
Subject:	FULL STRUCTURAL SURVEY TO DEAL PIER
Meeting and Date:	Cabinet – 4 September 2023
Report of:	Keith Watson, Corporate Estate and Coastal Engineer
Portfolio Holder:	Councillor Charlotte Zosseder, Portfolio Holder for Community and Corporate Property
Decision Type:	Non-Key
Classification:	Unrestricted

Purpose of the report:	To seek approval for a project to undertake a full structural survey of Deal Pier and any immediate repairs.
Recommendation:	To approve a project to instruct consultants to undertake a full structural survey to Deal Pier and carry out any immediate repairs as necessary.

1. Summary

- 1.1 Deal Pier was officially opened in 1957 being constructed of reinforced concrete. The pier consists of a main walkway stem with open timber seating. At the seaward end of the approach was a three deck pier head set at right angles to the approach, but the lowest deck is no longer functional due to sea levels. At promenade level there is a cafe, bar and terraced area. Below was the main landing and fishing deck with angled wings to increase berthing facilities, however this is now mainly used for recreational fishing. The pier head was constructed from encased steel sections with a reinforced concrete deck.
- 1.2 Structural engineers that specialise in structural marine concrete were appointed by Dover District Council (DDC) to conduct a limited visual and tap survey of the structure in 2017. The structure was found visually to have deteriorated and exhibited distress in some areas. The exposed surfaces were found to be variably weathered and discoloured, generally consistent with concrete elements cast and exposed in this environment for a minimum of 60 years. The levels of corrosion discovered within the concrete were deemed adequate for a 60-year-old structure.

2. Introduction and Background

- 2.1 According to the results of the survey it was necessary to carry out repairs to some of the concrete beams, south steps and supporting stringer beams to the lower deck beneath the pier head. These repairs were carried out in subsequent years during the agreed funded refurbishment works from 2018.
- 2.2 Although the structural survey was an important step to take this was only limited to areas that could be visually sighted and reached by existing platforms. The initial survey did not include the supporting pier legs, cross beams or substructure beneath the lower deck. These areas can be partially seen but not tested, however it is self-evident that some of the supporting pier legs have deteriorated further with signs of rusting taking place along with exposure of the internal reinforcement bar.
- 2.3 The initial survey picked this up and recommended a full structural survey in future years to ascertain the extent of deterioration and repairs. Consequently, it will be

necessary to provide specialist scaffolding, marine vessels and safety boats to access such areas to conduct the surveys safely.

- 2.4 Following completion of the inspections and surveys there might be essential repairs to be carried out in the short term and any remaining budget will be used to address this. The survey will also produce a report with recommendations to inform the Council further in addressing the long-term repairs and associated costs. Whilst present concrete defects can make the structure look vulnerable, it is worth noting that it is the steel within the concrete that is doing most of the work. The concrete in this scenario aids a layer of protection to the steel against corrosion from its coastal environment.

3. **Identification of Options**

- 3.1 Option 1: Do nothing.
- 3.2 Option 2: (Recommended) To carry out the full structural surveys/inspections and any short-term repairs with the remaining budget.

4. **Evaluation of Options**

- 4.1 Option 1 is not recommended because the structure will continue to deteriorate and without the results of the inspections and surveys it will be difficult to ascertain its true condition and level of repairs and costs for future maintenance.
- 4.2 Option 2 is the recommended option with Deal Pier being a key asset to the Council and this will inform members on the full extent of its structural integrity. This will also allow the Council to review and decide on future short/long-term repairs.

5. **Resource Implications**

- 5.1 £75,000 is set aside in the Special Revenue Project 2023/24 Medium-Term Financial Plan to fund the full structural survey and any necessary short-term repairs.

6. **Climate Change and Environmental Implications**

- 6.1 None.

7. **Corporate Implications**

- 7.1 Comment from the Director of Finance (linked to the MTFP): Accountancy have been consulted in the writing of this report and have no further comment to add (AC).
- 7.2 Comment from the Solicitor to the Council: The Solicitor to the Council has been consulted in the preparation of this report and has no further comments to make.
- 7.3 Comment from the Equalities Officer: This report recommending a full structural survey of Deal Pier to be undertaken and any immediate repairs carried out, does not specifically highlight any equality implications, however in discharging their duties members are required to comply with the public sector equality duty as set out in Section 149 of the Equality Act 2010.
- 7.4 <http://www.legislation.gov.uk/ukpga/2010/15/section/149>
- 7.5 Other Officers (as appropriate):

8. **Appendices**

Appendix 1 – Photographs

9. **Background Papers** – Limited Investigation Works to Deal Pier 2017 by CRL Surveys

Contact Officer: Keith Watson