

STRUCTURAL REPORT

ON: VERONICA, LOOE
STRUCTURAL APPRAISAL OF PROPOSED SCHEME

FOR: MR F. TALIA

DATE: JULY 2021

PREPARED BY: B PENGELLY M.Eng



1.0 INTRODUCTION

- 1.1 Martin Perry Associates has been instructed to provide a structural engineers report on the proposed new build domestic property on the vacant Veronica site located above the A387 Sandplace Road, Looe.
- 1.2 It is understood that the wall forming the rear elevation of the site collapsed in March 2013, causing significant damage to the existing building.
- 1.3 The building was subsequently demolished, and a new retaining wall designed and constructed by Cornwall Highways Authority and Cormac Solutions to support St Martins Road above. The highway retaining wall was constructed as a piled retaining wall and utilised existing retaining walls on the site. It is assumed that the retaining wall has been designed, constructed and inspected in accordance with all relevant and current Highways Standards.
- 1.4 We visited the site in May 2021 to review the site and the retaining walls.
- 1.5 Following our site visit a retaining wall above the A387 Sandplace Road on a neighbouring property has shown signs of movement and a road closure has been put in place.

2.0 THE SITE

- 2.1 The plot was vacant at the time of the visit, the original building had been on a raised terrace approximately 5m above Sandplace Road, formed on a cutting into the original sloping site.
- 2.2 Access was limited to a stepped and ramped pedestrian path from Sandplace Road running across the width of the site with stone facing walls either side of the access path. These walls appeared to be in fair condition at the time of the site visit.
- 2.3 The rear boundary wall, supporting St Martins Road has been fully rebuilt including a raised terrace area in front of the piled retaining wall. This will be monitored by the Highways Authority throughout its lifetime. Access to the wall for inspection will be maintained as part of the proposed scheme. The stabilisation works have been covered by the previous planning report produced by James Lockyer Associates.

3.0 PROPOSALS

- 3.1 Based on the Space Design drawings 2115 / 02-07, the proposals are for two, three storey townhouses of using traditional construction methods, utilising the footprint of the previously approved scheme.
- 3.2 The finished ground floor level appears to be lower than the existing ground levels.
- 3.3 There is to be a cantilever balcony to the front of the proposed buildings.

4.0 CONCLUSIONS

- 4.1 The highway retaining structure at the rear of the site will be retained and the proposed scheme will be designed not to affect the support system to the wall.
- 4.2 To allow for a reduction in site level, without undermining to the highway structure, a piled raft foundation is proposed. The excavations will be carefully monitored on site to ensure these are limited. A piled foundation will be created where made ground is present.
- 4.3 At the front of the site, any potential loading onto the existing stone facing walls will be designed

out. The piled foundations will be located to avoid surcharging the stone walls. The reinforced concrete foundation slab can be designed to cantilever to the edge of the wall without surcharging the wall.

- 4.4 Piles will be small diameter, Odex type, drilled piles with steel casing. A small drilling rig should be able to access the site and this type of foundation would minimise traditional excavation on site. The piles will extend into the underlying bedrock to support the vertical loads from the new building without surcharging the existing structures.
- 4.5 The stone facing walls should be monitored throughout the construction phase for any signs of movement or distress. Vegetation should be cleared, and walls repointed in lime mortar, the extent and details of this maintenance will be agreed on site.
- 4.6 The foundation proposals are indicated on the attached section drawing of the site. Drawing 21320 - 050 Proposed Section.



SIGNED:

DATED: 16th July 2021

APPENDIX A
PHOTOGRAPHS



Figure 1 - Vegetation on stone facing walls.



Figure 2 - Highway retaining walls to rear of site.x