

**THE COMMISSIONERS OF ST. MICHAELS**  
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Climate Change/Sea Level Rise Commission  
Regular Meeting  
Thursday, April 11, 2024, at 4:30pm

**CALL TO ORDER** –Meeting opened at 4:30 pm. Pledge of Allegiance.

Present: Roy Myers, Dennis Glackin, John Marrah, Dr. William Boicourt, Doug Rollow, Dr. Andrew Thaler, and Jim Tapp from the Waterways Management Advisory Board (joined via zoom) Steve Ball, Town Planner, Commissioner Breimhurst and Town Staff Kris Kakabar. Guest Presenter: Casey Rauch and Chris Schoenster from Rauch Inc. and Shelley Rensch from Annapolis Landscape Architects. Public attendees: four in person. Guest Presenters from St. Michaels High School ACE after school program: Payne Kilbourn, ACE Mentor, and students: Alexandria Rockwell, Hristos Mihalis, Immanuel Coleman, Thomas Weller, Constadinos Mihalis, Benjamin Chance.

**Minutes**

Mr. Myers requested a motion to approve the Climate Change/Sea Level Rise minutes from March 14, 2024, moved by Mr. Marrah and seconded by Dr. Boicourt, Mr. Glackin abstained from the vote, which carried on a vote of 5-0.

**Public Comment:**

None.

**Items from CC/SLR Commission for discussion:**

*St. Michaels High School ACE after school program presentation on flood mitigation of St. Michaels Harbor*

ACE Mentor, Payne Kilbourn, introduced the ACE program and students involved in this project along with Alek Joseph, a prior ACE member and St. Michaels graduate now a mentor and works at Lane Engineering.

Their project, “*St. Michaels Harbor Flood Gate*”.

The ACE group found that St. Michaels is experiencing flooding during high tides, which is projected to worsen in the future. Therefore, they reviewed flood maps, the 2020 Stormwater Infrastructure Study and physical flooding episodes. Analysis of the data directed their study to look for least restrictive harbor access flood mitigation methods for 2100 and beyond. Initially they drafted two options: Option A, a 1225 ft. seawall spanning the entire harbor with only one gate and Option B, two areas each with their own gate spanning 1407 ft. of seawall. They analyzed two potential solutions a levee or steel sheet pile to manage the channel width of 40 feet. The steel sheet would normally remain at rest on the bottom of the channel and raised as needed for flooding events to 10 feet above projected mean mean rise. They performed a cost-benefit analysis and timeframe to completion analysis for both options, including permits/environmental assessments, site prep, and barrier prep. They determined the materials for the levee construction for option A and B, respectively totaling \$5,116,323 and \$5,204,820. Whereas the steel sheet pile cost for option A and B respectively totaling \$770,882

and \$1,006,701, with the gate support assembly installed being \$48,000 and the gate cost total at \$20,750. Post analysis led them to determine that the steel gate Option A would be the most feasible from a cost and time standpoint coming in at \$791,632 over a 1 year 3 months period.

The attendees posed questions and different perspectives to the ACE group regarding their project and additional considerations to aid them to further expand upon their project analysis (add a recreational perspective). The ACE group also performed a cost-estimate for a gate on San Domingo Creek estimating to be \$161,000. The ACE group considered an environmental impact upon the harbor waters by making dead zone correctives, holes in the gate, to allow the harbor to continue to flush itself naturally. The CC/SLRC and Steve Ball, Town Planner, thanked the group and may consult with them in the future.

#### *MDEM Advanced Assistance Grant – Status Update on Cherry Street/Honeymoon Bridge-Harbor Walkway/Mill Street/Burns Street Study*

A layout of the study was presented by Mr. Myers prior to Casey Rauch taking over to explain their presentation for the Commissioners. This is a redevelopment project, in which we need to deal with existing conditions and private properties as well as flanking (flooding) around the edges. Phase I of the project began at the Town office area and we will reference elevation 5 in 2050, which incorporates 1% sea level rise, high tide, and storm surge. Options reviewed included: no action, backfill, berm/dike/levee, or a bulkhead at the seawall. We are looking at raising the bulkheads by 3 feet with backfill to the raised elevation of the bulkhead. If it was not backfilled, tide gates would be required to move the water out from the landward side of the bulkhead.

#### Option A: Mill Street study area

First option: The plan provides a cross connection into the CBMM parking lot (if bi-directional, approval from the CBMM will be needed). Mill Street and Burns Street will be raised to 5 feet and will be bi-directional. We will continue pedestrian access from Honeymoon Bridge all the way to the Crab Claw Restaurant. The CBMM voiced concern that the culvert plans be designed so it will not act like a dam. Chris Schoenster, with Rauch Engineering, has investigated various culvert types to provide the most effective for this location in the 2-, 10-, and 100-year storm events. We should note that the CBMM may wish to move the buildings on Mill Street, however this is not part of this study, and a separate study would be required to investigate this option. This will also be noted that the bed & Breakfasts are also outside the scope of this current study, but there are methods available to protect them. It is recommended that the blue water area on the slide be depicted to be “like an Isabelle occurrence and not every day”; in 2050 (3 days) and in 2075 (6 days) it is predicted to be above elevation 5 flooding depicted from our current studies. Mr. Schoenster can put a slide to explain the frequency of elevation 5 prior to all the blue.

Second option: Does not provide a cross-connection in the parking lot. In this version, the low areas will have fill. Question came up regarding moving the telephone poles and the cost involved is dependent if there is fiber optics on it, underground is an option. We should show Mill Street and Burns Street raised to 5 feet on the slides. As per discussions with CBMM, it is our understanding that the Crab Claw Restaurant will be raised to 5 feet, which Rauch has considered in their plans. A consideration is to leave the poles as they are with a widened sidewalk around them allowing for 3 feet on each side and move the poles in the future. Another area to be included is landscaping considerations. Rauch has a tree mitigation planting plan for the trees being removed, it is recommended to show this on a slide. Also, there was a previous diagram where you build the bulkhead at the lagoon like a stage dome at elevation 5, include this picture also.

Shelley Rentsch spoke about keeping the aesthetics in alignment with the Historic District. The plan is to tie in Cherry Street at elevation 5 to avoid tide gates, as we have Mill St., Burns St., and the Promenade all at elevation 5. Honeymoon Bridge is a cultural icon, in both schemes we suggest raising it to elevation 5, which

may be rebuilding it in-kind with the planters to elevate it to the new walkway. In so doing, we would widen it to 10 feet to include the current upper and lower walkways, hence becoming ADA complaint for funding purposes, and naturally tying into the widened design at the Promenade of its future 10-foot width. Previously it was mentioned that the walkway easement from Honeymoon Bridge to the Crab Claw Restaurant is understood to be 15 feet, the consultants used the ultra information but plan to verify this information further. Steve Ball, Town Planner, stated that in the records on the original plat it was 5 feet and we do not have additional documentation to state otherwise. Mr. Myers asked for clarification, Rauch will further investigate and note it accordingly.

#### Option A:

- Lift the bridge but not change anything on the water side.
- Lift all areas to elevation 5 with back fill towards Cherry Street where it ties into grade. On the public side, filling in the delta near the gut to prevent flanking along with a 5-foot retaining wall. No tide gates required.
- On the CBMM side, fill to 4-feet and tie into a stormwater drain collection system. In so doing the current upper walkway may require to be raised 8 inches in some areas to provide most of the CBMM proper overland flow to 4-foot, with no tide gates. Emphasize the benefits of this feature to the CBMM.
- Expand the Promenade walkway, up to the raised bulkhead, and Honeymoon Bridge to 10-foot width.
- Boaters' access/disembarking options will be explored by Mr. Schoenster, and he will draw conceptual plans for this area.
- Brick walkway above solid retention wall on Cherry Street side tying in at elevation 5.

#### Option B:

- Conceptually becomes an extension of Honeymoon Bridge.
- Requires fill at the public/Town side, at the boardwalk flush with grade and past the CBMM it would be elevated. It would need tide gate on CBMM. This is a wooden walkway option for the Historic District. The Town office is in the Historic District, but part of the parking lot is not. If the Town side is not filled flanking (flooding) would be an issue to contend with, hence this is not a feasible option. We plan to maintain the resiliency at the gut by not elevating it to elevation 5. For the vehicular and pedestrian connections, we will elevate to 5. Schemes for the Town public park open space with fill allows for more land space to the water's edge for an event in the future, whereas no fill decreases that land space. Stormwater management will need to be addressed in the CBMM area and the upper right corner of the design in this scenario. For CBMM, this scenario also destroys the overland flow of walkways around their park. A railing would also be required in this scenario.
- Rauch should document the thought process for utilizing fill emphasizing the cost-benefit analysis for the decision towards this scenario. It would also be helpful to provide the CBMM this cost comparison of the two options for their side to assist them with their informed decision process for stormwater management.
- Rauch explained how they analyzed the ability of the stormwater management system be able to manage this additional influx of water. And an onsite stormwater management pond.

#### Option C:

- A hybrid of both of both options.
- Mr. Myers reinforced that this is one unified project with the Town and CBMM, which needs to reflect being in the best viable interest for the overall Town, which may require both parties to concede a little. Hopefully, the cost-benefit analysis of materials of the above two options will aid in making this determination for both parties easier. Therefore, at this time remove Option C.

This has narrowed the options down to the following two:

- Brick versus wood boardwalk for the walkway.
- Solid fill underneath or no solid fill underneath.

Recommended additional charts also include (please refer to above notes for other recommended charts and notes be included in the final presentation):

- Involvement of neighboring parties, the B&Bs and the CBMM. Include the number of meetings with each group, and their input options suggested.
- Initially beginning with 7 options which have been narrowed down to 2 options.
- Option A – benefit of no stormwater management issues. Option B – will have several stormwater management concerns.
- Option A – more cost effective on the Town side. (To be determined on the CBMM, after cost-analysis performed.) Option A is consistent with Honeymoon Bridge, it allows the CBMM to maintain all their current overland pathways across their campus, and stormwater management concerns and ultimately the cost benefit.
- Consultants should make a final recommendation based on their data and findings which option is the most viably preferred choice.

Commissioner Breimhurst asked about the elevation of the current elevated walkway on the CBMM side in front of the administration buildings, which ranges from 3.5 to slightly above ft. If you take this walkway at 5 feet across Hollis Park to Honeymoon Bridge, then you have the upper walkway accessible for the 6 days of flooding expected in the year. The lower walkway was covered over 45 days last year and by 2050 it will be 1.5ft under water every high tide. This will impact the boaters disembarking. The option could be to get rid of the upper walkway and build the wider lower walkway in place.

#### Cherry Street Concept 1:

- Paired with brick sidewalk that we pair into where it is now at elevation 5. The overlook is at 3-3.5 ft. higher with steps down to landing area. Not changing the private edges. Does the Town have a responsibility to raise Cherry Street for the B&B owners? Shelley Rentsch commented that there are ways to solve the water issues, but we cannot work on private property. Casey Rauch previously spoke with the owner of the Hambleton Inn, Mr. Beevers who expressed to Mr. Rauch that as long as it is not creating issues for me, I'm not interested in solving any issues. It is not assumed to make them build to elevation 5. The question remains where does the Town responsibility end. Mr. Myers recommended following up with the B&B owners to keep them apprised of information and plans while obtaining their thoughts in respect to these options. We need to be cognizant of fire apparatus code and accessibility concerns with options posed. We have not assumed any specific design to the adjacent landowners but if they advise the Town of what elevation you wish to build your threshold to and tell us the grade for the road then they can design their property to connect to it. Casey Rauch recommended looking into what elevation we can get it to because it is public infrastructure that way, they can decide how to address concerns on their property.

#### Cherry Street Concept 2:

- Boardwalk to Honeymoon Bridge built upon pilings to 5 feet from Cherry Street. This walkway is built on pilings, with the water flowing freely underneath.
- If the property owners on both sides raise to 5 feet the concern would be stormwater runoff. Discussion with Victorianna Inn owner previously showed he is amenable to working with the Town but did not want to take on full brunt of the cost.
- Chris Schoenster has researched mitigation grants in these situations. FEMA hazard mitigation grants the Town as the sub applicant to MDEM main applicant have the decision to determine who to include in the grant i.e. the

private property owners and CBMM. As a Town you have to want to include this in share this with MDEM. An integrated approach is beneficial. Kristen Greenaway (Chesapeake Bay Maritime Museum) has expressed wishing to integrate with the Town for these projects and funding. Consideration needs to be taken for setting a precedence in this site and moving forward for phase 2 and the potential integrated partnerships there also. Shelley Rentsch posed this thought as a guide: "Is it necessary to make the integral infrastructure changes to move forward with the project? If so, then it should be included." Consideration needs to be taken to any diagram we show, fire access must work and be available.

Casey Rauch will redo the slide show for the CC/SLRC to review at their next meeting. Have another discussion/update meeting with the B&Bs and CBMM. Mr. Myers will speak with Jon Clarke of Higgins Boatyard, who has already begun to raise some of his boat slips.

Plan for final sign off by the new Commissioners, so we may postpone until the June meeting depending on where we stand with everything. Commissioner Breimhurst's point regarding linking a higher walkway from Honeymoon Bridge to the CBMM waterside properties as an interim should be reviewed. Casey Rauch interjected that raising Mill Street would carry a higher priority for emergency vehicle access over pedestrian walking access.

#### **Other Business:**

*Update Proposed Grant Guidance Meeting with Amanda Pollack, P.E. Water Resources Engineer with Center for Watershed Protection, Inc.*

She will put together a 5-year plan to review with CC/SLRC and when ready to take to the Commissioners incorporating resources and grant funding available for a construction grant and a timeline schedule for completing these milestones. She will help us determine matching fund grants.

#### **Public Comment**


No comments.

#### **Adjournment**

Mr. Myers made a motion to adjourn the meeting. Moved by Mr. Marrah and seconded by Mr. Rollow and carried through on a vote of 6-0.

The meeting adjourned at 6:45pm.

Minutes approved as submitted by 5-0 vote in favor on the 10<sup>th</sup> day of May 2024.

  
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Roy Myers, Chairman