

# SAND HILL RIVER WATERSHED DISTRICT

April 21, 1995

Minutes of Information Meeting, Ditch 98-148

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The meeting was called to order by President, Hanson at 9:09 AM April 21, 1995 at the Legion Club in Crookston, MN.

Board members present: Roger Hanson, Harold Vig, and Daniel Wilkens.

Others Present: Lawrence Woodbury, District Engineer, Leona Wilkens, Gary Letnes, Don Andringa, George Campbell, Charles Sylvester, Paul Dragseth, David Sylvester, Allen Dragseth, Blake Carlson, Richard Evenson, Lyle Wilkens, Robert Boucher, Chuck Wilder, and Doug Chandler.

President Hanson introduced the board and Engineer Lawrence Woodbury. Hanson gave a short presentation on what had transpired to this point in time, the purpose of this meeting, and what will be coming in the future. Hanson then turned the meeting over to Lawrence Woodbury. As material was being handed out, Lawrence went through his outline for the presentation. The project covers 11.4 square miles. He explained the difference between 3 to 1 and 4 to 1 profiles and pointed out the responsibilities of the ditch improvement project in regards to fixing unsafe road slopes at the time of improvement. Various aspects of 3 to 1 and 4 to 1 slopes were discussed at length as were the cross sections in the handouts. Many culvert questions arose, with Lawrence furnishing elevations on all the culvert crossing in the project. Questions about ditch capacity were asked. Lawrence explained how based on experience Houston Engineering uses a 10 year frequency storm event as a design criteria. This gives the best value between costs and drainage in the valley. How culverts and ditches work together was explained. Culvert sizes were discussed. If a culvert has water the same height on both sides when a major rainfall event takes place the culvert is not holding up the flow of water. If the culvert is sized properly there is very little difference between upstream and downstream elevations. Blake Carlson, Polk County Ditch Engineer, stated that he had surveyed elevations on the various crossings at high water and found very little difference at each crossing. He found one tenth of an inch in most locations. The three field crossings were discussed. It was stated that two of the crossings were building sites and one was a field crossing that has been abandoned for 20 years or more. Someone will ask the two landowners if they would like to include this bridge in the project or remove it from the design. Section 7 Hammond township requested looking at the possibility of running water both north and south on the west side of the section. At present the water is supposed to flow north, but in reality the section should be split in half and the water allowed to go either way. Lawrence then went through the cost estimates item by item. A question about how close together do you install double line pipes was asked? As close as possible while still allowing for compaction between the culverts was the answer. On a six footer it would be between three and six feet. The last question was is a filter strip necessary? The answer to that comes right out of chapter 103 D, of Minnesota law. Yes, anytime you send out viewers, filter strips are required to be established. Dan Wilkens asked what side slope would be preferred if this project proceeds? All present said they would like the 4 to 1 slope as it would save in maintenance costs over time and be much easier to maintain. There being no further questions the meeting was adjourned at 12 noon. President Hanson thanked everyone for coming and stated if there were any more questions that arose to please call the watershed office and we would get the answers.

Respectfully submitted,

Daniel Wilkens, Treasurer SHRWD