&W Q&A from the Hideout Forums

Many questions have been raised on the Hideout Forums recently, and at the RS&W Board Meeting in March, our Board of Directors authorized the following answers. Not all of the questions can be addressed in the space available, but we will continue to keep the Hideout community informed as we proceed.

Q: How are questions from the Hideout Forums and other sources addressed by RS&W?

RS&W: The questions and concerns raised on the forums and those that are emailed, mailed, or phoned in are compiled and presented to our Board for review at our regular monthly meetings, and the answers are then published in the monthly Hideabout newspaper and also added to our website to help inform the entire community.

Please understand that due to our limited staff, RS&W does not have the resources to respond to each individual question as it is posted. Also, some of the questions raised are involved enough that input from RS&W's Board of Directors, staff, or Engineer is required to provide a proper answer.

By compiling your questions and our answers into an article for the Hideabout, we can inform a much larger portion of the community more efficiently than by engaging in dialogues with individuals on the Forums.

Q: How can members of the Hideout most constructively and effectively express their questions and concerns regarding the project or other RS&W issues?

RS&W: Questions posted on the Forums will reach us, but please feel free to send them to us via email or regular mail as well. We do prefer that you call us during our office hours for information or to arrange an appointment.

We encourage you to contact us directly or attend a board meeting or workshop. The Board is always open to everyone's concerns and questions, and your input would be most appreciated.

Q: Will RS&W have a second public meeting regarding the project, and if so, when and where will that meeting take place?

RS&W: As described above, the Board of Directors has scheduled additional public meeting dates to better make ourselves available to the Hideout membership. More than likely we will add more dates as we progress.

Q: How is RS&W working with the Hideout POA to best address the needs and concerns of the community?

RS&W: Since the very beginning of the planning of this project, RS&W has worked closely with the Hideout POA. The POA has been most supportive of our efforts and quite helpful in our planning for the common good of the whole community. Together, we plan on addressing road restoration, culvert replacement, gas line investigation, and staging coordination.

Q: What is the South Wayne County Water and Sewer Authority (SWCWSA)? What does it mean that RS&W is an “agent” of SWCWSA?

RS&W: The Roamingwood Sewer and Water Association is the agent and operator for the South Wayne County Water and Sewer Authority. RS&W is a private, not-for-profit association; SWCWSA is a Municipal Authority. SWCWSA owns the assets and debt, and RS&W operates and runs the systems.

What RS&W and SWCWSA have in common is that they both exist to serve those portions of Lake and Salem Township that comprise what is the private, gated residential development known as The Hideout.

As a private association, RS&W is not eligible for PENNVEST low interest loans or for Department of Agriculture funding. SWCWSA as a municipal entity is, in fact, eligible those loans and funding.

Q: When did the current RS&W management become aware of the overall deterioration of the systems they inherited, and when was the Hideout POA Board informed of the state of the water and sewer infrastructure?

RS&W: Over the past several years, through leak detection studies, flow measurement studies, as well as hundreds of hours of closed-circuit television inspection from inside the sewer mains and laterals, we determined the scope of the serious infrastructure deficiencies that we are now presented with.

Reviewing the studies, inspection results, and repair history has clearly shown that the water and sewer systems are failing at a high and accelerating rate, and that the problems are widespread rather than being concentrated in just a few areas.

We and our engineering staff have been investigating the scope and impact of those deficiencies for the past 18 months, and in November, 2010 we developed a Master Plan to address them. The plan was then shared with the Hideout POA Board.

Q: Why are the water and sewer systems in the Hideout failing after “only” 40 years?

RS&W: Many factors will affect the lifetime of water and sewer pipes, including the care taken during installation and the bedding and backfilling around the pipes.

Unfortunately, shoddy work done initially is the likely cause of some of the problems we see today. Even a very small crack can allow roots to penetrate a sewer pipe and lead to serious damage over time. Likewise, a pinhole leak in a water pipe will eventually expand into a significant break.

Q: Can those who designed, installed, or approved the original system be held financially liable for its failure?

RS&W: According to our lawyer, we would have no case, especially after nearly 40 years. Typical bonding only lasts for five years, and guarantees are often for only ten years.

Q: Are other communities experiencing the same sort of problems with systems of a similar age?

RS&W: Yes, we understand that many communities are in similar situations with their aging infrastructure. Some are being forced into addressing those deficiencies by regulatory agencies, whereas we are taking a proactive approach.

Q: How will the new systems be better than the old ones, and how will RS&W make sure they are properly installed?

RS&W: Low-pressure sewers do not need to be installed as deeply as gravity sewers, and the shallower depth makes them easier to install. Quality assurance is one of the most important features in our bid documents, to help guarantee the longevity of our new systems.

Q: How long are the new systems expected to last?

RS&W: Most well-designed and installed water mains and sewer systems should be expected to provide about 50 years of service.

Q: Does the entire system really need replacement rather than just piecemeal repairs?

RS&W: Although some areas are certainly worse than others, the water loss and infiltration problems are widespread throughout the Hideout. These problems would be far easier to manage and fix if they were concentrated in fewer areas.

Q: Will installing new water and sewer systems affect the value of the Hideout and the homes and properties within the community?

RS&W: We believe that having new water and sewer infrastructure and freshly paved roads will add to the resale value of homes and improve the quality of life within the Hideout.

Q: What makes a low-pressure sewer system a better choice than gravity sewers with regards to the geography of the Hideout?

RS&W: The primary reason is cost. Per the Engineer's Master Plan report, low-pressure sewers (with grinder pumps) will cost the Hideout \$25.5 million LESS than replacing the gravity system in kind. This is mainly due to the depth of excavations needed to run gravity sewer mains through the hilly terrain of the Hideout.

Q: Did the 2010 work need to be done, regardless of the need for a more complete system replacement at some point in the future?

RS&W: Yes, those were the most critical areas identified at the time, and needed immediate attention. They could not wait while a more comprehensive plan was developed.