INVESTIGATIVE REPORT

on premises known as

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STONES SQUARE CAR PARK AND OVERSPILL CAR PARKING BURLINGTON PLACE SHREWSBURY

for and on behalf of

SOUTH HERMITAGE MANAGEMENT COMPANY

date of inspection

WEDNESDAY 7TH NOVEMBER 2012

Johnson Fellows Chartered Surveyors Charter House 163 Newhall Street Birmingham B3 1SW

Tel: 0121 643 9337 Fax: 0121 643 6407

Regulated by RICS

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1.0 INTRODUCTION

- 1.1 Johnson Fellows have been instructed on this occasion by South Hermitage Management Company to undertake an inspection of Stones Square and the overspill car park associated with the residential development. Indeed Andrew Rowson of Johnson Fellows made a brief inspection of the associated areas on Tuesday 4th September 2012 in order to provide a quotation for the survey and report.
- 1.2 The residential development is believed to be around 16 years old and the pressed concrete surface within Stones Square is original. Evidently the surface of the car park has been coated over recent years but generally no other maintenance works have been undertaken. Similarly, although quite unusually, the overspill car park associated with the development which is located on the front right hand side, when viewed with one's back to the nearby Doctor's Surgery, incorporates an uneven surface to the car park made up with hardcore and currently does not incorporate any pre-cast concrete kerbing to the perimeter or black top surfacing together with any formal drainage arrangements.
- 1.3 For the purpose of this report we have considered the Stones Square car park and the overspill car park separately and provided information in terms of the maintenance options together with advising on priority and timescales. It was observed that the car park immediately in front of the dwellings to the left hand side of the development, when viewed from the front with one's back to the nearby Doctor's Surgery, that this has been retrospectively improved and now incorporates pre-cast concrete kerbs together with black top surfacing and formal drainage provision. It is anticipated that South Hermitage Management Company would like a similar arrangement implementing to the right hand overspill car park, but this will require the formation of an appropriate fund which would need to be built up over a period of time.
- 1.4 For the purposes of this report we have included a number of appendices. Appendix A includes a indicative sketch which has been prepared by Johnson Fellows to show the current arrangement of Stones Square and Appendix B includes a sketch prepared by others as a potential method of improving the raised planters. We would point out at this stage that this method is not particularly indorsed by Johnson Fellows, but nonetheless provides an alternative option. Appendix C includes a number of photographs, taken during our inspection.
- 1.5 At this juncture we would point out that we have provided some initial advice in respect of the odours emanating from the bin stores associated with flat 28 but this is reported under separate cover.

2.0 STONES SQUARE

2.1 <u>Current Arrangement</u>

Stones Square is finished with a pressed concrete surface which is fairly smooth but incorporates a pattern in the surface to replicate cobbles or paviors. This type of surface within a residential development such as this is considered to be fairly unusual, but none the less perhaps the developer was being a little innovative at the time and wanted to provide an alternative to the usual black top surfacing or clay/concrete paviors. We are of the opinion that the pressed concrete surface to replicate a cobbled effect is appropriate for Stones Square and this type of surface finish should be retained as far as practicable to maintain the original characteristics. That said, the pressed concrete surfacing is in need of general repair and maintenance and the options included within this report are potentially quite radical, but provide solutions to the long term maintenance regime which should be adopted.

At this stage we would draw your attention to the indicative sketch which is included within Appendix A of this report, and within this section we have outlined our observations detailing the condition of the pressed concrete surfacing together with other items of disrepair associated with Stones Square.

2.2 Pressed Concrete Surfacing

Generally the pressed concrete surfacing associated with Stones Square is in reasonable condition considering its age and as discussed in a later section of this report, arguably one option would be to do nothing and not to carry out any investment in the foreseeable future. We are of the opinion that this would be a negative approach and will this will lead to escalated repair and maintenance costs. With ones back to the entrance tunnel we observed that the current car park has a more than adequate fall in a right to left direction and a central drainage channel is provided together with 3 no. yard gullies, one to each bay, to the left hand side. Having spoken to members of the committee, there does not appear to be a lack of surface water drainage facilities within the car park and indeed as far as we could ascertain, surface water drains away adequately. In order for the current condition of the car park to be recorded and thus, bench marked against potential future deterioration, we have highlighted each of the bays in numerical order and thus, would take this opportunity of discussing each bay in turn.

<u>Bay 1</u>

- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- The area around the manhole has sunken quite severely and is in need of localised repair. See photograph 01.
- It is our understanding that the yard gullies are not cleared out regularly and thus this should be undertaken at least on an annual basis. See photograph 02.

<u>Bay 2</u>

- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- At this juncture we would advise that in all bays the longitudinal movement joint/day work joint has opened up where the filler material has totally disintegrated. All of the joints associated with Stones Square are in need of thoroughly cleaning out, a heavy duty compressible filler material provided together with a hot bitumen seal which will allow the concrete to continue to expand and contract during the seasons but will prevent moisture ingress and frost attack which potentially could deteriorate the concrete surfacing. This is illustrated in photograph 03.

<u>Bay 3</u>

• The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.

<u>Bay 4</u>

- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- At this juncture we would also include the provision of the bollard near the entrance to the car park which has clearly been damaged by a vehicle resulting in the concrete from incurring fracture cracks. The bollard requires reinstating and one option to repair the cracks would be to clear them out as far as practicable and to provide a proprietary liquid seal to prevent moisture penetration. This however will only follow the line of the crack and although it will reduce maintenance liability, it will not improve appearance unless the whole section is broken out and recast. If the recasting option is preferred it must be acknowledged that the virgin concrete will be of a different colour and the cobbled pattern effect will not be able to be truly replicated. This is illustrated in photograph 04.
- At the junction with Bay 7, we observed that the concrete surfacing has sunken quite considerably including the surface water drainage channel but nonetheless the channel would appear to still appear to be working satisfactorily, although potentially water and ice will form in the depression during the winter months making the car park quite hazardous. This does not require immediate repair, but in the long term it requires cutting out and replacing. See photograph 05.

<u>Bay 5</u>

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- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- Fracture cracks have occurred in Bay 5 which are uneven and measure approximately 3mm in width. These can be cleaned out and sealed but will always remain visible. See photograph 06.

<u>Bay 6</u>

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- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- At this juncture we would advise that the galvanised steel lid associated with the surface water drain is rusting very severely and thus, we would recommend that this is totally replaced. Ideally the new lid should be black in colour as this would help to maintain the heritage ethos, but it is fundamentally important that it is secured with the existing bolt arrangement. This is illustrated on photographs 7 and 8.

<u>Bay 7</u>

- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- We would again reiterate that the movement joint/day work joints to the perimeter of the concrete surfacing have opened up over the years and are in need of resealing. See photograph 09.
- Fractured cracks exist within Bay 7 which require clearing out and resealing but will also always remain visible. A typical example is shown in photographs 10 and 11.

<u>Bay 8</u>

- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- Again fracture cracks are visible in the surface of the concrete which require cleaning out and resealing to prevent potential future deterioration. See photographs 12 and 13.

<u>Bay 9</u>

- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- At this juncture we would illustrate the open movement/day work joints associated with the pressed concrete surfacing which is in need of clearing out and resealing. See photographs 14 and 15.

<u>Bay 10</u>

- The previous surface coating to the pressed concrete has deteriorated severely and is in need of thoroughly cleaning and recoating.
- Further fracture cracks have occurred in Bay 10 where due to moisture penetration the surface of the concrete has begun to spall. The joints require clearing out and sealing but the spalling cannot be repaired other than

recoating. See photograph 16.

2.3 <u>Maintenance Options</u>

Short Term

Option 1 – Do nothing

South Hermitage Management Company have the option of not investing in the short term with a view of establishing funds to carry out longer term repair and maintenance issues. If the short term is only 1-2 years then we are of the opinion that the pressed concrete surfacing will not deteriorate significantly during this period.

Estimated cost £0.00

Option 2 – Minimal Maintenance

Notwithstanding our comments made in Option 1, it would be preferable if the minimum amount of maintenance could be undertaken in the short term and this includes the raking out of all of the movement/day work joints and resealing, raking out and resealing all of the fracture cracks to the pressed concrete surfacing, replacing the lid to the surface water drain, reinstating the defective bollard and the recoating the whole of Stones Square with a suitable water proof material. We are of the opinion that concrete surfacing such as this requires periodic recoating and thus as the last surface protection has now worn away we are of the opinion that the surface should be thoroughly prepared and recoated which will last up to 3 to 5 years.

Estimated cost £500,00 plus VAT

Option 3 – Medium Term

In the medium we would recommend that the sunken area of the pressed concrete surface should broken up and replaced including the raising of the surface water drainage channel. At the same time we would also recommend that the depressed concrete around the manhole in Bay 1 is again broken up and replaced. At the juncture we would advise that it would be impossible to match the colour of the concrete but if suitable skilled contractors are employed then the cobbled effect should be able to be replicated although this will never be an exact match. We would suggest that these works are undertaken within 5 years when the surface will require re-coating again.

We do not believe that sections of the pressed concrete surfacing should be broken up and replaced where fractures are occurring as this will inevitably introduce more joints and the fresh concrete will not be an exact match. Whilst potentially not an aesthetical solution, we are of the opinion that the stress fractures should continue to be raked out and resealed periodically and this will be an ongoing maintenance liability.

Estimated cost £3,000.00 plus VAT (excluding recoating)

Option 4 – Long Term

We are a little reluctant to provide long term recommendations as this will depend upon the implementation of the short to medium term recommendations and any further fracture cracks that may occur. That said it may become apparent in the future that less investment should be undertaken in terms of ongoing repair and maintenance including resealing the joints and surface coating where potentially the badly affected areas could be totally broken up and removed and an alternative type of surface provided. Although some of the individual bays incorporate fracture cracks, we are of the opinion that these are not causing any fundamental maintenance issues, subject to ongoing repair as previously suggested, and therefore the pressed concrete surfacing associated with the bays could be retained for a good many years to come.

One option however is to break up the concrete surfacing to the central common area which, as illustrated in Appendix A relates to bays 4, 5.6 and 7 and to provide an appropriate hardcore base and black top surfacing comprising dense bitumen macadam base course and wearing course. This will provide a compromise so that part of the original surfacing is retained to maintain the character, but the central more heavily trafficked part is replaced for an alternative solution requiring less long term maintenance.

Estimated cost £15,000 plus VAT

It must be borne in mind that the estimated costs of repair as highlighted within the various options are specific at the time of preparing this report and will be subject to annual increases in line with inflation due to labour and materials. The costs are subject to obtaining competitive quotations.

2.4 <u>Raised Planters</u>

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Obviously Stones Square incorporates 4 no. raised planters and we are aware that some residents would like to retain these features, others would like to remove them and potentially increase the car parking capacity and potentially other residents are not phased either way. From a general perspective we are of the opinion that the raised planters, with the exception of planter B, are not being utilised properly as they incorporate little vegetation growth or the plants provided are perhaps deemed to be very drab and do not provide any enhancement to the Square. We are also of the opinion that the planters perhaps are considered to be a little too high in comparison to the size of the Square and thus are overbearing.

At this point we would bring to your attention that generally the minimum size of public a car parking space is in the region of 4.8m long by 2.4m wide. You will notice from the plan within Appendix A that the length of the car parking spaces are only 4.0m and generally the average width of an individual car parking bay is in the region of 2.4m. As the parking bays are private, they do not need to comply with any legislation and we are of the opinion that the size of the bays is adequate. It should also be noted that the planters only measures approximately 2.0m in width and thus, if removed this would not be equal to a parking bay in their current format. In other words, we are of the opinion that this would cause problems where additional car parking will make the remaining bays much tighter and thus, damage to vehicles and injury to persons may become apparent.

We would conclude by stating that in our opinion the planters should remain in concept, but in the medium term all of the brickwork should be removed and reconstructed in engineering quality brickwork which is more durable and the brickwork should only extend to approximately 3 no. courses as opposed to the current height of approximately 5 no. courses. Again for the purposes of recording the current condition of the planters these are identified as follows:

<u>Planter A</u>

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- The planter is constructed from facing brickwork to match the dwellings and incorporates a brick on edge coping arrangement. See photograph 17.
- General isolated mortar erosion has taken place resulting in moss/lichen retention. See photograph 18.
- The brickwork has slipped quite considerably near car parking space no. 5 and this requires partially rebuilding. See photograph 19.
- It was noted that a piece of clear perpex has been fitted to the side of
 planter to help reduce damage to car doors. If our advice is taken and the
 planters are reconstructed to a lower level in the future then car doors should
 be able to extend further to open but it would be much better if residents
 were able to reverse into the car parking spaces so that the drivers at least
 can alight without causing damage.
- Further isolated brickwork has perished to the sides of the planter.

<u>Planter B</u>

- The planter is constructed from facing brickwork to match the dwellings and incorporates a brick on edge coping arrangement. See photograph 20.
- It was observed that Planter B is the most attractive due to the type of ornamental tree species where this type of planting should be encouraged to the other planters in medium term.
- We observed that a Jacobean stamp is provided on the brick on edge coping details which suggests that this may be an engineering type brick where it was also observed that this has perished least of all when compared to the general facing brickwork associated with the walling.
- Surface mortar erosion has taken place to the coping detail which is exacerbated by the tree species.
- Due to the lack of maintenance, mortar erosion has taken place where we would suspect that the facing brickwork has perished quite significantly below ground to all of the planters. See photograph 21, 22 and 23.

Planter C

• The planter is constructed from facing brickwork to match the dwellings and

incorporates a brick on edge coping arrangement. See photograph 24.

• This planter was generally found to be in reasonable condition excepting isolated mortar erosion.

<u>Planter D</u>

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- The planter is constructed from facing brickwork to match the dwellings and incorporates a brick on edge coping arrangement. See photograph 25.
- This planter has significantly deteriorated due to the poor quality facing brickwork where the surface has spalled quite significantly. The brickwork has perished due to the lack of a overhang detail associated with the coping arrangement which is inevitable. See photograph 26.
- The planter also incorporates isolated mortar erosion.

We would reiterate that in the short term all of the planters are in need of essential maintenance in the form of cutting out and replacing spalled/perished bricks, isolated repointing and in one instance partial rebuilding. Obviously these repairs will prevent further deterioration but to some extend investment in the short term does not seem to be cost effective as we would recommend in any case that the planters are totally rebuilt within the medium term. That is to say within the next 3 to 5 years all of the brickwork should be removed down to foundation level and then reconstructed in engineering quality brickwork incorporating an engineering quality brick on edge coping detail with a tile crease under to provide a drip arrangement. Obviously all of the soil will require replacement together with associated replanting.

Estimated cost £6,000 plus VAT

3.0 OVERSPILL CAR PARK

3.1 Current Arrangement

The word 'overspill' is not perhaps the best way of describing this car parking as it is a permanent arrangement. Nonetheless the current construction of the car park incorporates a surface made up of clean stone hardcore and does not incorporate any formal edgings in the form of pre-cast concrete kerbs or any drainage arrangements other than percolation. A couple of photographs of the current arrangement are shown below which clearly detail the gravel type finish to the car park and the distinct lack of routine maintenance resulting in vegetation growth particularly at the one end.



It was also observed at the junction with the access road, that the tarmacadam surfacing to the access road is beginning to spall due to vehicular movement and a pot hole has appeared within the gravelled car park. We would recommend that the access road is maintained where all vegetation growth should be removed to the kerb lines and this should be undertaken at least on an annual basis. Obviously the pot hole requires repairing immediately but we are of the opinion that resurfacing in the form of an additional wearing course on the access road is not required at this stage. This is illustrated on the photograph below.





The right hand photograph above also shows the poor condition of the boundary fence to the lower section of the car park where immediate repairs are required. South Hermitage Management Company should make enquiries with the appropriate deeds as to who is responsible for repair and maintenance of the boundaries.

We would also draw to your attention that the significant hedge line between the car park and the Doctor's Surgery site is severely overgrown and again checks should be made with title deeds to determine who is responsible for repair and maintenance. In this respect we would recommend that the hedgerow is reduced in height quite significantly and only needs to be at a similar height to that of the brick built bin store at the front end of the car park. The sides of the hedge line should also be trimmed quite significantly and as you will appreciate this should be repeated probably twice in a typical season.

As we see it there are only a couple of options available in terms of repair and maintenance associated with the overspill car park. That is to virtually do nothing or at least to undertake the minimal amount of repair and maintenance, or in the medium to long term to re-surface the whole of the car park including the provision of pre-cast concrete kerbs and soakways for adequate surface water drainage. This would then form a similar arrangement to the car park on the other side of the main access road which was alluded to at the beginning of this report. The options are detailed below:

Short Term

Thoroughly clean the access road, repair the pot hole, repair the boundaries and ideally remove the overgrowth to the surface of the car park at the lower end.

Estimated cost £1,500 plus VAT

Medium to Long Term

Over a period of time funds should be accrued to excavate to reduce levels, provide a suitable sub base and at least 75mm of dense bitumen macadam base course and 25mm of dense bitumen macadam wearing course. At the same time to introduce pre-cast concrete kerbs to the perimeter ensuring that drop kerbs are provided to the access pathways and the vehicular access points to the applicable dwellings. The provision of soakaways to the lower end of the car park for suitable surface water drainage maintaining the existing falls which are deemed to be more than adequate. Ideally the street lamp at the lower end of the car park should be moved towards the hedgerow which will help with manoeuvrability and at the same time an additional bollard type street lamp should be provided near the 'recess' at the bottom end of the car park.

Existing cost £35,000 plus VAT

4.0 CONCLUSIONS AND RECOMMENDATIONS

We are of the opinion that generally the pressed concrete surface to the car park of Stones Square is in reasonable condition and with suitable maintenance will last up to another 16 years. It is important however that the Options 2 and 3 are implemented in order to keep the area safe and potentially reducing the life expectancy of the surface.

Inevitably the pressed concrete will deteriorate over a period of time, where we anticipate this will occur more so within the central common area, hence we would recommend that a sinking fund is established for long term repairs.

In respect of the planters we would reiterate that in our opinion they are currently overbearing and constructed from brickwork which is not suitable for constant exposure. These should be reconstructed to a lower level when funds are available as opposed to interim investment in terms of repair and maintenance.

The overspill car park, although not ideal and to a standard perhaps expected for a residential development such as this, is nonetheless currently in reasonable condition. In our opinion there is no middle ground other than to carry out minimal maintenance and when funds are available to regrade and resurface with bitumen macadam. We would further recommend that funds are accrued for these works.

We trust that we have interpreted your instruction satisfactory but should you require any further assistance or clarifications then please do not hesitate to contact the undersigned.

Signed:.....Date: 6th December 2012

ANDREW D ROWSON BSc MRICS MBIFM For and on behalf of Johnson Fellows LLP

Checked by

Signed:Date: 6th December 2012

ANTHONY FOSTER BSC (HONS) MRICS For and on behalf of Johnson Fellows LLP

APPENDIX A

Indicative Plan

APPENDIX B

Option for Planters

APPENDIX C

Photographs