APPENDIX C

Structural Engineers Sequence of Construction Plan and Drawings

1. Before demolition begins the contractor must open up the existing building structure sufficiently to enable the project Chartered Structural Engineer to confirm that the existing building at no.16 does not restrain, or otherwise support, either existing adjoining building. They must obtain written authorisation before proceeding with any demolition. This is only a safeguard, as we are confident that no restraint is being provided to either adjacent building.

2. Carefully and quietly demolish existing building, in a reverse sequence from roof downwards, following all appropriate H&S procedures. Provide appropriate protection to neighbouring properties and gardens and the public footpath / highway. Wet works thoroughly to control dust.

3. Carefully excavate ground level to match depth of existing foundations throughout. Do not undermine any foundations, particularly in the case that some are found to be shallower than others.

4. Install contiguous piles throughout site and cast RC capping beam on top, as noted on plans 00250 P01 and P02. Do not cast capping beam along front boundary with no.15. Piles in this area to be cast up to existing foundation level, to offer temporary restraint to earth during local underpinning sequence.

5. Install walers and fully braced direct propping across site, at base of existing foundations (noted ‘stage 1 propping’ on section drawing 00250 S01, and plan drawing 00250 P02).

6. Underpin existing Party Wall foundations of no 15, to first stage depth, numbered 1 to 6 as indicated on plan 00250 P02.

7. Underpin existing Party Wall foundations of no 15, to first stage depth, numbered 10 to 16 as indicated on plan 00250 P02, cutting out individual piles as required for access to each underpin individually.

8. Cast remaining RC capping along front boundary with no.15 once above underpinning, numbered 10 to 16, has been completed.

9. Underpin existing Party Wall foundations of no 16½, to first stage depth, numbered 20 to 26 as indicated on plan 00250 P02.

10. Install walers and fully braced direct propping across site, at base of existing foundations (noted ‘stage 2 propping’ on section drawing 00250 S01).

11. In addition install fully braced direct propping across site to the rear garden area, between the RC capping beams.

12. Install second stage underpinning throughout, as numbered 30 to 36 on our basement level plan, 00250 P01. Install direct propping across site between adjacent underpin blocks as work progresses, (noted ‘stage 3 propping’ on section drawing 00250 S01).

13. Once all underpinning is completed excavate remaining earth down to basement formation level and cast reinforced concrete (RC) basement slabs, throughout.

14. Next remove stage 3 propping and cast RC retaining walls up level just below stage 2 propping. Once walls have been struck and cured sufficiently install propping at top of new walls and remove stage 2 propping.

15. Cast rest of RC retaining walls up to lower ground level, then cast the lower-ground RC slab throughout, including rear garden area.

16. At the front area, cast RC retaining walls up to stage 1 propping level.

17. Once the RC walls are sufficiently cured install propping propping at top of new RC wall and remove stage 1 propping throughout, so that remainder of RC retaining walls may be cast along with new external RC ground slab.

18. Once the lower-ground slab has cured sufficiently remove all the propping.

19. Construct new steel framed building above, following all appropriate H&S procedures.