

FM233: Appendix 1. Specification. Inflatable Dome for Beach & Standard Volleyball Courts (x 4), Birmingham City University, The Pavilion Moor Lane, Birmingham B6 7AA.

Background

Birmingham City University (BCU) is one of the largest universities in the UK with over 30,000 students from 100 different countries. With a spread of campuses across Birmingham we are proud of our strong links and close collaboration with the region. Our popularity has grown significantly in recent years, and the University is in the midst of an exciting estates investment plan, creating state-of-the-art teaching and learning facilities.

Project Overview

The project involves the construction of the UK's first indoor beach volleyball courts at Moor Lane playing fields. This will consist of four international standard beach volleyball courts, housed under an inflatable dome that will be erected for six months annually. The facility aims to be a centre of excellence for beach volleyball in collaboration with Sport England and Volleyball England.

Although not part of the present requirement, aside from Beach Volleyball events, it is worth noting the facility may be used for other high-level standard traditional volleyball events on the site within this dome facility in the future.

The dome is expected to be in use 6 months of the year (time periods to be confirmed) and the supplier of the dome will be expected to assemble and dis-assemble the dome at the start and finish of each volleyball season.

Storage of the dome out of season will be within a nearby BCU purpose-built facility on the Moor Lane playing fields site.

The dome provision will be a bespoke requirement based upon architect's design, drawings, Professional Sports requirements, and groundwork footprint for the site.

Robotham's Architects have prepared plans for this dome which are included within this tender documentation for bidder reference in completion of the bespoke dome offering. Please see Appendix 3 of the ITT Documentation for further information in this area.

The groundwork plans for this facility have been completed by O'Briens Construction and have included within this tender documentation for bidder reference in completion of the bespoke dome offering. Please see Appendix 2 of the ITT Documentation for further information in this area.



Construction of the groundworks for the project will be run as a separate tender exercise and the groundworks aspects of this project is currently subject to planning permission expected in June 2025.

1. Introduction

This document outlines the requirements for the **supply, delivery, installation, testing, commissioning, and ongoing maintenance** of an **inflatable air dome** for an indoor beach volleyball sports facility. The dome will have dimensions of **56m (L) x 28m (W) x 10m (H)**. It will be in use for **6 months** each year, with **6 months** of seasonal removal. The dome must include **heating, smart scan lighting,** and **emergency lighting (Thurlux)**. The required civil works, gound works for the Inflatable Dome are concurrently being provided under a separate tendering process.

2. Scope of Work

2.1 Supply & Delivery:

- Manufacture and deliver the inflatable air dome to the specified location.
- Dome
- Ensure all associated equipment (heating, lighting, safety systems) is included.
- **Compliance**: Meets safety regulations for public spaces.

2.2 Installation:

- Site preparation and setup of the inflatable structure, heating, lighting, and emergency systems.
- Inflatable Air Dome: 56m x 28m x 10m high, constructed from UV-resistant, flame-retardant PVC or equivalent material.
- **Heating System**: Energy-efficient system for indoor temperature regulation (18-22°C).
- Smart Scan Lighting: Adjustable LED lighting for dynamic colour and brightness control.
- Emergency Lighting (Thurlux):

2.3 Testing & Commissioning:

- Pressure testing of the air dome.
- Functional testing of heating, lighting, and emergency systems.
- Full compliance check with relevant safety and regulatory standards.



2.4 Ongoing Maintenance:

- Biannual inspection and maintenance (every 6 months).
- System checks for heating, lighting, and emergency features.
- Emergency repairs and parts replacement as needed.

2.5 Dismantling & Re-assembly:

- Seasonal dismantling and storage (within an onsite BCU Facility) of the inflatable structure during the 6 months it is not in use.
- Ensure (advise) safe storage and handling of the dome for future reinstallation.
- Re-assembly of the inflatable structure prior to the start of the new volleyball season, including re-commissioning and testing prior to client handover.

3. Technical Specifications

3.1 Inflatable Dome Structure:

- Material: UV-resistant, flame-retardant PVC with tensile strength of a minimum 2000 N/5cm.
- **Anchoring**: Secure system for wind resistance (up to 90 km/h).
- **Ventilation**: Adequate pressure relief valves and ventilation openings.

3.2 Lighting System:

- Smart Scan Lighting: Adjustable brightness and color temperature.
- **Control**: Centralized smart lighting system for scheduling and adjustments.

3.4 Emergency Lighting (Thurlux):

• Battery Backup: Adequate emergency lighting coverage for safe evacuation.

3.5 Lifespan and Warranty:

• The lifespan of the Dome is expected to be 15 years in duration with BCU. Bidders should provide the expected lifespan within question 4 of Annex 2 and state any warranty offered within the pricing return in Annex 1 of the Invitation to Tender.



4. Cost Breakdown

4.1 Capital Costs:

- **Supply & Delivery**: Manufacturing and transportation of the air dome and associated systems.
- **Installation**: Costs for site preparation, installation of the dome, heating, lighting, and emergency systems.
- **Testing & Commissioning**: Labour and materials for testing and final commissioning of systems upon initial installation.

4.2 Operational Costs:

- **Ongoing Maintenance**: Cost for regular inspections, cleaning, and minor repairs for the dome during the 6 months of operation.
- Energy Costs: Heating and lighting system operation during the 6 months of use.
- **Storage**: Costs associated with storing the dome during the 6 months it is dismantled and stored within a BCU facility. Bidders should state any special or specialist storage requirements for their offering within their tender return and specify these costs within their pricing return within appendix 4 of the ITT.

4.3 Dismantling Costs:

- **Seasonal Dismantling**: Labour and equipment costs for safely dismantling and storing the air dome.
- **Storage**: Safe, secure storage of the dome during the off-season within a BCU Storage Facility.

The remainder of this specification pertains to standard general installations of works at BCU and provision of goods & services requirements when working on BCU sites and provisions of goods & services to BCU.

Welfare Facilities

Welfare facilities provision is to be confirmed.

Execution of the works - Selection of Labour

The tendering contractor, must carefully select manpower resources experienced in carrying out the tasks to be undertaken to a high degree of accuracy and quality at all times using reasonable care and skill.



Contractors should be experienced, professional, and fully capable of discharging their duties in, and be in possession of sufficient financial logistical and manpower resources to undertake the tasks to be undertaken.

Sub-Contractors

Where Sub-Contractors are required, it is the Supplier's responsibility to manage this relationship and that they meet all Legal requirements and ensuring at all times subcontractors provide quality at all times using reasonable care and skill.

The Supplier is responsible for managing all aspects of subcontracting, in order to ensure that all services received meet the requirements of the contract.

This will include, but not be limited to protecting the Approved Organisation from any risks associated with the sub-contractor. Measuring the performance of the sub-contractor against agreed Key Performance Indicators. Problem solving and dispute resolution. Auditing and inspecting the sub — supplier's work, ensuring that they comply with all contractual requirements and legislative requirements. Establishing and maintaining appropriate records and information management systems to record and manage the performance of the Supplier.

Managing communication between the customer and the sub-contractors. Ensuring that sub-contractors have the appropriate up to date training and competencies to carry out the service or role that they have been assigned to. The Supplier is responsible for ensuring that all sub providers and supply chain partners have appropriate insurance and that they are legally and professionally compliant in all activities whilst operating within the Approved Organisation's premises.

Continuity of Site Personnel

The Supplier should ensure as much as is possible that there is continuity of Personnel and Operatives on site, particularly in terms of starting and finishing a job.

Supplier Employees (including sub-contractors) delivering good and or services must;

- Be suitably trained and qualified for the roles they are carrying out.
- Have cleared the relevant DBS checks for their role.
- The Supplier's Staff shall be properly and presentably dressed in appropriate uniforms and workwear while working on the Approved Organisation Site.



- The Supplier's Staff shall maintain a standard of personal hygiene commensurate with their allocated tasks. Observe Site Covid compliance requirements.
- The Supplier's Staff shall wear relevant uniforms, Licenses and identification badges, as approved by the Approved Organisation, at all times whilst on duty.
- Staff to show courtesy and consideration and maintain confidentiality at all times.
- Suppliers may be required to sign confidentiality agreement with the customer as part of the contract.

Execution of the works - Quality

Materials, Labour and Plant

The Supplier is responsible for providing all materials, labour, plant, carriage, freightage, implements and tools and any other resources that may be required for the efficient execution and completion of the Works, unless otherwise agreed at contracting. All materials are to be new unless otherwise agreed and specified.

Products supplied must have an appropriate product authorisation e.g. Product Licence, C.E. Mark or catalogue number. The supply of products that do not have appropriate authorisation must be agreed in advance with the Approved Organisation(s) before delivery is made and be in line with the requirements of this specification document.

Samples and Standards of Materials

The Supplier shall allow for obtaining samples of materials as required by the Customer's where required. All samples must be approved by the Customer prior to use on site in these instances. All materials subsequently used in the Works are to be of equal quality in all respects to the approved sample.

Suppliers should follow Manufacturer's recommendations and instructions at the date of incorporation into the Works.

Permit to Work

The Supplier must apply to the Customer for Permits to Work where any work may affect the Customer's Operations, for example, but not limited to confined spaces, Hot Works, Energy Systems and Roof Access Work.



Dimensions

Dimensions stated on any drawings, maps of photography must be adhered to. Any potential discrepancies between the drawings must be brought to the attention of the Customer Contact for further clarification and instruction.

Security

Where possible, the Supplier must allow for adequate measures to prevent access for example, but not limited from scaffolding or similar means.

The Supplier should ensure that all materials on Site shall be protected from damage or loss. The Supplier shall be liable for any loss and or damage, resulting from failure to do so.

The Supplier shall provide all necessary watching and lighting and care of the whole Works from weather or other damage.

The Supplier must ensure that there is as little disruption to the Owners and Occupiers of the Site as is possible. If the Work requires that the Supplier needs to access adjoining buildings, the Supplier must gain access from the Customer's Contact.

It is essential that the Supplier does not obstruct any Public areas.

Suppliers must work with the Customer's Contact to ensure that all Traffic and Police Regulations are adhered to, for example, but not limited to, in respect of unloading and loading of vehicles.

Suppliers must ensure that all noise levels are kept to a minimum.

The Supplier must ensure adherence to all Health and Safety at Work Legislation and Guidance for example but not limited to storage of hazardous materials. The Supplier is responsible for identifying whether carrying out any of the Works will interfere with elements, such as, but not limited to asbestos, electricity conductors, gas and water pipes etc.

The Supplier shall make the Customer aware of any such incidents and notify the Customer's Contacts and advise what precautions the Supplier proposes to take.

The Supplier shall exercise care when entering and leaving the site.



Asbestos

Contractors should refer to the customer's Asbestos register before undertaking any surveys or works.

The Supplier must notify the Customer's Contact in the event that Asbestos is discovered or suspected and when directed, arrange for any sampling and analysis to be done by a recognized firm. All activity must be carried out in line with the current Control of Asbestos Regulations.

Customer Safety Policies

In addition to complying with all relevant Legislation, the Supplier must work with the Customer to ensure that all local Health and Safety Policies are adhered to too.

Agreed Method Statements will allow any required safety precautions to be identified.

The supplier will be required to submit a H&S forward plan as part of their tender return if requested.

Maintenance of Public and Access Roads

If the Supplier causes any damage to public and access roads, it is the Supplier's responsibility to rectify this to the satisfaction of the Customer

Existing Mains and Services

The Supplier must ensure that during the work that they are carrying out all existing drainage systems, water, gas, sewers and electric and other services is maintained. The Supplier must have processes and procedures in place to avoid any unnecessary damage. If any interruption is required, this must be managed with approval from the Customer's Contact.

Waste Disposal

The Supplier must ensure that all waste is disposed of in line with current legislation.

Site Visits

The Supplier shall visit as many Sites as is possible to ensure an adequate inspection to be made, in order to accurately support the arrangement with the Customer.



The Supplier must visit sufficient Sites to ascertain:

- 1. Local Conditions
- 2. Means of access to the Site (s)
- 3. The confines of the Site (s)
- 4. Restrictions in respect of loading and unloading vehicles
- 5. The supply of and general condition affecting labour, materials and plant required for the execution of the work

No additional charges will be applied for the Site Visits.

Delivery of Materials

The Supplier must ensure that all materials are delivered to site in a timely manner to avoid delays to the completion of the work.

Materials Deliveries should be made within suitable time windows agreed with the customer prior to commencement of contract. Weekend deliveries are permissible with prior permission of BCU and adequate notice.

Working Area

The Supplier, including sub-contractors should ensure that Operatives confine their activities to the building that the work is assigned to. Operatives should not trespass on adjoining owner's property and any part of the premises which are not affected by the works.

Storage compounding can be made available on discussion with BCU Estates department.

Working Hours

Working hours will be confirmed with the Customer at contracting stage.

Occupied premises

The Supplier should take all reasonable care to avoid damaging the property and content.

The Supplier must ensure that all materials, plant and equipment is managed appropriately and not left in locations that may endanger or expose risk to the premises, its contents or occupants.



The Supplier should not leave any equipment or materials unattended.

Any inconvenience to occupants must be minimized as much as is possible.

Use of the Site

The Site must be used to carry out the job in question. Any Supplier advertising must be agreed with the Customer.

Alcohol

No alcohol is to be brought or consumed on any Customer Site.

Radio Receivers

Where the use of radio receivers and any audio equipment is required to be otherwise agreed with the Customer.

Tobacco

The Supplier must ensure Operatives follow trust smoking policy on any of the Customer Sites. Policy Available on request.

Site Procedures

Unless otherwise agreed the Supplier must adhere to the Customer's local Site Procedures.

These will be made available on commencement of contract but are available on request. These documents include:

EF002 Contractor Standard Operating Procedure
EF004 Unexpected contractor attendance escalation procedure
EF005 FM first response to a building incident
Ef006 Building Notifications Key Contacts
EF013 Permit to work policy
EF016 Contractor code of conduct procedure



EF017 Task Activity Flow Chart
EF018 Permit to work flow chart
EF019 Contractor Management Roles & Responsibilities
EF022 Roof access statements red roofs
EF023 Roof Access Statements green roofs

BCU electrical Cabling standards BCU AV installation requirements BCU Contractor induction policy

Fire Precautions

The Supplier must not burn any waste materials on the Customer's Site.

The Supplier must take every precaution to ensure that no fires are started on the Customer's Site through the work that they are carrying out.

Temporary Buildings

All plant, temporary buildings, equipment and items on the Customer's Site provided by or on behalf of the Supplier will be the Supplier's responsibility.

Any temporary buildings must be approved by the Customer's Contact. Where service connections are required, the Supplier must liaise with the Customer's Contact.

Working Platforms

In the event that Working Platforms are required to enable work to be carried out safely, the Supplier must ensure compliance with all Legislation relating to this. The Supplier must liaise with the Customer in the event that Working Platforms are required. Costs associated with Working Platforms will be in the pricing schedule Annex 1 returned as part of the tender or if unforeseen agreed at contracting stage.

Scaffolding

In the event that scaffolding is required, the Supplier must ensure compliance with all Legislation relating to this. The Supplier must liaise with the Customer in the event that Working Platforms are required. Costs associated with Scaffolding will be detailed in the



pricing schedule Annex 1 returned as part of the tender or if unforeseen agreed at contracting stage.

Ladder Work

Ladder work is considered inclusive of the rates supplied.

Execution of the Works - Management

Communications with the Workforce

The Supplier is responsible for ensuring that it maintains contact with its Operatives on a continuous basis, in order that Works can be met within the pre-determined response times.

Person in Charge

When a job is taking place, the Supplier must ensure that there is a competent person on Site to manage the job and act upon any instructions received.

Programme of Works

The Supplier shall prepare and submit for approval to the Customer a programme covering all aspects of Works when requested.

The contactor shall arrange for the following demonstrations of the installed systems as follows;

- a. Head of Estates, his representatives and other management
- b. To the estate's maintenance staff and operatives
- c. To the estates staff to be occupying the building post-handover

If any defective items of work are found at any stage, the contractor shall return to site at his expense no more than one working day following the logging and reporting of the fault, at no cost to the University.



Any work found to be sub-standard in any way, shall be removed and reinstalled at no cost, or prejudice to the dates of completion mentioned previously in this document at the expense of the bidder.

Sign off and completion of works as satisfactory will be provided following inspection and issue of letter of satisfaction by the Head of Estates or nominated representative.

Site Documentation

The contractor shall provide to create O &M files:

- a. Relevant copies of all technical equipment schedules 'as delivered to site'.
- b. Relevant technical literature on each type of equipment or component used within the installation.
- c. Copies of all relevant information. (Technical queries, relevant instructions, current installation/working drawings, current programme).
- d. O&M submission (where applicable)

If appropriate, on completion of works the contractor shall provide as part of their O&M submission;

- a. Test certification all systems to be employed and installed by them
- b. Manufacturers data of all systems utilised on the works
- c. Design calculations against Performance data
- d. Maintenance recommendations*
- e. Schematic drawings of systems
- f. Layout drawings
- g. All records are required to be stored, kept and transferred in line with General Data Protection Regulation (Regulation (EU) 2016/679).

In hard copy format 3 copies, and in media format CD or media drive 3 copies.

*All systems to be warrantied as set out in the scope of works section of this specification and contents of the ITT Document.



Contract Management

Management of the contract shall be covered by nominated key personnel for both parties upon award of contract.

Contact details of key personnel shall be exchanged following contract award.

Both parties shall seek to meet weekly to review project.

Meetings may be face to face, via Microsoft Teams or involve site visit inspections as appropriate.

Meetings will be minuted for recording purposes by a nominated representative of the Contractor or Contracting Authority agreed upon contract award.

The Supplier will work closely with the customer to formulate a process for Contract Management. This will ensure that regular contact is achieved between the Supplier and the Customer.

Contract Management shall be by a process of weekly review based upon the programme of works/mobilisation plan submitted as part of this ITT return & revised upon contract award at initial kick start meetings.

Supplier is expected to adhere to their implementation plan provided as part of this process.

Changes to the implementation/milestone plans, programme of works and timescales are to be agreed between the contracting authority and the supplier and may be subject to a change control process.

Weekly project milestones will be notified to the contactor by BCU Estates Department as complete/incomplete by a process of letters of satisfaction Certificate Milestone/ Satisfaction Certificate Sectional/Phase completion/ Satisfaction Certificate Project completion/ Non Completion Certificate Milestone/ Non Completion Certificate Sectional/Phase as appropriate.

A sample of this documentation can be made available upon request.

Milestone plans and completion/non completion letters will be filed & retained by the BCU Estates department and both parties shall hold and be issued copies. A version control process will introduced to capture and record developments or amendments within the programme of works.



Complaints arising from the services provided will be managed by the Supplier and the customer shall be made aware of any complaints and kept up to date with how they are being managed.

Dispute Resolution

Following any on-site discussions between supplier and customer, if resolution is required please refer to the dispute resolution procedure contained in the JCT Schedule of Amendments Contract for these works.

Performance requirements

Performance of the works shall take place at: Site Address – The Pavilion, Moor Ln, Birmingham B6 7AA.

Estimation of Costs and Works - Site visit

Suppliers are able to attend site visits to survey the works measure up and ask questions of onsite staffing regarding this requirement in order to complete accurate quotations.

Guidance on how to arrange a site visit is included within this ITT document.

Bidders should request any additional site surveys or visits required in order to complete a quotation return via the Delta E-Sourcing portal.

The estimated value of this 4-6 weeks contract does not look to exceed: £230K including vat.

Service Commencement dates:

- It is envisaged this contract will see commencement of works with a successful bidder will take place between 15th June 2025 as Contract Mobilisation with installation of the dome 1st September to 15th September 2025.
- Commencement dates of this contract are advisory and may be subject to change.
- The values given within this specification and ITT document are advisory and subject to amendment and change. They do not confirm a guarantee of works for a preferred supplier and are included for reference purposes only as estimated spend.
- The contracting authority reserves the right not to award this ITT to all or any supplier and can withdraw this tender at any time.



Pricing:

Will be required in the format requested in the pricing schedule Annex 1 of the ITT document. Please see Annex 1 of this document for details.

For reference and information purposes, suppliers should look to ensure their pricing is within national pricing schedules of rates, including but not limited to:

Current National Schedule of Rates (NSR,) including:

- Building Works (2020/21 Edition)
- Mechanical Services (2020/21 Edition)
- Electrical Services (2020/21 Edition)
- Painting and Decorating (2020/21 Edition)

(See https://www.nsrm.co.uk/products)

M3NHF Schedule of Rates, including:

M3 Schedule: Facilities Management

(See https://www.m3h.co.uk/products/schedules/m3nhf-schedule-of-rates)

The PSA/Carillion Schedule of Rates, including the following and as amended:

- Building Works 2015 Edition (Excluding Decoration Works)
- Decoration Works 2012 Edition
- Electrical Services 2011 Edition
- Mechanical Services 2011 Edition
- Landscape Management 2012

(See: https://www.ihsti.com/CIS/document/310496)

The above referenced schedules of rates are offered for illustration & reference purposes only. It is the responsibility of suppliers to submit a competitively priced commercial schedule of rates in response to this opportunity.



The authority accepts no responsibility for the submissions made by bidder, their contents or competitiveness.

Legal:

The following aspects of regulation should be applied but not limited when carrying out all aspects of works and installation:

Compliance with Regulations

The Supplier must ensure compliance with all relevant legislation and guidance in respect of the Work being carried out and how it is carried out. The Supplier should ensure compliance with, but not limited to:

This will include all Regulations as amended:-

- Factories Act 1961.
- Relevant HVCA Design Guidance Publications.
- CIBSE Guides volumes A,B,C and D and all other CIBSE codes of practice and guidance notes.
- Building Regulations.
- Public Health Act 1961.
- Clean Air Act 1968.
- Health and Safety at Work Act 1974.
- Control of Substances Hazardous to Health Regulations 2002 (SI No. 2002/2677)
- Environmental Protection Act 1990 and associated Waste Regulations,
- Energy Conservation Act.
- Control of Pollution Act 1974.
- Health and Safety Guidance Note PM5.
- The CDM Regulations.
- Management of Health and Safety at Work Regulations 1999 (SI No. 1999/3242)
- Manual Handling Operations Regulations 1992 (SI No. 1992/2793)
- Personal Protective Equipment at Work Regulations 1992 (SI No. 1992/2866)
- Provision and Use of Work Equipment Regulations 1998 (SI No. 1998/2306)
- Workplace (Health, Safety and Welfare) Regulations 1992 (SI No. 1992/3004)



- Building Regulations 2000 (SI No. 2000/2531)
- Health & Safety Executive HS(G) L56 Approved Code of Practice
- Health & Safety Executive PM5 and PM6 Approved Code of Practice
- Electricity Supply Regulations 1988 (SI No. 1988/1057)
- Electricity at Work Act 1989 including memorandum of guidance.
- Regulations under the Electricity Act.
- British Gas Council Codes of Practice.
- The Gas Safety Regulations.
- F Gas Regulations 2009
- Building and Engineering Services Association Standards and Code of Practice.
- ErP legislation.
- Fire Prevention on Construction Sites.
- Asbestos regulations.
- The control of Pollution Act.
- The Department of Environments Energy Efficiency Best Practice Programme (BRECSU).
- Institute of Electrical Engineers Regulations (BS 7671), 17th edition, including all guidance notes.
- Lifting Operations and Lifting Equipment Regulations 1998 (SI No. 1998/2307)
- Environmental Protection (Controls of Injurious Substances) Regulations 1992 (SI No. 1992/31)
- Requirements of the local Fire Officer.
- Electromagnetic Interference Guidelines.
- Confined Spaces Regulations 1997 (SI No. 1997/1713) and the Safe Working Confined Spaces Code of Practice
- "Guidelines for Implementing Controls Assurance in the NHS"; and
- All relevant British Standards and British Standards Codes of Practice issued by the British Standards Institute and any future standards including: British Standard 7671:2008 Electrical Installations; Engineering Recommendation G59/1 "Recommendations for the connection of embedded generating plant to the regional Electricity Companies" and ETR 113; Distribution code of the Public Electricity Suppliers of England and Wales, and all other relevant Regulations and British Standards.



 All safety requirements, legislative requirements and industry standards listed elsewhere in this specification.

The Works shall comply with the following and other model specifications, including, but not limited to and as amended-

Model spec A - electrical and mechanical standard

C51 – electrical requirements

C54 - BEMS

C82 – electrical and mechanical colour coding.

Other

Contractors will be expected to hold and evidence Enhanced negative DBS checks.

Contracting Form

It is envisaged this process will establish a contract in accordance with the Specification(s) within this document, and in line with the JCT Schedule of Amendments Contract.

This specification should be reviewed in conjunction with the following documentation supplied with the Invitation to Tender documentation:

Appendix 1 – Specification/Scope of Services (This Specification).

Appendix 2 – Groundwork Plans (Appendices 2.1 to 2.6).

Appendix 3 – Dome Plans (Appendices 3.1 to 3.7).

Appendix 4 – Site Photography.