September 7, 2021

Port Bay REDI Project – SEQR Comments and Responses

Comments and responses received in regard to the Port Bay Barrier Bar REDI Project between June 4, 2021 and August 19, 2021 have been compiled below.

The following comments were sent by Don Zelazny in an email dated June 23, 2021:

1. A big red flag for the submitted information is the breakwall re-facement, so it's good if that was covered in the earlier call. 3-5 feet of encroachment is simply not acceptable for this (or any other) project, especially since it would then require dredging out the opposing shoreline. They sunk sheetpiling here once and they can do it again, and finding tiebacks shouldn't be that difficult. DEC is looking for less than 1-ft encroachment from the existing wall.

   It is in the best interest of cost to keep the old retaining wall intact and construct a new one directly in front of it. Staying within 1 ft for the existing alignment would likely require removal of the existing wall to drive the new wall, which would be expensive and likely cost prohibitive. The thickness of the marine grade sheet pile wall itself is approximately 12-18 inches. A gap between the new and old wall to infill and provide driving clearance will also be required. In addition, there are geotechnical concerns that a cantilevered pile wall would not work (due to drivability) and the new wall would need to be anchored, which would require room for an interior waler (and possibly more offset from the existing wall). Placing the whaler on the interior of the new wall keeps it from becoming a hazard to navigation on the exterior of the wall.

   The existing tie-backs can be located easily, but there is a lack of good record information to know where the existing tie-backs are deadman anchored (offset into ground from the existing wall face). The new tie-backs would have to be threaded between the existing and the new anchor wall would have to be located behind the existing to ensure the existing wall remains stable during construction of the new wall. The June 4 concept plan indicated an offset of 3 to 5 ft in front of the existing wall. The team has further refined the offset in the revised documents to 3 ft. The design team will continue to minimize this offset as the design progresses.

   Sections 2.2 and 2.3 of the *Port Barrier Bar REDI Project – Concept Plan Report*, dated 9/7/2021, includes additional discussion of inspection, analysis, and concept design of the pier and channel sheet pile wall.

2. Still some uncertainties regarding sediment modeling associated with the pier realignment. I know that it should help keep the channel open, but it also increases the length of the channel that might require some level of dredging. It would be good to get an estimate of ongoing dredge volumes. Estimates of ongoing dredge volumes focusing on the entire actual volumes dredged are most needed – not the obviously low 1,000 cf figure used int eh original Port Bay Bar planning documents which is magnitudes below what has been dredged each of the past several years.

The realignment of the pier shown in the June 4 concept plan submission has since been revised. The proposed design includes the encapsulation of the existing pier in its current configuration. Sections 2.2 *Port Barrier Bar REDI Project – Concept Plan Report*, dated 9/7/2021, includes additional discussion of inspection, analysis, and concept design of the pier.

3. Seconding (thirding) more detail about the erosion control methods will be required, especially what will overlay the Envirolok, and ongoing monitoring/maintenance plans.

   The proposed treatment of the bay side of the west barrier bar may include Envirolok bags or some other green-type solution that promotes habitat and vegetation. Plantings and seeding would be integrated with the Envirolok bags, if used. Section 2.5 and 2.3 of the *Port Barrier Bar REDI Project – Concept Plan Report*, dated 9/7/2021, includes additional discussion of bay side treatments and Section 4.0 provides a brief description of the maintenance and monitoring items that will be further developed prior to the submission of the Joint Permit Application.

The following comments were submitted via email by Jeff Auser and Lori Furguson on behalf of the Port Bay Improvement Association (PBIA):

1. We note on the base map that the stone wrap is shown at the end of the pier. This was previously identified by the PBIA as a significant obstacle to PBIA dredging activities. As the design drawings did not show this stone wrap, we assume it has been eliminated (thank you!).

   An interim set of plans that was sent to the PBIA in July 2021 did show stone wrapping around the pier. As noted in the comment, the plans have since been revised and no longer show this feature.

2. Given the trend towards higher lake levels such as what occurred in 2017 and 2019, coupled with large reported wave height during some of the more significant west and northwest storms, should we consider adding some additional height to the deflector wall, say an increase of 2-3 ft? During past storms sediment has been observed washing over the top of the existing deflector wall and it seems like an east thing to do now instead of later.

   The height of the deflector will definitely be considered as the design and coastal modeling elements are advanced. In addition, the design team will investigate the use of temporary precast concrete block (or similar) to extend the deflector wall specifically during navigation season as discussed during the project conference call on 8/19/2021. More information is included in the *Port Barrier Bar REDI Project – Concept Plan Report*, dated 9/7/2021.

3. East barrier bar – one of the PBIA's goals (as others as well) is to maintain the integrity of the east barrier bar. We think we understand the purpose of the breakwater and agree with the transition to a more traditional large stone protection at the east end. But are we weaving the west end of the east bar too exposed? What does the modeling show at the west end in the area closer to the channel where no additional protection is shown? In prior years we have seen evidence of material migrating into the channel from the northwest corner of the east bar and wonder if some modifications are needed here as well.

More information on the proposed east barrier bar design is included in Section 3.0 of the *Port Barrier Bar REDI Project – Concept Plan Report*, dated 9/7/2021. There is an area between the portion of the east barrier bar that is protected by the shadow of the west pier and the portion of the bar that is protected by the headland breakwaters that must be nourished by dredged spoils as part of the ongoing adaptive maintenance and management plan.

4. We note that the channel width is being reduced by up to 3' as a result of installing new sheet pile. Three ft may not sound like much but when we get two 30' long vessels navigating the channel simultaneously in opposite directions, a three ft reduction in width can pose some risks to safe navigation. We suggest that consideration be given to either widening the channel by removing material along the east bar and/or adding some sheet pile along the west end of the east bar to maintain the channel width. Note: the east side of the channel currently exhibits material sloughing into the channel from the east bar from time to time requiring periodic dredging. Sheet pile has the advantage of avoiding this material from sloughing into the channel.

   It is assumed at this point that the current limits of the dredging permit will be applied from the face of the new wall. Since the east barrier bar is part of the wildlife management area, we are not proposing changes (such as sheet pile wall) to the west end of the east barrier bar. Details regarding the current dredging permit and any potential changes will need to be discussed as part of the future permit submission.

5. At some point the drawings will need to include provisions for the navigation lights, signage, and area lighting (currently located in the pier) to be temporarily removed and reinstalled after construction.

   These details will be included in the final construction documents.

6. As an FYI, the area just to the west of the pier is a popular recreation spot for many of the "locals". While not a great beach area, it is used for that purpose (swimming, etc..). With the addition of large stone fill in this area we note that the locals will be unable to safely use this shoreline for swimming and general recreating after construction. While we understand the purpose of the proposed modifications in this area, we wanted you to be aware of current uses that will be negatively impacted by the proposed work plan.

   Thank you for the information. Section 2.4 of the *Port Barrier Bar REDI Project – Concept Plan Report*, dated 9/7/2021, discusses this area of the project. The intent is to keep this area natural. Shoreline modeling and protection of the sheet pile anchor wall will be taken into consideration. The concept plans show an armored solution to quantify the worst-case scenario for impacts below ordinary high water elevation.