unexcavated foundations should be recorded for any further redevelopment of the area. It will be necessary to backfill voids with a granular fill compacted to a suitable specification.

Any removal off site of made ground may be kept to a minimum by stockpiling the material on site and reusing it for landscaping subject to adequate assessment of contamination.

8.4 Building Foundations

Table 8.1 summarises types of foundations and briefly discusses the generic suitability of each foundation type to carry reasonable loads in the existing ground conditions.

Table 8.1: Summary of Foundation Solutions

Foundation Type	Suitability
Strip and pad foundations	Considered suitable in areas where differential settlement is not expected (natural ground, Langley Silt or Lynch Hill Gravels) and low bearing pressures are designed.
Raft foundations	Possibly suitable providing that variable made ground is removed and foundations are based on natural ground (Langley Silt or Lynch Hill Gravels) or suitable reengineered ground at low to intermediate bearing pressures.
Vibro improvement	Suitable in the areas of deep made ground. Either stone columns or concrete columns will be suitable, though stone columns are likely to be more economic.
Bored piles	Bored piles are considered a possible option for the site to carry medium to high loads for the proposed multi-storey buildings. The presence of groundwater within the granular materials may give some construction problems associated with the collapse of granular materials in saturated conditions when boring (Lynch Hill gravels).
Continuous flight auger piles (CFA	The pile auger supports the bored sides during construction without the need for temporary casing or bentonite. These piles will reduce the likelihood of collapse and difficulties of construction of the bored piles in saturated granular ground.
Driven Pile (Cast in place or pre-cast)	Ideally suited for granular soils below the water table. Maximises the use of available skin friction and end bearing potential in granular materials. The drivability of the piles should be checked with a specialist piling contractor based on the data provided by this report. Vibration associated with installation can be an issue in sensitive areas.

Due to the considerable presence of made ground and Langley Silt at the site, it is likely that a selection of different foundations types will be appropriate dependent on the structural loadings to be imposed.

Spread Foundations

General

The made ground and the Langley Silt are unlikely to be suitable as founding stratums. Foundations will need to be taken to the firm Langley Silt or to the Lynch Hill Gravel. Further delineation of the areas of shallow foundations will be required. Deeper excavations will be required where made ground or Langley Silt is of greater thickness. Where greater than 2.0m in depth it is likely that excavations will encounter ground water and it may be more economic to adopt vibro improvement beneath structures.