

Proposed Waterside Improvements and The Coastal Revival Fund.

Report from Cllr Richard Bickford, Chairman of The Coastal Community Team : Saltash

Recommendations.

The CCT : Saltash recommends to Saltash Town Council :-

- 1. That the principle of preparing a design feasibility study utilising Coastal Revival Funding for a public realm and flood protection improvement scheme for the Waterside area be approved.*
- 2. That the scope of such a design feasibility study be prepared in conjunction with the Environment Agency and Cornwall Council as the basis for inviting proposals from suitably qualified and experienced engineering consultants.*
- 3. That the list of engineering consultants presented in Appendix A be approved. ,*
- 4. That a Saltash Flood Forum and Waterside resident's representative be invited to join the CCT: Saltash*

1.0 Introduction

- 1.1. The Ministry of Housing, Communities and Local Government has awarded a grant of £50k under the Coastal Revival Fund to examine redevelopment improvements for the Waterside, being the river frontage stretching from Ashtorre to the entrance of the Saltash Sailing Club.
- 1.2. The accountable body for the fund is Cornwall Council, however responsibility for pursuing matters rests with The Coastal Community Team : Saltash on behalf of Saltash Town Council.
- 1.3. The Coastal Community Team : Saltash comprises local county and town councillors, members of the Saltash Neighbourhood Plan Steering Group, Community organisations, Waterside based businesses and local residents.
- 1.4. Over the summer and autumn of 2019 future plans and intentions were discussed with the trustees and management of Livewire, the owners of the former Wheatsheaf PH and trustees of Ashtorre.
- 1.5. In parallel with this the Regulation 14 Consultation of the Draft Saltash Neighbourhood Plan has taken place and reaffirmed the wish of Saltash residents to see the waterfront area improved.
- 1.6. Key meetings have been held with relevant Cornwall Council (CC) and Environment Agency (EA) officers. These have clarified respective areas of responsibility and provided valuable guidance on how matters might be progressed. Cornwall Council have also declared a Climate Change Emergency.

2.0 . Flood Risk Management considerations for the Waterside.

- 2.1. The ability to improve and develop the Waterside area will be influenced and determined by the positioning and design of any flood prevention measures. This in turn will define the extent of land which might be made available for public realm, community, resident or commercial land-use opportunities and options. Because of this it is important that the determination of the appropriate "defence line," and requisite engineering solution and design of flood protection measures as well as the scope and nature of public realm proposals are well co-ordinated.

- 2.2. The Durston Head to Rame Head Shoreline Management Plan prepared by the South Devon and Dorset Coastal Advisory Group is the definitive document which will frame the flood protection aspects of the project and process.
- 2.3. Overall, and according to the EA, the Saltash waterfront area is considered a relatively protected location. Whilst in storm conditions there are waves, the EA do not view these as overly large when compared with more exposed coastal locations. Any design concept will need to consider how waves are managed and how much overtopping is considered acceptable. If a wall is proposed to manage the flooding, the shape of the wall can be adjusted to decrease the amount of overtopping.
- 2.3. Another aspect of defence design is to consider the still water level. This is the tidal level with surge allowance arising from pressure and wind strength and direction and over time will be influenced by sea level rise associated by climate change. Current guidance provided by the EA on sea level rise allowances predicts a 1.1m increase over the next 100 years.
- 2.4. The creation of a defence will hold back flood water and prevent an area from flooding. The height of the defence will dictate the risk of the defence being overtopped. If the defence is too low the duration of flooding could be increased to “at risk” properties as flood water could become trapped behind the defence once overtopped. Small scale overtopping may be acceptable if it can be stored on the dry side of the defence over the course of high tide.
- 2.5. The management of surface water behind the defence will also need to be considered during times when estuary water levels are higher than the ground levels. Non return valves are often used for surface water outfalls and it might be prudent to design in an area that could store surface water during times of rainfall coinciding with high tidal levels.
- 2.6. Consideration should also be given to design flood defences that can be upgraded in height over time so a large allowance for climate change does not need to be included initially.
- 2.7. Coastal erosion is a consideration, however due to the fact that the estuary frontage is already “engineered” the EA consider this is less of an issue. What is an issue is the condition of the existing estuary walls and if there are future plans to build on top of existing structures the condition of these needs to be checked. Blocking routes where water could leak through under a new defence will also need to be considered.
- 2.8. The entire waterfront immediately abuts the Tamar Estuaries Complex Special Protection Area and the Plymouth Sound & Estuaries Special Area of Conservation and any detailed proposals may require a Habitat Regulations and Environmental Assessment and consequent mitigation measures.
- 2.9. The area being examined is included within a defined historic character area of the town which identifies historic features and buildings which make Saltash a recognisably distinctive place. Unfortunately, much of the 20th Century development has been of lower design standard which is poorly related to these distinctive characteristics. Thus it is very important that new works and development reflects the characteristics of good design.
- 2.10. It is very difficult to encroach into the intertidal area with new development. This is due to the protected nature of the intertidal zone. What may be possible is the removal of certain features, such as unneeded slipways, in the intertidal area which might allow a “trade-off” encroachment elsewhere. This approach might although be supported if overall betterment can be demonstrated. A coarse financial assessment/feasibility study could refine these factors down to a preferred economic option.
- 2.11. There are vital access issues to be considered including to Ashtorre, the old ferry slipway, Saltash Sailing Club (including mobile crane access,) to the town pier, town quay as well as to existing

residences and businesses. Future potential requirements for access to the river and facilities for water taxis, “steamers,” visiting yachts and boats, leisure, sporting and event requirements as well as resident and visitor car parking will also be material considerations.

3.0. Conclusions and Proposals

- 3.1. Having secured £50k from the Coastal Revival Fund, the Coastal Community Team are eager to progress the preparation of an appropriate design feasibility study for a combined public realm improvement and flood protection scheme. This will lead to the identification of land which might be available for additional and agreed community or commercial development.
- 3.2 This will be a major and complex engineering project and at this very early stage it is difficult to assess how much can actually be undertaken within this sum. It should be anticipated that a partnership funding approach will almost certainly be necessary as time progresses. It is also important to be alert to the fact that the award of the Coastal Revival funding has been founded on examining other economic and community development opportunities for the waterfront.
- 3.3. The EA are a potential financial contributor and have also offered technical and professional support. Equally, CC as a landowner, highway authority and flood authority will also be involved.
- 3.4. It should also be anticipated that a detailed topographical/land survey of the waterside, potentially a bore-hole survey and detailed services and drainage plans will be required early on to inform appropriate design features and the feasibility study. This will incur costs.
- 3.5. As part of the procurement process, the consultants listed in Appendix A will be asked to comment on the advantages and disadvantages of examining two engineering design options to determine the appropriate “defence line.” These will be :-
 - a. Following the existing "shoreline" and
 - b. Extending out into the river to increase the public realm area particularly in front of the Union PH parking area.Such comments will be used as part of the price and quality evaluation of submitted proposals.
- 3.6. We are fortunate in having a local architect on the Coastal Community Team, who in view of previous preliminary work and knowledge of the proposal could if required, be invited to provide cost-effective input and comment to the CCT : Saltash on public realm design aspects. Taking this approach, certainly in the preliminary stages of the project, would mean that the principal procurement task would be solely for the appointment of a suitably qualified and experienced engineering consultancy.
- 3.7. In view of the potential scale and impact of any scheme, it is considered appropriate to invite representation from local Waterside residents and the Saltash Flood Forum.

Cllr. Richard Bickford
Chairman of the Coastal Community Team : Saltash

Appendix A

A Schedule of suitably qualified and experienced consultancy companies previously engaged by the Environment Agency and Cornwall Council on flood prevention projects in Devon and Cornwall.

1. **John Grimes Partnership, Ivybridge** - A medium size engineering consultancy with good experience of undertaking design of coastal defences.
2. **Hydrock, Plymouth and Camborne** - A national multi-disciplined civil engineering consultancy used by the EA to design local flood risk management schemes
3. **Jubb, Plymouth** - A south of England based multi-disciplined civil engineering consultancy. used by the EA to design local flood risk management schemes
4. **Airey and Coles, Plymouth** – a privately owned practice, offering civil and structural engineering design services and used by the EA to design local flood risk management schemes
5. **Atkins, Exeter** - a member of the SNC-Lavalin Group, one of the world’s most respected design, engineering and project management consultancies. Used by the EA to design local flood risk management schemes.
6. **JBA Consulting, Exeter** - An independent and employee-owned consultancy of engineers, environmental consultants, scientists and designers experienced in managing weather and environmental risks and opportunities.
7. **Royal Haskonning DHV, Exeter** – A major International Consultancy providing services that cover the whole flood risk management cycle, from concept to feasibility, impact assessments, design, tender process, site supervision and operation and maintenance and including the design of structural measures
8. **Jacobs Consultancy, Exeter** - A major international consultancy with expertise in building resilient coastal solutions.
