

# KPP ARCHITECTS

## Site Layout

Units 2, 3 and 4 remain in approximately the same location and orientation as Approved, albeit due to detailed analysis of the ground conditions they have reduced in overall size, principally to respect the extent of the previous quarried areas (see plan appendix I and appendix II).

With regard to unit 1, JPG Engineers have undertaken a detailed and comprehensive review of the ground investigation, principally concerned with the historically quarried area. This quarry had been excavated to a depth of up to 12 metres (see plan appendix 1). Whilst it is set out in detail in the Engineer's Report, principally the historic fill of this area is one of uncontrolled tipping, resulting in an inconsistent and unpredictable ground, comprising of diverse material, both in terms of scale, i.e., large boulders, etc. and type. The edges of the quarry also present a complex situation, known as a 'high wall' which is in effect the interface between the natural ground and the filled ground. This edge forms a hard fault, over which buildings should not be constructed, as this differential settlement has, in extreme cases, caused buildings to 'break their back' and in the worst cases require demolition. With these constraints, the Engineer's ability to provide a ground treatment/foundation solution that is acceptable and warrantable, both in the institutional market and for end users within any traditional and viable methods is virtually untenable. The conclusion of this investigation was the relocation of the building to avoid this area, as the use for external yards is less sensitive and the acceptability of any movement can be controlled for external areas, where as the high level tolerances and inherent risk for buildings is unacceptable in the market and occupier (see JPG's Report appendix III & report "Factual Geotechnical Investigation").

## Visual Impact Acoustics

The visual benefit of reorientation of the building is that it is moved further away from the boundary/residential unit by some 40 metres which as seen from the sections reduces significantly any overshadowing of the residential units. The consequence is the location of the yard and it's potential for noise generation, our Acoustic Consultant was appointed to undertake detailed analysis of this and working with the Local Authority, provided mitigation proposals which we believe address this potential issues, notably by the increase in landscape bunds, the introduction of acoustic fence, which through detailed analysis and in consultation with the Local Environmental Health Officer, would provide the appropriate mitigation to match, or indeed exceed, that from the original Approval proposals.