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PLANNING

- IAN KEEN
LIMITED

**ARBORICULTURAL
METHOD STATEMENT**

**RELATING TO PROPOSED
FOOTPATH**

ALONG

**MoL LAND
ADJACENT TO
TWICKENHAM SORTING OFFICE
LONDON ROAD
TWICKENHAM**

**Consent Reference:
13/1147/FUL**

**Our Reference
JTK/7720/so**

AUGUST 2015

**CLIENT
St James Group Ltd
Berkeley House
15b St George Wharf
London
SW8 2LE**

WARNING

Existing trees adjoining these works are protected by Tree Preservation Order.

That Order protects all parts of the tree, whether above or below ground, and failure to comply with this method statement that results in damage to trees can result in prosecution resulting in a criminal record and substantial fine.

Do not stray from this Arboricultural Method Statement without first obtaining written approval from Craig Ruddick, tree officer at London Borough of Richmond-upon-Thames.

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ABSTRACT

A small block of woodland exists at the east of the MoL through which the path passes. Within the grounds of Heatham House there are several large trees that need to be protected.

Protective barriers and ground protection are required throughout the construction process to protect the retained trees on the site.

Tree removal and coppicing is required. Minor pruning work will be needed. It is listed in a schedule in this method statement.

A pathway and adjoining soil capping is required close to retained trees. Specialist measures for the pathway installation are set out in this method statement.

A service duct is proposed to follow the route of the pathway. Where it passes close to retained trees specialist measures are to be taken for its installation or an alternative route will be selected.

Space for storage, unloading and welfare can be accommodated within the existing site set up on adjoining land.

1. Statement of purpose

- 1.1 The purpose of this method statement is to demonstrate how works will be undertaken to implement the proposed pathway installation upon the MoL land at Twickenham Rough to avoid unacceptable arboricultural impact and provide an adequate level of protection for those trees that are to be retained.
- 1.2 This method statement has been produced for St James Group Ltd in order to inform the construction team and satisfy the requirements of the Local Planning Authority (LPA), London Borough of Richmond-upon-Thames. The works are the subject of a planning consent and this arboricultural method statement has been prepared to aid the discharge of conditions.
- 1.3 This method statement considers the systems of work in relation to the health and safety of retained trees. It does not address requirements of the Health and Safety Executive that should be considered in detail by those parties involved.

2. Related documents and drawings

- 2.1 This method statement should be read in conjunction with the documents in Table 1 below.

Table 1: Documents referred to

Originator	Title/Reference
British Standards Institute	<i>BS5837:2012 Trees in relation to design, demolition and construction – Recommendations</i>

and the following drawings in Table 2 below.

Table 2: Drawings referred to

Originator	Drg No	Title	Scale
JSA Consulting Engineers	4616/CIVIL/70 Rev E	MOL FOOTPATH	1:500@A0
Ian Keen Limited	7720/05	Tree Protection Plan	1:500@A1

3. Arboricultural issues & implications

- 3.1 Detail of the trees and their protection are discussed and detailed in the documents, and shown on the drawings, listed above and should be read in conjunction with this method statement.
- 3.2 The proposed footpath extends in an east-west direction to connect a footbridge at the western end with the London Road at the east. It passes through mainly open space but towards the west it passes within a small block of naturalised woodland and the remnants of formal tree planting within the southern portion of Heatham House grounds.

- 3.3 Tree removal, coppicing and pruning will be undertaken to provide space for the path and its use.
- 3.4 Where the pathway is close to retained trees it will be formed above existing ground levels to avoid root loss.
- 3.5 A capping layer of soil is to be placed on either side of the pathway. Where close to trees the capping layer shall not be built up directly against the tree stem.
- 3.6 A duct is to be installed along the length of the pathway. Where it is close to trees specialist techniques will be used for its installation. Where possible an alternative route for the duct will be taken.
- 3.7 Supervision of works is required.

4. Facilitation tree works

- 4.1 It is necessary to remove a selection of trees from along the route of the pathway. In addition trees will be coppiced on either side of the pathway where it passes within the woodland to create a ride edge adding to the habitat value. These aspects are set out in detail in the Woodland Management Plan.
- 4.2 Trees to be removed or coppiced will be marked and agreed with the tree officer in advance of works commencing.
- 4.3 In places tree pruning is required to provide clearance from the pathway.
- 4.4 Tree works are scheduled in the list of tree works at Appendix 1.
- 4.5 All tree works shall be undertaken in accordance with *BS3998:2010: Tree Works – Recommendations* where it is appropriate.

5. General site care

- 5.1 To ensure that the trees to be retained are afforded an adequate degree of protection during the works, the following general precautions will be observed:
 - 5.1.1 No works shall proceed until appropriate tree protection barriers are in place, with the exception of initial tree works.
 - 5.1.2 No fires shall be lit on site.
 - 5.1.3 No access will be permitted within the temporarily barriered areas, unless and only where otherwise approved herein. Ground levels will not be changed within them and existing vegetation and topsoil will be left undisturbed but may be treated with approved herbicides if eradication is required.

- 5.1.4 No materials, equipment or debris will be stored within any of the barriered areas and no chemicals, petrol or diesel will be allowed to spill where they may contaminate the root protection areas of retained trees
- 5.1.5 All heavy plant, machinery, cranes and delivery vehicles shall be excluded from the areas demarcated for protection on the Tree Protection Plan and shall operate only upon areas of ground protection or existing hard surfaces.
- 5.1.6 No equipment, signage, fencing, tree protection barriers, materials, components, vehicles or structures shall be attached to or supported by a retained tree.

6. Sequencing of works

- 6.1 A logical sequence of events is to be observed as follows:

- Stage 1 Pre-commencement site meeting (See Section 11)
- Stage 2 Undertake tree removal, coppicing and pruning in accordance with the schedule of work.
- Stage 3 Erect protective barriers and lay ground protection as shown on drawing 7720/05 in Table 2 (specifications given in Section 7).
- Stage 4 Implement pathway and install duct.
- Stage 5 Take down protective barriers, uplift ground protection and complete soft landscape works.

7. Protective barriers and ground protection

- 7.1 Temporary barriers will be erected as indicated on the Tree Protection Plan 7720/05 listed at Table 2. The specification for this barriers will be in accordance with the recommendations given in *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations* Section 9.2 and will comprise 2.0m mesh barriers (Heras type panels are a simple, readily available solution) attached to a scaffold framework. Support scaffolds will be attached to the scaffold framework as necessary at an angle of 45 degrees on the side of the trees and anchored by further scaffold poles carefully firmed into the ground. Clear signs will be attached at 6 metre intervals along the line of barriers stating 'Tree Protection Area – No Access'.
- 7.2 The barriers shall remain in place until soft landscape operations require their full or partial removal. No other construction activity will take place within those areas formerly protected by the fence (see Section 5).

8. Pathway installation

- 8.1 A location and typical detail of the pathway is given on the drawing at Appendix 2
- 8.2 Detail 1 on that drawing will be used in the locations shown on the Tree Protection Plan number 7720/05 listed at Table 2. In all other locations Detail 2 shall be used.
- 8.3 The capping layer placed abutting the pathway shall not be built up against the base of tree stems. Any make-up in soil levels shall be dished around tree bases to ensure the original soil level remains. Evidence of retention of original soil levels shall be looked for during supervision and monitoring visits.
- 8.4 Close to trees machinery used to install the pathway shall operate from the route of the pathway only and not stray on to adjoining land.

9. Duct installation

- 9.1 The route of the proposed duct installation is shown on the drawing at Appendix 2.
- 9.2 Where it is remote from trees it can be installed normally.
- 9.3 Where it is close to retained trees it must be installed using either hand excavated trenches, air spade excavation, thrust boring, directional drilling or other form of installation that ensures significant (those over 25mm diameter) roots are retained.
- 9.4 Alternatively the route of the duct may be altered to select a least detrimental option that permits ease of installation but retains significant trees unharmed.
- 9.5 Prior to commencement the route of the duct shall be marked out and the options of 9.3 and 9.4 above considered.

10. Reinstatement and landscaping

- 10.1 Any final grading to marry in new levels with existing ground, following works such as trenching, will be achieved by importing topsoil and spreading by hand equipment only. The newly graded areas will be grass seeded or turfed by hand.
- 10.2 Any tree and shrub planting pits will be dug by hand within the root protection areas of existing trees.

11. Planning, communication and supervision

- 11.1 A pre-commencement meeting will take place on site attended by the appointed arboricultural consultant, the tree contractor, the site manager and the local authority arboricultural officer. The purpose of this meeting is to ensure that everyone fully understands the implications of the arboricultural method statement and to agree on finer points of detail prior to any works commencing.
- 11.2 An induction session will be held with personnel working on the the project to ensure they understand the protection and reasoning behind their use. At the induction key personnel will be identified and their individual responsibilities set out. Any hierarchy of delegated powers will be established with each of the key personnel.
- 11.3 The appointed arboricultural consultant shall directly supervise the works at the following key stages:
 - 11.3.1 Tree removal and coppicing
 - 11.3.2 Marking of footpath route
 - 11.3.3 Marking of duct route
 - 11.3.4 Erection of protective barriers and ground protection
 - 11.3.5 Installation of footpath where close to trees
 - 11.3.6 Excavation of trench for duct where close to trees
 - 11.3.7 Removal of protective barriers and re-grading of ground levels adjacent to the new hard surface
- 11.4 At the completion of each supervisory visit the appointed arboricultural consultant will circulate a short site supervision report to the client, site and the local authority arboricultural officer to advise on works and if they are progressing in accordance with the requirements. Failures to adhere to the requirements will be reported.
- 11.5 Monitoring visits will be undertaken by the arboricultural consultant at intervals commensurate with site progress to make sure that all tree protection measures are in place. A record of these visits will be kept and maintained for inspection on site.
- 11.6 Should any problems arise on site, the site manager will immediately inform the appointed arboricultural consultant who will assess the situation and make recommendations accordingly. If any modifications to the method statement are proposed, the arboricultural consultant will immediately advise the local authority arboricultural officer. Only upon written approval from the local authority may those variations be undertaken.

11.7 The site manager will brief all site personnel on the implications of the arboricultural method statement. A copy of this method statement will be available on site at all times. The progress reports detailed in Section 11.3 will be kept with the method statement so that both are readily available for inspection.

11.8 A list of contacts is attached at Appendix 3.

12. Transgression

12.1 Failure to adhere to the requirements in this method statement may result in a Stop Notice being issued by the local authority. This will bring all operations at the site to a halt until the local authority permits resumption.

12.2 Failure to adhere to the requirements of this method statement that results in damage to a tree subject to a Tree Preservation Order may result in prosecution of the individual, the contractor and St James.

12.3 The following measures will be required, but do not absolve the perpetrator from action, if the identified transgression occurs:

- a) Breakage of branches – the damaged shall be assessed by an arboriculturist, they shall advise on requirements and any pruning shall be undertaken in accordance with BS3998:2010 to remove the damaged section.
- b) Damage to bark – the damage shall be assessed by an arboriculturist and they shall advise on the measures that can be taken to optimise the repair of the damage. Some paring back of damage may be required.
- c) Damage to roots – the damage shall be assessed by an arboriculturist and they shall advise on the pruning or repair required.
- d) Compaction of soil – where machinery operates outside of ground protection and hard surfaces, leading to the compaction of soil, the compaction shall be alleviated by using compressed air injected to circa 1m deep to create fissures in the ground and lift the compacted areas. The compaction shall be assessed by an arboriculturist. A specialist company (for example Terrain Aeration Ltd) shall be appointed by the contractor to undertake the work.

12.4 All items of transgression shall be reported to the Local Authority tree officer to consider if action should be taken.

13. Conclusion

- 13.1 If the provisions of this arboricultural method statement are complied with in full, the proposed works will be able to proceed without detrimental impact to retained trees.

14. Health and safety method statement and risk assessment

- 14.1 Each trade is responsible for preparing their own health and safety method statement and risk assessment for each area.
- 14.2 Always consult the site manager or their Health and Safety representative to obtain guidance on any particular hazards you may encounter on this site.
- 14.3 All trades and their operatives must comply with site safety rules at all times.

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APPENDIX 1

Schedule of tree works

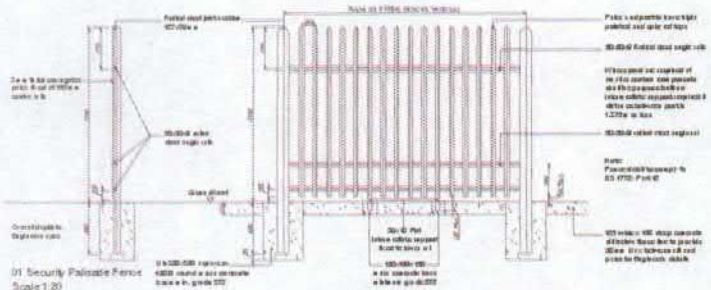
Schedule of tree works

For tree locations refer to Ian Keen Ltd Tree Protection Plan reference 7720/05

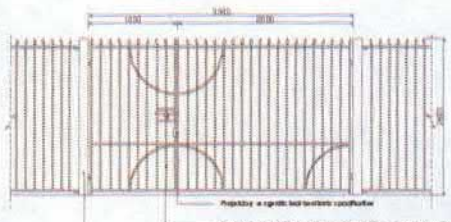
Item	Action
1	Fell trees within path footprint
2	Undertake work in accordance with Woodland Management Plan

APPENDIX 2

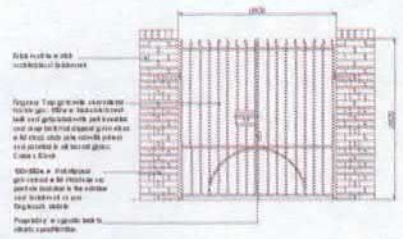
MoL Footpath



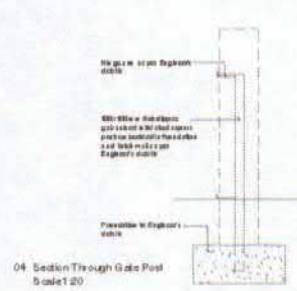
01 Security Palisade Fence
Scale 1:20



02 MCL Double Gates
Scale 1:20

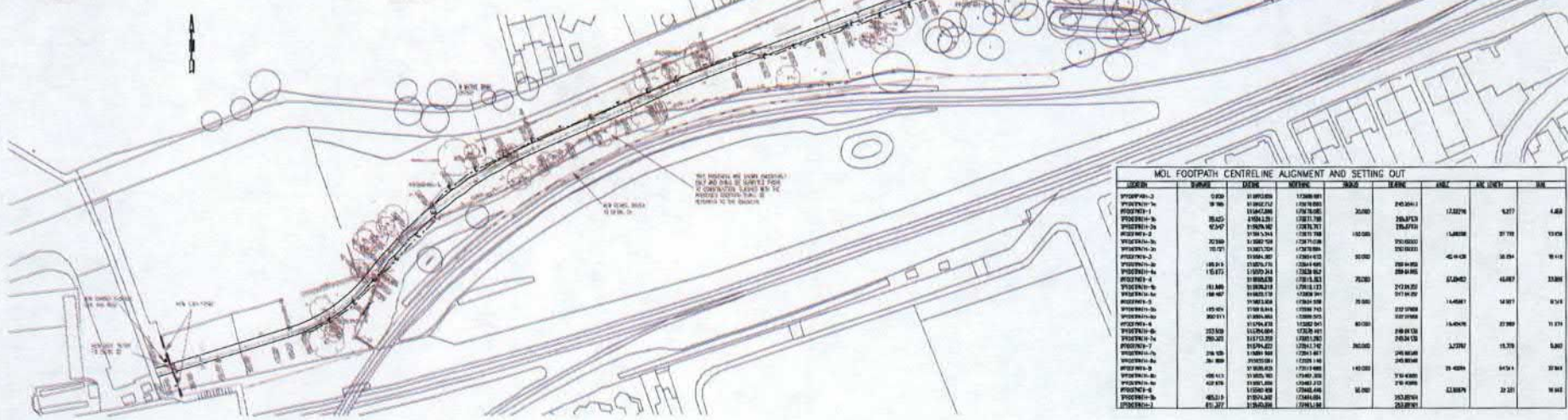


03 Pedestrian Double Gate
Scale 1:20



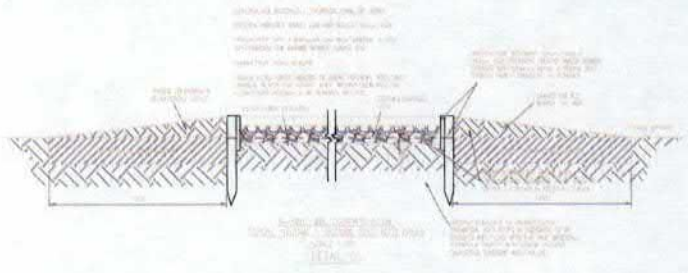
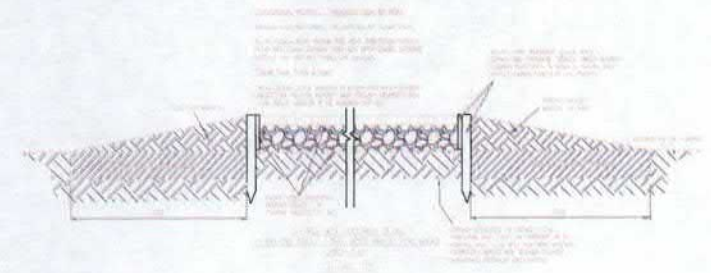
04 Section Through Gate Post
Scale 1:20

Collage w/ contribution to create pedestrian
friendly environment. Pedestrian friendly
environment. Pedestrian friendly environment.



MCL FOOTPATH CENTRELINE ALIGNMENT AND SETTING OUT

CHAINAGE	MARK	MARK	MARK	MARK	MARK	MARK	MARK
0+000	10000	10000	10000	10000	10000	10000	10000
0+005	10005	10005	10005	10005	10005	10005	10005
0+010	10010	10010	10010	10010	10010	10010	10010
0+015	10015	10015	10015	10015	10015	10015	10015
0+020	10020	10020	10020	10020	10020	10020	10020
0+025	10025	10025	10025	10025	10025	10025	10025
0+030	10030	10030	10030	10030	10030	10030	10030
0+035	10035	10035	10035	10035	10035	10035	10035
0+040	10040	10040	10040	10040	10040	10040	10040
0+045	10045	10045	10045	10045	10045	10045	10045
0+050	10050	10050	10050	10050	10050	10050	10050
0+055	10055	10055	10055	10055	10055	10055	10055
0+060	10060	10060	10060	10060	10060	10060	10060
0+065	10065	10065	10065	10065	10065	10065	10065
0+070	10070	10070	10070	10070	10070	10070	10070
0+075	10075	10075	10075	10075	10075	10075	10075
0+080	10080	10080	10080	10080	10080	10080	10080
0+085	10085	10085	10085	10085	10085	10085	10085
0+090	10090	10090	10090	10090	10090	10090	10090
0+095	10095	10095	10095	10095	10095	10095	10095
0+100	10100	10100	10100	10100	10100	10100	10100
0+105	10105	10105	10105	10105	10105	10105	10105
0+110	10110	10110	10110	10110	10110	10110	10110
0+115	10115	10115	10115	10115	10115	10115	10115
0+120	10120	10120	10120	10120	10120	10120	10120
0+125	10125	10125	10125	10125	10125	10125	10125
0+130	10130	10130	10130	10130	10130	10130	10130
0+135	10135	10135	10135	10135	10135	10135	10135
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0+150	10150	10150	10150	10150	10150	10150	10150
0+155	10155	10155	10155	10155	10155	10155	10155
0+160	10160	10160	10160	10160	10160	10160	10160
0+165	10165	10165	10165	10165	10165	10165	10165
0+170	10170	10170	10170	10170	10170	10170	10170
0+175	10175	10175	10175	10175	10175	10175	10175
0+180	10180	10180	10180	10180	10180	10180	10180
0+185	10185	10185	10185	10185	10185	10185	10185
0+190	10190	10190	10190	10190	10190	10190	10190
0+195	10195	10195	10195	10195	10195	10195	10195
0+200	10200	10200	10200	10200	10200	10200	10200



DR APPROVAL

Project: _____

Drawn by: _____

Checked by: _____

Scale: _____

Revision: _____

jsa

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APPENDIX 3

List of contacts

LIST OF CONTACTS

Site Address:	Twickenham Rough, West of sorting office, London Road, Twickenham	
Site Manager: *	TBA	Tele No: *
Constructor:		
Address:		
Contact Name: *		Tele No:
Arboricultural Consultant:	Jago Keen, MSc, Dip. Arb., MArborA, MICFor	
Address:	Redlands Farm, Redlands Lane, Ewshot Farnham, Surrey GU10 5AS	
Tele No:	01252 850096 (office)	07836 279935 (mobile)
Local Authority Tree Officer	Craig Ruddick, Esq.	
Address:	London Borough of Richmond-upon-Thames Arboricultural Section Environment Directorate London Borough of Richmond upon Thames Second Floor Civic Centre 44 York Street Twickenham TW1 3BZ	
Tele No:	0208 891 1411	

* To be inserted