

MUSSELBURGH FLOOD PROTECTION SCHEME: FORMAL OBJECTIONS TO THE EAST LOTHIAN COUNCIL SCHEME

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Introduction

The Scheme presented to the public on 21 March 2024 for comment and objection has been revised from previous versions in the light of public concerns. Some improvements have been made, such as the use of flood gates at key points by bridges to allow public access to the riverside, lowering of defence heights along the river in accord with Scenario 2, the related reduction in the 'future proofing' from 2100 to 2050, the introduction of pumping stations to deal with heightened ground water levels, and addressing the requirements in National Planning Framework 4. However, despite this movement to deal with residents' and visitors' legitimate concerns, the revised Scheme neither fundamentally deals with the issues of lack of a holistic integrated Scheme using Nature based Solutions at the coast or within the catchment., It takes no account of the public expenditure crisis, nor the degree of uncertainty about the climate and weather changes which drive the need for the Scheme, nor the biodiversity crisis. I am therefore formally objecting to the Scheme as published. For each objection. I state the reasons for my objection, having assessed the documentation recently made available, and note my own particular legitimacy in objecting, such as property ownership and residency in an area that is identified as a flood risk, together with my knowledge, expertise and experience over 50 years.

Objection 1 Amenity, privacy and public safety arising from walkway on the proposed embankment adjacent to my property

As an affected resident living in and owning a C Listed property in a Conservation Area in lower Eskside West situated on the terrace subject to inundation by the river and the sea, I formally object to the Scheme approved by East Lothian Council on the following specific grounds.

1. **No property based solutions for flood protection have been provided to or discussed with property owners in lower Eskside West.** A property based alternative has not been presented for consideration. This would be far cheaper, less intrusive on my amenity and health and at least as effective for this section of the river between the North High Street and New Street junctions with Eskside West than the combination of embankments and end walls proposed.
- 1.1 **No demountable structure solutions have been provided to property owners in lower Eskside West.** These structures, widely used in other parts of Britain, could be used between the Store Bridge and the Electric Bridge to reduce the loss of amenity to residents and passers-by. These would be financially beneficial to the constrained public finances and less damaging to the amenity of my property.
- 1.2 **The proposed embankment will have a detrimental effect on the amenity and privacy of my property.** This is the result of removal of the direct view of the river from my property and, because of a raised walkway on top of the embankment, allowing people to see more easily into my house and grounds. This loss of privacy is totally unacceptable, and the walkway must be removed from the Scheme along with lessening the width of the embankment in order for me to remove this part of my objection. There is a road with plenty of capacity for cyclists, and two pavements for walkers, so no additional capacity is justified from the active travel perspective and certainly not from the flood protection perspective.
- 1.3 **The design of the embankment reduces the amenity and increases public safety risks.** The proposed 10.5m wide embankment is quite unnecessary and the proposed walkway on the top risks damage to the structure, reduces amenity and increases the risk of injury to users. The structure must be redesigned so that it is narrower in cross section and without public access on

the top. Public access can be gained to the river bank via the openings at the two bridges except when the flood gates are closed.

- 1.4 Alternatives to the replacement of the bridges in close proximity to my property have been dismissed by the consultants.** There will be a long period of disturbance, disruption and noise during demolition and construction of replacements. This will have detrimental effects on my physical and mental health and wellbeing which are not acceptable. The replacements are unnecessary compared with the alternatives, including a tree catcher at the exit from The Grove in the vicinity of the Olive Bank Road Bridge and fixing *starlings* to all of the existing bridge stanchions – a solution which has been used globally for centuries.
- 1.5 The rationale for the changes in type of flood barrier and its height have not been adequately assessed by the consultants and presented to residents in lower Eskside West.** The documentation states that the embankment between the Store Bridge and the Electric Bridge will vary from 1.m to 1.4m but no explanation is given in the papers of the reasons for this variation.
- 1.6 A barrier alongside the pavement on the east side of lower Eskside West should be considered.** This would allow the river channel to be wider in the event of flood conditions from the river and/or the sea. It would also be justifiably lower than the height of the proposed embankment. The health of the trees would not be materially affected as the inundation would be for a very short period of time.
- 1.7 What consideration will be given to compensation to myself as the owner of a property in the flood risk area?** Compensation can be justified specifically due to any structural damage to my property as a result of the engineering works for embankment formation and bridge replacement in close proximity to my property. Also, I will have reduction in my amenity due to the flood structures proposed, as this amenity was an important factor in my decision to purchase the property. Also, the demolition and construction works in the proposed Scheme will affect my health and wellbeing and those of my equally aged neighbours.

Objection 2 Lack of options have been presented to the ELC Councillors and to the public

As someone with public sector experience in assessing complex programmes and as a local resident and property owner within the area identified as a flood risk, it is normal to present options to decision makers. I object to the lack of options presented to Councillors and to the public as part of the decision making process for the following reasons.

- 2.1 Other possible solutions to reducing water and debris flow in the river as it flows through Musselburgh have been dismissed by the consultants without documentary evidence to back up their recommendations.** For example, there is no evidence available to me that the consultants have considered including a tree catcher at the downstream exit point of The Grove, the fixing of *starlings* on the existing bridges to reduce the chances of woody debris building up and therefore raising the water level at the bridges. No costs for the bridge replacement compared with the alternatives itemised above have been given. Further alternatives for slowing the flow of water from the land into the streams and rivers which comprise the Esk catchment, other than the use of two small redundant reservoirs have either not been considered or dismissed by the engineering consultants. Their assessments have never been made available to the public.
- 2.2 No options were presented to East Lothian Council's Cabinet for their decision in January 2020 on the Preferred Scheme.** The papers available on the ELC's web site provide no evidence of options being presented to Councillors. They were given 'a take it or leave it' single proposal.
- 2.3 No options were presented to Councillors in January 2024.** The papers available on the ELC's web site provide no evidence of options being presented to Councillors. They were given 'a take it or leave it' single proposal.
- 2.4 Options presented to the public early in 2023 setting out 4 scenarios were dismissed after public soundings** with the reasons never revealed to justify consultants' advice and the Council's decision.

- 2.5 The EIA glosses over the options process carried out earlier in the project.** The EIA provides no details to enable the public to come to a view on what options have been identified, what was the process of deliberation and what were the criteria used to arrive at the reasons for dismissal of the options. Indeed, the papers state “to ensure all interested parties have an opportunity to comment“, but where is the evidence of the papers made available to the resident population in Musselburgh of all of the options, the processes used, and who were formally consulted? It does not exist; the workshops and technical meetings appear to have been with other than?? the local residents community. These papers must be made available for public scrutiny.
- 2.6 No evidence has been presented to residents that property based solutions have been evaluated.** In any analysis of complex problems the whole range of possibilities should be evaluated and presented to the affected parties, in this case property owners along the river and at the coast. This has not been done. When challenged, the consultants apparently dismiss these suggestions as unworkable without evidence, or discussion or analysis.
- 2.7 No flood risk assessments have been made available to residents** following the iterative adjustment to the heights and types of barriers along the river side through Musselburgh.
- 2.8 Only a wall for protecting the ground landwards of the coast has been presented with passing reference to planting of dune grasses.** This is relevant to properties like my own that are downstream of the HWMOST, particularly as the advice from Dynamic Coast is that such a wall will be inundated in about 15 years’ time (see the arguments below under Objection 4).

Objection 3 Totally inadequate addressing of Nature based Solutions within the Scheme in the catchment and along the coast.

As an internationally and nationally recognised expert on the management of nature as well as a local resident and property owner in the area identified as a flood risk, I object to the Scheme approved by East Lothian Council because Nature based Solutions have been deferred until after the Scheme is being constructed despite the fact that it is now the recommended practice in river catchment and along the coast for building flood resilience .

- 3.1 The alternatives using Nature based Solutions within the catchment and along the coast have been dismissed until after the Council’s Preferred Scheme has been constructed.** If undertaken as part of the Scheme then the outcome would have had a material effect on the type and scale of flood resilience measures adjacent to my property, as well as to the costs of the Scheme, and the benefits to ameliorating the effects of climate change and addressing the biodiversity crisis.
- 3.2 The consultants have dismissed a number of obvious alternatives** Specifically, there are possibilities of storing flood water temporarily in all of the existing reservoirs throughout the catchment by the state operated Scottish Water. No evidence is available to the public from Scottish Water that this has been addressed seriously. And also the placement of Nature based Solutions, such as drain blocking, tree planting, creation of leaky dams, reinstatement of the natural flood plain, all of which are used extensively in flood resilience planning elsewhere in the UK have been dismissed by the consultants without adequate assessment of the possibilities, despite recommendations by Jacobs’ staff reviewing the possibilities for further investigation.
- 3.3 There is no recognition by experts who focus on hard engineering solutions of the changing position away from this outmoded approach.** The need for a change in approach is supported by the SEPA CEO and the Head of Sniffer consultancy reviewing Scottish Government Flood Resilience Strategy. Why are the MFPS consultants out of tune with this reality and the impact it has on the design and cost of the Scheme?
- 3.4 There is no overarching Adaptive Management approach in the Scheme.** This is now best practice in river and sea inundation protection works, as evidenced in many articles in the professional engineering journals.
- 3.5 Jacobs internal report of 2018 on Nature based Solutions proposed further investigations.** This was summarily dismissed by Jacobs Musselburgh Manager.
- 3.6 The consultants claim that the proposed tree catcher is a Nature based Solution.** This is factually incorrect.

- 3.7 The consultants claim that Nature based Solutions will have limited effect on major flood event is not scientifically credible.** It is based on single study of Eddleston catchment which has not been independently verified by scientists. Whereas there are other examples in mainland Britain of the use of this approach. The consultants' advice and the Council's decision also ignores the increasing amount of credible international guidelines and case studies, for example the [IUCN Global Standard for Nature-based Solutions | IUCN](#)
- 3.8 Assessment of the use of flood plains for storing water that are not built on between the A1 bridge and the river mouth are dismissed by the consultants as inadequate for the mega flood on which the whole scheme is based.** No documentation to justify this conclusion has been made available to the public.
- 3.9 Discussions with landowners in the catchment by the consultants have not been progressed to deliverables within the Scheme.** Given the meetings that MFPS staff claimed to have had with owners and occupiers of land within the catchment it is of surprise?? that this has not led to proposed actions for NbS. Obviously, resources were available in the consultancy contract to allow these meetings, but clearly due to the proposal from the consultant to defer consideration of NbS, which the ELC uncritically agreed to, this work has not been capitalised on as part of the Scheme. Maybe, it is because of the Council's strong requirement to submit the Scheme within the Cycle 1 timescale.
- 3.10 The Scheme proposals are inadequate in considering the interaction of tides and sea water ingress into the estuary on water ponding around high water.** No evidence has been presented that assesses the river/tidal interaction in the estuary below the HWMOST on the properties adjacent to the river and below the limit of HWMOST.

Objection 4 Prematurity of the coastal defence works

As someone technically knowledgeable about sandy coastal systems and their management, and reading the analysis and recommendations made by Dynamic Coast in their report, and someone who is regular user of the coast at Fisherrow, I formally object to the proposals for the sea defences in the Scheme on the following grounds.

- 4.1 They are premature without the development of the Coastal Change Adaptation Plan and the updating of the outdated Shoreline management plan of 2002.**
- 4.2 Why is scenario 4 the basis for assessment?** It is obvious from the assessment of the effect of storms over recent years, as measured by Dynamic Coast, that the predicted increases in storminess are not taken into account when it is likely to have greater impact on the erosion of and retreat of the coastal edge than sea level rise in the next decades.
- 4.3 Why is the Scheme making hard engineering proposals when the Dynamic Coast experts recommend production of an adaptation plan?** The Dynamic Coast report makes the following point "We suggest that the Council consider a range of coastal resilience measures be developed and appraised as part of ELC's proposed Coastal Change Adaptation Plan". Why is this not being considered as part of the Scheme? Why are the ELC's Scheme proposals at odds with the Scottish Government (2023) Coastal Change Adaptation Guidance? Do the Council and its consultants know better? This seems unlikely. The Dynamic Coast report also states that the original 2002 ELC plan needs to be updated in the light of the new guidance and the new evidence of current and future coastal erosion. So why have ELC decided already on a solution which will not work within 2-3 decades? There is only reliance on a wall which if the sea reaches it could cause removal of the sand in front of it and overtopping would destabilise the ground behind it and place more pressure on the structure. The lead consultant on Dynamic Coast has made it clear to me that 'no nature based solutions should be ruled out at this stage'.
- 4.4 Why have no Nature based Solutions been assessed for reducing the risk of coastal edge retreat and loss of sand?** The Dynamic Coast report recommends the following "other important aspects to ensure effective future coastal management are also recommended to be addressed, such as community involvement and adopting a Dynamic Adaptive Pathway approach to allow flexibility with future management options and actions." Additionally, it states that "Adaptive

approaches which ‘jump directly’ to address risks not expected until the end of the century may prove more costly in the short-term and risk losing community support”. The report goes on to say that “we encourage ELC to work with communities and adaptation specialists to define what their vision of long-term adaptation looks like and outline the range of possible management approaches required to deliver this adaptation to support the desired outcomes.”

- 4.5 The projections of coastal erosion and coastal edge retreat are based on sea level rise, whereas the recent erosion and retreat was a result predominantly of weather induced storm waves.** These are not taken into account, as far as I can see, in the Dynamic Coast report. The assumption in that report is that the beach will not rebuild. However, observations by coastal scientists along the east coast of Scotland shows that over time the beach rebuilds; the length of time dependent on the wave conditions.
- 4.6 Why has no modelling been done on the effects of the proposed sea wall on potential loss of beach material?** For example, the effects of undermining the beach in front of the wall and the effects of overtopping the wall on the material behind it.
- 4.7 Why has no formal review of the possibilities of beach nourishment been undertaken?** This approach is well tried and tested in the UK, including at Portobello. Assessment of the supply of sand off beyond the low water mark would provide evidence of the availability of material.

Objection 5 The Scheme is out of kilter with current Scottish Government policy

As Convenor of the Royal Society of Edinburgh’s Community of Interest on the Environment and a Patron of the Chartered Institute of Ecology and Environmental Management, as well as a local resident and property owner in the area identified as a flood risk, I object to the Scheme approved by East Lothian Council as it is out of step with current Council and Government policy on the environment.

- 5.1 The scheme fails to take adequately into account the three crises of climate change, biodiversity loss and public expenditure constraints.** The ELC and its consultants argue that they are working to a contract signed some years ago. However, the results of work by the IPCC and by IPBES internationally demonstrates that climate change and biodiversity crises are inextricably linked. It is not defensible that these issues are not fully factored into the Scheme. The supposed biodiversity gain measures within the river corridor in Musselburgh are merely window dressing to persuade residents to be in favour of the Scheme.
- 5.2 The Scheme fails to take into account the emerging findings from the review of the Scottish Government’s Flood Resilience Strategy.** The ELC’s proposals are therefore premature as the Scottish Government’s Flood Resilience Strategy (with likely headline proposals for all flood resilience schemes to focus on catchment management and community participation) will not be available for public consultation until spring 2024.
- 5.3 The Scheme is premature as it has been developed ahead of the Governments’ review of Water, waste water and drainage policy.** This is relevant given the importance of ground water levels and the increase in house building within the Esk catchment which increases the ground water table level and increases the speed of runoff from previously cultivated land. The work is at an early stage with public consultation only closed late February 2024.
- 5.4 There is no apparent assessment of the Scheme against ELC Climate Emergency policy.** This is particularly relevant to the requirements for the use of concrete, whose energy requirements and greenhouse gas emissions in its production are well documented. The amount of concrete required to implement the Scheme is estimated in the EIS. Of these estimates for concrete, 36% is required in the construction of the proposed new bridges.
- 5.5 There is no assessment of the Scheme proposals against the Scottish Government’s Just Transition to Net Zero .**
- 5.6 There is no justification for the narrowing of the river in certain places as it passes through Musselburgh.** Indeed, this will speed the velocity and the associated turbulence of the flow at times of high river discharge.

Objection 6 The costs of the Scheme are not itemised and not justified to reduce flood risk in Musselburgh

As a national and local tax payer, as well as a local resident and property owner in the area identified as a flood risk, I formally object to the Scheme approved by East Lothian Council on the following grounds.

- 6.1 **No break down of costs has ever been presented to residents** to justify the Council Leader and CEO welcoming £96m (now estimated at 103.535m) investment in Musselburgh.
- 6.2 **Costs for the new bridge at river mouth and replacement of Ivanhoe bridge are unjustified** as they are not related to flood resilience, but are to meet claimed Active Travel needs.
- 6.3 **No consideration is apparent to residents of whether Historic Environment Scotland** would allow discretely placed *starlings* on upstream side of the Roman and Rennie Bridges to facilitate the passage of debris in the river.
- 6.4 **No debris catcher is proposed for the exit from The Grove** despite the fact that it would collect a considerable amount of debris from fallen trees, especially willow, and would obviate the main reason for the need to replace 3 existing bridges with single spans. The river banks downstream of the proposed debris catcher site on the Buccleuch Dalkeith Estate upstream of the A1 bridge have virtually continuous cover of trees which can in whole or part fall into the river. Hence, a debris catcher downstream of the exit from The Grove is more justified than the one in the proposed Scheme.
- 6.5 **The means of dealing with the services currently carried by the Pipe Bridge replacement is not considered.** No material is presented about the implications for and the cost of replacing the lower bridge (Pipe Bridge) which has a vitally important role in the transmission of services: gas, electricity, water and waste. What are the costs and what is likely to be the disruption to citizens?
- 6.6 **Only minimal operational expenditure appears to have been allowed for maintenance of structures for their planned 100 year design life.** This attempt at future proofing fails to understand the level of uncertainty about climate change forecasting and the consequences of weather regimes on particular events and other consequences in light of experience of flood risk from climate change, and the consequential changes along the coast and in the catchment.
- 6.7 **Residents have been given no evidence of why demountable barriers or property based solutions have been dismissed.**
- 6.8 **No evidence is available to residents of the case for strengthening existing walls,** for example at Eskmills and Newfield, rather than building additional or new walls.
- 6.9 **No evidence is available about the potential use of materials other than concrete.** Tropical hardwoods from internationally certified sources could be used rather than concrete for structures along the river or along the coast. There are suppliers in Scotland with experience of the certification, supply and use of these materials as alternatives to concrete. This would significantly reduce the environmental impact compared with the use of concrete.
- 6.10 **The repair/replacement of the sea wall embracing the lagoons should not be included in the Scheme** This is a matter of private negotiation and resolution between the private owner, Iberdrola, and the Council, on the basis presumably that the company has responsibility for ensuring the security of the sea wall and safe storage of the pulverised fly ash stored behind it.

Taking these points together has resulted in an extremely expensive solution with no alternatives given to the East Lothian Councillors when making their decision to submit the Scheme to the Scottish Government for funding under Cycle 1. This means that the effect on my property and on those who live there and on those who visit is much greater than it need be.

Objection 7 The decision is being rushed for purely financial gain

As a local resident and property owner within the flood risk area, and a local and national taxpayer it is difficult to understand the urgency of submitting the Scheme under Cycle 1 except to grab money now from the Scottish Government.

- 7.1 East Lothian Council appear to be determined to keep Scheme in Cycle 1** as they accept the consultants' claim that there are no resources for Cycle 2. This ignores the Scottish Government's commitment to £42m pa for life of current Parliament, a one off additional amount of £142m and the Scottish Government commitment to announcing the Cycle 2 financial allocation this year. And it ignores the First Minister's request to Local Councils through COSLA to consider moving Cycle 1 pipeline schemes to Cycle 2.
- 7.2 Musselburgh flood risk is lower than other places** such as Perth, Haddington and Dumfries, where flooding is a regular occurrence. This means that SEPA should reassess the relative need for flood protection schemes.
- 7.3 The Council's decision ignores c4000 signature petition** to Council to pause scheme to allow a more holistic solution to be developed in full collaboration with residents.

Objection 8 Lack of independent scrutiny of the Scheme proposals presented to affected property owners

As a local resident and property owner within the flood risk area, and a local and central government taxpayer, as well as an experienced member of the Senior Civil Service and Accountable Officer during my working life, I object to the lack of independent scrutiny of the consultants' proposals.

- 8.1 The consultants have publicly stated that all assessments have been done internally by Jacobs staff.** All of the paperwork made available at the Brunton Hall in March/April 2024 is Jacobs 'material with no evidence of any external independent appraisal.
- 8.2 Standard practice used by the Institute of Civil Engineers has not been applied for dispute resolution.**
- 8.3** Evidence of appraisal by SEPA has not been presented to residents. No independent assessment of the Scheme has been presented to either the Councillors or the public. It is entirely appropriate to use the phrase 'the consultants are marking their own homework'.

Objection 9 The consultation process is fundamentally flawed

As a local resident owning a property in the identified flood risk area affected by the Scheme proposals, I object that the 'so called' consultation process has failed to interact with and respond to the views and concerns of property owners in the flood risk areas and is out of kilter with modern consultation processes.

- 9.1 East Lothian Council have continued to scaremonger residents** with press adverts of water depths in High Street especially at Pinkie Pillars.
- 9.2 East Lothian Council and its consultants have accused residents and property holders of scaremongering.** In fact these interests were merely using data provided in the public realm by the ELC and its consultants.
- 9.3 The consultants have scaremongered residents with continual increase in the number of properties likely to be affected by flooding.** The number has escalated from 2600 to 3200. However, in the formal Scheme proposals the number of affected properties is stated as 2037 residencies and 242 non-residential properties. No explanation of the reasons for the changes is given and gives rise to lack of trust in the consultants' work.
- 9.4 The old fashioned and outmoded top down approach to consultation** with residents has been used throughout: consultants tell us and ask for our views rather than adopting a collaborative approach.
- 9.5 Views and questions submitted by expert local residents** are never formally responded to by the consultants despite promises to do so.
- 9.6 No consultation of residents** has been allowed prior to the amended Scheme being put to East Lothian Council for decision in January 2024.
- 9.7 The Council argues that non EH21 signatories to the petition are inadmissible,** . It should be the other way round by recognising the value of Musselburgh 'place' to the wider community who visit the town because of its high amenity and attractiveness .

Objection 10 The EIA contains many inaccuracies and inadequacies, including lack of assessment of cumulative effects and the accepts that the impact on birds and their habitats will be excessive during construction phase and later given the changes proposed.

My objection is based on knowledge of assessments systems and the veracity or otherwise of the material and the way it is interpreted, as well as a local resident and property owner in the flood risk identified area.

- 10.1 The number of properties likely to be affected keeps changing without any justification.** This is a glaring example of the inaccuracy and confusion within the Council and its consultants. The leaflet delivered to houses affected, such as my own, states categorically on the front cover that the Scheme will protect in the order of 3200 properties. However, the EIA states 2037 residencies and 242 non-residential properties. Such gross differences in documents released at the same time raises questions about the veracity of any statements by the ELC and its consultants.

Objection 11 Documentation is not available to the public and apparently not to the Council to validate the consultants' decisions on many aspects of the Scheme.

Having reviewed the material publicly available and as a local resident owning and living in a property in the flood risk area, I object to the lack of documentation available for decision making by the Council and for public scrutiny on the following grounds.

- 11.1 Documentation on the options appraisal process in 2019.** I can find no documentation on the almost 100 options which the consultants claim they assessed. There is no material available to the public, and maybe not even to the Councillors, on the description of the options, the decision criteria used and the precise process of determining those options to be rejected and those taken forward.
- 11.2 No documents on the options were provided to the East Lothian Council Cabinet** when it made its most significant decision on what has consistently been termed the *Preferred Scheme* by the Council and its consultants.
- 11.3 No documents have been made available to the public about the assessment of public consultation on the four scenarios for the river and the coast.** As a result, the public have been given no evidence for the decisions by the Council for using Scenrio 2 for the river and Scenario 4 for the coast. This is so fundamental, but no justification has been set out to enable the Council or the public to make a reasoned assessment and come to a view on the veracity of the consultants recommendations which now form the fundamental basis for the Scheme.
- 11.4 No documents setting out the options for the flood barriers in front of my property have been presented to me or to my neighbours.** Starting with a wall of varying heights, the Scheme has now iterated it to a very wide embankment without any reasons being given in writing. Nor have alternatives of, for example, demountable structures, a wall on the inner side of the riverside pavement or a property based solution been presented for consideration by property owners and residents.
- 11.5 No documentation is available to the public on the consequences of removing the trellised bridge (informally termed the Pipe Bridge)** carrying vital services including water, drainage, gas and electricity, across the river.
- 11.6 The EIA glosses over the options process carried out earlier in the project.** The EIA provides no details to enable the public to come to a view on what options have been identified, what was the process of deliberation and what were the criteria used to arrive at the reasons for dismissal of the options. Indeed, the papers state "to ensure all interested parties have an opportunity to comment", but where is the evidence of the papers made available to the resident population in Musselburgh of all of the options, the processes used, and who were formally consulted? It does not exist; the workshops and technical meetings appear to have been with other than the local residents community. These papers must be made available for public scrutiny.

- 11.7 The cost to the public of obtaining the documents lodged for the statutory public consultation process is scandalous.** The Council cannot justify the cost of £1000 payment for a member of the public to obtain a copy of the lodged documents. This is compounded by the fact that the documentation is limited in its coverage as I state under this objection and elsewhere in my objections.
- 11.8 No documentary evidence is available to the public from Scottish Water about the use and management of the public reservoirs in the Esks catchment.** Given what has been achieved through changes in the management of reservoirs feeding into the Water of Leith on the north side of the Pentland Hills and given that Edinburgh's main water supply is from reservoirs in the Borders Council area, especially the Talla Reservoir, it is essential that the public and the Councillors have access to Scottish Water's formal appraisal and the opinion of SEPA on the proposals.
- 11.9 Limited availability of documentation.** The consultation documents released for public scrutiny during the March/April 2024 were only available for 6 hours on weekdays at one location in Musselburgh. They were also inadequate, as much of the backup material, as referred to earlier in this objection, was not presented. Most significantly no financial information is available to the public.

Objection 12 Incorporating active travel in the Scheme provides no benefit for reducing flood risk and is therefore irrelevant

As an active person walking and cycling locally for over 30 years and living and owning property in the flood risk area on Eskside West for over a decade, I formally object to the inclusion of Active Travel elements in the Scheme approved by East Lothian Council as being immaterial to the reduction in flood risk for the following specific reasons.

- 12.1 The Council now claim that parts of the Active Travel are no longer included in the Scheme.** This is factually incorrect, and I formally challenge this statement as the Active Travel components are in the formal documentation as part of the statutory public consultation process. The need for all of these schemes and the financial cost to the public purse has not been justified. There are plenty of options for walkers of all types and ages and cyclists to undertake active travel in, around and through Musselburgh at present without difficulty. These proposals seem to be a scheme looking for a project rather than a response to a pressing need.
- 12.2 The proposed schemes are heavily skewed towards cyclists,** but my observation of use levels is that pedestrians as walkers, pram/buggy wheelers and wheelchair wheelers are far more significant. The scheme developers need to undertake a fundamental review of the priorities of these schemes to favour pedestrians on the basis that being active out of doors benefits human health and wellbeing and should be for the majority not the minority. **Route 1** This route has very low cyclist use and makes no real sense so why is it being proposed? Specifically, Keer's Wynd is not suitable for cyclists, especially the passage through the pond where cyclists must dismount. Allowing cyclists to contraflow along Short Hope Street is nonsensical for motorists and for pedestrians who are the main users. This should be removed.
- 12.3 All of the proposals for Route 2 are sensible as this is the main route for cyclists.** But its development crucially depends on the provision of a multipurpose bridge at the New Street/ Eskside East crossing point. Any such new crossing must bear in mind the two critical uses: the utilities of gas, electricity, water and drainage which cross the river on the lower bridge at present and the pedestrian connection between lower Fisherrow and the town centre, including the important school student traffic from Loretto.
- 12.4 It is quite wrong to have Route 3 as part of the MFPS.** It is totally unnecessary to construct a new crossing of the river at the coast as is proposed, especially given the potential for a crossing where the Electric and Pipe Bridges are at present. Walkers and cyclists can easily travel up from the coastal path alongside Newfield to cross on the existing bridges. More fundamentally, it is against natural common sense, which ELC should be taking into account since it has declared a nature emergency. Such a bridge will affect the diurnal movement of birds within the estuary and will require an Appropriate Assessment under the Birds Directive Regulations by

NatureScot. Such a bridge will disturb the natural movement of sediment around the river mouth which is so important to retain the net sand accumulation occurring there for many decades. The founding of the proposed bridge will make the coast much more vulnerable to erosion at those points than it is at present and exacerbate the likely future coastal erosion predictions identified in the Dynamic Coast report.

12.5 The proposal for Route 5 makes no sense as it fails to utilise the existing riverside path. What is needed is to formalise the connection between QMU and the river crossing on the steel trellis bridge immediately upstream of the East Coast Mainline rail bridges. Again, the link to the MFPS is superfluous. That would avoid cyclists having to use the main route into the town from the A1 and City Bypass along Monktonhall Terrace and Eskview Terrace which is congested with cars quite justifiably parked outside their residences.

12.6 The proposed walkways on the top of the proposed embankments are not justified, as stated in Objection 1 for amenity, public safety, privacy and damage limitation reasons and should be removed from the Scheme.

12.7 The new proposed bridge at Goosegreen is not justified as part of the flood protection scheme. The proposal must be formally evaluated by NatureScot under the Habitats and Species Regulations for its impact on the Special Protection Area and also for its effect on sediment transfer from the river to the inshore area protected as an SSSI. It is not justified for flood protection and is not necessary for Active Travel. Furthermore, it is likely that it will negatively affect the natural sediment regime at the river mouth and have an impact on the seasonal and diurnal movement of birds between the river and the estuary.

Overview assessment against the Scheme objectives

Environmental Objectives

1. That the Scheme will achieve as a minimum a neutral impact on the environment.
Assessment: not achieved as is admitted in the EIA statements about long term damage to habitats and place. Furthermore, Scottish Government policy is to reduce impact.
2. To ensure that the Scheme includes appropriate catchment and natural flood management (NFM) measures. Assessment: not achieved 2 small scale reservoirs are proposed to be used but nothing else within the catchment.
3. To ensure that the Scheme considers the impact of climate change and includes appropriate provisions to mitigate any impact. Assessment: the use of climate change estimates is the main driver for all of the estimates of flood risk on the river and along the coast. However, it does not address these in the detail necessary to design an appropriate scheme for this catchment as the information is not available. Also the variability and unpredictability of weather, rather than climate, is not addressed. This is an important factor given the predicted increase in high intensity precipitation events affecting the catchment and the increased intensity and frequency of storm conditions at sea affecting the removal of intertidal sediment and the inland retreat of the coastal edge.
4. To ensure that the Scheme considers in full, and includes for any appropriate measures, to protect the Firth of Forth and its protected statuses. Assessment: not achieved. The statements in the EIA suggest that damage is recognised but no mitigating measures are proposed.
5. To ensure that the Scheme consults with all appropriate environmental stakeholders.
Assessment: largely achieved in the statutory sector but whether their views have influence on the Scheme is difficult for the outsider to judge. Not achieved from residents' standpoint

as there will be major changes to the environment that the consultants have only marginally modified.

Social and Cultural Objectives

6. To ensure that the Scheme does not sever the town from its river (through the height / size of flood protection walls and / or embankments) in either the physical or visual sense. Assessment: only some partial achievement as the sections of walls will remove views and also stop access to the river banks. The perception within the resident community and among visitors is that the river will now be cut off from the town to the detriment of all.
7. To ensure that the Scheme respects the cultural heritage of the town. Assessment achieved in not changing the two historic Listed bridges, but not achieved in cutting the town off from the river with the placement of defence works.
8. To ensure that the Scheme takes account of people most vulnerable to flooding. Assessment : not obviously achieved to me as the owner of a property vulnerable to future flooding.
9. To consult with stakeholders, businesses and the local population. Assessment: not good as flawed old fashioned top/down process used, and interaction is from consultants. The consultants are also the mouthpiece of the Council and its Elected Members.
10. To remove the real and perceived danger of a flooding event from the communities, individuals and businesses that lie in the floodplain. Assessment: has to be achieved with a Scheme which the property owners and users are satisfied as meeting their requirements and those of their insurers.

Ultimately East Lothian Council should be wishing to achieve the following objective:

Let's use Nature Based Solutions throughout the Esk catchment so that Musselburgh flood protection becomes an exemplar of new best practice: protecting properties, enhancing our lives, providing value for public money, improving amenity, and helping to address the twin crises of biodiversity loss and climate change.

The current Scheme does not achieve that objective , nor does it adequately achieve the ELC's own stated objectives. So, I Have 12 objections.

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