



## **Written Representation on Sizewell C DCO application September 2020 and Changes January 2021**

### **1.0 Introduction**

Felixstowe Town Council (FTC) welcomes the opportunity to submit this Written Representation concerning EDF's Application for a Development Consent Order granting Development Consent for The Sizewell C Project, including Changes submitted by EDF in January 2021 which were subsequently accepted by the ExA in April 2021

FTC takes no stance of principle in relation to nuclear power generally, or whether the coastal site at Sizewell may be an appropriate location.

The new power station is not immediately local to Felixstowe; hence FTC will limit our response to those aspects which may specifically affect the town, its economy or wellbeing.

Please note: All references in this document to the Transport Assessment (the TA) should be interpreted as relating to the effective TA document as represented by both the Original and Revised TAs submitted by EDF unless otherwise stated.

These concern what we believe to be a fundamentally flawed and unacceptable TA submitted in support of the Application. The deficiencies of that document have led directly to a range of concerns for FTC in regard to a number of elements of the road and rail strategies which have such a potential, 3 in number:

- The rail strategy, and the potential negative effects on available freight capacity from the Port of Felixstowe (PoF) to the west of Westerfield junction, especially in the medium term.
- The significant increases predicted during the construction phase in both LGV and HGV traffic volumes at a number of pressure points on the main road network in the wider vicinity of the town, many of which are critical to the daily lives of our residents.
- The potential effects on local traffic safety and amenity arising from the proposed Freight Management Facility at Nacton

FTC accordingly proposes that a new marine dimension of containerisation should be considered and fully investigated.

A number of other aspects of the DCO could be relevant to Felixstowe. FTC may wish to have an opportunity to comment on these at a later stage should the material at relevant Hearings so require. These include, but are not limited to:

- Tourism, locally or as part of the wider Visit Suffolk concept.
- The labour market, both skilled and unskilled, notably around the transport and logistics sector.
- Housing issues, noting that the application defines “local employment” as a radius of a 90-minute drive time, which Felixstowe is well within, with an aspiration to employ the maximum number possible within that category.
- Coastal processes, given that these may be affected over 150 years and more, may be substantial and that the general mechanism of the coast between Lowestoft and Felixstowe is perceived to be an overall southerly drift of beach sediments

## **2.0 The Transport Assessment (Original and Revised)**

FTC has fundamental reservations in regard to the inadequacy of the TA so far as it affects both Rail and Road capacity in the southern part of the County, and in the case of rail, the national shortage of network freight capacity.

We make below some detail comments in regard to these, but suggest that these can only properly be considered within a wider and more strategic context.

FTC’s 3 concerns from our local perspective are around the proposals for freight movements, namely:

- The rail strategy, and the potential negative effects on available freight capacity from the PoF to the west and south of Ipswich – which is currently fully utilised.
- The significant increases predicted during the construction phase in both LGV and HGV traffic volumes at a number of pressure points on the main road network in the wider vicinity of the town.
- The potential effects on local traffic safety and amenity arising from the proposed Freight Management Facility at Nacton

However, those, alongside many others from parties further north who are much more seriously affected by road and rail impacts, derive from the minimal information on and justification for the various proposals in the so-called Freight Strategy (the FS) contained in the TA. That omission has meant that little meaningful debate has been possible around the basics of the impacts of freight supplies to the SZC site.

We would suggest the FS is not really a strategy at all, but rather a range of outcomes, and some potential mitigations of those, arising from a wholly undefined range of requirements for servicing the construction, for which minimal

information is available, and by implication have been given relatively little attention by the applicant. This applies equally to the original TA and to the sadly limited changes in the Revised TA.

Section 4.5 of the TA mentions only:

- The project will “require large volumes of freight to be transported to the main development site.”
- An aim to “to reduce the volume of materials that requires movement off-site” by re-use of materials where possible
- “to seek to move bulk materials and containerised goods by sea or by rail where this is practical or cost effective.”
- “where movement of materials by road remains necessary, to manage this” to minimise local impacts

The passenger traffic aspects are analysed in detail as to their geography, scale and timing during the construction phases, which has allowed a constructive educated public debate on those issues.

However there is no such analysis of what freight types and volumes are required, which would enable Interested Parties to understand or comment on how those could be better managed and especially how the Modal Split could be optimised, or for IPs to judge validity of the many assumptions made.

The effective assumption throughout is that only bulk materials such as aggregates and similar are candidates for rail or sea delivery, and that all other goods must go via road on HGVs or LGVs. We submit that that is a deeply flawed misconception.

Critically, while the above mention is made of “containerised goods”, that remains the only reference to containers throughout the range of documents, so far as we can identify. We suggest that this is a fundamental flaw in the so-called Freight Strategy. It is self-evident that a wide range of goods are routinely moved, very efficiently, in containers, which lend themselves flexibly to all modes of transport, be that road, rail or sea.

This omission came into focus much more prominently when the Proposed Changes were published, with the option of the Temporary Beach landing Facility (the BLF) becoming a jetty of 400m or more, into significantly deeper water. We suggest that this does give a practical option via some modifications of that jetty to allow for berthing of small container ships. That matter is discussed in detail below.

Similarly, no data is given on likely sources for materials, whether bulk or manufactured items. For aggregates in particular the source locations, whether from marine sources or if from land whether from Somerset, Derbyshire or elsewhere are fundamental to the traffic patterns, certainly for rail in the latter case.

We therefore request that the Examining Authority request EDF to fully examine a containerisation strategy for incorporation into the final Order, to the benefit of many communities both in our wider area and those further north, who have articulated many aspects of the issue of LGV and HGV volumes. That would necessarily include the supply of significantly more detailed information on the profile of freight types, volumes and sources.

EDF have stated repeatedly that an advantage of the SZC project is the prior experience of the similar build in progress at Hinkley Point. However, this is very clearly not the case for the Transport aspect, given the very different local geographies, and critically the absence at Hinkley of both a deep water BLF and a highly developed local logistics industry with all the required facilities fully developed. However, there is little evidence that EDF have “started again” in the formative assumptions underlying the TA.

### **3.0 Rail Strategy**

FTC has been concerned throughout the long series of consultations by EDF in regard to the potential impacts from the additional rail paths required for SZC construction on the currently congested rail freight capacity west and south of Ipswich.

These impacts are potentially directly harmful to the short and medium term future of the PoF and its large dependent logistics business sector, and indeed to the UK economy at large.

While we recognise the desirability of rail delivery of materials to the SZC site, those issues are limited in time and in scale in contrast to the importance of rail freight capacity to Felixstowe Port as by far the largest strategic element of the economy of the Eastern region. In that context, we do not believe that the EDF Transport Assessment comes close to examining these issues in sufficient depth, let alone proposing any mitigation thereof.

These impacts need to be considered against an understanding of the evolving port and logistics business both globally, in the UK as a whole and specifically for the eastern region, as well as Felixstowe itself - whose economic and social life is highly dependent on the ongoing health of the Port business. The Port is fortunate in its ideal geographic location in UK – but nevertheless critically dependent on further expansion of rail capacity, currently running at very high load factors. The shipping and logistics industry is very sensitive to even short-term disruptions of throughput, as recently graphically illustrated by the worldwide disruption, including at Felixstowe, resulting recently from the grounding of the vessel Ever Given in the Suez canal. The customers of PoF must have long term confidence in all elements of the supporting infrastructure, including rail freight capacity improvements over time. Competing ports at Southampton and especially London Gateway seek to fill spare port capacity in those areas. While Felixstowe has unique advantages in terms of geographic location, the lack of rail

capacity in short and medium term is critical to its continued viability, and therefore for some operators, an ongoing presence in Felixstowe.

The modern Port was created and has thrived on the back of huge public investment in road and rail in the 1960s and 1970s, but we have seen only small local improvements since. (The Ipswich Chord and the Trimley Extended Loop). But the local advantages of those, giving a capacity as far as Ipswich of some 45 paths, are wholly unavailable without major changes elsewhere, primarily at Ely.

Current rail bottlenecks have suffered constant delays in the emergence of improvement plans from Network Rail: the critical Ely Junction scheme has been under active discussion for at least 10 years, with no firm plans yet in place, but an earliest likely date now of 2028/29.

FTC has carefully considered the so-called Rail Strategy document, notably in its Revised form. We recognise and are pleased to see that a Rail Network chapter was included in the TA, in contrast to earlier consultation phases. However, we do not perceive the issues raised have themselves been addressed. That must be corrected before a DCO should be granted. However, while the TA deals in great detail with the local issues around the SZC site, Leiston and the Saxmundham junction, it has little or no strategic content, other than suggested detailed times of the 2, 3, 4 or even 5 additional trains expected daily during the middle years construction phase. Namely:

- The outbound trains would be flighted from Saxmundham junction after the last passenger service, passing Westerfield between 2355 and 0120
- One inbound train would utilise the existing unused morning SZA/NDA path, passing Westerfield at 0807.
- Other Inbound trains would be overnight, passing Westerfield at 0350 and 0447

Critically, only local issues on the East Suffolk line have been taken into account in that document.

But there is unfortunately no strategic consideration of whether and how these trains would impact on the (largely freight) services to the west, the critical strategic matter at issue. The principles around this are discussed below. But it is germane here to regret here the unfortunate continuing use of the 0807 Westerfield path, which precludes a rush-hour commuting service between Ipswich and Woodbridge.

The discussion of the rail system from Sizewell to Ipswich is thorough, and largely correct, but the wider network issues beyond Westerfield have not been properly researched, let alone addressed. This is despite many requests and discussion during the earlier consultation phases, and specifically responses to the original TA.

The latest local improvement to the Felixstowe Branch Line (the Trimley Extended Loop) became available to traffic on 25/5/2019, improving the theoretical Branch Line capacity to some 45 paths daily. However, that capacity can only be utilised by currently 37 paths west and south of Ipswich, such that the actual available paths are some 37 to 38 (depending on a temporary level crossing issue just east of Ipswich). That increase from the previous 33 was very quickly taken up and the demand for that and more if possible has been confirmed in recent conversations with the Port company.

The issues involved are complex and technical in regard to the operation of the rail system. We have taken the view that these issues are best articulated via a commentary on the rail chapter of the Transport Assessment in its various contexts, summarised below.

Paragraph 2.7.55 of the original TA is highly misleading in respect of the prospects for any improvement during the current Network Rail “Control Period 6” – 2019-2024. It appears to be based on a comment in Network Rail’s Anglia Route Strategic plan dated January 2018: to “Ely Area Capacity Enhancement projects”.

See: <https://www.networkrail.co.uk/wp-content/uploads/2018/02/Anglia-Route-Strategic-Plan.pdf>

However, that document was revised in March 2019, and again in March 2020, removing any hope in early investment at Ely, or anywhere else other than the now completed Trimley Loop, as follows.

The [Anglia Route Strategic Network Plan](#) dated March 2019 contains no commitment to work at Ely junction – just the following comment under “Freight” “What freight particularly want from the Anglia route is a reliable asset performance whilst ensuring fair regulation whilst on the network. With Trimley Long Loop being completed during CP6 this will add much operational flexibility to better current performance for intermodal services. We need to concentrate our efforts on increasing infrastructure reliability on the Cross Country route from Haughley Jn to Ely and Peterborough which is a major artery of the UK PLC.” I.e. the only work planned which is relevant to SZC is increased reliability of current lines and equipment – welcome, but of no effect in increasing planned line capacity.

And the later updated [Network Rail Delivery Plan Update Summary for CP6](#), dated 26/3/2020 makes no reference to any work at Ely or elsewhere, beyond the completed Trimley Project.

Those delays and uncertainties have now been exacerbated by the recent announcement by the Government of the publication of the necessary Outline Business Case in mid-2022 at best. That would seem to render impossible any significant expenditure by NWR in their Control Period 6 (CP6), so all will depend on the totally unknown approach to CP7 from 2024 onwards.

Political factors in that regard may be affected by the Government's "Levelling Up" concept for the Midlands and North, but that is unknowable.

Conversely some hope for eventual improvement may be implied from the recent inclusion of Felixstowe / Harwich as one of the 8 new Freeports. However, the understanding of likely outcomes in that context appears again to be medium term at best, rather than a timescale which would advantage SZC traffic.

FTC understands from all of the above that the current expectation for significant improvements at Ely are now expected in 2028/29 at the earliest – which would be beyond the peak years of SZC construction.

It is essential therefore that this unpalatable situation is fully recognised in regard to the feasibility of EDF's plan for any rail delivery to SZC. And from that it follows that significant mitigation should be required from EDF, in order to provide in consultation with NWR and all interested parties, funding for such improvements as can be identified to permit the additional SZC rail freight capacity to be provided without prejudice to existing users of the rail network, passengers and freight alike.

Put simply the above uncertainties indicate that almost all is unknown in regard to future rail freight capacity, and unless EDF in conjunction with NWR can confirm that the 2 to 4 new paths can be made available without detriment, at the very minimum, to the current 37/38 paths utilised by PoF customers, the short term advantages in respect of SZC construction access should not be allowed to endanger the long term security of the national rail freight capacity.

We suggest that the wider Nationally Significant Infrastructure Projects objectives for the UK as a whole should be the driving policy factor in the ExA's decision on this issue.

#### **4.0 Effects on the main road network**

FTC has significant concerns in regard to the volumes of traffic, and especially the degree to which the nearby main road accesses to the town are predicted to suffer from significant over capacity at critical junctions, and the increase in queuing thereby predicted to occur during the Construction phase of SZC.

FTC acknowledges that traffic in the town of Felixstowe and its immediate vicinity is unlikely to be directly affected. However, our geographical situation on a peninsular with only a single main road access via the Seven Hill (Junction 58) interchange represents a major issue for the economic and social well-being of our residents and indeed our visitors, given that tourism plays a major part in our economy.

FTC have carefully considered the numerous statistical analyses and predictions contained within the TA in regard to both light and heavy goods vehicle traffic flows, as an increased part of already very heavy general traffic – which is itself predicted to increase by some 25% during the period, according to the figures presented.

FTC acknowledges that very detailed analyses of current traffic and future trends have been undertaken as part of the TA, which are most useful in understanding the potential issues likely to arise.

This situation paints a picture which would be of concern to any community, but especially in our specific geographical situation:

The Seven Hills Roundabout and the main roads it links are fundamental to convenient and safe access to our town. It is already normal at peak times to experience queues on the A14 westbound slip road, the A1156 and frequently on the A12 north approaches. Hence, we are disturbed that even without accounting for the SZC traffic the capacity of the routes is predicted to increase sharply, to a situation of 170% overload, even with the proposed Adastral Park mitigation.

While our prime concern is in regard to the Seven Hills junction, many of our residents have daily commitments in Martlesham, Woodbridge and beyond, and the converse is true for some residents of those areas. Accordingly, we have similar concerns about the whole series of junctions from Seven hills to Woods Lane, all of which are predicted to have similar congestion issues.

We note that it is claimed that the SZC traffic will make only a marginal increase on these numbers, and hence that EDF state that no further mitigation is justified in connection with the SZC build.

We reject that claim and that approach strongly. We note that the SZC traffic, just for LGVs and HGVs, represents some 2.1/2% of the volume. While it may be true that in a situation of adequate capacity, a change of that size may be of modest concern, we suggest most strongly that in a situation of near permanent overload , a marginal increase in numbers, especially of HGVs, inevitably requiring larger gaps in traffic and slower acceleration times would be likely have an entirely disproportionate effect on delays at the roundabout.

We therefore believe that the stance of EDF is wholly unreasonable, and that accordingly the DCO should not be granted on this basis, but should be conditioned that EDF make a proportionate contribution to fund more significant improvement works to the A12 and Seven Hills than those currently conditioned in connection with the Adastral Park and other developments. That would need more detailed interaction with SCC Highways and ESC Planning Department than appear to have taken place to date

Additionally, while those improvements are expected possibly around 2023 in connection with that development, that outcome is contingent on many unknowns, and may not happen on time, or indeed at all. We therefore further contend that it is unreasonable for the TA to be accepted on that basis, given the extreme congestion predicted should those not be completed appropriately. We suggest this matter further underlines the need for the DCO to require an appropriate contribution from EDF, to cover that eventuality.



We are not clear whether the Adastral Park proposal includes full, interactive signalling of the A12 roundabouts, which proved so enormously effective when the roundabout and signalling at Junction 60 (Dock Spur roundabout), were completely re-designed and rebuilt in 2010, but if that is not the case, then an EDF contribution should be used to enable that, most significantly at Seven Hills.

## **5.0 The Freight Management Facility**

FTC has many years' experience of the effect of very heavy flows of HGVs into and around the Port of Felixstowe. The efficacy or otherwise of the local road system's ability to handle PoF traffic has changed dramatically over the last 25 years or so. That has been due to the combined effect of improvements to the local road system and the evolving, now sophisticated, Freight Management System operated by the Port of Felixstowe (PoF). However, the current situation, with Port volumes having increased broadly year on year is largely successful in avoiding undue congestion from the HGV traffic.

For a long period between c.2000 to 2010, there was frequent need for "Operation Stack" to be invoked, whereby large numbers of HGVs were diverted and held, originally on the carriageway south of Junction 58, and later on the Old Felixstowe Road. However, in recent years this has been a relatively rare occurrence.

Two major factors have successfully procured this outcome:

- A) The major rebuild of the roundabout at Junction 60 in 2010, critically with the use of fully interactive computer controlled signalling, which can be observed to change behaviour very significantly at different times of day and according to changing traffic volumes
- B) The implementation by PoF of their Freight Management System (FMS), which remotely allocates entrance times to the port for all HGVs.

Accordingly FTC, having observed the ability of good HGV traffic management to largely eliminate the previous major congestion, strongly supports the concept of a Freight Management Facility with appropriate software and control of supplier hauliers to mitigate potential negative effects of SZC HGV traffic, not only locally, but throughout the route to Sizewell.

FTC takes no view on the suitability of the site chosen, in terms of the impact of the site itself on the appearance of the local area in comparison to other potential sites. We believe that is a matter for the local parishes directly affected to consider.

However, FTC strongly suggests that the proposed access route is not the most appropriate, both in terms of almost certainly exacerbating delays, and also the potential for accidents at the Crematorium Junction. These are addressed in the following section.

## **6.0 The Proposed Access Route to the Freight Management Facility**

Further to our RR paragraphs on the FMF access route, and a question on this from a Panel Member at the OFH 21/5/21, FTC has given further thought to this topic, and now proposes the following analysis of and alternative solution to this issue.

The currently Proposed Route accesses the FMF from the North onto the Old Felixstowe Road, via A14 junction 58, Seven Hills, and a short stretch of the A1156 (the main local access road into central Ipswich), via a T-junction ("the Crematorium Junction" ) only slightly offset from the entrance the Ipswich Crematorium.

FTC, and a number of other local Parish Councils in their Relevant Representations, have major concerns about this route, most notably the very awkwardly sited and potentially dangerous Crematorium junction.

Also FTC have concerns about adding to the constantly growing traffic, with congestion at some times of day, by use of the Seven Hills junction on both Inbound and Outbound trips to the FMF, in addition to the traffic outbound southward from the SZC site, which can only be exacerbated by SZC LGV and HGV traffic using the junction on both northbound and southbound trips.

We believe that a much preferable option from a local traffic management perspective is to route FMF inbound by SZC traffic remaining on the A14 to the very lightly trafficked Trimley overpass roundabout (J59), and then westbound on the A14 to the existing full standard off-slip at Levington.

And similarly, to route FMF outbound traffic briefly eastwards to the Levington (local standard) A14 on-slip, then via Seven Hills roundabout to the A12 northbound.

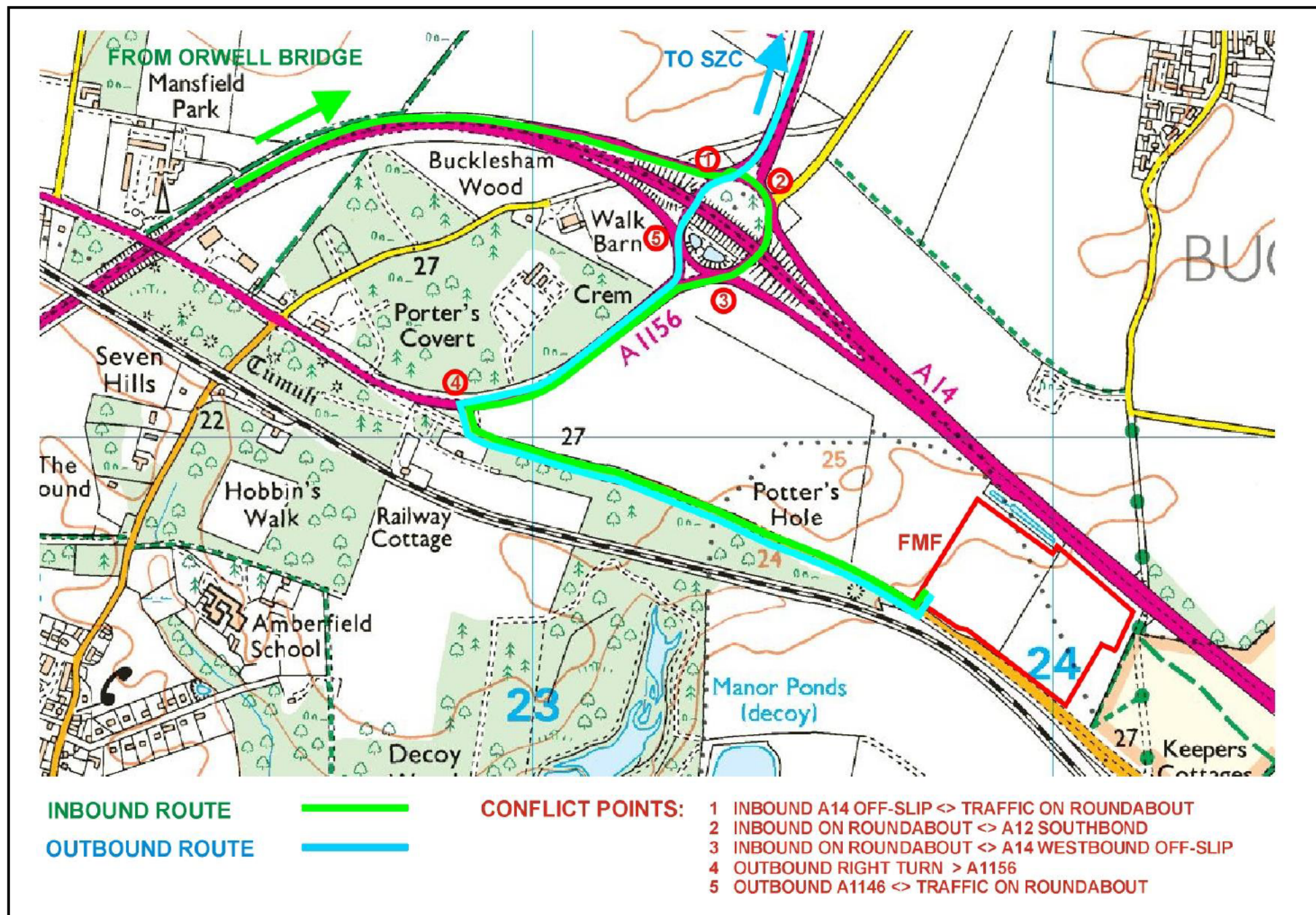
We suggest this can be analysed by defining points at which on each option there are "Traffic Conflicts" on the routes. The 2 diagrams below illustrate this and show that those conflicts could be reduced from 5 to 2 by the alternative route proposal, as well as wholly eliminating the accident potential at Crematorium Junction. In this context "Traffic Conflicts" are defined as points where the SZC traffic would need to pass in front of or merge with existing significant traffic flows, so potentially either being delayed and / or itself suffering delays. Interference with minor flows, e.g. the single track Bucklesham exit from J58 are not included.

While we recognise that this would involve a small additional mileage on the A14 for HGVs, the negatives on that score would be far outweighed by the benefits of the alternative suggestion, most notably by also avoiding a clear accident potential at the Crematorium junction., where northbound HGVs would have to cross both streams of fast-moving local traffic at this location, on a long but fast bend on the A1156, which has a significant constant flow of traffic for most of the day, and a heavy flow, often congested, at peak times, particularly eastbound.

The above is illustrated in 2 maps below, showing the above for:

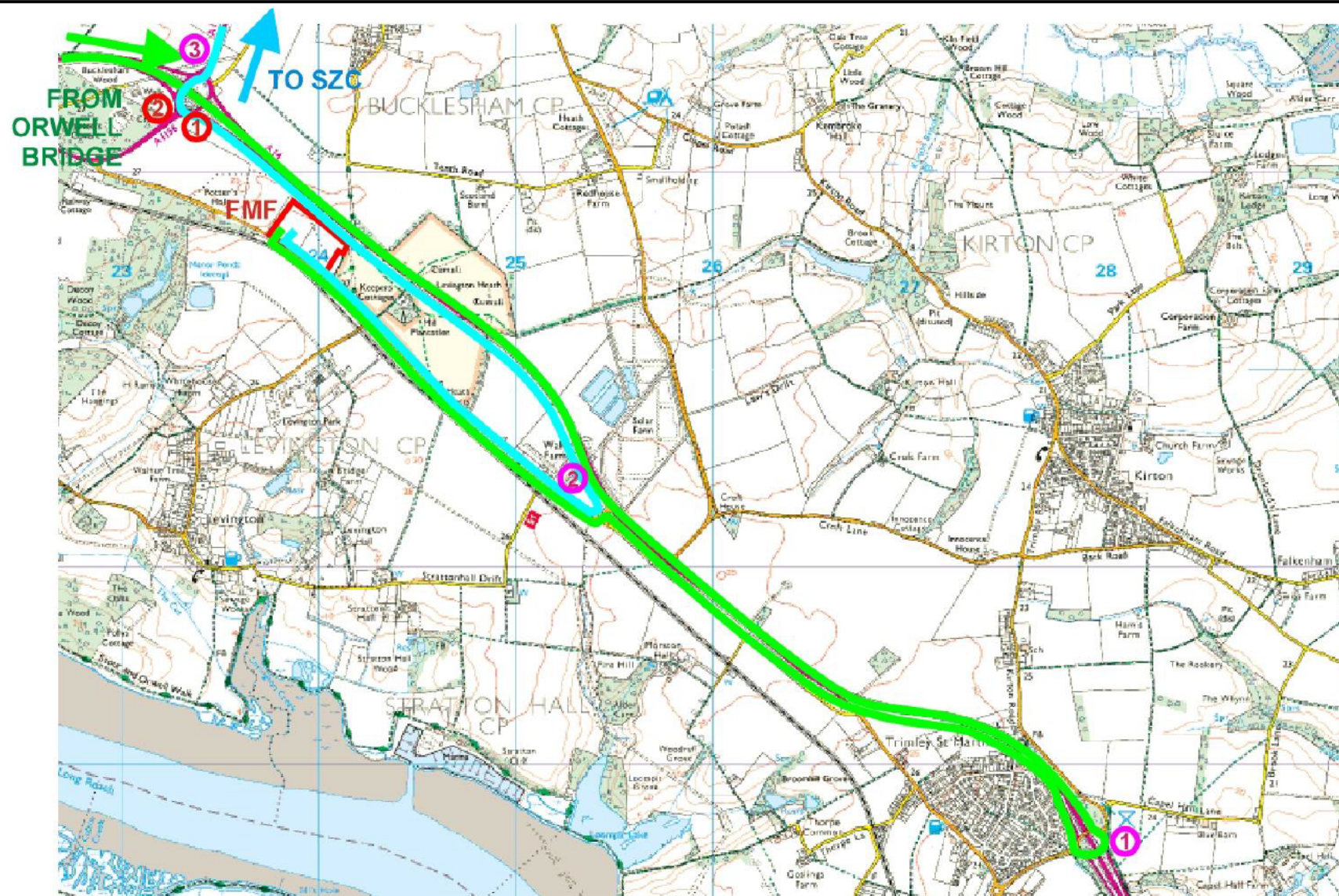
- A) EDF' s submitted Proposed Route
- B) FTC's suggested Alternative Route.

**A) TRAFFIC CONFLICTS – EDF PROPOSED ACCESS ROUTE TO FREIGHT MANAGEMENT FACILITY**





## B) TRAFFIC CONFLICTS – ALTERNATIVE ACCESS ROUTE TO FREIGHT MANAGEMENT FACILITY



**INBOUND ROUTE**



**OUTBOUND ROUTE**



**CONFLICT POINTS:** 1 OUTBOUND A14 WESTBOUND OFF-SLIP <> TRAFFIC ON ROUNDABOUT  
2 OUTBOUND ON ROUNDABOUT <> A1156 EASTBOUND

**NOTES:** 1 NO CONFLICT - TRIMLEY ROUNDABOUT HAS MINIMAL TRAFFIC  
2 LEVINGTON LOCAL ON-SLIP IS SHORT, MAY NEED UPGRADE  
3 LIMITED CONFLICT A12 NORTHBOUND DUE TO A12 LEFT FILTER LANE

However, should this alternative routing not be adopted, the Crematorium Junction still requires significant further consideration than is contained in the TA.

The proposed intensification of use of the A1156 / Old Felixstowe Road junction ("the Crematorium junction"), without any mitigation applied, is likely to cause significant difficulties. In particular, the need for significant numbers of HGVs to emerge from old Felixstowe Road onto the A1156, on a right turn, across a busy single carriageway road, on a long bend with limited visibility is clearly liable to problems. Currently very little traffic needs to make that turn, with the majority of the small amount of northbound traffic on Old Felixstowe Road making the left turn towards Ipswich. Significant numbers of HGVs being required to make that sharp right turn, inevitably slowly, across often fast-moving westbound traffic is likely to be problematic at best, and potentially with significant danger of collision.

If this approach is adopted, we submit that a significant mitigation is required by provision of a redesigned layout, including signalisation, at the Crematorium junction. We would therefore ask that the DCO be conditioned to require that.

## **7.0 SZC Transport Strategy – an additional marine dimension?**



### **7.1 Introduction**

The Town Council mentioned containerisation only very briefly in our RR. However, with more time available up to the current deadline, FTC now submits here a fuller discussion of the feasibility and large potential advantages of an entirely new approach for a substantial proportion of the SZC transport requirements other than bulk materials by use of containerisation, with a high portion of that potentially delivered by sea.

This opportunity has been created by the evolution of the Beach Landing Facility driven both by Coastal Process considerations and EDF's recognition to a degree of the possibility of improving the Modal Split for freight deliveries. The depth of



water at the resulting jetty would appear to be able to accommodate small container ships of up to perhaps 500 TEU. See note below.

(Note on container jargon: TEU = “Twenty-foot Equivalent Units”. The original shipping containers were all 20ft, but now many are 40ft, so 2 TEUs)

However, FTC believes that the latter can be taken very much further by innovative and flexible approach to containerisation for a coastal nuclear build.

This proposal seeks to address issues such as

- The type of small container vessel which could be accommodated in the depth of water available.
- The practicalities of unloading and moving containers on the BLF
- The required shore end facility for ongoing container movements into the construction site
- The feasibility in regard to potential sea and weather conditions
- The conclusion that such a facility if implemented imaginatively could allow a major reduction in both HGV and rail movements required, throughout the construction period.

Given Felixstowe’s situation as the largest container port in the UK, there is of course a large and thriving local (logistics) business infrastructure in the area to support a container-based strategy which could be very flexible and very cost-effective, including not only the availability of the port itself, but all of the wide range of skills and resources in the local logistics economy. It is not for FTC to be specific about detailed aspects of that but commend to EDF and hence to the Panel the advantages to be gained from an innovative use of the resources available.

We therefore request that the Examining Authority request EDF to fully examine this possibility for incorporation into the final Order, to the benefit of many communities in the area. That would necessarily include the supply of significantly more detailed information on the profile of freight types, volumes and sources.

Accordingly, we propose investigation and hopefully adoption of this new concept to improve the SZC Transport Strategy.

## **7.2 EDF Transport Strategy – consider a Marine Container component?**

Recognising the above combination of elements of the SZC proposal, FTC strongly suggests that a new and multiply beneficial element is now potentially feasible and should be seriously considered, namely the potential to use the temporary BLF as a dual-purpose facility not only for bulk materials but also for containerised deliveries. See further notes below on the currently proposed Transport Strategy.

The new BLF concept, especially the largest, Option 4, would appear to be a significant new opportunity to remove a second sizeable entire class of HGV

movements from the local road system, using the BLF also as a berth for small container ships.

Suffolk is of course hugely well served for container traffic access to the Port of Felixstowe, by road, rail and sea. The road system to the Port would be wholly capable of absorbing some further traffic for SZC, either directly or via the proposed Freight Management Facility. The Port is therefore ideally situated to host a container transshipment facility to serve SZC. Containers could be delivered flexibly to the Port by any permutation of marine, rail or road from suppliers ranging from local to worldwide.

A very elementary analysis would suggest that a vessel round trip time, including handling at each end may be less than 12 hours for a smaller vessel, so single or dual daily sailings could be investigated, against vessel and berthing facility size, as the most cost effective.

It would appear therefore that there is a real potential to institute a container shuttle service, using a very modest size of vessel, between the Port and a berth at the BLF, if suitably integrated at the design stage.

### **7.3 BLF Option 4**

Option 4 is seen as the best option both:

- a) To have the largest capacity for bulk material movements, maximising the reduction in HGV traffic, and
- b) As the option least likely to affect the critical near-shore movement of sediment from the coastal management perspective. Coastal Partnership East have stated that from a coastal process point of view Option 4 is the least worse option ESC. In layman's terms – many seaside towns have had piled piers of similar length for a century & more, with no detectable negative effects on beach sediment. This point is properly covered at para 1.2.10. “... *the SEP piles further offshore are unlikely to exhibit any detectable impacts at the shoreline.*”

It would appear therefore to be very feasible to equip the temporary BLF to handle containers. Certain elements would be required:

- a) A suitable berth, able to accommodate the small container ships – the exact optimum size would need thought on cost / benefit. A crane may be required, or alternatively to use a “gearless” ship – i.e. a ship with its own crane(s) capable of handling containers direct to quay.
- b) A modification to the proposed conveyor system, with rails to support an elementary form of container trolley, powered by the conveyor system itself – or if space permits, a parallel path for conventional port container tugs and trailers.
- c) Suitable shore end facility – see below.

### **7.4 Shore end facility**

The best handling option at the shore end would need to be determined in conjunction with the design of the coast defence works, and their build. 2 options may be:

- a simple vehicular access to the haul road if the jetty width can allow tugs & trailers. This option would eliminate any shore end handling time.
- possibly a small single jib crane from the shore end of the BLF to local on-site tugs and trailers.

## 7.5 Sea and weather conditions

There will clearly be a need to consider the matter of berthing small container ships offshore with the possibility of adverse weather conditions. This issue has already been considered in principle in the current Strategy, including the possibility of some winter operation (para. 3.3.30) – in the context of much less manoeuvrable un-powered barges dependent on tugs for their safety. While assumptions would need to be built in in regard to the overall rates of delivery to be expected at different times of the year, the concept should not be invalidated on this ground. The winter does not have a monopoly of storm events nor the summer of calm conditions, as Felixstowe frequently has occasion to observe.

And the issue in regard to container ships is significantly more robust than for bulk material barges, in that a) in the case of unforeseen poor weather, a container ship can simply move offshore, returning to port if necessary, and b) in the event of prolonged interruptions to the schedule, winter or summer, the inherent flexibility of containerisation means that the necessary programme can be immediately transferred back to road or rail transport for as long as required.

## 7.6 Conclusion

It would appear that if shown to be feasible, and adopted with energy and flexibility of thought, this proposal could have capability to remove at least 50%, and possibly substantially more, of the proposed HGV traffic – the biggest single contentious issue facing the project.

FTC therefore strongly requests that the ExA request EDF to fully analyse this proposal and consider its adoption.

## 7.7 Notes on latest proposed Freight Management Strategy

As expected, and welcome in the light of years of public concern regarding the volume of HGV movements on the A12 and roads local to SZC, the FMS lays a great emphasis on reducing HGV movements.

In particular, at Para. 3.1.3, it advocates:

*“..where materials must be transported to or exported from the site, to seek to move bulk materials and **containerised goods** by sea or rail...”*

That is stated more fully at para. 2.2.9



*“SZC Co. shares the objectives of stakeholders and the local community that goods should be moved sustainably wherever possible and that HGV numbers should be limited to those necessary for goods which cannot be moved by rail or sea. SZC Co.’s contractors also strongly favour the use of rail and sea because it can be highly efficient, reliable and cost-effective. Implementing these freight management changes would be likely to result in approximately 60% of the construction materials (by volume) being moved by rail or sea.”*

This is a valid, desirable and appropriately wide-ranging aspiration, which all will welcome. However, that is the only occurrence of the word “container” in the entire document – a serious omission.

Conversely, however, there is a clear but un-evidenced assumption throughout the document as a whole, repeated in many contexts, that only bulk goods (and tunnel sections or reinforcements) are capable of movement by rail or, critically, by sea.

This is stated clearly and concisely for example at para. 3.1.2:

*“Some bulk materials are more able to be moved by rail or sea than by HGV – examples include aggregates and backfill material for ground raising and stability. Other materials are not suitable to be moved by sea or rail and can only realistically be moved by HGV.”* It is detailed further, again incorrectly, in the modal split table 3.1.

That statement is quite clearly not the case: the vast majority of goods of every class are now moved in containers nationally and internationally – the key to the vast improvement in efficiency of material handling which has contributed to the prosperity of the world as a whole.

It is doubly ironic that this false analysis is presented in the context of SZC, which will be supplied west of Seven Hills on the A14, a national trunk road created wholly in response to the demand and the opportunities created by the Port of Felixstowe over the past five decades, and the proximity to the site of the Port itself, some 37 miles or app. 90 minutes of steaming time distant.

Thus, the fundamental assumptions on which the strategy is based are clearly false, or at least now clearly out-dated by the welcome evolution of the project towards rail and sea based strategy and the proposal for the BLF Option 4.

There is however now an unmissable opportunity, in the context of the desirability for other reasons of the temporary BLF Option 4, for this to be re-evaluated as to opportunities for a further substantial shift towards seaborne container handling as a core methodology.

**Additional considerations include:**

- It may be expected that a proportion of the required equipment for SZC may be sourced from Europe, notably France, or from the Far East. Hence transshipment at PoF could be very cost effective.
- For deliveries from elsewhere in the UK, rail delivery to PoF is immediately available via existing freight train capacity and paths and other infrastructure.
- With a container capability, the BLF would serve the whole life of the project – not just the construction phase as proposed for bulk materials only – a massive environmental benefit for the A12 and local SZC areas.
- The offshore seabed depth (-6.5m AODN mid-tide) would be sufficient for a vessel of the size illustrated - a capacity of 508TEU, equal to the capacity of 254 HGVs. Or a smaller vessel with more frequent sailings may be more economical.
- Such a ship is app 100m in length, or quayside handling length of c. 80m. – again affecting choice of optimum vessel
- An option for “gearless” vessel with own crane(s), as widely used in small third world ports would avoid the cost of a crane and its foundation on the BLF jetty. (“gearless” – does not require landside handling gear).
- An emphasis on a containerised strategy may also reduce the need for warehouse storage and handling facilities at the SZC site, as for some classes of goods at least, containers could act as the storage infrastructure.

**Further Options**

If the above were found feasible and adopted to maximum capability, further options might include

- Elimination of the need for the Freight Management Facility at Nacton, which could possibly be sited at PoF, with significant cost, traffic management and environmental benefits. Any additional cost to the build of BLF Option 4 could be more than discounted by the saving of building and then subsequently restoring the site of the FMF.
- That would have the additional advantage of through routing of container HGVs on the A14 to Felixstowe, avoiding any significant effects at the 7 Hills A14 interchange.
- The use of rail freight capacity at container level on existing rail freight services would have less impact on rail capacity issues than the potential loss of train paths to serve SZC, requiring shorter and possibly lighter trains, a waste of capacity west of Ipswich.
- Potential to consolidate many smaller HGV loads to containers at the FMF, whether at Nacton or PoF