



Jared Eigerman <jeigerman@gmail.com>

Waterfront West

1 message

James Brugger <jamesmbrugger@gmail.com>

Wed, Dec 5, 2018 at 4:53 PM

To: Andrew Port <APort@cityofnewburyport.com>, Jared Eigerman <jeigerman@gmail.com>

To the Waterfront West Ad Hoc Committee,

This is basically the testimony I gave on Thursday November 29th. In addition are calculations regarding what the displacement of 7 feet of fill on the site would mean.

The first item is regarding the small boat lift. The preliminary plans presented over the last year eliminate most of the boat yard elements of the current property except for the small boat lift left on site. As others have mentioned, the proposed layout is not conducive to a real working marina that includes the routine putting in and out of boats at that location and therefore not practical. As has been stated, there are better options up river that do not create a hazard and interfere with a vibrant pedestrian area.

Leaving the small boat lift is a token in my opinion and gives the NED unwarranted claim of this particular marine dependent use and therefore I do not support it remaining. Or, if it does remain, it should not be considered a marine dependent benefit to the city in any trade off calculations as the project has been presented thus far.

The second item is flooding and projected sea level rise. As we saw this week, an astronomical high tide of about 9 ft 8 inches (per the tide applications) with high river flow and possibly minor surge results in minor flooding at the WW site at old Black Cow ramp and at the marsh next to Michael's Harborside. Living on the river, I am acutely aware of the effects of extreme high tides, high river flow levels due to precipitation/snow melt and storm surge. With the projected climate change are predicted increases in storm activity, both in frequency and intensity. That means more rolls of the statistical dice of there being large precipitation and storm surge events occurring in the future. (The NED project takes this type of flooding into account.)

On top of that, one must add to the projected sea level rise. Taking the projected 6.6 – 8 ft sea level rise by 2100 that was discussed on November 15th by Rick Taintor and the city engineer into account, that puts the parking area under the buildings in a permanent state of ~2.5 ft to 4 ft of water at the twice daily high tides.

Even in 2050, a little over 30 years from now, less than a standard mortgage period for the first residences, that might be built, the rise of 7 inches to 2 ft, means that the parking area will flood 2 - 3 ft a couple of times every year, assuming 2018 is representative.

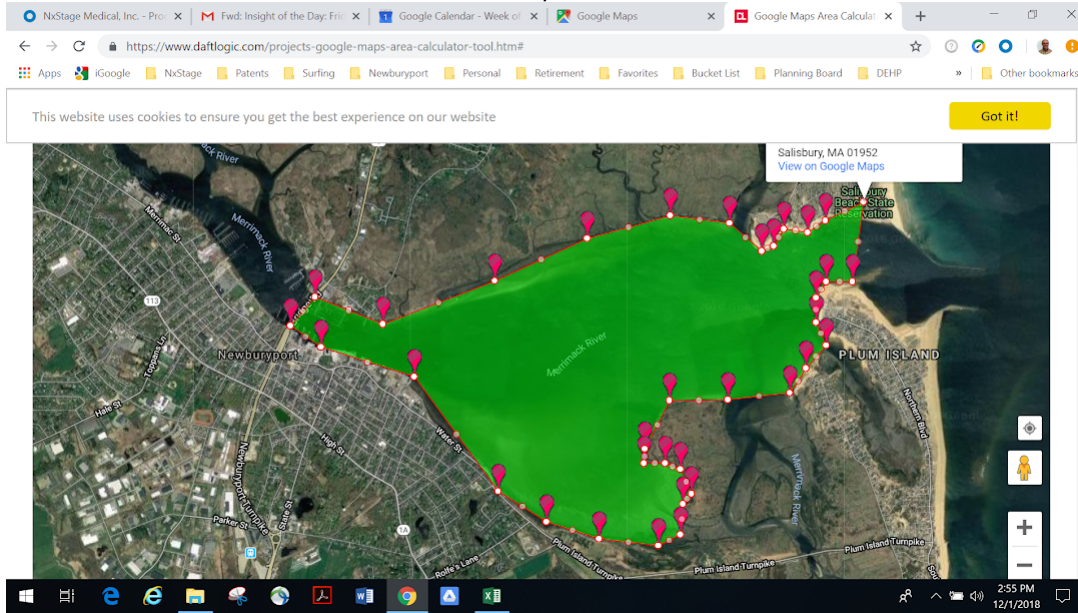
Not acting according to the consensus regarding scientific projections of climate and weather instability, combined with sea level rise, is untenable to me. As stewards of Newburyport's future, we need to make sure we are not passing the buck to our children on this.

Moving forward with a residential and commercial project like what is being proposed, on a low section of the river front, becomes an ethical issue for me. We should not put people in that space knowing that the essential feature of parking, not to mention basic livability, being at risk with a twice daily tidal flood. In my opinion, we cannot create a special zoning district that creates a future liability for the city and its future residents.

Fill of the area was stated in the November 15th meeting as something that is not being proposed. However, I believe that needs to be put back on the table and is the only way I can support this project given the projections. Based on what I understand, that is the only safe and ethical path forward given the projected rise in sea level and increased storm activity. I think the information presented calls for at least 7 ft of fill if we want WW to conservatively support an 80 – 100 year project life.

The rate of sea level rise is about 1 inch a year in 2100 based on the chart Rick Taintor provided, or about a foot a decade. So, this project is still limited to about 150 years in my estimation, even with 7 ft of fill. I believe raising the site grade needs to be part of the solution.

Regarding the concern about the displacement of water caused by fill on this site. The math is simple. You take the volume of fill and divide that by the surface area of the water concerned, in this case, the lower portion of the Merrimack River.



The area of the Merrimack and Jappa in the vicinity, see clip above using <https://www.daftlogic.com/projects-google-maps-area-calculator-tool.htm#>.



The google website calculates the area colored green (notice all the area near the Plum Island bridge would be part of the area as well) and gives 1563.99 acres.

The math is: $(2.5 \text{ acres} \times 7 \text{ ft}) / 1564 \text{ acres}$, which calculates out to 0.003 inches increase in water level (taking the full area makes it even less). For reference, the Human Hair is on average 0.004 inches in diameter. The issue raised regarding fill causing additional flooding is a non-issue.

Given the ratios of water covered area to the volume of fill, it is like tossing a rock in a swimming pool.

Thanks for all the effort going into doing the best for Newburyport.

Best Regards,

James Brugger
4 Savory Street
Newburyport, MA 01950
978-376-8033