



Review of paragraphs 4.15 to 4.17 of the East Sussex Minerals and Waste Plan with regard to Marine Landings with particular reference to the comments of The British Marine Aggregate Producers Association (BMAPA) who maintain, there is sufficient wharf capacity to make significant landings in East Sussex for the foreseeable future.

I have reviewed the data on Newhaven, Shoreham and Rye Harbour the availability of vessels to access these ports and the protected berths therein and conclude that the statement by BMAPA is incorrect. It appears to me that BMAPA has reached that conclusion based on the geography of the protected wharves and the past low volumes of aggregate actually landed. These data do suggest sufficient capacity exists but without proper examination of the reason for these low volumes, it is possible to draw an incorrect conclusion which, in my opinion, has occurred on this occasion.

The statement made in paragraph 4.15 of the East Sussex, South Downs and Brighton and Hove Waste and Minerals Local Plan, adopted in 2013 (the MLP) acknowledges the local need for the material and states that although some wharves have been mothballed and others are failing, sand, gravel and crushed rock are landed by small vessels to the wharves at Newhaven, Rye and Shoreham port and it is still economically viable for operators to continue to import materials through these existing wharves. I have addressed below why that is also incorrect and importantly why the ports suggested are not accessible for sea dredged operations.

Further, in paragraph 4.17 of the MLP, BMAPA maintains that there is a long term future for smaller vessels to import to smaller wharves and local operators have indicated that this is the case. **On this basis, there is sufficient wharf capacity to make significant landings for the foreseeable future.** Paragraph 4.17 then goes on to identify, correctly, that “the principal constraint on the level of marine landings during the Plan period is not the level of marine reserves but the security of port access (loss of wharves to other uses), channel and berth restrictions, vessel availability and investment in modern wharf infrastructure”.

I have therefore carried out a review of each of the three port locations and of both aggregate dredger and small vessel availability and report my findings below.

---

## **Newhaven : North Quay**

Access to wharves on the North Quay has only been for small vessels which has resulted in them being no longer used for sound economic reasons: -

- They are only accessible after passing under the A259 road bridge that has a navigation restriction of 90m LOA and Beam restriction of 14m.
- The berths are drying so only vessels that can accept “Not Always Afloat but Safe Aground (NAABSA) conditions would use these wharfs.
- Vessels matching these criteria are generally no longer available nor being replaced.

NAABSA wharfs are used by Rhine trader type small coasters with reinforced hulls. They are designed to take the stresses when they are grounded on the wharf during/after discharge until the tide returns. The vast majority of aggregate dredgers and the larger self-discharge vessels are not NAABSA compatible and would suffer significant bottom damage in taking the ground.

A review of available small dredger vessels that could use the North Quay berths show that CEMEX no longer have small dredgers and the only two remaining are the Arco D and Dart both owned by Tarmac. It is significant that Tarmac abandoned its Newhaven operation on the North Quay as it was no longer economically viable. Anecdotally, I understand that the reasons for that decision were access restrictions and attendant tidal delays (vessel demurrage costs) and also the quay would require very considerable investment for continued use. My belief is that the combination of very restricted access (low volume high cost) and replacement quay costs is most unlikely to see the protected quays on the North Quay returned to commercial use.

**The port of Shoreham:** Shoreham also has navigation restrictions to the protected berths where vessels have to pass through Philip Lock. Philip Lock has a beam restriction of 16.4 metres and the berths beyond are NAABSA. This navigation restriction has similarly to Newhaven North Quay led to the demise of aggregate import through Shoreham port.

Shoreham does have a non-protected quay (the Outer Berth). This berth can accommodate vessels to 120m LOA but again it is a drying NAABSA berth. The outer berth is operated by Sussex Port Forwarding for general cargo handling which in my view rules out aggregate importation. Shoreham port is not rail connected.

**The port of Rye (Rastrum):** The restrictions at Rye are greater than at either Newhaven North Quay or Shoreham port. The Rastrum berth is accessed via the river Rother which has a maximum beam restriction of 13m and an LOA of 89m. The Rastrum berth is tidal and the (MV Pluto - Draft 4.216m - LOA 83m - Beam 11m) that is used for occasional processed aggregate imports and vessels used by Long Rake Spar Ltd which are of similar size can only access the berth on around 50% of the available tides per month. Examples are: -

- Jan 2016 adequate depth of water for a Pluto type vessel was 28 of 62 tides.
- March 2016 adequate depth of water for 31 of 62 tides
- June 2016 adequate depth of water for 29 of 60 tides.

The port LOA and channel beam navigation restriction of 13 metres rules out dredger traffic to Rye. The Port of Rye is not rail connected.

---

**Small vessels:** Paragraph 4.17 of the MLP states: *The British Marine Aggregate Producers Association (BMAPA) maintain that there is a long term future for smaller vessels to import to smaller wharves and local operators have indicated that this is the case in East Sussex.*

This statement maintains that there are adequate small coasters available to make deliveries to the restricted wharfs in Newhaven, Shoreham and Rye. I disagree; this may have been the case a decade ago but is no longer true. Operational costs are the same for crew, boatmen and pilotage for a small coaster as a larger capacity vessel. Fuel use per tonne (the primary cost) is also greatly reduced in larger vessels which cost pressure has taken its toll on small ships.

Within the last decade Laphorn who operated the Hoo boats for over 50 years went into liquidation. They were followed by Union Transport Ltd and very recently by Absolute Shipping. The majority of small coasters and self-discharge fleets in the main have now been lost to the market.

A further factor is that shore side cranes, needed for unloading, are very capital intensive, have high maintenance costs and for most small locations the cost of crewing a crane that lies idle for long periods is not sustainable. These market pressures have required the size of self-discharge vessels to grow to fill the need but in so doing have ruled out the use of many established small port locations.

**Self-discharge dredgers:** The long East Quay at the mouth of the River Ouse at Newhaven with deep water does not have the same access restrictions as berths on the North Quay. It can accommodate large dredgers such as the MV Britannia Beaver (Draft 6.24m - LOA 100m – Beam 17.35m) and the MV Charlemagne (Draft 8.5m LOA 101m – Beam 20.8 metres). These vessels, which can carry cargos of 4600 tonnes and 9600 tonnes respectively direct from the dredging grounds, would benefit when using the East Quay from economy of scale, there being no need for shore side cranes and access at all states of the tide.

**Conclusion:** The BMAPA assertion that *‘there is a long term future for smaller vessels to import to smaller wharves and local operators have indicated that this is the case in East Sussex’* is flawed for the reasons set out above. It is evident from the closure of marine dredged aggregate wharves on the North Quay that the shortage of land won construction aggregate resources in East Sussex can only be supplemented economically by the importation of marine aggregates on large self-discharge dredgers discharging their cargos at deep water ports, such as Newhaven East Quay, where immediate processing can be carried out.

*Alex Stanmore*

Alexander Stanmore MSOE, MILT, MIRTE, MITA.

24<sup>th</sup> March 2017