

Special Meeting for the Sturgeon Island Bridge - November 8, 2020

The meeting was called to order at 6:02 PM by Chairman, John Wesely. Others present were Supervisors Heidi Kroening and Mark Dunaski, Clerk Scott Danelski, and Pine County Engineer Mark LeBrun. Absent Treasurer Ron Mossberg and Tom Wilson of Erickson Engineering.

Also in attendance, in-person 29 residents.

STURGEON ISLAND BRIDGE # R0726 :

The Sturgeon Island Bridge # R0726 was discussed. Pine County Engineer Mark LeBrun was present to give a presentation of options for replacing the existing structure with a new bridge. LeBrun explained that the Windemere Township Board has signed a cooperative agreement (State Aid Project # 058-599-045) with Pine County to replace the existing structure and the purpose of this meeting was so that residents could have input on what type of structure will be replacing the old bridge.

LeBrun explained that the project qualifies for funds from the MNDOT Road & Bridge Fund which caps the total cost to Windemere Township at \$20,000.00 (\$10,000.00 for Engineering Costs & \$10,000.00 Construction Costs), provided the new structure follows the MNDOT's guidelines for bridge structures. For roads that have less than 150 cars per day, the new bridge will need to be constructed to a 2-lane traffic bridge with a minimum bridge deck width of 20', and the bridge will also need to have a crash barrier railing.

The current bridge structure only has a 13' 9" bridge deck width and does not have a crash barrier.

LeBrun went on to discuss four different options of bridge styles and three different examples of bridge coverings that could be used to replace the existing structure and they are as follows :

1) Option # 1 (Single-Span Timber Bridge w/ Timber Railing)

Advantages of this option are it is aesthetically pleasing to the eye, the bridge will have an approximate life span of 50 - 55 years, construction will only take 6 – 7 weeks to complete, maintenance is very manageable for the township, it has a lower cost than other options, the DNR prefers this type of structure as it does not have a false bottom in the channel, and it allows for a cover to be placed onto the bridge at a later date.

Disadvantages of this option are that it does not work well on high-volume traffic or heavy truckload traffic. LeBrun believes this option to be a good option since traffic volumes on the road are less than 150 cars per day.

2) Option # 2 (Two-Span Timber Bridge w/ Timber Railing)

Advantages of this option are aesthetically pleasing to the eye, the bridge will have an approximate life span of 65 – 70 years, construction will only take 6 – 7 weeks to complete, maintenance is very manageable for the township, it has a lower cost than other options, the DNR prefers this type of structure as it does not have a false bottom in the channel, and it allows for a cover to be placed onto the bridge at a later date.

Disadvantages of this option are that it does not work well on high-volume traffic or heavy truckload traffic and a pier will need to be placed in the center of the channel which may hinder water traffic under the structure.

3) Option # 3 (Concrete Span-Bridge w/ Timber Railing)

Advantages of this option are the bridge will have an approximate life span of 75 – 80 years, it works well on high-volume traffic or heavy truckload traffic, and the DNR prefers this type of structure as it does not have a false bottom in the channel.

Disadvantages of this option are construction will take approximately 3 months to complete, it has a higher cost than all other options, the township may have maintenance issues over the years as the bridge deck deteriorates, and it is not a viable option for the township if they want to replace the structure in the year 2021.

4) Option # 4 (Concrete Box Culverts)

Advantages of this option are the culvert will have an approximate life span of 75 – 80 years, it works well on high-volume traffic or heavy truckload traffic, construction will only take 3 -4 weeks to complete, it has a lowest cost than all other options, and maintenance is minimal (set-it and forget-it).

Disadvantages of this option are that it is not very aesthetically pleasing to the eye, it will take more than one box culvert to fill the span so piers will need to be placed in the center of the channel which may hinder water traffic under the structure, and the DNR does not prefer this type of structure as it has a false bottom in the channel. LeBrun does not recommend this option.

Next, three different examples of bridge coverings were presented, and the residents were allowed to ask question regarding replacement of the current structure.

After the Q&A session was completed, Chairman Wesley called for a show of hands from the residents in attendance for each bridge option and bridge covering example that Pine County Engineer Mark LeBrun presented this evening. The vote count totals are listed below :

Option 1 (Single-Span Timber Bridge w/ Timber Railing) - 22 Votes

Option 2 (Two-Span Timber Bridge w/ Timber Railing) - Zero Votes

Option 3 (Concrete Span-Bridge w/ Timber Railing) - Zero Votes

Option 4 (Concrete Box Culverts) - Zero Votes

Example 1 Bridge Covering - 16 Votes

Example 2 Bridge Covering - 1 Vote

Example 3 Bridge Covering - 3 Votes

The Board plans to take into consideration all input given this evening by Pine County Engineer Mark LeBrun and the residents in attendance regarding the replacement of the Sturgeon Island Bridge # R0726. The Board's plan is to have a final decision made on how the township will move forward with the project at the next regular monthly Board meeting which will be held on November 12th, 2020.

ADJOURN :

Motion made by Wesely, seconded by Dunaski to adjourn the meeting at 7:29 PM.

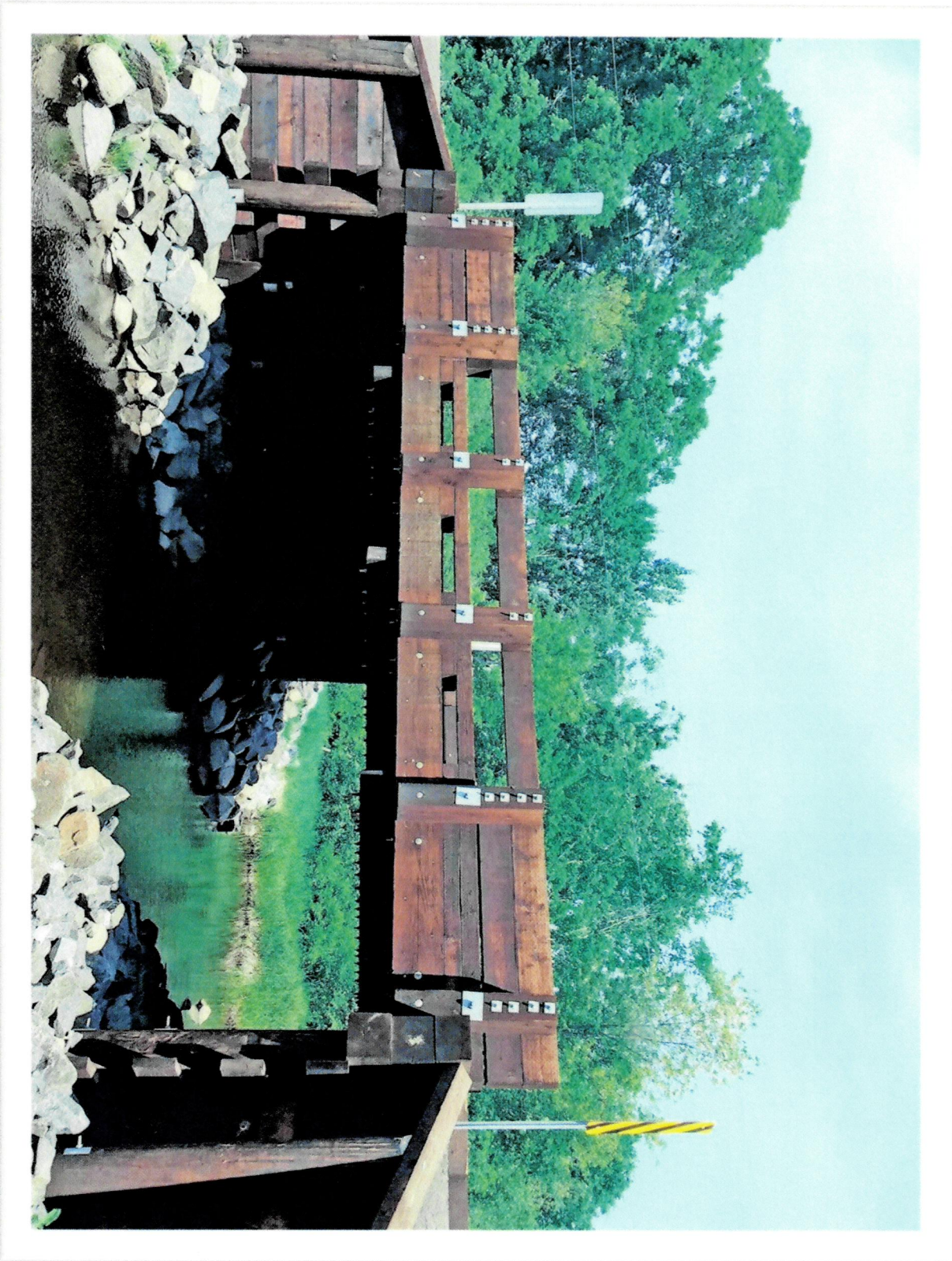
Roll Call Vote Taken: Wesely – Aye, Kroening – Aye, Dunaski – Aye. Motion Passed 3 Aye – 0 Nay.

RESPECTFULLY SUBMITTED :

APPROVED :

Clerk, Scott Danelski

Chairman, John Wesely



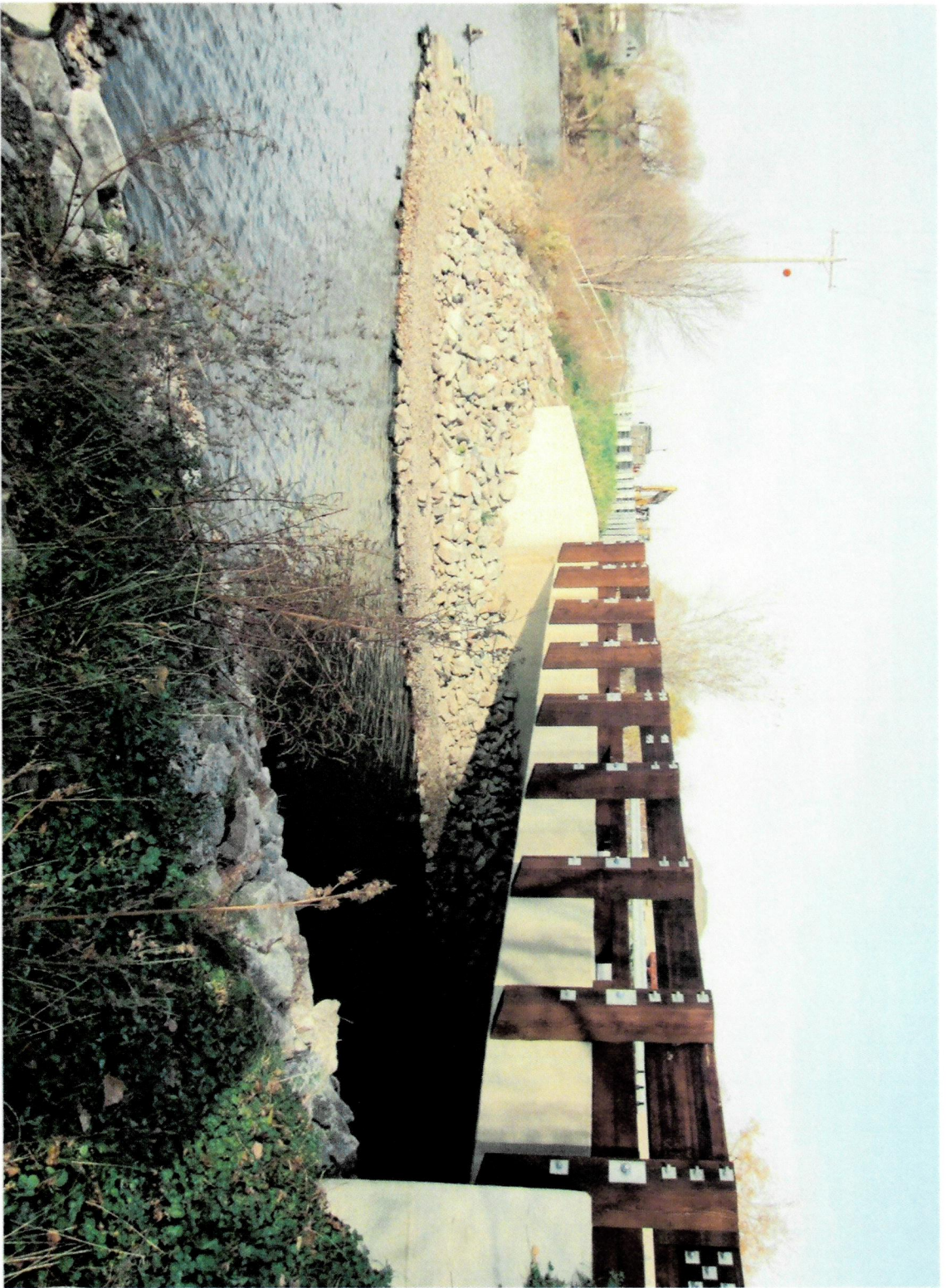
Option 1 - Single-span timber

Erickson Engineering Co., LLC



Option 2 - Two-span timber

Erickson Engineering Co., LLC



Option 3 - Concrete Bridge w Timber Railing

Erickson Engineering Co., LLC



Option 4 - Concrete Box Culverts

Erickson Engineering Co., LLC



Covered Bridge - Example 1

Erickson Engineering Co., LLC



Covered Bridge - Example 2

Erickson Engineering Co., LLC



Covered Bridge - Example 3

Erickson Engineering Co., LLC