

Structural Condition Report
on
Existing Retaining Walls
at
Former Clun Primary School
Clyne, Neath
SA11 4BW

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Ref :CM/SM/JS/001

For the attention of Mr John Slater

Dear Mr Slater,

RE: SITE INSPECTION AND STRUCTURAL CONDITION REPORT ON EXISTING MASONRY RETAINING WALLS AT FORMER CLUN PRIMARY SCHOOL, CLYNE, NEATH, SWANSEA, SA11 4BW

Further to your recent instructions, I visited the above site on 1st July 2019 in order to carry out a visual inspection and prepare a structural condition report on the existing masonry retaining walls that support the front of the school grounds and playing fields and also form the main access to the school. This report has been commissioned in order to address Condition No8 of the current planning consent. No elements of the retaining walls were exposed during the visit and this report is based purely on a visual inspection, my findings were as follows.

1.0 Description

The site is currently occupied by a complex of school buildings and a large playing field area that formed the former Clun Primary School site. The school which was built in the late 1800's and has had extensive new elements added over the past 100 years, was closed in 2015 and the children and staff largely relocated to the Ynysfach Primary School. The main school buildings have yet to be demolished and the site cleared in readiness for the construction of 26No new dwellings and associated infra structure works. The stone walls fronting the site can be divided into two distinct sections

- 1) Original stone walls that front the school buildings and form the access in to the grounds.
- 2) Newer section of stone faced wall (with gabion baskets behind) that front the playing field area.

2.0 Structural Condition Report

- 2.1 The original stone wall fronting the school section of the site is a random stone face wall which given its age is likely to have a thick rubble core since this was a traditional method of wall construction in the late 1800's. The wall varies in height from 2.4m at the western end to 3.3m at the eastern end and has a large stone coping feature that runs along the top. There are large and irregular shaped weep holes formed in the stonework. A vehicular access up in to the school has also been constructed approximately mid way along this section of wall
- 2.2 The wall would have been constructed using locally sourced random stone with a lime based mortar, however, at some time in the past the face has been re-pointed using a modern raised cement based mortar. The original weep holes appear to be open and clean along the wall.

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- 2.3 Generally this section of original stone wall, given its age, appears to be in very good condition and apart from some small localized areas where vegetation is growing from the face of the wall (see photo) the wall appears to have been well maintained over the past 100yrs.
- 2.4 There are no signs of cracking in the face of the wall or the mortar or any signs of structural issues/failure, such as rotation movement or settlement, visible in the wall or the adjoining footpath.
- 2.5 The stone wall fronting the playing field section of the site is a much newer coursed stone faced wall with a gabion basket retaining element behind the front masonry element and security fence along the top. Enquiries lead me to understand that this section of wall was added when the school grounds were extended to the West for the new playing fields.
- 2.6 The age of the wall is further highlighted by the use of a modern cement based mortar pointing, Plastic weep holes and the provision of an ACO type drain along the bottom of the wall to Intercept any discharge from the weep holes. The new stonework is random coursed as opposed to the random stone used in the older wall but the large stone coping feature has been retained. The new wall is an average of 2.0m high along its entire length. There is a pedestrian access appoint with metal gate in the wall which is to be infilled.
- 2.7 This newer section of retaining wall is in very good condition structurally and again there are no signs of cracking in the face of the wall or the mortar or any signs of structural issues/failure, such as rotation movement or settlement, visible in the wall or the adjoining footpath.

3.0 Conclusion/Recommendations

- 3.1 The overall conclusion to be drawn from this inspection is that both the old and new school walls are currently in good condition structurally and, despite the fact that the original school wall was built over 100 years ago, it has probably benefited from regular routine maintenance such as re-pointing, and is still structurally sound. The walls do not show any signs of structural movement or failure.
- 3.2 The vegetation growing in the older section of wall should be carefully removed and the wall treated with weed killer and then re-pointed. Both sections of wall, and in particular the older section, should be periodically inspected and routine maintenance work carried out, such as cleaning the weep holes, to ensure that long term they still remain in a serviceable condition.
- 3.3 In terms of the layout of the proposed housing development the walls will be supporting the rear gardens of the houses (houses set back) and as such will not be subjected to any additional loads. Any new or infill sections of wall should be designed to accommodate a domestic garden surcharge of 1.5 kN/m²

Please contact me if you need to discuss any aspect of this report or the recommendation.

Yours Faithfully



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