3.4 BUILDING 3

North Elevation

South Elevation

East Elevation abuts building 4.

West Elevation

3.4.1 Building 3 comprises concrete portal frames with concrete purlins supporting a timber boarded and slated roof. External walls are masonry with blockwork inner leaf and external brick leaf, a concrete gutter is present that is assumed to form the eaves member of the primary concrete frame.

3.4.2 Generally, the building appears tired with the majority of defects superficial and caused by lack of maintenance. Modifications have been undertaken involving the blocking and opening up of doorways. The workmanship of modifications made is of questionable quality, for example weatherproofing not considered or properly addressed.

3.4.3 Anecdotally, from an employee of some 15 years, the roof leaks. This is notable where old ventilation extracts have been sealed poorly. Clearly some of the timber boarding needs replacing, however generally appeared in reasonable condition.

3.4.4 The site falls towards the north with the slab running level from the southern end. There is therefore a raised section of masonry substructure with concrete capping exposed at the northern end. The concrete capping and masonry are significantly damaged along its length with the rebar exposed and a large loss of the concrete section. This however does not appear to have compromised the overall stability of the floor slab or side wall at this end.

3.4.5 Externally the roof line appeared to have a slight undulation, sagging only very slightly between the main frames. The tiles appeared in reasonable condition despite the lack of maintenance, the odd tile has slipped. Vegetation has been allowed to grow over the roof obscuring the tiles.

3.4.6 Where building 4 abuts building 3 a change in roof level occurs forming a trapped gutter. Judging by the tideline significant amounts of water appear to form in this valley. The build-up of vegetation obscured the detail of this gutter area. Notably the edge of the original concrete gutter can be seen inside building 4 suggesting that a new gutter should have been formed. However, no additional downpipe was noted.

3.4.7 To the west elevation the concrete gutter appears to still be functioning albeit overdue maintenance. The downpipe to the left of the main roller shutter has completely corroded away at the top where it joins the concrete gulley.

3.4.8 The external masonry was generally weathered with some significant mortar loss in some areas. The bricks appeared to be an LBC common type known to be of poor resistance to frost and moisture. The guttering has overflowed causing staining and mortar loss and the corners of brickwork have been damaged by impact from vehicles.

3.4.9 Cracking was noted to the southeast corner adjacent to a window opening. There is cracking internally in this position but not a direct reflection of the external. The pattern of the cracking indicates some minor settlement of the southeastern most corner relative to the remainder of the building. The foundations should be exposed in this area to confirm the underlying ground conditions and how the masonry is supported relative to the main frames.

3.4.10 The concrete frames themselves appeared in sound condition throughout. No testing of the concrete was undertaken and there was no specific cause to lead us to propose such testing. The frames are the type commonly associated with Atcost who produced large numbers of reinforced concrete portal sheds between the 50s and 70s. Concrete issues

such as high alumina cement or poor-quality materials/construction is not known to be associated with this type of frame.

3.4.11 One column was damaged adjacent to the main roller shutter doors, likely caused by vehicular impact. A similar problem has occurred to the concrete frame surrounding the openings at each gable end. The metal cladding around the roller shutter housing a support frame is damaged and the frame is corroded at the base.

3.4.12 When viewed from ground level the frames do appear to have a number of cracks however, on closer inspection these appeared to be cobwebs or superficial cracking to the paint finish that could be rubbed or scratched away. It was not possible to reach all areas of the frames with the cherry picker to confirm this but nothing that appeared to be significant structural cracking within the concrete frames was noted.

3.4.13 The frames have a number of coats of paint applied, this has flaked in some places revealing the concrete beneath. Where exposed the concrete appeared to be of sound quality. Green staining from moisture and lack of damp proofing to the columns either side of the roller shutter door is present. This must be cleaned off, the paint removed so that the condition of the concrete beneath can be assessed.

3.4.14 The underside of some of the primary concrete rafters have been hit, presumably with equipment or machinery. This has resulted in minor spalling of the concrete. No reinforcement is exposed although the cover is now reduced.

3.4.15 The concrete purlins appeared in good order. It was not possible to view the top surface of all purlins to check if water damage to the timber has affected the concrete. Viewing from the underside there was no indication that the purlins are defective in any way.

3.5 BUILDING 4

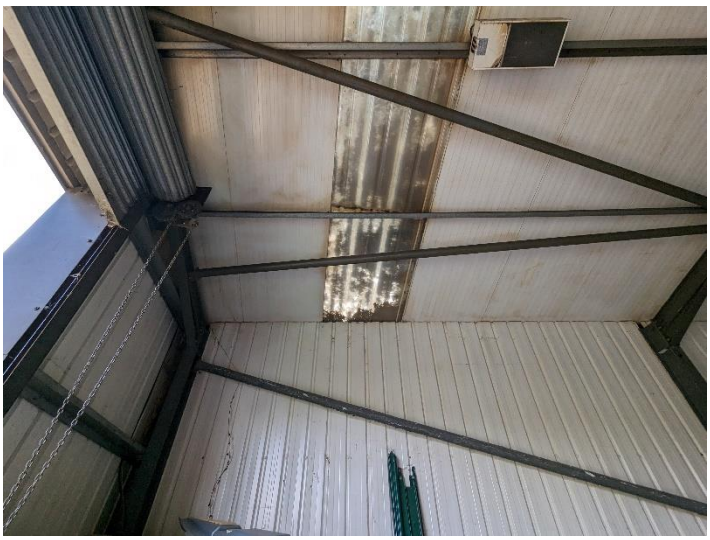
North Elevation

South Elevation

East Elevation

West Elevation abuts building 3 to right of photo

3.5.1 Building 3 comprised a steel portal frame built tight to the eastern side of building 4. Unusually, the frame is skewed to fit the tapered gap between building 3 and the boundary. The building is clad in profiled metal sheeting with a blockwork plinth. For unknown reasons, the eastern wall does not have side rails and it is missing the eaves member.



3.5.2 At the southern end of the main frame a doorway in the cladding leads to a small monopitch steel framed shed with roller shutter to the southern elevation and further roller shutter and door into building 3. I was not able to open the roller shutters or door.

3.5.3 Substantial vegetation is growing to the eastern side and across on to the roof. This did not appear to have caused any damage, but the gutter could be seen to be blocked.

3.5.4 The cladding was damaged in places, presumably by vehicular impact. In two positions in particular the cladding appeared damaged such that it may no longer be weather tight.

3.5.5 With reference to item 3.4.6 of building 3 the concrete gutter originally serving only building 3 is still present internally to building 4. A downpipe is still present indicating that the guttering may still be at least partially functioning. The masonry of building 3, now internal to building 4 was in reasonable condition with some mortar loss to the lower few courses. This is likely to have occurred before building 4 was installed.

3.5.6 The paintwork to the steel frame was unusual in so much that some of the primary steel members along the eastern (skewed side) appear to be coated in a thick layer of textured paint. This has flaked off in some areas revealing and rough primer coat presumably required as a key for the surface finish. Small flecks of rust are noticeable in the primer coat. The remaining steelwork appears to be coated in standard paint. My inference from this evidence is that the framework for building 4 has been repurposed from another site where possibly the eastern elevation was exposed externally and therefore required no purlins or eaves beam to fix cladding and treated with a more 'attractive' finish.

3.5.7 The primary steel members, other than the unusual paint finish appeared in good condition overall. No section loss, significant damage or displacement was noted.

3.5.8 As far as could be seen the ridge line was straight. The sealant strips to the ridge capping are dislodged in places.

3.5.9 The monopitch frame to the southern end appears to have been built to fit the space in an ad-hoc manner. Despite some non-standard detailing it appears generally in good order. The external surfaces including were almost entirely inaccessible and obscured with vegetation.

3.5.10 Some bolts are missing from base plates and the floor is uneven with the timber decking undulating between support points. The overall floor makeup is unknown.