



## LNNLRCD Meeting Date: November 5, 2005 Time: 2:00PM

### I. Call to Order and Roll Call – Joe called the meeting to order at 2:00PM.

<b>Board Members</b>	<b>Joe Olliges</b>	-	<b>President</b>
<b>Present:</b>	<b>Jerry Sellers</b>	-	<b>Vice President</b>
	<b>Bill Piper</b>	-	<b>Treasurer</b>
	<b>Dan Dummett</b>	-	<b>Member at Large</b>
	<b>Herb Hill</b>	-	<b>Secretary</b>

### II. Pledge of Allegiance

**III. Fehr Graham Engineering Study of New Landing Utility** – Joe introduced the two speakers from Fehr Graham, Hans Anderson and Tim Ortmann. The evaluation cost \$6,100. Hans and Tim did their presentation (See Attachment 1 for synopsis of presentation). Joe distributed copies of the survey for each of the board members, one for each POA, one for the RCD office, and one for the library. If any property owners want a copy of the report, they can contact the RCD office to get one for the price of the copy fee

### IV. Questions from the Community -

**Michael Robinson** – Mike said that even though the tower didn't have any value from the engineering firm's standpoint, it is currently working. In three years, when the repair contract is up (it cost about \$265,000), if they pay an \$11,000 fee annually, the company will continue to fix it and guarantee that it will continue to work. He asked if that was a good deal and Hans said that it might be a good deal for some period of time, but at some point, the tower is going to require more than \$11,000 worth of maintenance and it will have to be replaced eventually – say in 10 years or less. Someone asked if it was better to keep that tower up when a new one is built to replace it and

Hans said yes, otherwise they would have to have the hydrants running continually (as they did when they did the repairs), which would be a waste of water.

**Tom Wendling** - Tom asked if the firm's valuation of the utility of \$1.8 million, was after depreciation or does it include the depreciation and Hans said that it accounts for the age of the equipment. Tom asked what the cost of an immediate fix to the sewage treatment plant, to stop the pollution of the creek, would be. Hans said that the sewage treatment plant is shot and beyond fixing; it would need to be completely replaced. Tim Ortmann said that the type of system that Fehr Graham recommended them to change to would be a STEP/RSF system, which would cost about \$750,000. Tom asked about fixing the existing system. Tim said that they looked at the cost of fixing the building and replacing the existing system, and the equipment costs alone would be \$500,000, which doesn't include construction or electrical costs. Hans added that the firm feels pretty strongly that the existing plant and the operation that is required to keep it going is not appropriate for a community the size of Lost Lake. The reason that the EPA discourages that kind of plant (Batch Activated Sludge System) for a community of this size is because in their experience, they see them not being maintained correctly. There are simpler options that will meet the permit limits yet are less expensive and (in Fehr-Graham's opinion) more appropriate.

**Mel Jackovich** – Mel said that even though Fehr-Graham said that the wastewater distribution system working fine, he has noticed that at the corner of Slippery Rock and Rolling Lane there is sewer bubbling over. He asked if the pipes for the waste water and water supply systems, plus the systems themselves will be adequate for the future population of the community, with regard to its current growth rate. Hans said that the original waste system plant was manufactured to support .1mgd, which can support about 1,000 residents. He feels that the pipes are of adequate size for the wastewater leaving the grinder pumps. As for the water coming in, a two-inch line may be adequate for one house, however, if you put two or three houses on it, there won't be enough pressure. He added that any line less than 6" in diameter would also not provide adequate water for fire protection.

**Dan Nicolini** – Dan wondered if the plant was on a flood plain and whether or not the boards on the dam going out caused the flooding in the basement of the plant. Hans said that it may be on a flood plain and a lot of plants are. He said that it would have to be addressed when they went to design something to replace it. Tim said that what actually caused the plant to flood was a valve in the basement that let go and so it was flooded with wastewater. Out of the five valves that Tim tried to turn, he was only able to turn one and normally, you should have a valve exercise program at least twice a year to ensure that they could be turned. There are several valves that are rusted solid.

**Herb O'Rourke** – Herb asked what an approximate cost for a second well would be. Hans said that there is no immediate need to provide a second well, however, if they wanted to have an extra water source, the cost varies depends on the depth. Tim said it would be about \$300,000 for a 6" well with hydro-pneumatic tank at ½ the depth of the original well (which is 675 feet deep).

**Donna Moody** – Donna expressed her concern regarding the sewage going into the creek and the health issued involved. How long would it take for them to stop the polluting and where would it go? Hans said that the regulatory responsibility and the enforcement of it has not been pursued until very recently, even though it has gone on for a long time. He has seen other situations, especially when it is industrial, where this would have been addressed much sooner. Hans said that it wouldn't happen overnight and any entity that would take the plant over, there would have to be some short-term allowances for dealing with the situation, like transporting the waste to Dixon on a temporary basis. She asked how long it would take for them to get a new sewage treatment plant set up and Hans said it could take six months to one year.

**Pat Bendry** – Pat asked if the sewage plant totally shut down, could it back up into the houses through the grinders. Hans said that it is not going to back up as long as your grinder pump is working. Hans said that the sewage is traveling through to the creek and there is no danger of it backing up.

**Donald Finn** – Don asked about the value of \$1.8 million that the firm assessed the Utility's value at and if that number would be added to the \$2-2.5 million, making it \$4.5 million. Hans said that even though they valued the property at \$1.8 million value, they are not saying that that is what should be paid. It's just a calculation based on what equipment is out there and the age and condition of it. In his opinion, what they should pay would be a very low number.

**Crystal Pohlman** – EMC as the receiver has said that they could either put in a temporary plant or haul away the waste to stop polluting the creek and Crystal was wondering what the cost to put that in and how efficient they are. Hans said that he doesn't have a cost estimate on that, however, a temporary unit, of the type mounted on a skid, could bring them into compliance. It would cost about \$2,000 a day to transport the waste out. Joe Olliges added that Fehr Graham was not commissioned to answer some of those questions (like the costs of various temporary options) and that it is up to the courts to determine what is going to happen next. Dan Dummett said that they don't have any objection if the firm wants to speculate on the question, however, they were not asked as part of the contract with the RCD to look into that aspect of it and so they may not have accurate numbers at this time. Hans said that whoever takes the Utility over there would have to be some agreement with the EPA as to what should be done. Having let this go on as long as it has, the EPA isn't obligated to be reasonable on anything, however, he would think that they would work with the next owner.

**Tom Clarey** – Tom asked if the numbers that the firm quoted on the cost of migration from the existing system to the new system include the labor costs of moving the waste to another site during the 6 months to a year that they would take to construct a new system. Hans said that they don't know the costs of that – it would depend on what the company that they would take it too would charge.

**Mel Jackovich** – Is the plant infrastructure salvageable or will it need to be torn down. Hans said that as an example the Recirculating Sand Filter alternative that Tim had mentioned previously doesn't even require a building – it would just require a large septic tank.

**Herb O'Rourke** – Clear Creek is the main source of the golf course's water for watering and whoever takes over this utility would be open to liability for contaminating the creek. Hans agreed that the EPA has lots of well-defined tools for enforcement that they can use, however, he doesn't think it would be appropriate if someone is trying to take it over and make it right.

**V. Statement and Motion** - Joe thanked Tim and Hans for coming out and making the presentation. He then read off the following statement:

“The benefit of immediate acquisition accrues primarily to New Landing Utility and its current owner Gene Armstrong. Known and unknown liabilities need to be determined and resolved before the Community and the R.C.D. is burdened with undetermined future costs. One only has to read the September 20, 2005 letter from New Landing Utility owner Gene Armstrong to New Landing Property Owners Association, through its attorney. It is clear that it would be an unfair penalty to the Utility users to assume the stated liability as outlined in the above referenced letter, much less the unknown liabilities, for which the R.C.D. is liable.”

Joe motioned that the pursuit of the New Landing Utility purchase be suspended until a single governing body is formed in the Lost Lake Community and until the completion of all court actions by the I.C.C. and I.E.P.A. along with any other suits against the utility are settled. Bill seconded the motion. Bill asked if by lawsuits Joe meant just the individual suits against the utility or if he meant also any against the RCD and the utility collectively and Joe said all suits. Dan said that Hans had discussed one of the future steps to be determining rates; he felt that until they determined rates, they don't really know what amount would have to be borrowed or the cost of payback related to that loan would be. He asked whether Joe wanted to forego that process at this time as well and Joe said yes. Joe added that if the two parts of the motion don't take place, then it would be a waste of the RCD's money to pursue determining the rates, however, if the two parts of the motion do happen, it could then be pursued at any time. The board approved the motion unanimously by roll-call vote. [11-05-05-01]

**VI. Adjourn:** Jerry motioned to adjourn the meeting at 3:23PM. Dan seconded the motion. The board approved the motion unanimously by roll-call vote. [11-05-05-02]

#### **November 5, 2005 Motion List**

1. Joe motioned that the pursuit of the New Landing Utility purchase be suspended until a single governing body is formed in the Lost Lake Community and until the completion of all court actions by the I.C.C. and I.E.P.A. along with any other suits against the utility are settled. Bill seconded the motion. Bill asked if by lawsuits Joe meant just the individual suits against the utility or if he meant also any against the RCD and the utility collectively and Joe said all suits. Dan said that Hans had discussed one of the future steps to be determining rates; he felt that until they determined rates, they don't really know what amount would have to be borrowed or the cost of payback related to that loan would be. He asked whether Joe wanted to forego that process at this time as well and Joe said yes. Joe added that if the two parts of the motion don't take place, then it would be a waste of the RCD's money to pursue determining the rates, however, if the two parts of the motion do happen, it could then be pursued at any time. Some discussion of the purchase of the Utility by Aqua Illinois took place. The board approved the motion unanimously by roll-call vote. [11-05-05-01]

2. Jerry motioned to adjourn the meeting at 3:23PM. Dan seconded the motion. The board approved the motion unanimously by roll-call vote. [11-05-05-02]

## Attachment 1

**Introduction** - Hans Anderson introduced himself and Tim Ortmann as the speakers. He described Fehr Graham & Associates as an engineering firm that works in environmental & civil engineering with a lot of wastewater work including municipal and industrial wastewater plants. Hans designs the systems and works in the water supply area and Tim designs the wastewater systems and works at evaluating utilities and optimizing operations.

Part of Fehr-Graham's evaluation of New Landing Utility was the inventory of all the water and wastewater infrastructure assets (lines, pipes, equipment, etc.) and the determination of the age, condition, and value of those assets. They also wanted to identify current deficiencies that would not allow the utility to comply with the current regulatory requirements or the ability of the assets to supply an adequate level of service to their residents.

**Sources of Information** - The sources of their information came from the Illinois EPA through FOIA requests and from discussions with the IEPA – Rockford office, USEPA regarding Safe Drinking Water Act compliance, testimony from the recent rate case, records and drawings from NLU, and their own visual inspection performed July 27, 2005. On the wastewater side they evaluated the collection system, the sewer system, and the treatment plant and on the water side they looked at the water production facilities, the well and well house, the chemical feed equipment, the water storage tank and the water distribution system.

**Wastewater System** – The wastewater system serves about 150-160 homes on the west side.

**Wastewater Collection System** -The collection system is a pressure sewer system instead of a gravity system, which is more typical of a municipality. It consists of 57,000 feet of old pressure lines, varying in size from 3 to 10 inch. Every home serviced has a grinder pump (owned by each homeowner) and a service line that ties into the sewers, with cleanouts and valves. Most of the pipes were installed in the mid-seventies. They estimated the value of the pipes at about \$715,000 by estimating unit values for new components of the same type and material and applying straight line depreciation over the years of service of each component. Much of the expected useful life of the pressure pipe will expire in less than 20 years, with other components expected to last less than 10 years. There appears to be no immediate problems with the wastewater collection system or no immediate capital improvements identified.

**Wastewater Treatment System** – The type of wastewater treatment plant that New Landing Utility owns is called a sequencing batch reactor plant. Using a schematic provided by Mr. Clark from New Landing Utility, Tim explained how the wastewater is normally processed through that type of plant. Upon entering the plant, they immediately had several concerns, which are reflected in the pictures that they took. The plant was in disarray with spare and used equipment strewn about. There were numerous OSHA safety violations, with one of the main safety concerns that they had was the chemical feed pump missing the cover and didn't have a plug. Every wall of the building had water staining and leakage. The gas line and vent was disconnected. The heater was inoperable, there was a large wasp nest outside the entrance of the plant, the main power transformer was partially submerged in water, soffits rotted away, roof holding water, and plants growing on the roof. Tim showed lots of slides and indicated the problems he saw to include live bare wires, discarded and inoperable equipment, and no lock out procedures listed or any indication of concern for personnel safety. Blowers disconnected, they used sump pumps to move the water through hoses across the floor from one tank to another, with no aeration or biological treatment being performed. The sludge in the plant has not been pumped out for several years.

They were asked to look at alternatives to replacing the plant and they recommended a recirculating sand filter (STEP/RSF) treatment system because it has a lower cost, much less labor intensive, much less equipment, and has worked well in similar sized communities. Some of the underground tankage for the RSF, however, there would be a significant cost involved to pump out, clean, and re-pipe them. The cost to replace the existing treatment plant is further in the report. They did not put a value on the plant because they felt that there was not a lot there that was of value and the amount of work it would take to fix it wasn't worth it. They estimated the cost to replace the facility to be between \$750,000-\$1,300,000.

Hans said that when the plant was designed and built, it was a good system that would have handled a lot of growth, however, it just succumbed to a total lack of maintenance. The only thing working in that plant was the chlorination process. According to the discharge monitoring report data that the EPA maintains, the plant is just passing raw sewage through and discharging it into the creek. Current EPA design

standards discourage an activated sludge type plant for communities this size because they're operationally complex and require a lot of attention. A simpler system would require a lot less attention while still meeting the permit limits to take care of the community into the future.

**Water System** - The water system, with about 309 active accounts, serves all the residents of the community.

**Water Production and Treatment** – the water production and treatment consists of a well in a 12' X 10' well house where the water is pumped from and then chemically treated for disinfection, with a small water quality laboratory contained in the well house too. It is in a lot better shape than the wastewater treatment plant and provides good water. It had housekeeping issues: some corroded equipment that is in need of painting and cleaning, the roof needs to be replaced (picture 19 shows daylight through the soffit), the building needs to be painted, organized, and cleaned up, there are weeds growing all around the building and graffiti on it.

**Recommended Improvements of the Well and Well House** – The biggest recommendation that they made was to install a backup generator. They also recommended that the pump be pulled and preventive maintenance be performed and repeated every 10 years. The chemical feed equipment had some components that appear to be nearing the end of its life and would need to be replaced. All costs for those items are in the report.

**Storage Tank** –The storage tank was recently repaired and painted – prior to that it was in horrible condition and hadn't been painted since it was placed there. It is of adequate size to support the community. They estimate the age of the tank to be about 90+ years old. The maintenance work was done on a court order from a judge at a cost of \$267,000 – to be paid over three years (it is assumed that the future owner will have to take on this expense as payment has not been made yet). The firm believes that a new structure, with a 100-year life, could have been built for a cost of about 25% more. They don't feel that it has a value since it has reached the end of its useful life. Cost to replace the tank \$340,000.

**Water Distribution System** – It's constructed of about 100,000 feet of pipes that are 1 1/4" to 12" in diameter, valves, services, hydrants, curb stops, and meters. Hans said that there are a lot of lines (about 1/4 of them) that are less than 6 inches in diameter and current EPA standards don't allow lines to be less than 6 inches. The EPA has noted it in their inspection reports and expects those to be upgraded. They can't demand that it be done immediately, unless there is a pressure problem in a specific area, but they do expect it to be done in a fairly short time. They estimate the cost to replace all the undersized lines with 6" lines to be about \$715,000. Cost to replace 309 meters: \$93,000. The valuation of the water distribution system is about \$1,039,000.

**NLU INFRASTRUCTURE ASSETS AND IMPROVEMENT COSTS**

	Current Valuation	Immediate and near term Capital Improvement Cost
<u>WASTEWATER</u>		
Wastewater Collection System	\$715,000	----
Wastewater Treatment Plant	----	\$750,000-1,300,000
<u>WATER</u>		
Water Product/Treatment	\$77,000	\$111,000
Storage Tank	----	\$340,000
Water Distribution System	\$1,039,000	\$93,000 plus \$715,000 in main replacement costs
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	\$1,831,000	\$2,009,000 to \$2,559,000 plus main improvements