53 Bradfield Way
Waverley
S60 8WE

05/10/17

Supporting statement for Minor Material Amendment Application for Planning Application 2017/0003 14 x flats on site of Former Social Club Farm Road, Barnsley

Differences between Planning drawings and Construction Drawing are due to:

- design development, detail design and robust details
- Building Regulations/ Fire officers comments
- Construction Methods include ease of construction
- Structural Engineering design
- Value engineering
- Planning Conditions
- Sap Calculations

The results is that all Building differs slightly from the designs submitted to Planning. A condition of Planning Application is that the building must be built 'as shown' on the drawing submitted. Therefore we submit this Minor Material Amendment Application.

Size of Building:

- The width remains unchanged
- Length of building extended by 225mm (1 brick)

Ridge heights: (see dwg. 033-102C)
The Scheme show on the Planning Application had 3 x ridge heights and 4 x eaves height the scheme for construction has 4 x ridge heights and 2 x eaves heights.

These changes are required to allow sufficient headroom in Flat 13 and the Roof over this flat (No.1 in list below) this is where the greatest increase in ridge and eaves height is. The DT has then endeavour to mitigate this increase by redesign the roof scape to step down towards the Bungalow where both ridge and eaves height are lower than the previous design (over flat 7) Please note that the building has moved a further 212mm away from Farm Road (South) thus helping reduce the visual impact of the building as seen from Farm Road.

Differences for the Ridges heights listed below as seen from East to West from Farm Road (The North Elevation A eg 1= roof over flat 13)

1.	Planning: 114.760	Construction: 115.240	+480 mm
2.	Planning: 115.780	Construction: 115.740	- 40 mm
3.	Planning: 114.210	Construction: 114.330	+120 mm
4.		Construction: 113.810	-400 mm

Eaves Heights: (see dwg. 033-102C)
Differences for the Ridges heights listed below as seen from East to West from Farm Road (The North ElevationA)

1.	Planning: 111.456	Construction: 112.130	+675 mm
2.	Planning: 111.962	Construction: 112.130	+170 mm
3.	Planning: 110.650	Construction: 110.700	+ 50 mm
4.	Planning: 111.130	Construction: 110.700	- 430 mm

External Works, Car parking and Building Position (see dwg. 033-101D)

- To comply with Highways an alternative vehicular ingress scheme has been designed to ensure visual splays onto Farm Road comply

- The widening of the drive width and the footpath running alongside pushes the foot print of the building 600mm West. The building moves 212mm south (away from Farm Road).

- The location of the footpath was adjacent to the East Elevation, due to the above reason the footpath now runs parallel along the eastern boundary alongside the access to the electrical substation

- The car park layout has been pulled away from the South/western corner of the site to keep the works away from the banking and negating any unnecessary retaining structures, reduces the amount of tarmac areas and thus increasing the grassed area

Materials:

Change of roof tile from Marley Eternity fibre cement roof tile to a Condron grey roof tile due to value engineering. The new tile has been chosen as a 'best match' to the one it replaces.

Building changes:

- The stairwell and its fenestration has been widened to comply with Building Regulations escape widths
- The roof 'overhang' above the Entrance has been omitted due to value engineering and to simplify the construction.

Thermal Efficiency:

SAP calculations have been undertaken and show that the current design and specification fails the SAP calculations. The consequence of this is that it will not pass Building Regulations and the specification needs to be readdressed. Considerations are as follows:

- Heat apartments and hot water via gas boilers.
- Heat a portion of apartments via gas boilers and remainder with electricity.
- Mitigate electric heating with Solar Thermal heated water.
- Mitigate electric heating and hot water with photovoltaic panels (10KW system) which will provide a portion of electricity.
- Move towards air source heat pumps for the heating.

Assessment of the options yielded that:

- Bringing gas into the properties and providing gas boilers would be cost prohibitive – estimated to add in the region of 20-25k onto the scheme, as well as giving logistical challenges of fluing the boilers.
- Gas heating to half of the apartments (or even 2/3 of the apartments) would still not yield a pass in SAP calculations.
- Solar thermal heating is possible, though the resultant inclusion of a dedicated plant area is not feasible within the confines of the building as it stands, therefore significant design amendment would have to be undertaken. This would in turn increase costs (adding extra space to the plant room) and may also result in a significant change to design .
- Air source heat pumps for the building would cost in the region of £1400 per dwelling and would not include provision for hot water heating. This method is also deemed cost prohibitive, again adding in the region of 20k to the scheme.
- The inclusion of PV panels will achieve SAP compliance but will add £10k onto the scheme. Though it will require some elements of the building fabric upgrading it is deemed to be the most cost-effective way of achieving compliance.

Therefore please see the addition of a 10KW PV system to the southern elevation (see dwg. 033-102C)

Conclusion

It is our hope that Planners support our Minor Amendment Application and it is shown that we have demonstrated that the Design Team has made best efforts to mitigate the design and Regulatory conditions which have arisen during the detail design stage. We feel the changes we have made enhances the overall design and layout of the proposal making the built scheme a better designed and better performing structure which provides 14 new flats to the area. Please note, that the internal floor areas (sqm) for the flats has not changed and remains as per the Granted Planning Application.