



# 1.1 The Prices – Additional Information

**Clarifications and Assumptions** 



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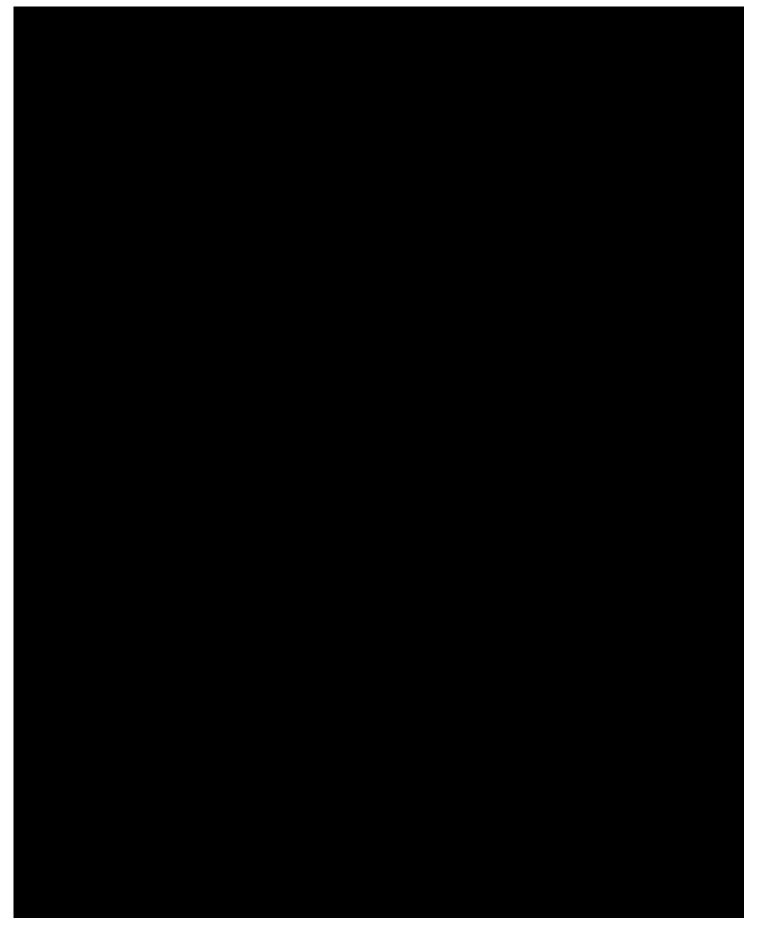






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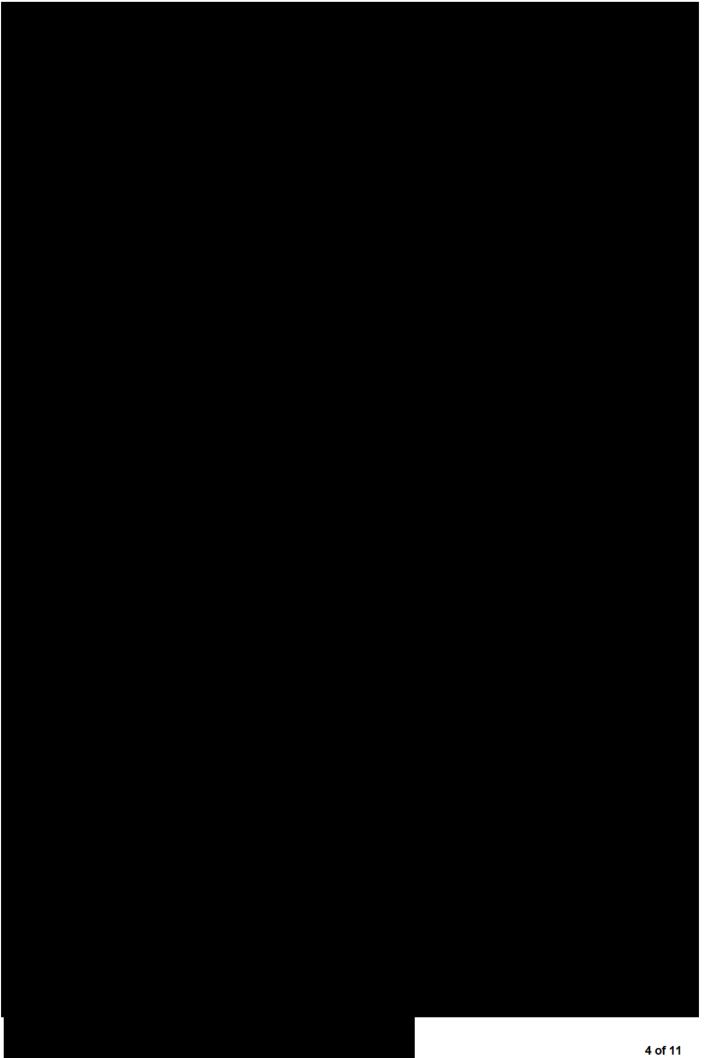




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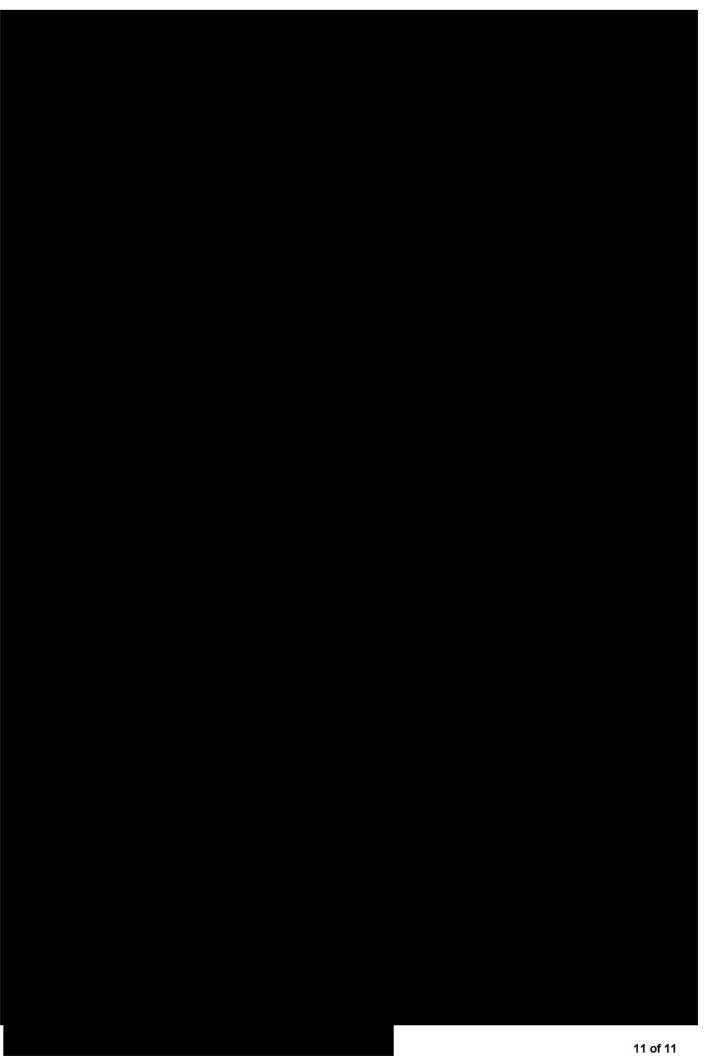


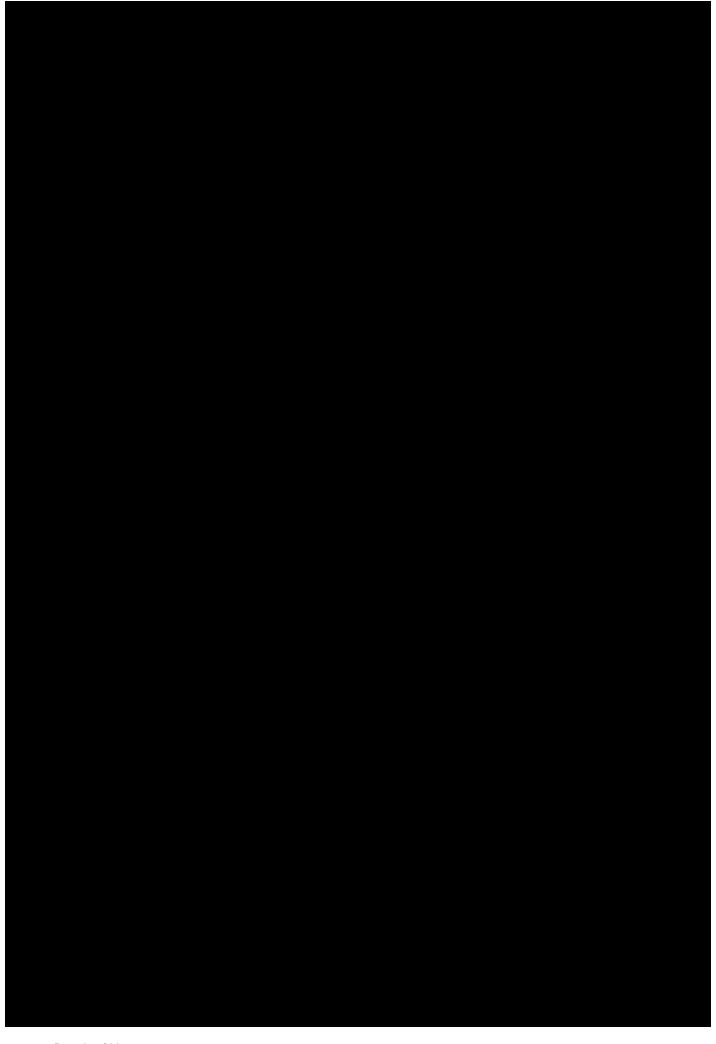


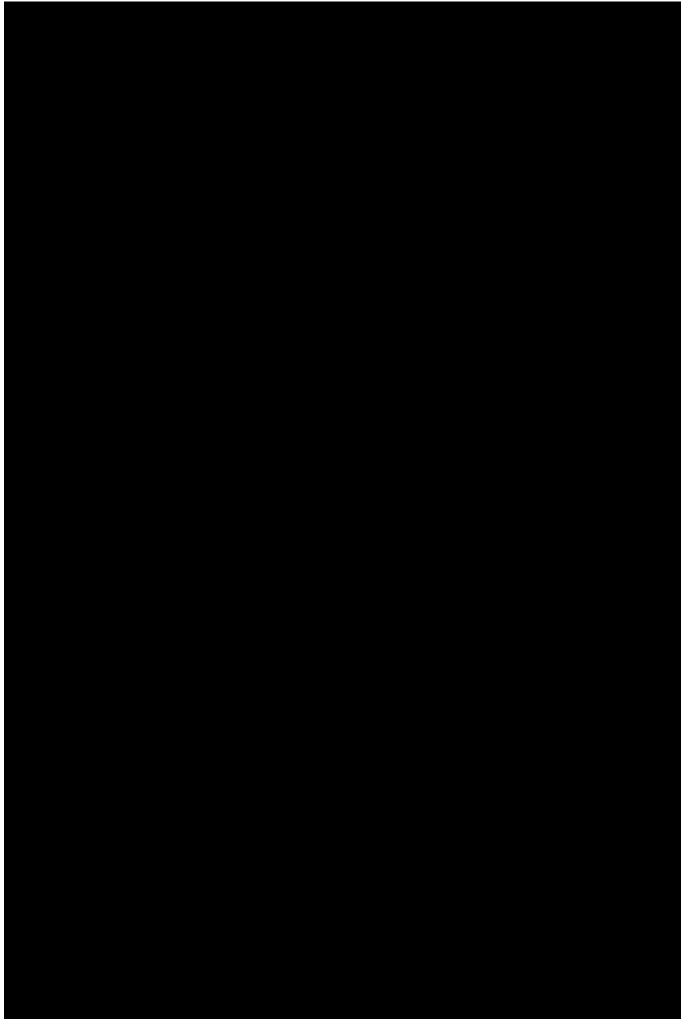












## 1.2 Contractual Mark Up

Project Name: Stadium Transformation Contract Title: Shell-and-Core Works, Main Contractor

Tenderer Name: Balfour Beatty Group Ltd

Clause Reference	Proposed drafting amendment (mark up of the relevant provision of the Contract or ancillary document)	Explanation of why the proposed amendment is necessary	If the Contracting Authority does not accept the proposed amendment, financial impact on the Tenderer's tender price
Contract data part 1	Heading top right of page  Delete "2"  Insert "1"	Heading is for data part 2	nil
1 general	The contract title should read: Delete "as amended" Insert "including the LLDC standard additional clauses and amendments"	This is what the contract is called. See front page of NEC document	nil
1 general	Add X14	Advanced payments are required under the roof works contract and may be required under this contract	nil
Optional statements	The Contractor is to submit a first programme for acceptance within Delete "two (2) weeks" Insert "four (4) weeks"	The two week period may not be achievable	nil

Key dates	KD1 to be deleted	The proposed key date 20 <sup>th</sup> December 2013 is the contract starting date and is not required as a key date	nil
Contractors forecast	The Contractor preparesat intervals no longer than Delete "four weeks" Insert "monthly"	Four weekly reports result in 13 per year.  Reporting periods are monthly	nil
Option X5 and X7 delay damages	The section descriptions are different to those stated in X5	Both sections descriptions should be the same.	nil

Memorandum of agreement Item 4	Add X14	Advanced payments to subcontractors will be required	nil
Clause 11.2 (24) Clause 17 and 21 and 60.1 (1)	The definition of Employer Pre Contract Design refers to section A300 to identify what this includes however in A300 this is not clearly defined	A300 needs to clearly identify what the Employer Pre Contract Design is	nil
Clause 28.2	The clause states that these are defined in the Project information however these are not clearly defined	For clarity insert roof works to be novated in project information same as for services page 29 of 174.	nil
Clause 28.3	Delete "(and procure that its parent guarantor execute and deliver)"	It is the Contractors responsibility not the parent guarantor.	nil
Clause 28.6	This clause is deleted	Delete this clause,it is not in the Roof Contract and BB governance does not allow the Employer to be appointed attorney.	nil
Clause 79.8	Replace Subcontractor with Contractor	Drafting error.	nil
Option X18.3	Add "subject always to the limitation on liability identified in X18.1 " at the end of the paragraph.	To eliminate any ambiguity.	nil

## 2.1.1 Health and Safety



### Key points

- Zero Harm the driver of our strategy and our commitment to you
- People our leadership and safety management team will work tirelessly to reduce risk
- Experience a core leadership team from Aquatics and a world class safety management team from Heathrow Terminal 2

Our priority from concept, planning, design and delivery is to provide exemplary health and safety standards and leadership; meaning that in everything we do, we commit to eliminating and where this many not be possible, reducing our impact on our client, staff, workforce, stakeholders and public. We review health and safety beyond on-site activities and get to the heart of all risks through the design, fabrication and transport of materials and elements. We plan, we think, we eliminate. We therefore commit to discharge and comply with all relevant health and safety duties specific to this project as outlined within B100 of Appendix D of the ITT the "Employer's Health & Safety Standard".

## Supporting the key objectives, common & visual standards of the LLDC

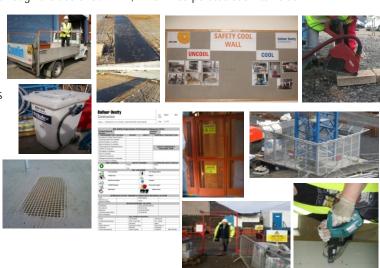
DEVELOPMENT CONFORMATION CONFORMATION	ZEROHARM MAKE SAFETY PERSONAL	
No fatalities	Eliminating fatal risks	
No accidents	Eliminating hazards	
Information	Maintaining Zero Harm day to day	
Health and wellbeing	Keeping the public safe from harm	
Health and wellbeing	Keeping all our people healthy	
Working with You	Working with our customers	
Waste	Please see the Environmental Sections	
Workforce	Making safety personal	

Table 1: Alignment of LLDC's and Balfour Beatty's Health & Safety commitments

#### Our common and visual standards

We strive to lead and not follow. That is why we always look to innovate and adopt new best practice at every opportunity. Having reviewed the LLDC Common and Visual Standards within Appendix 15 of the ITT, we are pleased to confirm that our standards are aligned with those of the LLDC and that such standards are adhered to on site through the use of our PEP, which incorporates such items as:

- Management of nuisance dust, emissions, etc
- Management of Temporary Works
- Materials storage, protection and distribution
- Protection and working adjacent to buried services
- Exclusion zones
- Occupational Health
- Vehicle and pedestrian segregation
- Logistic Plans
- Lifting Plans
- Emergency Plans including Rescue from Height
- COSHH and Emergency Plans



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As standards are always improving, we will carry out reviews before and throughout our time on site, making sure that we continue to adhere and improve on industry standards and legislation. Through our lessons learnt at the Aquatics Centre from the ODA to Legacy and other projects, we have continuously improved our on site activities.

Through close collaboration with our customers, supply chain and from within our Group companies, we always review and share best practice for the overall benefit.

We understand that our activities on site can have environmental, health and safety and financial impacts on the project and those affected by it. Therefore, we always seek to:

- Eliminate: Aquatics Centre no damage to the natural environment
- Protect: Aquatics Centre protection of rail and waterways
- Reuse: 52% reuse of materials achieved at the Aquatics Centre
- Recycle: 96.5% of material diverted from landfill at the Aquatics Centre

#### Environmental management (alignment with the HSE Standard for Olympic Park Transformation)

Our experience of working within the LLDC standards means we are pleased to continue contributing and supporting the maintenance of the LLDC standards and innovations to improve Health, Safety and Environment issues on the park. With the surrounding rivers and close proximity of public dwellings on the west bank of the river, environmental planning is essential in continuing and maintaining the relationships with the neighbours and stakeholders.

Our environmental objectives are set out and given ownership within our Project Execution Plan. The highlights of the plan are:

- The prevention of environmental incidents
- Minimise carbon emissions
- Minimise waste
- Re-use and recycle
- Sustainable and ethical sourcing of materials and workforce
- Protection of biodiversity
- Reduce water consumption
- Optimise positive and minimise adverse impacts on the environment

#### Experience and knowledge

Our experience of maintaining and adding value to the health and safety standards required on the Queen Elizabeth Olympic Park are evident from our continued involvement on the Aquatics Centre and its legacy transformation, our recently awarded involvement on the Stadium Roof Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement on SHELT of Transformation and through the direct involvement of the direct involve

As our previous experience is only a base line of evidence to what we have done, we are committed to further expanding and developing standards on the Stadium Transformation project through jointly agreeing betterment targets to safety and providing a team of experienced health and safety professionals from Heathrow Terminal 2B (please see Table 2) to work as part of the site team ensuring that at every opportunity we eliminate risk.

#### Our commitment to the LLDC leadership model and management of arrangements

#### Commitment through leadership

We commit to ensuring that the project has the very best leadership delivered through our personnel, that of our supply chain, design team and individuals. This leadership is initiated from the top from our Project Director, who has successfully delivered projects for the ODA and LLDC previously and will continue with his commitment on the Stadium Transformation development.

We are successfully achieving our aligned objectives and aims from the table 1 through our commitment to strong HSE leadership, exemplary management and training whilst integrating every member of the team including the customer and supply chain. We ensure the resource is right for the task and that the team are competent, fully trained, informed and briefed. Our commitments to you, our employees and subcontractors include:

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- Providing safe workplaces and systems of work
- Eliminating (reducing where not possible) risk at all possible opportunities
- Championing behavioural safety
- Providing training, information, and supervision in everything we do
- Encourage reporting of near misses and accidents
- Benchmarking and Reporting on a regular basis, through face to face meetings, campaigns and talks
- Providing HSE champions and a Project Leadership Team

We will continue to achieve this through leadership engagement and tours, an auditable trail detailed within the PEP and by gaining committed leadership to Health and Safety through our supply chain.

Balfour Beatty has worked with the ODA and LLDC in the safe delivery of the complex Aquatics Centre Project and its legacy remodelling, and are now delivering the Stadium Roof. This experience gives us a thorough understanding of the requirements and expectations of the LLDC for the Stadium Transformation project.

#### Our key members of HSE team supporting your leadership team

Name	Role	Strengths	Evidence of supporting leadership
	Site Safety Manager	Depth of knowledge and varied experience of projects People Skills	CMIOSH Training and coaching others
	Environment BREEAM Specialist	Legacy history of working on the Aquatics, supported by the global strength and knowledge provided by Balfour Beatty Group and Parson Brinckerhoff	Member of the Chartered Institution of Water and Environmental Management Member of the Chartered Institution of Waste Management Fellow Royal Geographical Society

Table 2: Our HSE Team for the Stadium Transformation – please refer to Section 2.3.2 for details

#### Reward and recognition

Recognising the achievements of individuals and companies for their commitment and delivery to health and safety and environmental awareness is essential to not only its continued success, but its uptake and delivery. We ensure our individuals commitments are recognised and valued regularly with incentive schemes such as awards, vouchers, free meals, employee of the month posters.

On the Stadium Transformation Shell and Core project, we would look at a minimum of monthly employee awards, on the spot meal vouchers and taking the time to value exemplary health and safety behaviour. The system would be communicated from the start on site at induction and maintained through Daily Activity Briefings (DABs), notices and weekly open safety meetings.

#### Communication

Communication is key to delivering a safe and productive work environment which is essential on site. Therefore, to ensure day to day control of the segregation of works, a supervisor's meeting will be held at the end of each day to present their DABs (Daily Activity Briefings) to their teams the following morning. A number of large scale drawings of the stadium showing the phases of work, exclusion zones and current routes for vehicles and pedestrians will be shown at these briefings and will also be located at communication hubs around the project site. Regular "Safety Stand Downs" will encourage people to think and review safety on site and offer the opportunity to discuss observations.

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#### **Transition**

Our knowledge and experience gained through working on the QEOP and throughout projects within the Balfour Beatty Group can only go from strength to strength. We already have extensive experience of working with the Tier 2 subcontractors selected for the Stadium Transformation. As we are delivering the Roof works, our management system and ethos are already aligned, and our past and current relationship with as a preferred subcontractor on some of our prestigious projects at Bishops Court and 67 Lombard Street mean that our visions are akin to one another. We have already commenced engagement with them on issues pertinent to the safe and timely delivery of this iconic project. We are used to leading complex, time critical, prestigious, high profile projects to a safe on time delivery, such as the London Aquatics Centre, the M25 widening, Blackfriars Station Redevelopment and Heathrow Terminal 2B.

Our team commit to delivering a seamless, effective and safe transition to Principal Contractor on the project. As Roof Contractor and Main Contractor we will eliminate the interface risks associated with inheriting the most safety critical element of the overall project, whilst concentrating on integrating and delivering the other elements seamlessly. Planning and coordinating will be critical to achieving this and we feel we are the best placed to achieve this not only from our involvement already in the roof but because we have committed and driven individuals assigned to this project that are already formulating how to excel on the Stadium.

#### **CDM**

The following outlines how we implement our duties under the Construction (Design and Management) Regulations 2007 and industrial best practice.

Balfour Beatty has produced a comprehensive Health and Safety Procedures Manual with procedures that provide robust and comprehensive guidance in the managing of safety. Their implementation realises the goals stated in our Health and Safety Policy. These procedures are further supplemented by recognised safety standards which apply to the construction industry.

We integrate CDM issues into the management of the project, via the Project Execution Plan (PEP). The Project Execution Plan addresses all the headings as detailed in the CDM regulations, and ensures the Project Manager creates his own bespoke plan underpinned by CDM regulations.

The responsibility for this plan lies with (Project Manager), who will be assisted by a site based support staff, many of who come with years of experience in working either on the Aquatics Centre or Heathrow Terminal 2B. Their roles and responsibilities will be clearly defined by our company procedures and the bespoke PEP prepared for the Stadium Transformation Works.

We conduct three levels of audit and monitoring of our Health and Safety System to ensure they are up to date and relevant to the works we are doing. An overview of the audits will be circulated in the monthly HSEQ report. Annual reports will be produced by the Company H&S Manager and the Q&E Manager to improve performance and correct deficiencies identified by audit. The reports will explain the overall strategy to improve the Safety Management System and will set objectives, establish priorities, allocate resources and responsibilities and set deadlines for implementation.

The attainment and maintenance of an exemplary safety performance and the well-being of our people is fundamentally important. The key characteristics that underpin a safe outcome are:

- Vision
- Strategy
- Leadership
- Planning

- Engagement
- Personal commitment
- Wellbeing

#### Vision

The vision of Zero Harm must prevail above all other factors. The impact of accidents upon the families of those affected or those closely involved with a project is profound. Our commitment will be to complete the Stadium Transformation in its entirety in line with our aligned aims tabulated above. We will also continue to learn and evolve from our experiences not only on the Park but from within the BB Group to lift standards, improve safety, introduce new and better work methods and educate all whom we touch.

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#### Strategy

Our suppliers are selected because of their experience, knowledge and industry leading approach to safety and delivery along with their known commitment to the wellbeing of their people. We will all be challenged to out-perform our past. We will ensure zero tolerance of poor performance. The behaviours and competencies of management and supervisors will always be under review. We will all cooperate with each other to reduce the risk of incident or injury.

#### Leadership

We will ensure our leadership team demonstrate high visibility across all activities on site and contribute to the Park-wide forums that exist to promote exemplary standards. We will hold regular Safety Leadership Team meetings with representatives of our suppliers, our design support team the workforce and yourselves.

#### **Planning**

There will be an emphasis on planning to eliminate risks through the design and procurement stages. High risk activities will be HAZOP reviewed with stakeholders – designers, contractors, suppliers, the HSE and specialists. Actions discussed will be recorded and implemented. Works will not proceed on site until we are satisfied that method statements, risk assessments and lifting plans are robust and properly thought through and approved.

#### **Engagement**

We will develop a specific engagement plan for the Stadium conversion. We will encourage workplace engagement, reporting of good and bad practice and near misses, reward and recognition and supervisor training. We will communicate and provide guidance on what is good and what is unacceptable. Regular safety stand-downs and senior management briefings will reinforce our commitment.

#### Personal commitment

Every individual will be challenged from the onset. Do you want to be cooperative or not? Are you caring or uncaring? Will you treat others as you would be treated yourself? Are you supportive of zero tolerance at the workplace and are you intolerant of personal abuse? What are your responsibilities as a supervisor? What will you do to secure your own safety and that of your colleagues?

#### Wellbeing

We will provide trained medical support, encourage healthy eating and be intolerant of alcohol or drugs abuse at the workplace. We will support a programme of guidance and support on healthy living and medical checks for workers carrying out high risk activities.

#### Innovation

The implementation and use of innovation on a project can bring many benefits from programme to cost, but more importantly it can reduce risk or ultimately eliminate it. Innovation can come through many different routes, materials, design, methodology or technological. We embrace innovation at all times, having reviewed, questioned and tested it to ascertain the real benefits. Building Information Modelling is an important innovation to the industry. Balfour Beatty will use this technology through our own specialist BIM professionals and our existing contractual relationship with Autodesk to ensure we deliver an exemplar conversion of the Stadium and provide for its future maintenance and management.

#### The role of design in HS&E

Our appointed design team, along with our selected suppliers will ensure that Health and Safety is considered in every aspect upon our appointment as Principal Contractor. To ensure safe and timely delivery on projects, a grass roots approach to HSE must be adhered to. Regular HSE workshops will be facilitated ensuring that the design is challenged, making sure that it is deliverable both safely and sustainably. This will be achieved by preparing Red, Amber and Green lists and collaboratively closing these out through the workshops. Previously, we have managed to gain safety and programme benefit from such workshops. At the Aquatics Centre, temporary works were incorporated into the permanent works on the roof, allowing the installation of a perimeter handrail system into the edge steel forming the gutter, meaning additional external scaffolding was not required, therefore, allowing for the safe installation of both guttering and roof covering without having to unnecessarily move handrail positions. This provided to be a cost and time effective solution, benefiting the project.

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## Supply chain and procurement

Our supply chain undergoes rigorous testing prior to appointment to the delivery team. We utilise Achilles and our own stringent auditing process and pre-appointment meetings to ensure that our values of health and safety, sustainability, ethics and community are aligned. This provides LLDC with the confidence that those employed on the project share similar goals and vision, meaning LLDC benefit from an aligned delivery team. The delivery team and our supply chain have been involved in the Olympic Park delivery and we have started to review the Health and Safety issues and objectives for this project in readiness for start on site. By working collaboratively, we are aligning and integrating our risks and opportunities, ensuring we work collectively by reviewing the design and methodologies together. Balfour Beatty and the team are keen to continue collaborating with the LLDC to deliver a successful project.

### Risk identification and management

There are particular risks and characteristics associated with the Stadium Transformation. These include:

- working at height
- lifting operations
- falling materials
- buried live services
- contaminated ground
- structural alteration
- temporary works
- operational interfaces

Key risk	Control measures to be adopted	Examples of previous work	Involvement in resolution
Injury/death to personnel from working at height	Eliminate where possible Instigate stringent training and qualification regime Thorough jointly reviewed Method Statements and Risk Assessments Use of MEWPs, Rope Access, netting as appropriate all fully risk assessed.	Blackfriars Station Redevelopment – working over the River Thames and Live Rail Routes.	All Health and Safety personnel, supply chain and Client
Disturbance of contaminated ground	Eliminate where possible. Use of Specialist Supply Chain Use of Monitoring and Alarms Decontamination and Rescue Plans in place	Olympic Aquatics Centre Noon Building – Southall, West London Kidderminster Town Centre	All Health and Safety personnel, Temporary Works Department, BB Civil Engineering, Supply Chain and Client.
Extremely tight delivery programme	Use of specialist, recognised and robust supply chain Value engineering opportunities maximised Seamless integration of Roof and MEP Contractor	Olympic Aquatics Centre Blackfriars Station Redevelopment London Heathrow T2B Stadium Roof Transformation	All Health and Safety personnel, supply/procurement chain and Client.
Delivery by supply chain	Use of specialist, recognised, robust and financially stable supply chain partners	Olympic Aquatics Centre Blackfriars Station Redevelopment London Heathrow T2B Stadium Roof Transformation	Balfour Beatty Procurement, Client, supply chain
Working around water	Instigate stringent training and qualification regime Thorough jointly reviewed Method Statements and Risk Assessments	Blackfriars Station Redevelopment London Aquatics Centre Temple Quays, Bristol, UK	All Health and Safety personnel, supply chain and Client.

Table 3: Initial indication of key risks to the safe delivery of the planned works

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## 2.1.2 Quality Management

### Key points

- Robust processes in place to deliver Zero Defects
- Quality standards understood and delivered on the Aquatics Centre
- Shared commitment to continually improve standards

## Driving operational excellence and quality

As thoughtful contributors to the built environment, attention to quality is central to Balfour Beatty. A core principle is driving operational excellence in all we do. We are committed to sharing our thinking inside and outside our company and harnessing the capabilities of our people, partners and supply chain to ensure quality delivery to our customers.

Balfour Beatty operates a Quality Management System which complies with BS EN ISO 9001. We define quality as meeting customer requirements every time. We will identify and understand these requirements and focus on perfect execution throughout the project lifecycle so that our standards for managing quality will ensure that:



- robust quality planning enables works to be performed in a systematic, safe and coordinated manner
- processes, materials and workmanship deliver a quality finished product
- inspection and testing will support a right first time culture, reducing defects and re-work



- engaging with our customers, partners, designers and supply chain
- identifying, and working in compliance with applicable legislation, corporate directives, relevant codes of practice, accepted industry standards and customer requirements
- ensuring our Business Management System supports our right first time culture
- embedding a quality culture which allows our people to take pride in their work and to fulfil their potential
- harnessing all of Balfour Beatty Group's capabilities and delivering locally
- driving continuous improvement through the adoption of innovation and best practice
- establishing, implementing, cascading and reviewing corporate objectives to drive continual process improvement (GPS Goals, Priorities and Scorecard)

## Outline & summary of the Quality Plan structure in line with B1300 requirements

At the heart of project delivery is the Project Execution Plan (PEP) (please see appendix 2.1.2 A), which is an integrated document that covers all operational aspects of Health, Safety, Quality Assurance and Environment, and describes how each of these issues will be addressed and managed throughout the project. This plan is dynamic, briefed to all project personnel and reviewed and revised on a regular basis. The Quality Plan will be developed to outline the following specific project quality controls in accordance with B1300 of the ITT requirements and is embedded in the processes from inception, through design, into our supply chain and on site delivery through to handover and after care with the end users:

- a) Scope & requirements
- b) Quality Objectives & Mobilisation
- c) Resources & Responsibilities
- d) Documentation & Records
- e) Customer Satisfaction
- f) Design Management
- g) Supply Chain Management

- h) Inspection & Test
- i) Lean
- j) Asset Management
- k) Non Conformance and Defect Management
- I) Audit
- m) Handover
- n) Feedback



Figure 1: Quality Process Map

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### Principle processes and components

#### Monitoring quality of construction output

Quality on the Stadium project will be managed through a bespoke Quality Management/Project Plan used to consider:

- The ownership of quality through appropriate talent and quality expertise within BB and our supply chain for each assignment and
  ensuring correct provisions and resource are in pace to monitor and report
- Technical quality aspects, as measured by the progressive self certification inspection and acceptance process and through the resolution of defect and acknowledgement of best practice
- Perception of quality, measured by such indicators as customer involvement and stakeholder satisfaction
- Suitable review of outputs, using appropriate review levels and participants to ensure successful project/asset handover
- The embedment of robust Balfour Beatty quality processes to ensure correct approach by all parties to achieve and to progressively
  monitor quality results

We have an established formal structured Business Management System that provides a framework for Quality Management. Our BMS operates under the principles of plan, implement, check, review and improve as well establishing a framework for our right first time culture and an understanding by all our people that the pursuit of excellence is not an option. The BMS:

- Provides the framework for the delivery of our Quality Policy Statement
- Establishes quality accountabilities and responsibilities at all levels from our executive leadership through to our workforce
- Includes regimes to ensure people are trained and competent in the delivery of quality
- Includes processes and procedures that enable the business to plan, implement, control, monitor, audit, review and improve our activities
- Includes the capability to adapt to meet the needs of our varied and changing circumstances
- Drives the culture and delivery of our "Right First Time" principles

Our BMS uses a systematic approach to provide a high probability that our agreed service will be achieved. It is designed to accomplish our key objectives, to meet legislative and contract requirements and acts as a foundation for the identification of best practice, eradication of non-conformances and continual improvement across our business. The BMS system will be used to inherent the correct project specific quality methods and tools for the Stadium Project across the project life cycle as per the Balfour Beatty Process Operating Model.

#### Mobilisation of quality on the Stadium

Quality culture initiatives and training & development will be embedded at the Stadium Transformation project through bottom up interventions. These include the establishment and promotion of:

- Quality Golden Rules each person on the project is asked to consider the following every day
  - I have the right information
  - I have the right materials & tools
  - o I have seen the benchmark or understand the desired output
  - I know how to leave/protect the finished work
- Quality focused inductions Each induction will include specific items related to quality
- Daily briefings Each day each person will be briefed this will include specific quality outcomes
- Quality toolbox talks Each trade will take part in periodic tool box talks related to product and /or process quality. Mock-ups, Samples
  and Benchmark will be used to raise awareness of Quality and engage workforce to ensure delivery of consistent quality
- Shoulder taps Our reward system for exemplary working methods. If one of our team recognises 'model practices', the individual(s) is(are) rewarded with shopping vouchers/breakfast tokens
- Specific intervention strategies 'Stop for Quality', 'Be Proud', 'Right First Time'
- Quality Site Walks Periodic site walks with the supply chain and client will take place for quality performance

#### Liaising and working cooperatively with the Employer

The Project Management Plan/Quality Plan will be subject to approval, review and continuous improvement as appropriate to the project and in line with the B1300 requirements. As a minimum, the Project Quality Plan on the Stadium Transformation project will be approved by the Project Director, Construction Managers and reviewed for appropriateness by the Quality Manager and HSE Team and issued to the client for

"The approach is 'Right First Time' at every stage, through robust inspection and test regime and sign-off."

Indi Bansal, Quality Manager Balfour Beatty







acceptance. The Plan will then be reviewed at Quality Meetings attended by MACE and the LLDC along with Chris Thompson (Quality Control Manager) of the site team. The meetings will provide a forum for all parties to raise any concerns, agree actions and monitor resolutions.

#### Quality assurance and minimising the incidence of defects on the Stadium Transformation project

Further to the PQP, quality culture initiatives and training & development, inspection control and quality management will be detailed within trade specific Inspection Test Plan. Each key work package/subcontractor with an assignment at the Stadium Transformation project will provide a detailed Inspection & Test Plan (ITP) to define the control processes that is required to ensure delivery of quality in accordance with the LLDC specifications. A checklist and handover proforma will accompany the ITP to engage in a detail review of their checking regime.

An ITP will be prepared with the trade contractor at early stage of the works planning process, to enable monitoring of the relevant inspection and testing during the fabrication and construction phases in accordance with the design and contract information to:

- ensure that the inspection frequency, procedures, specifications, compliance criteria, records and responsibilities for the work activities
  are formally and clearly documented, approved and issued to those controlling the conduct of the contract
- · stipulate the necessary level of tests and attendance required at inspections for each aspect of the works
- provide details of 'Hold Point' requirements in addition to compliance criteria and records arising from the inspection. Hold Points are
  where the construction activity is halted until inspection of that activity is carried out before commencement (receipt of pre-fabricated
  product, during works and at the end of the construction activity)
- Identify key inspection of specialist activities and include all those activities and inspection test controls that are key to the delivery of
  the project in terms of Quality, Safety and Environmental Controls, Workmanship and Specification Compliance.

The ITP must be issued by the trade contractor to Balfour Beatty one month prior to the commencement of fabrication and site works and as minimum outline the adherence to the Project Quality Management Plan and the management/ governance of:-

- Non-conformance Identification and managing the closure of defects and minimise the occurrence of quality concerns.
- Material/Product Acceptances Ensure materials utilised have been pre-approved by Balfour Beatty/Client & Design Team prior to commencement and procurement.
- Design Assurance Processes Ensure only approved and the latest construction drawings and specifications are being used during fabrication and construction phases
- Samples/Benchmarks/Prototypes/Mock-up Acceptance Create and provide Samples/Benchmarks/Prototype/Mock-Up as per specification for review and approval prior to fabrication/construction. Use these items to engage workforce to ensure delivery consistent quality.
- Fabrication Activity (Raw Material, Fabrication Process, Supply Chain & Shipment Checks & Inspection) Subcontractor to identify
  the product identification process and the product status with respect to monitoring and measurement requirements throughout their
  supply chain process and the identification of a checking regime required throughout the supply chain and fabrication process (from
  raw material to finished fabricated part)
- Delivery (Pre Installation Checks & Inspection) vesting & visual inspection of all parts delivered to the site prior to installation
- Construction Activity Installation Checks and Inspection Regime and the Identification of checking regime throughout the installation
  process, including hold points where the subcontractor will need to offer the area or element up for inspection
- Product/Element/Asset Protection Identify and agree asset protection controls for all works in the vicinity of your operations and
  upon the completion of your works

#### Checking

Subcontractor to conduct 100% process checks/inspections as per the outlined Inspection & Test Plan and achieve desired quality standard Complete Subcontractor Inspection & Handover Sheets

#### **Verification Checks**

Balfour Beatty Package Team conduct sample checking to verify conformance of required quality standards. Approve Subcontractor Inspection & Handover Sheets

#### Validation Inspections

Balfour Beatty, Client and Third Party to attend Formal Hold Point Inspections to validate conformance of required quality standards. Complete Inspection Test Certificates

Figure 2: **Handover Documentation** – Submittal of records supporting Completion Handover: Health & Safety File, O&M, Record Drawings, Assurance Documentation & certificates.

### Management and resolution of defects on the Stadium Transformation project

Balfour Beatty non-conformance procedure defines the process steps to detect, monitor, record and ensure the effective closeout of non-conformity/snags/defect on our projects. The objective of this process is to:

- Adopt the 'Stop for Quality' culture
- Correctly raise and report a defect
- Correct the detected non-conformity by implementing remedial measures

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- Conduct verification checks to confirm completeness of issue
- Prevent NCR being built in and becoming a defect
- Analyse cause of NCR & implement preventative and drive knowledge share

We have re-engineered our day to day processes which typically rely on paper based forms and compliance inspections to an electronic process that can be operated on handheld computers (PDAs/tablets). The use of this tool will allow the project team to simplify and create an effective process to capture defect status and will:

- Allow the project team to create a task/action which is assigned to the responsible sub-contractor company and person to conduct remedial works
- Allow the project team to take digital photographs to supplement the task described
- Allow the project team to pin point snag areas on localised drawings
- Create bespoke "project geometry" to track snags and actions associated with readiness to handover areas/rooms. Use of tablets to scan barcode label to instantly select the inspection location
- Allow a user friendly interface by creating "bespoke libraries" (provide a common approach and forum of reporting across all sites)
- Allow subcontractors to view only actions associated with their works
- Allow the project team to monitor the status closure of these issues and produce management reports
- Allow the business to monitor the high level quality performances of our site and analyse trends to facilitate improvement

#### Liaising and working cooperatively

Inspections will be conducted by all key stakeholder representatives (Balfour Beatty, design team, client and third party) to witness, verify and record that works comply with Building Regulations, contract specifications & construction drawings. A thorough inspection test programme and tracker will be developed to include all key inspections required for a successful and effective handover. The Inspection & Test Package Schedule as part of the Quality Performance Dashboard will conclude all necessary checks for:

- Phase 0 Testing Offsite Factory/Fabrication Tests
- Phase 1 Testing Static Acceptance (Installation and Service Dead Testing)
- Phase 2 Testing Dynamic Integration (Building Commissioning)
- Room /Area Completion Acceptance Validation of works is fit for purpose, correct contents and fully functional

#### Quality performance reporting on the Stadium Transformation project

A Quality Performance Dashboard will be implemented on the Stadium Transformation Project. This has been geared to consider and register all the inspection, approvals, documentation required during construction to ease the handover process:

- Inspection & Test Plan Schedule Identification of ITPs required by trade in line with construction start date and status of ITP approvals by BB and client where required
- Sample, Benchmark and Material Acceptance Schedule Identification of product and material requiring approval as per specification and status of approvals by Balfour Beatty, third party where required.
- Inspection & Test Package Schedule Identification of verifications and validation inspections to be conducted by BB and witnessed by 3rd party with the LLDC Supervisor and /or accepted by the client. Inspections include offsite/onsite static installation checks, dynamic and integration testing
- Handover Document Deliverables Acceptance Schedule identification of all documents required for handover, i.e. Assurance Records, O&M, H&S File, Services/ Commissioning Certification, Statutory Approvals/Certificates, etc
- Non-Conformance Schedule (NCR) Status & summary detail for each works NCR raise
- Defects and Outstanding Work List Status of snags by trade

#### Evidence of and confidence in our QMS

We are able to evidence and give confidence in our QMS through its use and implementation on the Aquatics Centre during both the ODA build and LLDC Legacy Conversion (see Appendix 2.1.2 A).

Balfour Beatty Perfect Landings model will not only ensure an efficient and effective handover that is snag free, but it will ensure we continue to support the End User Teams in a manner that is both responsive and effective. The process is backed up by a gateway process and an overarching Perfect Landings tracker (see Appendix 2.1.2 B) and KPI dashboard (see Appendix 2.1.2 C) allows all stakeholders to maintain visibility and closure of the progressive key project deliverables from design, samples, benchmarks through to end user training and full customer satisfaction.

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# Quality Management Plan LC403-AQC-ARE-B-PLN-0001-P02

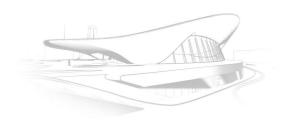
For

Aquatics Centre Legacy Project and Bridges

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Example Quality Management Plan_Aquatic Legacy Phase	Not Protectively Marked	Page 1 of 31

# **Quality Management Plan**

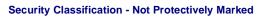
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10.1.1Work Package Inspection Test Plans & Quality Control2110.1.2Sample, Benchmark, Prototype and Mock-up Approval2510.1.3Material Request Approval2610.1.4Process Control Checklists (verification / validation)2710.2Generic Topographical, Setting Out, Control & Surveys2710.3Work Package & Room Completion Inspection Test Certificate2710.4NCR Management28				
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10.1.3       Material Request Approval       26         10.1.4       Process Control Checklists (verification / validation)       27         10.2       GENERIC TOPOGRAPHICAL, SETTING OUT, CONTROL & SURVEYS       27         10.3       WORK PACKAGE & ROOM COMPLETION INSPECTION TEST CERTIFICATE       27         10.4       NCR MANAGEMENT       28				
10.1.4       Process Control Checklists (verification / validation)       27         10.2       GENERIC TOPOGRAPHICAL, SETTING OUT, CONTROL & SURVEYS       27         10.3       WORK PACKAGE & ROOM COMPLETION INSPECTION TEST CERTIFICATE       27         10.4       NCR MANAGEMENT       28			u. 1.2 — Sample, behulinark, Mototype and Mouk-up Appi Oval	
10.2       Generic Topographical, Setting Out, Control & Surveys.       27         10.3       Work Package & Room Completion Inspection Test Certificate       27         10.4       NCR Management       28				
10.3     Work Package & Room Completion Inspection Test Certificate     27       10.4     NCR Management     28				
10.4 NCR Management				
		10	0.4.1 Snag Management - Project Wide Electronic Process to Control & Manage Inspection Oriented Tasks	31

# **Quality Management Plan**





11	PROJECT DELIVERABLES AND ASSET HANDOVER PROCEDURE	31
11.1	1 Asset Protection	31

Document Number	Security Classification	Page Numbers
Example Quality Management Plan_Aqua ic Legacy Phase	Not Protectively Marked	Page 3 of 31

#### **Quality Management Plan**

Security Classification - Not Protectively Marked

#### 1 Objective and purpose of the Quality Management System

This manual is the first level of documentation for Balfour Beatty's Quality Management system and will outline the site specific procedures/ processes to generate services that give the greatest benefits to our clients and ensure corporate values are kept in the forefront of Balfour Beatty operations as per Fig 1.

As a minimum the Balfour Beatty Construction Ltd (BBC&S) procedures will apply. Exceptions or deviation (site specific) from the BBCL procedures will be approved by the Project Manager and noted within this plan.

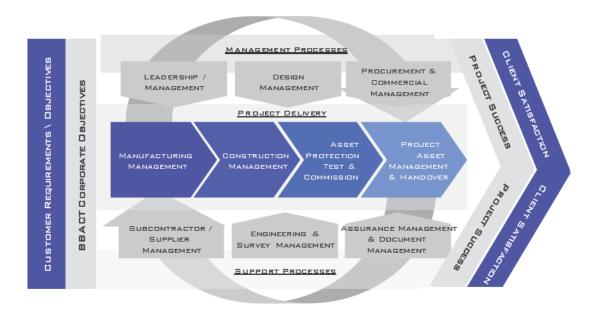
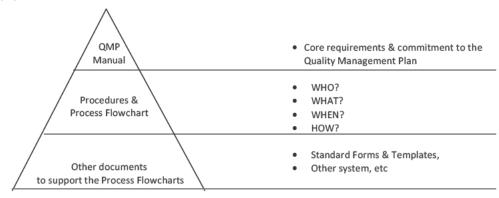


Fig 1 Quality Systems Arrangement

The quality system is documented on three different levels:



The Aquatic Centre Legacy Project due to its complexity and size will manage separate systems in respect of H&S, Quality & Environment. The Project will be managed in accordance with Balfour Beatty Construction's Company Management System (H&S Procedures and Contract Management Procedures), except where notified by the various Aquatic Specific HSEQ Manuals.

The overall objective of HSEQ Manuals is to ensure that the Project is constructed safely, efficiently and economically, giving due regard to the Environment, all in accordance with the Customer requirements and contract specifications.

Document Number	Security Classification	Page Numbers
Example Quality Management Plan_Aqua ic Legacy Phase	Not Protectively Marked	Page 4 of 31



## 2.1.2 Appendix B Perfect Landings

## **Key Principles**





### **Key Stages**

## Stage 1 - Inception

Agree principles, responsibilities and scopes, brief team, review and establish strategy

# Stage 2 – Design Development

Manage design development in line with agreed strategy, agree samples, benchmarks, peer review and handover documentation

# Stage 3 – Planning for Handover

Manage trackers and tools, review metrics and deliverables, involve stakeholders, certainty of operational building readiness and "Are We Ready" Gateway

# Stage 4 – Initial Aftercare

Manage transition, facilitate knowledge transfer

### Stage 5 – Extended Aftercare

Co-ordinated periodic monitoring and review to get the best out of the building

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# Project review and reporting

		"/	PERFEC	:T'	La	and	din	qs	Matri	ix	
	Project : High School							_	Date:	11/05/2012	
					_				Reu:	1	
Ref	Action	Forceast Start Date	Actual Start Date	BOCAP	Resp	Ponsi	C.	Ead wou	Pregress (RAG)	Commente	Actual Completion Date
Pre Handover	E months										
3.01	Client move in and mobilisation attrategy (including any client provision of equipment and IT] agreed and integrated into CJF is BEIV plans.	1011112012	30/09/2012							In place and reflect contract positions. Follows Place gate implementation	31101/2012
3.02	Initiate countdown review proxess and regular meetings.	10(1)(2012	03/04/2012							Countdown 6: oc-ordination materings in place	
3.03	Do ordinate programme of assurance inspections (to address problem areas from previous projects) overlaid onto completion programme.	304115045								C.// to review where the assurance where lists add to our one inspection regimes to avoid duplication. Joint inspections to be planned	
3.04	Identify any work the allent into undertake to existing facilities to ackieve. Handower Condition' prior to service commencement.	30(1)(2012	010442012							Mot applicable	01/04/2012
2.05	Fleviev sample of FDO dispings to ensure that these fully and contently assertions and support of the provisions and state bear signal by a CMED INTERPORT of FLEX provisions and share bear signal by a CMED INTERPORT of the State State of the FDO Interport of th	3041162012	03/04/2012							Completed	0040442012
3.06	Inkate review of plyinge management process to ensure AND 6 CNC Solve failes are fully up to date and determine latest date by which any future shanges can be accomposated (lefreeze on changes)	10/11/2012	090392011							ANCORI for Yele start date still outstanding plus Calvering, Ongoing monthly reviews	
3.07	Appoint or position handoner leader.	3041162012	23/04/2012							Continued for CJV k BBW	20/04/2012
3.06	Maintainable assets schedule, confirm and tasse to DEW	3041115012	30/03/2012							BBW carry out excet collect, typically 3 months out from handover before cellings are in place	30/03/2012
3.09	Complete every law room(iii) and offer up for joint magging to agree standard of linkfeet.	30HH20t2	010312012							Vale completed	01/03/2012
3.10	Plan for maintenance spared agreed with Supply Chain and procusement initiated.	10(1)(2012	01/06/2012							Prepare sohoo lapvoi fix fata	
3.11	Continuits all FDD Status El comments have been incorporated into fire construction approved drawings and facilitate an audit of a representative comple.	3048182012	890592042							Sample check to be carried out by LEP	
3.12	issue commissioning programme indicating dates for testing and intressing	3041112012	03/04/2012							All inned	00/04/2012
2.12	Indus MLE deviced functionality and performance defting to work plan	3041112012	03/04/2012							In place, captured by cause and effect actedules:	00/04/2012
3.14	isose proposal for training and familiar isotion - detailed matrix	3041162012	390592012							Deneric / annual training plans in place, will need to be broken down in to school specific detail	
3,15	Pagmech workshop to ensure all pertex understand the parameters of the Pagmech and establish a defined process with clear tokes and serpons biblies in line with the Choup delects protocol to manage delects.	1041112012	1710512012							17 ft Mag	
3.15	Continu D6M strategy, and agree final documentation and maintenance deliverables schedule.	304115015	2002/10/05							Completed, using standard N Systems approach	31K0M5045
3.17	identify commissioning programme, supportivitivess requirements and authorised persons for commissioning sign-off, (Buddying programme	300112012	03/04/2012							In place, Write febing place	00/04/2012

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# OLYMPIC STADIUM TRANSFORMATION SHELL & CORE TENDER SUBMISSION OCTOBER 2013





**Balfour Beatty** 



### **Balfour Beatty**

Template Form Project "PERFECT" Landings Matrix Tracker

Project Name Project Number Project Lead Revision Key / Dash Board Cet.	Creedus / Activity Has Not to Completed in Une with Getweey  Activity Started  Activity Not Commenced	Activity :	Successfully Comp	1) Do 2) Yo 3) En 3) If 4 4) En Do 5) Ea comm	ter the Final Activity is no iter Forecast D NOT COPY ich Coloumn ment box. F	or enter ner Countries Cateway R t applicable Date [DAT DATA & PA has predeli ease hover	w row or / Descri leview Do to the p E ENTRY STE INTO rifed trace mouse of	columns ptions in line with p stes for each phase roject, please ente , Actual Start Date D CELLS FROM OTH	(i.e. inception, des r "n/a" in columns r [DATE ENTRY], Res ER COLUMNS eletion to todays de symbol		) in Column. (C)  One Completion Date [DATE ENTRY], Completion Date [DATE ENTRY]  istes for each or The Completion Date [DATE ENTRY].  It is the state of the Completion Date [DATE ENTRY].
Tad	Action	Final Gateway review dates	Forecast Start Date	Actual Start Date		I I	î	Target Completion Date	Completion Date and RAG INDICATORS	Dash Board Status	Construits
Inception											
1.01	AGREE PERFECT LANDINGS CHAMPION						$\Box \Box$			Not Commenced	
1.02	AGREE CUSTOMER EXPERIENCE PROCESS	]								Not Commenced	
1.03	EXPLAIN PERFECT LANDINGS TO ALL PARTICIPANTS	]					ΙТ			Not Commenced	
1.04	HOLD STRATEGY LESSONS LEARNT WINDWOOD	7								Not Commerced	

		review dates	D0.00	*			•	Date	RAG INDICATORS		
to constitute											
Inception				_		_					
1.01	AGREE PERFECT LANDINGS CHAMPION				$\vdash$	_	ш			Not Commenced	
1.02	AGREE CUSTOMER EXPERIENCE PROCESS				$\vdash$	_	ш			Not Commenced	
1.03	EXPLAIN PERFECT LANDINGS TO ALL PARTICIPANTS	1			$\vdash$	_	ш			Not Commenced	
1.04	HOLD STRATEGIC LESSONS LEARNT WORKSHOP	1			$\perp$	_	ш			Not Commenced	
1.05	AGREE DESIGN STRATEGY FOR PROJECT DELIVERY	1			$\vdash$	_	ш			Not Commenced	
1.06	DESIGN SERVICES SCOPED	1				_	ш			Not Commenced	
1.07	CARRY OUT DESIGN REVIEWS/EVALUATION WORKSHOPS AND AGREE TIMETABLE	1				_	ш			Not Commenced	
1.08	BUILDING PERFORMANCE TARGETS						ш			Not Commenced	
1.09	AGREE SIGN-OFF PROTOCOLS - Design, RDD, Samples, Benchmarks, Building Acceptance etc						ш			Not Commenced	
1.10	AGREE POLICY OF HOW THE BUILDING WILL BE MANAGED AT HANDOVER						ш			Not Commenced	
1.11	PIGASING PLANS - to ensure phasing matches the curriculum and 3rd party use of facilities	]								Not Commenced	
1.12	CONTINGENCY PLAN - to agree mitigation strategy should facilities not be ready on time									Not Commenced	
Design Development							П				
2.01	ALL NEW PARTICIPANTS TO BE MADE AWARE OF PERFECT LANDINGS									Not Commenced	
2.02	BREEAM - AGREE STRATEGY AND TRACKING MEDIANISM									Not Commenced	
2.03	REGULAR DESIGN REVIEWS HELD WITH STAKEHOLDERS	]								Not Commenced	
2.04	SAMPLE ROOMS/ROO/DESIGN USER GROUP - Identify and programme key samples etc for early finish to establish standards.	1					$\Box$			Not Commenced	
2.05	SQUAD CHECK - co-ordinated planned due diligence to check safety, buildability, affordability & efficiency. Min Gate 8, ITT, Planning Submission, Contract Award and key stages thereafter	I			l I		ΙI		j	Not Commenced	
2.06	Contract Award and key stages thereafter PEER DESIGN REVIEWS	1		-	$\vdash$	+	$\vdash$			Not Commenced	+
2.07	COMPLETION COUNTDOWN TRACKER ESTABLISHED	1			-	+	Н			Not Commenced	
2.08	PREPARE PROJECT TRACKERS - ICT, BREEAM, RDG, Planning, Suttainability, BCD, Samples/Senchmarks, Change Control/VE, Warrantees, H&S File, O&M,	1				$\top$	Н			Not Commenced	
	Test and Commissioning, and a Contract Requirements Matrix				$\vdash$	_	ш				
2.09	KEY SUBCONTRACTORS - Identify those in setting the building to work and ensure understanding & commitment			_	$\vdash$	+	ш			Not Commenced	
2.10 2.11	AGREE MAINTENANCE STRATEGY	1		_	$\vdash$	+	Н			Not Commenced Not Commenced	
2.12	OBM MANUALS - Initiate and develop throughout the construction phase  SIMPLE TECHNICAL GUIDE - agree scope to initiate suscinct introduction for the building manager / caretaker	1		_	$\vdash$	+	Н			Not Commenced	+
Pre Handover	6 months					_	_			Hot commences	
1.01	PRE HANDOVER GATEWAY REVIEWS - agree dates for PC-3 months, PC - 6 weeks, PC -2 weeks			 _		_				Not Commenced	
1.02	COMPLETION COUNTDOWN TRACKER - update & review to ensure on target	1		 _	-	+	Н			Not Commenced	<del>                                     </del>
1.01	PROJECT TRACKERS	1				+	Н			Not Commenced	
1.01.01	PLANNING DISCHARGE TRACKER - on programme	1					ш			Not Commenced	
1.01.02	BREEAM TRACKER - on programme	]								Not Commenced	
1.01.03	SUSTAINABILITY TRACKER - on programme	1			$\perp$		ш			Not Commenced	
1.01.04	ICT TRACKER - on programme			_	$\vdash$	_	ш			Not Commenced	
1.01.05	RDO TRACKIR - on programme SAMPLE/BENCHMARK TRACKIR - on programme	-		_	$\vdash$	+	Н		_	Not Commenced Not Commenced	
1.01.07	ROOM DATA SHEETS COMPLIANCE CHECK	1		_	-	+	Н			Not Commenced	<del> </del>
1.01.06	BUILDING CONTROL TRACKER - on programme	1		_	$\vdash$	+	Н			Not Commenced	+
1.01.09	INSPECTION, TEST & COMMISSIONING TRACKER - on programme	1				+	Н			Not Commenced	
1.01.10	O&M TRACKER - on programme	1					П			Not Commenced	
1.01.11	H&S FILE TRACKER - on programme	1					П			Not Commenced	
1.01.12	WARRANTIES AND GUARANTEES TRACKER - on programme	]					П			Not Commenced	
1.03.13	CONTRACT REQUIREMENTS MATRIX AND TRACKER - on programme [includes reference to other tracker where applicable]	1		_	$\vdash$	-	ш			Not Commenced	
1.01.14	CHANGE CONTROL/VE TRACKER - on programme	Į.		_	$\vdash$	-	ш			Not Commenced	
1.04	BUILDING READINESS PROGRAMME CUSTOMER EXPERIENCE AND WORK - Review Customer feedback and identify any work the client is to undertake to existing facilities to achieve	-		_	$\vdash$	+	Н			Not Commenced	
1.05	Handover Condition' prior to handover.					1	ΙI			Not Commenced	
1.06	STATIC COMMISSIONING PROGRAMME	1								Not Commenced	
1.07	COMPLETION & COMMISSIONING PROGRAMME	1		_	$\perp$	$\bot$	ш			Not Commenced	
	DRAWING CO_ORDINATION _ Review sample of Reviewed drawings to ensure that these fully and correctly co-ordinate the required M & E services, ICT					1	ΙI				
1.08	and FF&I provisions and have been sign-off by Client. This is likely to require a two stage process i.e. 1st stage review incorporates requirements based	l					ΙI		j	Not Commenced	
	on contract spec and 2nd stage RDD review incorporates the finalized requirements based on the agreed solution.	I			l I		ιI		1		
	CHANGE FREEZE - Initiate review of change management process to ensure ANC & CVC Schedules are fully up to date and determine latest date by	1				$\top$	ш				
1.09	which any future changes can be accommodated (i.e. freeze on changes)	I			l I		ΙI		j	Not Commenced	
3.10	DESIGN STATUS CONFIRMATION - Confirm that all Status 5 comments have been incorporated into the construction approved drawings and facilitate	1								Not Commenced	
	an audit of a representative sample.			-	$\vdash$	_	ш				
3.11	SNAG TOOL - ensure minimum requirement for use of Priority One for all snagging and correction						щ			Not Commenced	
Pre Handover	3 months										
1.12	COMPLETION COUNTDOWN TRACKER - update & review to ensure on target	1			$\vdash$	_	ш			Not Commenced	
1.11	PROJECT TRACKERS - on programme (Review 3.03 documents)	1		$\perp$	$\vdash$	+	ш			Not Commenced	
3.14	FAMILIARISATION WORKSHOPS AND SITE TOURS - Facilitate 'Best Practice Operations' workshop with Client to ensure initial requirements for	I			l I		ΙI		j	Not Commenced	
	successful operation from handover are understood, including statutory obligations on Client.	1		+	$\vdash$	+	$\vdash$				
1.15 1.16	MAINTENANCE CONTRACTS - Ensure plant and BMS maintenance contracts are in place  CUSTOMER EXPERIENCE AND AFTERCASE PLAN - Confirm plan for aftercare team and establish post Practical Completion processes	ł		-	$\vdash$	+	$\vdash$			Not Commenced Not Commenced	
***	Exercises for several service in register. From a continue plan for american seam and establish post Fractical Completion professes	J			-		$\perp$			HUL COMMERCED	

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# OLYMPIC STADIUM TRANSFORMATION SHELL & CORE TENDER SUBMISSION OCTOBER 2013





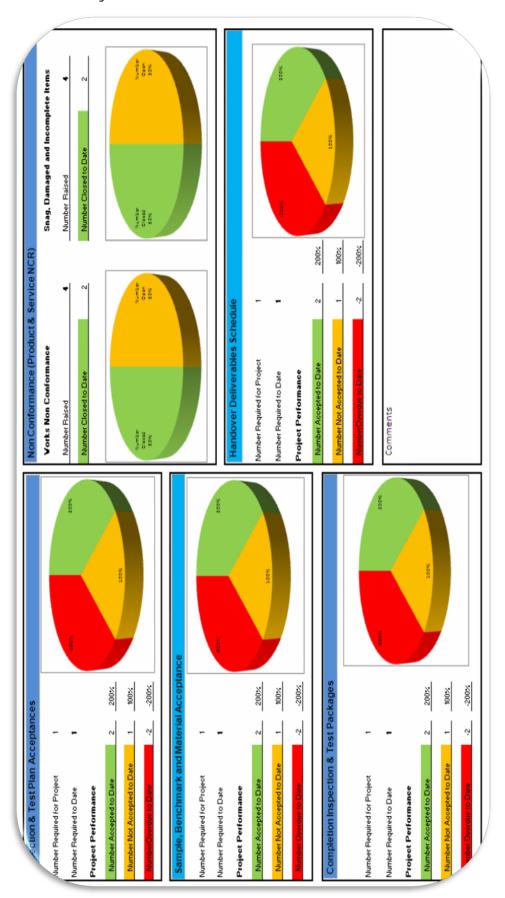
**Balfour Beatty** 



						Responsibl	Bity					
Ref	Action	Final Gateway review dates	Forecast Start Date	Actual Start Date	WILL SECOND		i i	E Co	Target Co ompletion Date RA	and and MG INDICATORS	Dash Board Status	Comments
3.17	PROJECT DEMOBILISATION PLAN - In place.										Not Commenced	
Pre Handover	Six weeks To Go											
	COMPLETION COUNTDOWN TRACKER - update & review to ensure on target				$\overline{}$		$\overline{}$		$\overline{}$		Not Commenced	
3.19	PROJECT TRACKERS - on programme (Review 3.03 documents)	1									Not Commenced	
1.20	COMMUNICATION STRATEGY - agree	]					$\Box$				Not Commenced	
321	HOUSEKEEPING - Agree all housekeeping arrangements e.g. meter readings, sign-over of keys, access cards etc. provision of fire extinguishers, arrangements for security, intruder alarm, fire alarm etc										Not Commenced	
3.22	CUSTOMER EXPERIENCE AND SERVICE LEVEL AGREEMENTS - SLA's in place (incorporating required response times) for key maintenance subcontractors	1					$\top$				Not Commenced	
	e.g.: BMS, Fire Systems, Bollers, Lifts etc.					$\perp \perp$					Not commenced	
Pre handover	Six weeks Gateway Review - 'ARE WE READY'											
122	GATEWATEMEN - "Are we Ready?" (Gateway Review) event. Cateway Reviews deliver "peer review" in which senior management from outside the project team use their experience and expertise to examine the progress and likelihood of successful delivery of the programme/phase or project, and identification of intolerable risk. (Gateway Review guidance available)										Not Commenced	
3.23	GATEWAY REVIEW ACTIONS AGREED - Following the Gateway Review, confirm readness for handover and all contractual processes in place.						П				Not Commenced	
Pre handover	Two weeks To Go											
3.24	COMPLETION COUNTDOWN TRACKER -All actions discharged or mitigations agreed.				I						Not Commenced	
3.25	PROJECT TRACKERS - Completion actions discharged or mitigations agreed (Review 3.03 documentation)				$\equiv$		$\Box$				Not Commenced	
3.26	GATEWAY REVIEW ACTIONS UPDATE - Readness report confirming close out of issues outstanding at HIO Are We Ready Event?										Not Commenced	
3.27	CUSTOMER EXPERIENCE AND READINESS - Ensure Customer/End User has made Post Handover arrangements e.g. Fire Risk Assessment, SLAs etc				T		П				Not Commenced	
3.28	HOUSEKEEPING - Review all housekeeping arrangements in g. meter readings, sign-over of keys, access cards etc. provision of fire eatinguishers, arrangements for security, includer alarm fire alarm etc.				+	$\sqcup$	$\sqcup$				Not Commenced Not Commenced	
Handover	DAILY PLANNING - Initiate daily planning meetings with the client leading up to handover  Handover										Not Commenced	
					_			_				
129	STATUTORY/CONTRACTUAL DOCUMENTATION - certificates, insurance inspections, written schemes of examination, risk assessments etc in place.						$\perp$				Not Commenced	
3.30	COMPLETION COUNTDOWN TRACKER-All actions discharged or mitigations agreed.					$\perp$	$\perp$				Not Commenced	
3.31	PROJECT TRACKERS - Completion actions discharged or mitigations agreed (Review 3.03 documentation)										Not Commenced	
3.32	HOUSEKEEPING - Ensure all housekeeping arrangements are in place e.g. meter readings, sign-over of keys, access cards etc. provision of fire						T				Not Commenced	
1.31	extinguishers, arrangements for security, intruder alarm, fine alarm etc CUSTOMER EXPERIENCE AND SITE AFTERCARE PLAN - Effectively invoked	1			-	$\vdash$	+	_			Not Commenced	
Initial Aftercare	1 week post handover										Not Commenced	
					_			_			Not Commenced	
4.02	FEED BACK - Close down meeting to capture lessons learnt and formalise feedback  OBM MANUALS - Complete with any updated post completion commissioning information	1			_	$\vdash$	+				Not Commenced	
4.03	SITE AFTERCARE TEAM AND OFFICE - in post, visible and accessible	1			_	$\vdash$	+ +				Not Commenced	
4.04	CUSTOMER SERVICES HELP DESK - entablish protocols and contact details	1					+				Not Commenced	
4.05	BRIEFINGS AND TECHNICAL GUIDANCE - as simple user guide	1					$\top$				Not Commenced	
4.06	POST HANDOVER TRAINING	1					$\top$				Not Commenced	
4.07	BUILDING MANAGERS TAKE FULL CONTROL	1					$\top$				Not Commenced	
4.08	WALKABOUTS - weekly to identify any emerging issues and review progress										Not Commenced	
Initial Aftercare	1 month											
4.09	Issue first monthly performance report to client										Not Commenced	
4.10	Review first monthly performance report and provide any associated mitigation evidence					$\vdash$	$\bot$				Not Commenced	
4.11	Revisit / review additional training and familiarisation requirements					Щ					Not Commenced	
	3 months						-					
5.01	YEAR 1 MONTHLY AFTERCARE REVIEW MEETINGS				$\perp$	$\vdash$	+				Not Commenced	
5.02 5.03	YEARS 2 & 3 PERIODIC REVIEW MEETINGS				+	$\vdash$	+				Not Commenced	
5.03 5.04	END OF YEAR REVIEW MEETINGS				+	$\vdash$	+				Not Commenced	
5.05	ANNUAL BUILDING MOT - to check users are still using the building in accordance with the design SEASONAL COMMISSIONING - review issues arising	1			+	$\vdash$	+				Not Commenced Not Commenced	
	SEASONAL COMMISSIONING - REVIEW RELIEF STRING ENERGY AND ENVIRONMENTAL PERFORMANCE	1			+	$\vdash$	+				Not Commenced	
5.07	FINE TUNING AND SYSTEMS CHANGES	1			+	$\vdash$	+				Not Commenced	
5.08	WALKABOUTS	1			+	$\vdash$	+				Not Commenced	
5.09	POST OCCUPATION EVALUATION (POE)	1			$\top$		+			$\overline{}$	Not Commenced	
5.10	PLANNED MAINTENANCE	1					$\top$				Not Commenced	
Extended Aftercare	12 months											
5.11	Compile end of DLP inspection lists of any outstanding defects.						$\Box$				Not Commenced	
5.12	Establish a defined process with clear roles and responsibilities in line with the Group defects protocol to manage latent defects.				$\top$	$\sqcap$	$\top$				Not Commenced	
Extended Aftercare	3 months post end of DLP											
5.13	Issue Certificates of Making Good Defects						T				Not Commenced	
5.14	Notify Retention Bond Issuer	1			$\perp$		1				Not Commenced	
5.15	Complete Post Occupancy Evaluation	]									Not Commenced	
5.16	Confirm all Defect Works completed										Not Commenced	

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# 2.1.2 Appendix C Quality Performance Dashboard



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## 2.1.3.1 Employment and Skills Strategy (Proposed Approach)

#### Key points

- Aligned vision and commitment to deliver on the objectives set out in the LLDC socio-economic policy
- Commitment to continue and complete obligations towards existing apprenticeships
- Commitment to build on existing relationships with job brokerages

Our proposed approach to the employment and skills strategy will cover each of the following areas in more detail:

- A code of practice for recruitment agencies
- · Identification of apprentice opportunities on site
- Supporting opportunities for women & disabled people
- Ensuring the supply chain are involved in the delivery of targets
- Working with other contractors and stakeholders on the Queen Elizabeth Olympic Park
- A commitment to accurate reporting
- Training opportunities on site
- Our support for priority themes

Our targeted approach to employment and skills will look to build on the successful practices that have been delivered as a Queen Elizabeth Olympic Park contractor since 2008 on the Aquatics Centre. This has given us a great insight into the challenges that are faced in delivering results in priority employment areas. We have reviewed our practices in their entirety to ensure we take the best practices onto the Stadium Shell and Core contract and more importantly learn the lessons where there have previously been particularly difficult challenges.

To ensure the delivery of our Employment and Skills Plan (ESP), we have engaged with Newham Workplace and Reds 10. These are specialists in the delivery of apprenticeships and employment in targeted areas and already work with the LLDC. They will work with us to ensure that our processes deliver results in the targeted employment areas. We will also engage with JobCentre Plus as local partners for employment and skills.

A genuine commitment to delivering results in priority employment areas, apprenticeships and training has the support within Balfour Beatty at the highest level and this will be reflected in all our practices. To ensure results are achieved, a dedicated member of our team will be responsible for interfacing with our partners and managing the delivery of the Employment and Skills Programme. There is a commitment to work actively and transparently at the start of the process with all relevant stakeholders. This will also be communicated to our supply chain and a contractual commitment will be secured at the time of procurement.

The early identification of labour requirements is vital in ensuring employment and skills objectives are achieved. To ensure delivery we will provide a high level ESP for the project upon award. This will become a live document and communicated clearly with all relevant stakeholders. To ensure that this is kept up to date and relevant we will review on a monthly basis our own labour requirements and each subcontractor will be required to submit a labour histogram as part of their tender to inform the detail of their labour requirements, identifying employment and apprentice opportunities.

We are seeking to build and improve on the targets we have set for the stadium roof works since the scope of the stadium transformation works offers greater opportunities for delivering results in priority areas.

#### A code of practice for recruitment agencies

Where new employment opportunities arise these are often filled using a recruitment agency. Their practices need to reflect the commitments we have to deliver the objectives of the LLDC's socio economic policies. To ensure that there is engagement between brokerages and the

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active agencies being used on site. All subcontractors will be required to provide details of the agencies they use as a contractual requirement prior to starting on site. All agencies working for us and our subcontractors (secured through contractual obligations) will also be required to sign up to a code of practice that ensures the payment of the Construction Working Rule Agreements and 100% adoption on the London Living Wage for roles not covered under the CIJC /trade union Agreement. Early and regular audit under the Memoranda of Agreement of our appointed supply chain will ensure compliance in this area. There will also be a requirement for all positions instructed to be communicated to the brokerages before being advertised elsewhere. Initially, these details will be provided to Newham Workplace as the most important local brokerage.

#### Identification of apprentice opportunities on site

In keeping with our targeted approach to employment and skills we will identify apprenticeship opportunities at the start of the project, prior to starting on site. We have already demonstrated our commitment to providing apprentice opportunities during the Aquatic Centre construction and legacy works, both through our own apprentice frameworks and by providing placements for the Legacy Apprentices during transformation. To date we have engaged with 41 apprentices and there is a commitment to provide a minimum of 36 apprentice opportunities as part of the stadium shell and core works. These are to be both new opportunities and also positions offering continuity of work with Legacy Apprentices to enable them to continue with their vocational qualification.

Our approach to apprentices has been recognised by inclusion in the Top 100 Employers list. This is supported by both the National Apprenticeship Service (NAS) and City and Guilds.

We acknowledge that our supply chain and sub contractors will have an important part to play in the support of the apprenticeship programme. We will, with the support of local providers, map out the delivery of apprentices based on the suitability of packages of work and their compatibility with apprentice frameworks. Requirements to make apprentice placements available will then be written into sub contract orders.

We are committed to working with the LLDC to identify where continuity of employment can be offered to Legacy Apprentices currently active on the transformation works. Where the programmes of our packages of work are too short for apprentices to finish their frameworks, we will utilise the Apprentice Training Agency approach to delivery. Using registered ATA's who offer direct employment to apprentices and can place the candidates onto other sites ideally within the QEOP or the surrounding area to ensure that NVQ frameworks are completed. This maximises the opportunities we can deliver as part of our scope of works and within the programme constraints of the stadium transformation.

We also operate an Apprenticeship model that will allow people to work towards an apprenticeship whilst moving between and working within a number of businesses in our supply chain. The model ensures continuity of employment, increased job security and gives a breadth of experience to the trainee allowing them to complete and achieve a full apprenticeship framework.

Later in this submission we refer to our proposals for an Apprentice Hub.

#### Supporting opportunities for women and disabled people

The use of an effective ESP underpinned by a labour histogram can identify specific opportunities for women and disabled people. We believe that women and disabled people should have access to as many roles as possible as part of the stadium transformation. Where appropriate we will work with local outreach partners including Women into Construction. This has previously been demonstrated during the course of the Aquatics Centre Olympic build, whereby, we actively engaged with the Women into Construction programme giving work experience opportunities to eight women of various trades. This resulted in two of the women being given permanent roles by the facilitating subcontractor. We aim to encourage women to fill specific roles as part of the project.

To support the delivery of disabled people into work we are committed to providing a minimum of two opportunities as part of NewCo's Workchoice program, supported by the Department of Work and Pensions. This will provide a disabled person with a six month supported work placement as part of the stadium project. NewCo are a member of British Association of Supported Employment.

#### Ensuring the supply chain and subcontractors are involved in the delivery of targets

As mentioned above our subcontractors have a vital role to play in the delivery of targets we have committed to in priority policy areas. A requirement to support us in the delivery of these commitments is to be included in the subcontractor's orders to ensure they are fully engaged with the process and programmes to achieve results we put in place.

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A contractual requirement for each of our subcontractors will be to provide their own ESP's and labour histogram for their package of works prior to commencement of works on site. This will ensure that our targeted approach can be delivered as well as informing our own ESP and labour projections. As highlighted the requirement to make new vacancies available to job brokerages exclusively for a set period of time prior to commencing on site will also be a written into our subcontractor's orders.

We have an important role to play in ensuring that our subcontractors engaged in the stadium transformation are fully informed of the socio economic and employment priorities of the project. A briefing note highlighting the targets we have committed to and the processes we intend to put in place will be sent to all subcontractors as part of the invitation to tender.

#### Working with other contractors and stakeholders on the Queen Elizabeth Olympic Park

Collaboration with other contractors and stakeholders is vital in ensuring that information is exchanged that can help achieve the employment and skills priorities of the LLDC and Local Authorities. This will ensure there is continuity of employment opportunities on the park.

We are committed to communicating skills and training requirements as part of the stadium shell and core works. We offer to present the scope of works and labour requirements to the Construction Operatives Group. This will provide an insight of the project requirements to relevant local stakeholders.

Our collaboration with other sub-contractors will include the sharing of data from the biometric entrance system to support their reporting on target employment areas, whilst recognising that those employed on the project have the right not to provide this data, should they choose, under the Data Protection Act.

#### A commitment to accurate reporting

In order to report accurately on the priority employment areas it is vital that relevant data is collected when all operatives are inducted onto the site. To achieve this, we have welcomed the sharing of good practice by the LLDC with the issuing of a comprehensive induction form to all staff and operatives working on the project that will provide information on all the priority areas required to be reported on.

We are committed to continuing to report monthly in all required priority areas in the format provided by the LLDC. One of the major challenges faced during the transformation of the Aquatics Centre has been the capturing of the monthly active workforce on site. We have reviewed our systems and are seeking to improve processes to ensure that an accurate monthly snapshot of the workforce can be provided. This will be supported by a biometric site access system to the stadium. We would work with the principal contractors currently on site to ensure that the system in place is transferable.

#### Training opportunities on site

Our business relies on having a skilled workforce to carry out packages of work to the highest quality. We are constantly looking for ways in which we can continue to support up skilling through training and education opportunities. Our commitment to this was demonstrated during the construction and transformation of the Aquatics Centre. As an example of this, we ran a comprehensive training programme in conjunction with Speedy. We were successful in up skilling both our employees and our subcontract labour by providing an onsite trainer, training facilities and co-ordinating this with our supply chain requirements. We provided access to courses such as, behavioural safety training, PASMA, MEWPS resulting in over 500 staff being trained during the course of the Aquatics Centre Olympic build.

We provided evidence based documentation to the Olympic Delivery Authority to confirm any new qualifications and numbers of staff trained. We will ensure as the main contractor to engage with our subcontractors to confirm their commitment to the ongoing development on their workforce, providing evidence of their qualifications achieved and any further NVQ development. Training will be reviewed and monitored on a monthly basis during the course of the build.

Checks will be made during the induction process to ensure that the workforce on site will have the competence and skills to carry out their role. There is a mandatory CSCS requirement to work on site. Equality and Inclusion training will also be covered during the induction process.

#### Our support for priority themes

We are currently supporting a number of initiatives that seek to help young people gain knowledge in construction opportunities; these are directly linked to our activity on the Aquatics Centre. We are an active supporter of the Construction Youth Trust (CYT). This summer we have provided work experience placements for two people from Newham. These placements will be offered again for the October half term. If awarded the stadium contract we intend to continue offering work placements for the duration of the contract. We have previously demonstrated

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out commitment to support the Olympic host borough schools by introducing a schools engagement plan in the infancy of the Aquatics Centre project. We provided over 28 work experience placements during the course of the build, careers events for local schools for students who had a particular interest in the Construction and Built Environment and numerous site visits for engineering undergraduates.

We are sincere in our commitment to help the LLDC achieve a tangible legacy in socio economic priority themes. We support the aspirations of the LLDC to set up a Technical College, as a lasting legacy of the games. We will offer our support with the provision of mentors and the provision of an Apprentice Hub on site which will facilitate IT access for apprentices to continue their studies. We will establish this facility in conjunction with

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# 2.1.3.2 Employment and Skills Targets (Proposed Targets)

#### Key points

- Commitment to exceed targets achieved at the Aquatics
- Commitment to provide and collate fully detailed data to confirm objectives are being achieved
- Commitment to a high level of BAME workforce employment

We have learnt from our own experiences as a QEOP contractor that early intervention is vital in delivering results in targeted employment areas. We are committed to ensuring that the workforce local to the Stadium have a chance to gain employment where opportunities arise. This will require active engagement with local brokerages, in particular Workplace based in Newham. Most importantly we acknowledge that brokerages need early notification of the jobs and skills needed as part of the stadium works and early engagement with our appointed supply chain will help us to achieve this.

We are committed to ensuring that all new positions that arise as a result of the stadium with both us as main contractor but also within our subcontractors are accessible to local brokerages. Our approach to delivery will be the issuing of Employment and Skills Plans (ESP) to all the local brokerages to ensure they have early notification of new positions.

We have shown a real commitment to equality, inclusion, employment and skills throughout its involvement in the development of the Queen Elizabeth Park. The projects Respect for People and opportunities initiatives have been instrumental in communicating this commitment to diversity and delivering real benefits to various groups, individuals, including employees and the local community.

We consider the targets below to be realistic and achievable. We have reviewed the scope of works for the stadium transformation and labour requirements. We anticipate that there will be in the region of 400 operatives on site during peak times at the stadium. We have included the number of projected workforce in each target area. We will ensure there is a targeted evidence based approach to employment and skills by working with Reds10 and the Newham Job Brokerage.

Priority Area	Target	Project workforce numbers based on 400 peak operatives
% of workforce from host borough	40%	140
% BAME workforce	40%	140
% previously unemployed	23%	60
% disabled workforce	5%	20
% women workforce	8%	32
% apprentice workforce	7%	36

Table 1: Proposed Shell and Core employment targets

We have also assessed the targets against what we have achieved on the site to date. This includes the performance on the Aquatics Centre where the following targets were achieved:

These targets were independently endorsed by the Olympic Delivery Authority auditors who concluded that "Balfour Beatty has shown a real commitment to the Equality, Inclusion, Employment and Skills throughout its involvement in the development the Olympic Park"

We understand from our current involvement on the Roof Contract and also from our Legacy work on the Aquatics Centre that the accurate reporting of data to the client has

BAME workforce	36%
Previously Unemployed	21%
Disabled Workforce	3%
Women Workforce	2%
Number of apprentices	36

Table 2: Aquatics Centre achieved employment targets

not always been forthcoming. We therefore commit on appointment as Principal Contractor to review all induction processes, information and record collection and align it with electronic systems and records. It is our intention to monitor our workforce on site by the introduction of a biometric entry system which will reflect 'real time' accurate data thereby establishing correct reporting information against our targets. KPI's will be provided to the LLDC on a monthly basis.

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#### 2.1.4 Inclusion

#### Key points

- Robust strategies in place to maximise opportunities
- We promote shared values within our supply chain
- Commitment to improve on achievements achieved at the Aquatics Centre

Our inclusion strategy will cover the following areas in more detail:

- Balfour Beatty as an inclusive Employer
- Our experience of the Park
- Stakeholder engagement and a partnership approach
- Inclusion through contractual commitment
- · A targeted approach

#### Introduction

Key to being able to demonstrate inclusion through the transformation of stadium, there must be an understanding of the legacy left by the games. The London 2012 Olympic and Paralympic Games were won on a commitment to promote a lasting legacy of accessibility and inclusion. No one can doubt their success. The success of legacy in delivering the promise set by the Games starts with the transformation of the park and venues. We have been part of the transformation as the main contractor on the Aquatics Centre. Transforming it from an accessible world class sports arena to a facility that will soon be accessible to all. We want to demonstrate that through the transformation works we can build on our own best practice and also the best practices that have been developed across the park and industry. This requires evaluation of what we have achieved to date. Core to our business ethos is the commitment to continue to adopt best practice alongside a desire to create best practice.

It is clear from the London Legacy Development Corporation's Equality and Inclusion Policy that objectives are focused on convergence. That the residents of the host boroughs should benefit from the same opportunities as their neighbours across London. This is encapsulated in their five key objectives:

- Places should be created with the highest standards of inclusive design
- Procurement should be used to maximise the positive opportunities for the diverse residents of East London.
- That the practices of the corporation and its partners should deliver flagship projects to promote inclusion and the recruitment of a diverse workforce
- The continued promotion of disabled sport after the Paralympic Games
- That projects should look to integrate future residents of the Queen Elizabeth Olympic Park with their neighbours

We understand the objectives that the legacy corporation has set. We acknowledge the responsibility that key partners must play in the delivery of the LLDC's objectives. Our proposals seek to demonstrate how as the transformation of stadium contractor we can play our part in delivering tangible benefits for the convergence agenda. We will support the LLDC in its status under the Equality Act 2010 which involves removing or minimising disadvantages suffered by people (because they are from a protected equality group).

#### Balfour Beatty as an inclusive Employer

We are an Equal Opportunities Employer, complying with and often exceeding public sector equality duty. We are determined to ensure that no job applicant or employee receives less favourable treatment on the grounds of colour, race, age, nationality, national or ethnic origin, disability, sex or marital status, sexual orientation or religion. We avoid unlawful discrimination in all aspects of employment including recruitment,

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promotion, opportunities for training, pay and benefits, discipline and selection for redundancy. Person and job specifications are limited to those requirements that are necessary for the effective performance of the job. We pay and require all our subcontractors to pay in line with the CIJC Working Rule Agreement, or if not covered by a trade union agreement, the minimum payment of the London Living Wage.

Candidates for employment or promotion are assessed objectively against the requirements for the job, taking account of any reasonable adjustments that may be required for candidates with a disability. Disability and personal or home commitments do not form the basis of employment decisions except where necessary. We consider any possible indirectly discriminatory effect of our standard working practices, including the number of hours to be worked, the times at which these are to be worked and the place at which work is to be done, when considering requests for variations to these standard working practices and will refuse such requests only if we consider we have good reasons, unrelated to any prohibited ground of discrimination, for doing so. We comply with our obligations in relation to statutory requests for contract variations. We also make reasonable adjustments to standard working practices to overcome barriers caused by disability.

We monitor the ethnic, gender and age composition of the existing workforce and of applicants for jobs (including promotion), and the number of people with disabilities within these groups, and will consider and take any appropriate action to address any problems which may be identified as a result of the monitoring process. All new employees receive a copy of our Equal Opportunities policy. To ensure the accessibility of this policy Balfour Beatty has also produced 'A Guide to Equal Opportunities' booklet, which provides guidance to all staff about the relevant laws, company policy and about the individual responsibilities of staff as both employees and within their roles of responsibility to ensure everyone is treated fairly and works in an environment free from prejudice.

#### Our experience on the Park

An example of how we will support and deliver our policies in relation to equality and diversity is highlighted through the Aquatics Centre project. We have established an Opportunities Leadership Group to work across our Olympic Projects reviewing performance and strategically directing our work in this area. Their responsibilities are crystallised in our Equality Action Plan. Our experience on the East London Line and, more recently, the Aquatics Centre has enabled us to address employment and opportunity issues with some measurable success. Building on the lessons we have learned are four clear objectives:

- 1. Adopt and implement equality and diversity policies and procedures
- 2. Promote equality and diversity
- 3. Monitor equality and the diversity of the workforce (including during recruitment)
- 4. Ensuring our supply chain engage

#### Stakeholder engagement and a partnership approach

We see the engagement with the LLDC and their stakeholder partners including the London Borough of Newham as a vital part of our inclusivity strategy. If selected as contractor for the main stadium transformation we propose to hold an inclusivity pre start meeting that will look to review the protocols we have put in place to date. Engagement will continue throughout the transformation works to ensure that our construction site is accessible and that barriers to employment are removed. Throughout the works we want to make sure that positive outcomes can be maximised. A specific member of the Balfour Beatty team will be a point of contact on all inclusivity related issues. They will be responsible for ensuring that our targets are met and exceeded where possible.

#### Inclusion through contractual commitment

A key objective of the LLDC is to use procurement to maximise the positive opportunities for residents of the host Boroughs. With stadium transformation we share this objective through our own procurement. We are committed to ensuring that measures ensuring inclusivity on site will be included as a contractual obligation with our subcontractors. This will support our strategies for ensuring a diverse workforce and support of the Legacy Apprenticeship Scheme. Subcontractors will be required to engage with local job brokerages including Newham Workplace to ensure that local residents have access to the employment opportunities on site.

#### A targeted approach

It will be vital for the main contractor on the stadium works to take the lead on issues of inclusion, demonstrating industry leading practices. We are committed to taking this leading role as it can impact the operations of our subcontractors in a positive way. By showing what is possible, the ripple effect is that subcontractors can take an understanding of inclusivity onto other construction sites, improving the industry as a whole.

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As highlighted in the LLDC's Equality and Inclusion Policy 2012 the host Boroughs and in particular the host Boroughs surrounding the Park including Newham have some of the most diverse communities within London and the UK. The demographics of the local area include high percentages of young, Black, Asian and minority ethnic (BAME) and also disabled people. However, within these groups there is also high unemployment. Our target inclusive approach to employment will seek to support the LLDC's convergence policies.

As outlined in our response to 2.1.3.1 we are committed to ensuring that our employment and skills strategy maximises the diversity of our workforce. To deliver the above an Employment and Skills Plan (ESP) will identify specific roles that can be targeted to underrepresented groups from Newham and the other adjacent host Boroughs. We want to offer tangible outcomes from this approach. To ensure that disabled residents from Newham are part of the stadium workforce we have made a commitment to support a minimum of two people from NewCo's Work Choice programme. This will continue to build on the achievements we have had to date in achieving 3% of the workforce being disabled on the Aguatics Centre transformation.

Our targeted approach will seek to build on the achievements we have had in delivering opportunities for women as part of the Aquatics Centre transformation. Through offering work placements for two previously unemployed women, full time employment was secured. We are committed to continuing to work with Women into Construction to ensure that women gain access to job opportunities. Through ensuring that job opportunities on site are shared with Women into Construction via the LAVA Portal suitable female candidates can be sought.

Supporting young people into a career in construction will be vital in ensuring that convergence occurs for the host boroughs. We have been proud of our contribution to supporting apprentices during transformation to date. The LLDC has achieved great success through the Legacy Apprenticeship scheme. We have to date made 36 apprenticeship opportunities available on the works for the Aquatics Centre. We will continue to maximise opportunities for young people and are committed to a minimum of 24 apprentice opportunities as part of the Main Stadium works. This is addition to the four opportunities we have already identified as part of the roof works.

To embed diversity into the hearts and minds of everyone, a diversity training programme; Respect for People will continue to be delivered to all employees, subcontractors and operatives throughout our projects. This aims to raise awareness and understanding of diversity and its organisational and individual benefits. The training focuses on practical actions employees can take to promote inclusion. Feedback indicates that the team now has a greater understanding of the benefits derived from a more diverse workforce.

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## 2.1.5 Community Engagement

#### Key points

- Build on existing relationships with the London Borough of Newham and other host Boroughs
- Continuity of personnel and relationships from the Aquatics Centre
- Commitment to work in partnership with future tenants and operators

The final construction works on the Olympic stadium converting it into a world class sport and cultural facility will complete the transformation of sporting venues on the Queen Elizabeth Olympic Park (QEOP). It is vital that during these works, engagement with the surrounding community is clear and inclusive to make sure that the surrounding communities feel connected to the facility when it opens to the public. We are committed to working in Partnership with the LLDC, Newham and West Ham Football club to ensure that we support their community engagement objectives.

The aims and objectives of the Development Corporation's Community Engagement Policy is to ensure that the QEOP knits into the existing communities surrounding the park. Through engagement it seeks to hear their views in shaping the park. It also seeks to ensure that socio-economic opportunities are maximised for residents supporting the growth of cohesive and sustainable communities, with an inclusive and entrepreneurial outlook. As an experienced contractor on the QEOP we have understood the importance of stakeholder and community engagement through our works on the Aquatics Centre. That experience has highlighted the need for a dedicated Officer to co-ordinate community and stakeholder liaison who will be responsible for implementing our community engagement strategy and reporting on its performance against the aspirations of the legacy corporation's policy.

A key driver of all LLDC Policy areas is convergence. There is a commitment to ensure that residents surrounding the park have access to employment opportunities. We have outlined clear and targeted strategies for employment and skills, equality and inclusion in our responses to Sections 2.1.3 and 2.1.4. It is vital to the success of these strategies that initiatives designed to help residents surrounding the park into work are clearly communicated. We will work with the LLDC and Newham, in particular to ensure that there is targeted outreach for apprenticeship opportunities within Newham.

As well as supporting outreach activities we will also work with the LLDC and Newham to ensure that access to site is available during transformation for school and other engagement visits. Managed in a safe way, it will offer a fantastic insight into all aspects of the transformation works and help to build connections. During the course of the Aquatic Centre Olympic build we hosted over 42 school and university visits to site and held careers events in host borough schools.

The engagement with schools forms a vital part of our Considerate Contractors initiatives. We are an industry leader in the scheme and look to achieve a minimum of Gold standard on all of our projects. Our commitment to achieving excellence has been rewarded for our works on the Aquatics Centre where a gold award was achieved and we were also Most Considerate Contractor Runner Up, across the UK, in 2012. The Considerate Contractor Scheme offers an independent audit of our engagement practices.

As a contracting partner we will actively support initiatives that have been set up or championed by the Legacy Corporation. The Echo is a scheme that we can lend our range of expertise to. It is a tangible way of linking the stadium works with the surrounding community. We are committing to this project. We will work with the Echo team to explore which areas of our expertise can best support local people and businesses. We are also committed to using the time of our staff to support the Future Foundations Legacy Careers project. The project is a great way of connecting with young people surrounding the stadium and helps in raising their career aspirations and fosters an entrepreneurial spirit.

As a team, we have enjoyed supporting community projects during the Aquatics project. To coincide with 'World Hunger Day' the Aquatics Centre forewent their lunch and donated the money they would have spent to Newham Food Bank. A charity football game is also in the pipeline. Our history of holding and hosting charitable events will continue with a new focus being placed upon smaller local charities for whom relatively modest donations can make a real difference.

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Our engagement strategy will look to work in Partnership with the future tenants of the stadium. We will support their community outreach programs and work closely with the West Ham Community Sports trust. Our dedicated Stakeholder/Liaison Manager, will be your regular contact on-site to ensure that our operations are understood and that we in turn understand and make arrangements to accommodate your business and daily functions including deliveries, VIP liaison, parking and traffic management. The role also extends to your neighbours generally in line with our Considerate Constructors obligations and will cover:

- Agreement to logistics and interface with any shared access provisions
- Regular inspections of hoardings and footpaths
- Managing communications with each of the neighbours
- Initiating and chairing the neighbourhood liaison meetings
- Preparing and issuing of regular newsletter updates
- Ensuring compliance with the Considerate Constructors Scheme
- Undertaking satisfaction surveys
- · Liaison with other local construction teams
- Dealing with complaints making sure each one is promptly dealt with and closed out

Our community engagement will also be guided by the client's requirements to ensure a consistent approach to the community and external stakeholders. Workshops and forums will be held as necessary to maintain open relationships and keep stakeholders up to date on construction progress and its impact on all third parties. We will also engage in the following community activities:

- Engagement with local schools and visits
- Work experience for local school pupils
- Fundraising for local charities
- Re-introduction of friends and family visits
- Supporting any client initiatives, such as Time to Shine

In addition, we are already supporting the construction of the Cre8 Sustainability Academy in Hackney Wick. This is an initiative which is also supported by the LLDC and Groundwork London.

At the London Aquatics Centre, the CCS assessors praised the team for continuing to show the construction industry in its best light through a commitment to best practice and innovation. They also referred to the way in which the team engaged with the community and all the other stakeholders by their willingness to receive visitors and provide tours and talks. The efforts that went into making the Friends and Family Events so successful and which boosted the charitable donations to more that £26,000 were also highlighted. The money raised helped to fund 'Time to Shine', the annual Stoke Mandeville event providing mixed sporting activities for host borough disabled and disadvantaged children. Finally, the Balfour Beatty team were commended for their focus upon the environment and, in particular, the high use of recycled materials, reduced waste to landfill and more than 50% by weight of materials being delivered by sustainable transport.

We acknowledge the leading role that a Tier 1 contractor can take in community engagement and that we can help inform the practices of our supply chain. We will do all we can to encourage our subcontractors to support community initiatives with which we are engaged.

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### 2.1.6 Inclusive Design

#### Key points

- Maximise opportunities for inclusivity during detailed design development
- Fully utilise expertise within Balfour Beatty and Consultant team
- Maintain established relationships with BEAP

#### Embedding the principles of Inclusive Design

This response sets out how we will fully embed the principles of inclusive design as set out in the Inclusive Design Strategy, the Inclusive Design Standards and the specific requirements of the Inclusive Design Access Statement.

Balfour Beatty will appoint Buro Happold Inclusive Design Consultancy (BHID) as our inclusive design consultant, registered with the National Register of Access Consultants.



Our Inclusive Access Statement (IAS) will be developed further during stage E to formalise the solution and to provide assurance on compliance as the design develops. Each development of the IAS will contain an explanation of measures that will be incorporated within the scheme to facilitate access and use by all people, including disabled people and indicate how the design of the proposals meets the design standards, good practice design guidance, Building Regulations and other access requirements.

#### Meeting the Employer's Inclusive Design Standards (IDS)

Buro Happold Inclusive Design Consultancy (BHID) is well versed in the delivery of projects that meet the needs of diverse communities through development of flexible and inclusive design solutions putting people at the heart of the design process.

BHID will establish a rigorous internal review process and change control mechanisms (see Fig 1) that highlight and track critical elements in regards to inclusive design elements which parallel the structure of the LLDC's Inclusive Design Standards (IDS) to ensure that the delivered venue is one which people feel comfortable and secure and is convenient and accessible to everybody.

In supporting the design team, BHID as the author and contributor to the original ODA Inclusive Design Standards has extensive knowledge of background arguments and the requirements of the LLDC's IDS. BHID brings an exceptional knowledge of not only good practice guidance and relevant research to the process but also have a long working relationship with stakeholder groups such as the LLDC's Built Environment Access Panel (BEAP).



Figure 1: Sample page from our IDS Tracking Schedule – full page on page 4

The internal review process will complement the LLDC's conformance reporting process; the conformance reporting process will be used to demonstrate compliance with LLDC's standards or where designs deviate from the IDS, the proposed alternative solutions and the rationale for the consideration of the LLDC and/or BEAP.

Many elements of the Inclusive Design Standards will be relevant to the Olympic Stadium Transformation and will require attention throughout the design process. External movement will be particularly relevant given the extensive nature of the external works. Graded routes, ramps, bridges for pedestrian use, and seating/rest points will all need to be addressed along with walking surfaces, tactile paving, street furniture, signage and lighting.

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Internal movement within the facility will also be paramount. Entrances, doors, steps, handrails, lifts, circulation corridors and venue concourses, and floor finishes will all require focus when considering people movement, while the number, positioning, and layout of accessible toilets, family (Baby Change) facilities and emergency egress will need full consideration also.

Within the stadium itself, we will be reviewing the spectator and amenity seating with a particular emphasis on wheelchair user viewing.

#### Meeting the Employer's Built Environment Access Panel (BEAP)

BHID brings to the project extensive experience of consultation and engagement with stakeholder groups. During the development of the Olympic Delivery Authority (ODA) Inclusive Design Standards BHID consulted widely with the ODA's Built Environment Access Panel and the Access and Inclusion Forum in formulation of the standards reflecting and addressing the needs of the diverse communities of interest represented. Consultation with the ODA's groups continued through the design development of the venues for which BHID provided advice (London 2012 Olympic Stadium, Velodrome, Basketball Arena, Water Polo and Media Centre).

During the development of the Legacy Communities Scheme (LCS) planning application BHID worked closely with the LLDC and BEAP for the aspirations of the LCS as well as the detail such as housing typology studies to ensure Inclusive Design could be integrated successfully.

As part of the Olympic Stadium Transformation design team, BHID has supported the design team in their engagement with BEAP.

BHID has also worked closely with The  $O_2$ 's consultative access group (the AAA group) on many projects including Up at the  $O_2$ , the climb over the top of the  $O_2$  (365m long; 52m in height) stretching the concept of accessibility and inclusion by challenging the perception of what disabled and non-disabled people can achieve.

#### Our experience in stakeholder consultation

Our Director for Design, led our design management of the London Aquatics Centre and worked with ZHA architects and the ODA's access officer, to ensure that the design in Olympic, Paralympics and Legacy modes took full account of the needs of all users of the building including people with mobility impairments, wheelchair users, families with children, those with secondary and cognitive impairments, people of different faiths and languages. will be involved in reviewing our designs with and the project team.

Our experience on Aquatics, the significant number of public Education Framework projects and major public infrastructure projects, such as Heathrow Terminal 2 and Blackfriars Station, all executed in the last 5 years, has confirmed the importance to our design managers of leading an open dialogue with all stakeholders to ensure that full consultation is facilitated to listen and understand the needs of a diverse group of key stakeholders.

BHID has experience in wider community engagement, particularly as part of the planning process. BHID believes that engaging with communities means contributing in a way that helps them become stronger and more prosperous. Inclusive consultation with stakeholders is crucial for Buro Happold to ensure that their needs and opinions are reflected in our projects.

Consultation for the Inclusive Access Statement included UK Athletics, Newham and Essex Beagles (Athletics Club), IAAF technical representatives, 2015 Rugby Worlds Cup, LLDC Technical Fora, BEAP and GLA Technical Adviser. In developing the IAS, we will continue to consult with these bodies and expand this consultation to include West Ham Football Club, their Supporters Club and other relevant stakeholder groups.

#### Meeting the needs of diverse communities

Inclusive design is more than just access for disabled people. As part of that process we will take into account potential social, cultural and community users to provide an inclusive environment suitable for diverse user groups, including disabled people, older people, carers, people of diverse faiths and parents with young children. Where a single design solution cannot accommodate all users, our aim is to provide as much choice and flexibility as possible.

Good practice guidance is often narrowly focused; however BHID has significant experience working in culturally diverse communities where issues may cross the recognised lines of good practice experience: A clear example of this is where BHID codified many of the issues in regards to faith that were raised in consultation as part of the ODA's IDS. Our experience working internationally also has increased our awareness of the subtleties of working in diverse communities.

We regularly engage inclusive design experts but also engaged people with disabilities to help us design specific facilities. An example of this involves the engagement of the RNOH Hospital at Stanmore. It is Director of one of the largest access management

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companies. He sustained a spinal chord sever in 1983 and spent 10 months in hospital experiencing trauma and rehabilitation services, social support, and resettlement. therefore, was the perfect person to advise on the design of new facilities dealing with the injuries and disabilities he had experienced.

#### Our Access Consultant - Buro Happold Inclusive Design

Buro Happold Inclusive Design (BHID) team will be an integral part of the team, with the role of access consultant and Inclusive Design Champion.

The appointment of BHID as access consultant would bring their wealth of experience in the development of inclusive facilities within the Queen Elizabeth Olympic Park. Members of the BHID access consultancy team were co-authors of the London Development Agency's 'Access for All Framework' document (2004) setting out the high level requirements and deliverables in regards to how access and inclusive design would be delivered if London won the Olympics. BHID individuals were engaged as part of the Olympic Park masterplanning team and subsequently provided access consultancy services as part of the design teams for the Olympic Stadium, Velodrome, Basketball, Water Polo, the Media and Energy Centres as well as Horse Guards Parade and the Mall. The 2012 Olympic Velodrome was a finalist in the Civic Trust's 2012 Selwyn Goldwyn Inclusive Design Awards.

BHID provided access consultancy services to the Olympic Stadium Transformation design team, seeing the design process through the submission and awarding of planning.

As authors and contributors to the ODA's IDS, BHID has a firm grasp of the content and background to the LLDC's IDS. Having worked extensively in the Olympic Park, BHID has a good working relationship with both JLAB and BEAP, where dialogue and engagement is important in obtaining suitable outcomes for both the contractor and ultimately the community of users.

#### Managing the Role

Balfour Beatty will appoint Buro Happold Inclusive Design Consultancy (BHID) as our inclusive design consultant. Populous as our lead Designer will ensure that inclusive design is fully integrated throughout the design and our Design Manager, will manage the process.

We will implement a Consultation and Partnership Matrix to engage with stakeholder groups and confirm compliance with inclusive design standards. Our Design Manager will lead and own the matrix and manage outcomes and design deliverables with the design team and supply chain. The matrix will link to our quality management procedure to check specifications and drawings are compliant prior to submission for client acceptance.

The Consultation and Partnership Matrix will be 'signed off' at each design development stage, typically informed by RIBA design stages and the design and procurement programme.

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# OLYMPIC STADIUM TRANSFORMATION SHELL & CORE TENDER SUBMISSION OCTOBER 2013





**Balfour Beatty** 



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asts approximately 200mm Accepted Circled			Designed to allow a wheelchair user or scooter user to sit alongside friends and family or in groups			Accepted			Accepted
Pesco			Some with armrests approximately 200mm			Accepted		Closed	Accepted
			Samples/Colours					Closed	Accepted

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# OLYMPIC STADIUM TRANSFORMATION SHELL & CORE TENDER SUBMISSION OCTOBER 2013









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## 2.1.7.2 Environmental Legislation

#### Key points

- Successful track record in compliance with Environmental Legislation
- Proven Management Systems
- Achieve Gold Award as the Aquatics Centre

Balfour Beatty is an externally accredited ISO 14001 certified company. We take our environmental responsibilities seriously and aim to go beyond legislative compliance on all of our construction sites to set new standards in environmental practice.

We have completed some £400m of work on a variety of London 2012 projects to date and our selected management team and our key supply partners for the main Stadium works have significant Olympic Park experience.

#### Site Environmental Management

Our extensive experience means that we are acutely aware of the potential for construction works to disrupt the normal functioning of a local community. This disruption can have a negative impact on the overall regeneration of the area and therefore we have developed strategies to ensure that our legacy is a positive one.

#### Site Environment Management Plan

We will produce a comprehensive Environment Management Plan (EMP) prior to starting on site which will include a detailed Aspects and Impacts Register specific to the Olympic Stadium site and the scope of the proposed works. The EMP will be cognisant of the Code of Construction Practice. Working in compliance with the EMP will form part of our contract agreements with our supply chain partners.

The Aspects and Impact register will build on the key risks already presented in this tender submission and will include further mitigation measures as necessary. The Register will be reviewed and updated on a regular basis to ensure it accurately reflects the current and proposed scope of works and methods of working.

We will keep up to date with any changes in regulation via the monthly Business Environmental Updates administered by the Environment Agency. Any new piece of legislation that may have an impact on our construction site activities will result in a revision to the EMP and will be communicated to our site team.

#### On-site environmental support

Our proposed Environment Manager, is a Member of the Chartered Institute of Water and Environmental Management, Chartered Institute of Waste Management and a Fellow of the Royal Geographical Society. She has been working on the Olympic Park site for the past 15 months. She is familiar with the operational procedures across the Queen Elizabeth Olympic Park and has been overseeing the implementation and subsequent data collection to finalise the Aquatics Centre BREEAM assessment.

will monitor performance and ensure compliance with the current regulations and promote best environmental practices. The maintenance of high environmental performance standards on site on a daily basis will be the responsibility of the Construction Manager.

will be supported by who extensive knowledge of the Queen Elizabeth Olympic Park sustainability requirements and detailed knowledge of the Stadium itself, having been involved in the Stadium development since 2005.

#### **Considerate Constructors Scheme**

We will register the site with the Considerate Constructor Scheme and target a score of 40 out of 5 0 with a minimum of 7 points targeted in each of the five categories. This aligns with the exemplary performance credit under BREEAM Man 02: Responsible Construction Practices. It is expected that the opportunities identified throughout this document and the other relevant sections of this technical submission will contribute to the achievement of this ambitious score.

A score of 40 out of 50 is likely to be sufficient to be considered for the Considerate Constructors annual awards which are awarded from scheme that are in the top 7.5% of industry. Balfour Beatty already holds a number of such awards under the old Considerate Constructors Scheme including a Gold Award in 2011 for the London Aquatics Centre.

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#### **Key Stakeholder Relationships**

We understand that creating supportive partnerships at an early stage benefits the construction process. Our key stakeholders include: local communities, Environment Agency, Thames Water, Land and Water, LLDC and other Olympic Park contractors. We will facilitate pro-active involvement of all parties to ensure proposed method statements adhere to the requirements of these regulatory bodies as well as the broader community.

We endeavour to engage our stakeholders to change the statutory undertakers relationship from one of compliance and regulation to a more productive relationship involving technical support and early engagement. This proactive approach to our stakeholders was developed through our work on the Olympic Park and all parties agreed the approach delivered increased value and speed of construction.

Over the years we have created excellent working relationships with the Environment Agency representative on site and the Environmental Health Officer from the London Borough of Newham. We will continue to nurture these positive and beneficial relationships during the Stadium works.

#### **Training and Communication**

All staff will be required to undertake a 1 hour site induction prior to starting on site. The site induction will include aspects such as site layout, health and safety and site-specific sustainability requirements.

A site notice board will be installed at the site entrance detailing relevant site environmental information including locations of surface water drains and water courses, waste management performance, etc.

Tool box talks will be prepared and delivered on specific subjects which are either pertinent to the works being undertaken or to target specific areas of performance improvement on the site. We will operate a reward and recognition scheme on site offering free meal vouchers or gift vouchers for Environmental Best Practice, this is a system we have operated successfully on the Aquatics Centre site.

#### Monitoring and Reporting

A comprehensive site inspection will be undertaken on a weekly basis and will include photographic evidence. Near misses, incidents and best practice will be recorded during the inspection. LLDC representatives will be invited to these weekly site inspections. A full inspection report will be issued within 24 hours of the site inspection.

As a company, we also report project data on a monthly basis through our Sustainability Dashboard. The dashboard collates a range of data including:

- Local supply chain spend, local employment, apprenticeships and volunteering on community projects
- Energy and water consumption associated with the construction phase
- Total waste produced and percentage of waste diverted from landfill
- · Responsible sourcing of major materials, including sustainable timber and recycled content
- Number and type of environmental incident and near misses

This collated data will support the achievement of BREEAM credit M5. It will be reported on a fortnightly basis through Environment and Sustainability meetings with the client. Actions taken to improve performance, as required, and elements of innovative best practice will form part of the monthly client report. We will actively contribute to the Environmental Leadership Team meetings facilitated by the LLDC and openly share our lessons learnt and best practice.

#### Key environmental risks and proposed management

The environmental risks detailed below are not necessarily exhaustive but do represent the most significant risks identified to date.

#### Waste

Balfour Beatty will apply a philosophy of Material Resource Efficiency on the Stadium site. This approach goes beyond basic Site Waste Management and endeavours to:

- Prevent waste at source through early supply chain engagement
- Maximise the potential for all materials used on site to be reused or recycled, at the end of their useful life
- Close the loop within the supply chain by promoting the use of products with a high recycled content
- Eliminate waste going directly to landfill

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Waste will be disposed of in accordance with the **Waste (England and Wales) Regulations 2011** and amendments. Specifically, we will operate within the waste hierarchy and undertake checks of Waste Carrier's Registrations and disposal sites' Waste Management Licenses/PPC Authorisation, collate and store Waste Transfer Notes and Consignment Notes. In the selection of our waste processing facilities we will adhere to the 'proximity principle' as far as possible; ensuring waste is reprocessed into useful products as close to site as practical. An appointed waste champion will be responsible for collecting the waste transfer notes associated with the removal of the waste skips.

We are observing with great interest the National Electronic Duty of Care (e-doc) Programme and should it be launched in 2014 as expected we would promote the Stadium project as one of the first to use this system.

Hazardous waste will, as far as possible, be eliminated. We operate a comprehensive Healthy Materials Procedure which endeavours to eliminate products that are hazardous to health of the environment form the construction works. We do however expect to undertake excavation which break the marker layer, soil excavated from below the marker layer will be treated as contaminated and we will therefore register the site as a hazardous waste producer and comply with the Hazardous Waste (England and Wales) Regulations 2005 and amendments. For procedures associated with the management of contaminated soil refer to the Pollution Prevention section below. All other hazardous waste will be stored in a dedicated area of the waste management compound in clearly signed steel drums. All hazardous waste will be disposed of by a licensed hazardous waste carrier.

As the majority of plant and equipment within the Stadium is proposed to be reused, we do not expect to generate Waste Electronic and Electrical Equipment (WEEE) on site. We will, however, comply with the WEEE Regulations 2006 which aims to reduce the amount of WEEE being disposed to landfill. Any WEEE leaving the site will be disposed through the relevant compliance scheme and the necessary consignment note will be obtained.

A comprehensive Site Waste Management Plan will be drafted prior to start on site and reviewed regularly throughout the project. We will capture and report disaggregated material and waste data against each level of the waste hierarchy. We will provide a secure, clean area for waste management. Skips will be provided for segregated waste streams including metal, timber and plastics as a minimum. We will target 50% reuse of all waste generated through the project in addition to a waste segregation rate of 60% and a 95% diversion from landfill rate. We achieved a similar performance during the construction of the Aquatics Centre and we are confident it can be repeated. This level of performance will support the achievement of an exemplar performance credit under BREEAM Wst01: Site Waste Management.

#### Air

As indicated above, we restrict the use of certain products on site. Where paints and finishing materials are required, for touching up steel work for example, we will select the product with the lowest possible Volatile Organic Compound content and will ensure compliance with the Volatile Organic Compounds in Paints, Varnishes and Vehicle Finishing Products Regulations 2005.

In support of the Air Quality Standards Regulations 2010, we will:

- Reduce dust generation on site by ensuring any cutting of materials including timber is undertaken in a sheltered, managed space
- Require all HGV delivery vehicles to meet a minimum Euro IV engine standard and site vans to meet Euro 3 engine standard
- Adhere to a strict speed limit of 10km/h on site
- Use ultra-low sulphur diesel in all site plant and equipment
- Ensure all concrete cutting and on-site crushing equipment will have integrated dust control mechanisms
- Ensure all site haul roads are sealed as far as reasonably practical
- Landscaping works will be kept adequately damped down and soils will only be placed in low wind conditions

#### Noise

Prior to start on site we will undertake detailed noise assessment as part of our application for section 61 consent. We will ensure 'Best Practicable Means' are adopted on site to control noise levels during the works, including:

- Use of reversing alarms kept to a practical minimum by introducing a one way delivery system on site. Banksmen will be used for reversing of delivery vehicles
- Mobile plant e.g. MEWPs and forklifts will utilise white noise reversing alarms as far as reasonably practical
- Generators are not required on site. Should mains power not be available, fully enclosed, 'sound-reduced' generators will be used
- All plant will be regularly maintained and switched off when not in use
- No idling of delivery vehicles permitted on site

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- Driven piles will not be used on site
- The Stadium works involve concrete cutting. Prior to starting works, dedicated noise screens will be installed around the cutting works

#### Light

Light pollution at night can disturb wildlife and neighbouring communities. If this is due to the location of the works there is minimal risk of light nuisance. Regardless, all site lighting will be highly directional and low level. We anticipate to be working during the normal working hours and we will ensure all external lighting is task or security specific. All external lighting, with the exception of safety lighting, will be switched off prior to leaving the site in the evening.

#### Pollution Prevention: Storage of Chemicals and Fuel

Spillages can compromise water and ground quality. We will ensure all chemicals and fuel used on site are stored in a dedicated bunded area, located on hard standing away from drains and water features. There will be spill kits in place in at strategic, accessible locations. Operatives will be trained to use them. A selection of plant nappies will be provided for use across the site. A clear procedure for refuelling plant and machinery will form part of our EMP.

#### Pollution Prevention: Stockpiling of Soils

The works will involve stockpiling of soils and exposing areas of open ground. Stockpiles will be placed away from surface water drains as far as reasonably practical. Works will be planned to reduce the extent of stockpiling and open ground at any one time. Drain covers will be installed over all drains within 10metres of stockpiles or non-vegetated ground to prevent silt migrating to surface water.

The works will require excavation below the marker layer. All ground below the marker layer will be treated as potentially contaminated and will be removed from site as quickly as possible. Soils excavated from below the marker layer will be carefully segregated from clean soils and stored in a clearly marked, dedicated area. Stockpiles will be located on hardstanding on an impermeable membrane and kept covered at all times. We will register the site with the Environment Agency as a Hazardous Waste Premises, no contaminated spoil will be removed from site without a Consignment Note, as required under the Hazardous Waste Regulations 2005.

#### **Pollution Prevention: Dewatering Activities**

A number of the excavations may require dewatering. We will apply for Water Quality Discharge Consent prior to undertaking any dewatering activities. As far as reasonably practical, dewatering water will be treated on site via silt busters prior to discharge to surface water, subject to strict quality control and testing procedures. Where dewatering water quality is not suitable for discharge to surface water consent will be sought from Thames Water to discharge direct to foul sewer.

#### Pollution Prevention: Works near water courses

Extensive works will be undertaken in close proximity to controlled waters including landscaping works and painting of retained temporary bridges. Procedures will be put in place to prevent accidental paint spillage or other pollution incidents associated with the works. Flood Management Consent will be sought from the Environment Agency prior to these works starting as required under the Land Drainage Act 1991 and the Waster Resources Act 1991. The use of herbicides, pesticides and fertilisers during the installation of new landscape works will be avoided. Extensive upgrade works will be undertaken to the surface water drainage systems on site. Surface water drainage systems will be hydraulically disconnected from the surface water outfalls as soon as reasonably practical for the duration of the works. In addition bunds will be installed around surface water outfalls.

#### **Pollution Prevention: Concrete Washout**

Concrete washout water presents a key pollution risk. A dedicated, bunded concrete washout facility will be provided on site. All concrete subcontractors and ready-mix concrete suppliers will be required to utilise these facilities.

#### Wildlife Protection

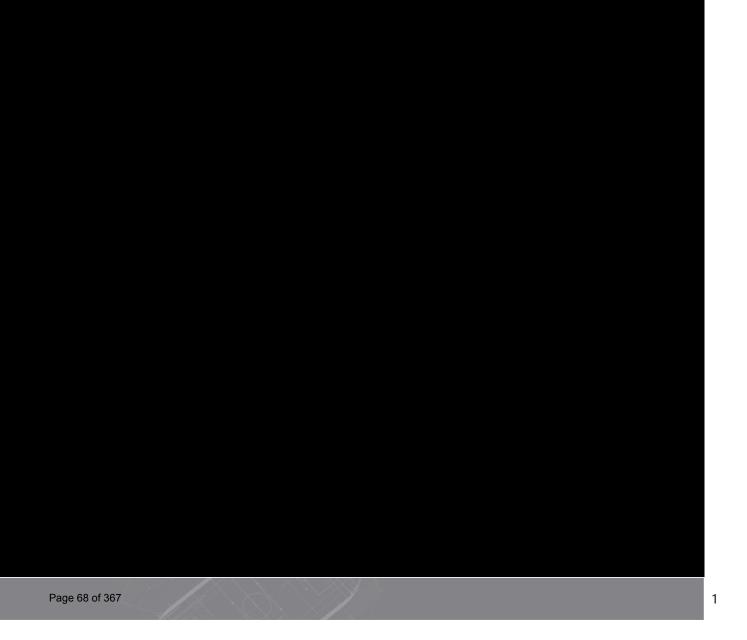
Extensive areas of biodiverse habitat and mature trees have been installed on the Olympic Stadium site. All retained habitat will be securely fenced and marked prior to works starting on site. All retained trees will be protected in accordance with BS 5837:2012 prior to works starting on site. Materials storage areas will be located away from tree root zones to avoid compaction. A large number of bird and bat boxes have been installed around the site. Works will be scheduled to prevent extensive works in these areas during the bird nesting season as far as reasonably practical. All hibernacula will be routinely checked during the bird nesting season for evidence of nesting activities. Where nesting activities are observed, nests will be clearly marked and fenced off to prevent disturbance. Elements of the new structure will potentially be accessible to nesting birds, therefore provision to prevent nesting birds will be made. The use of a sparrow hawk during initial construction works provided an effect and humane bird deterrent device and will be employed on site during bird nesting season.

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2.2.1 Project Programme







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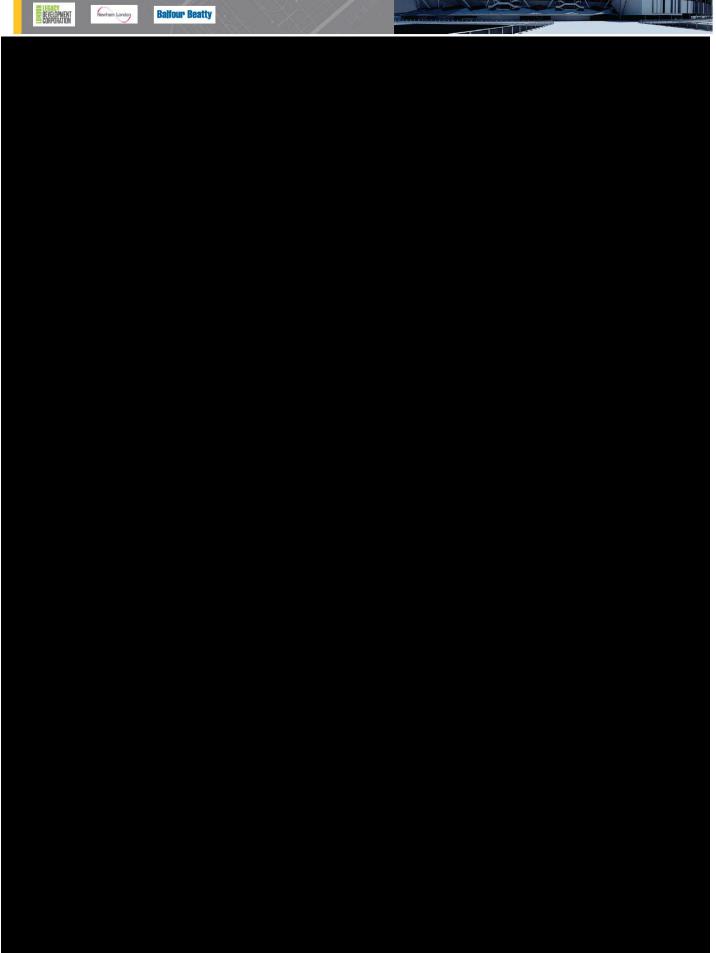






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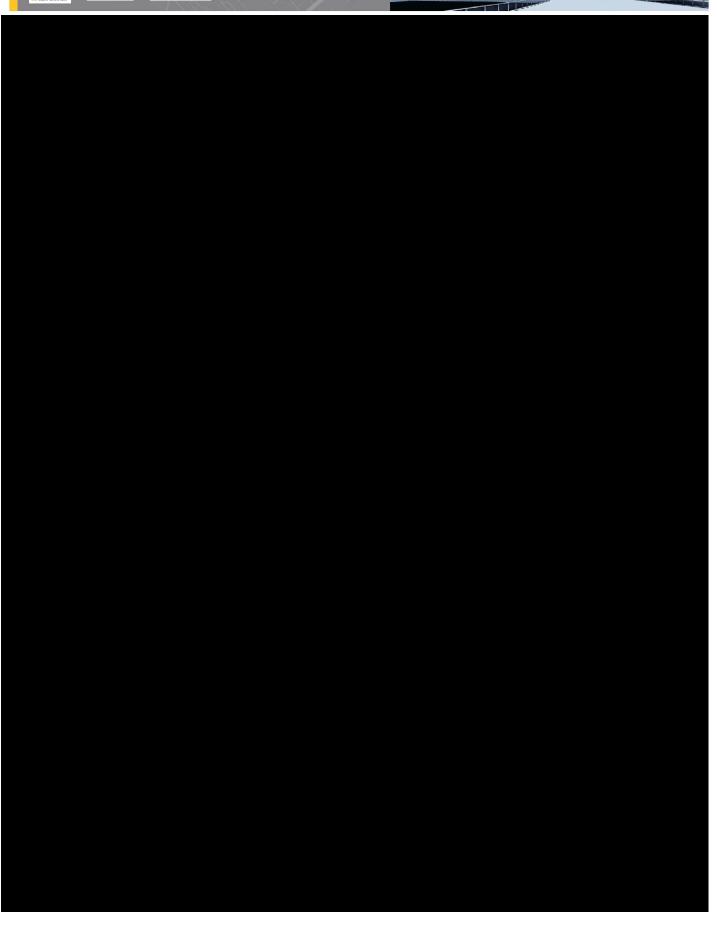




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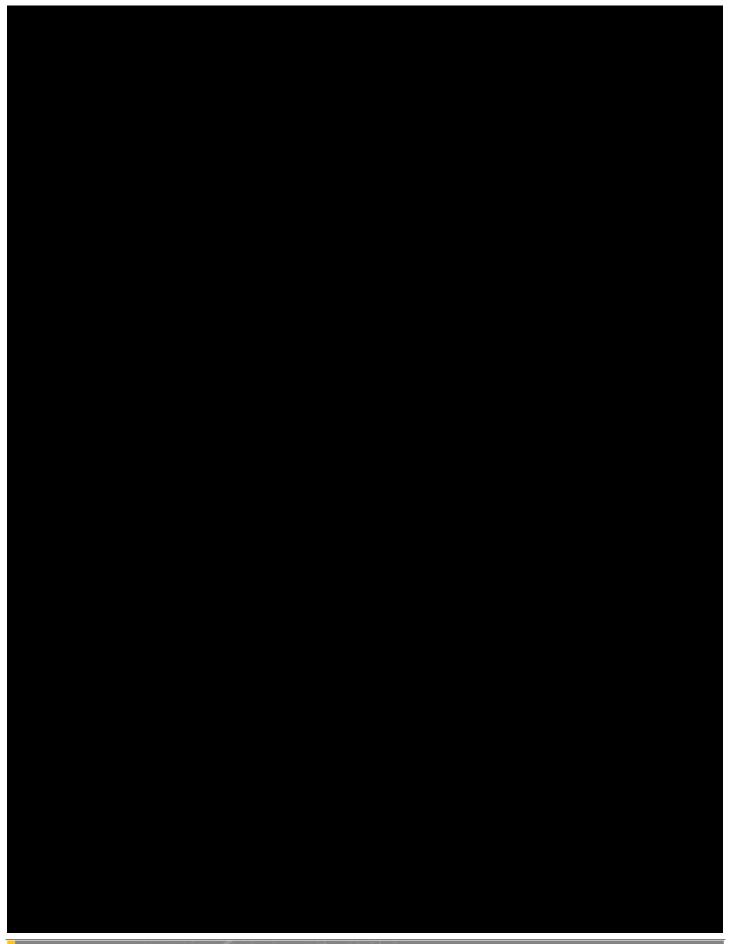






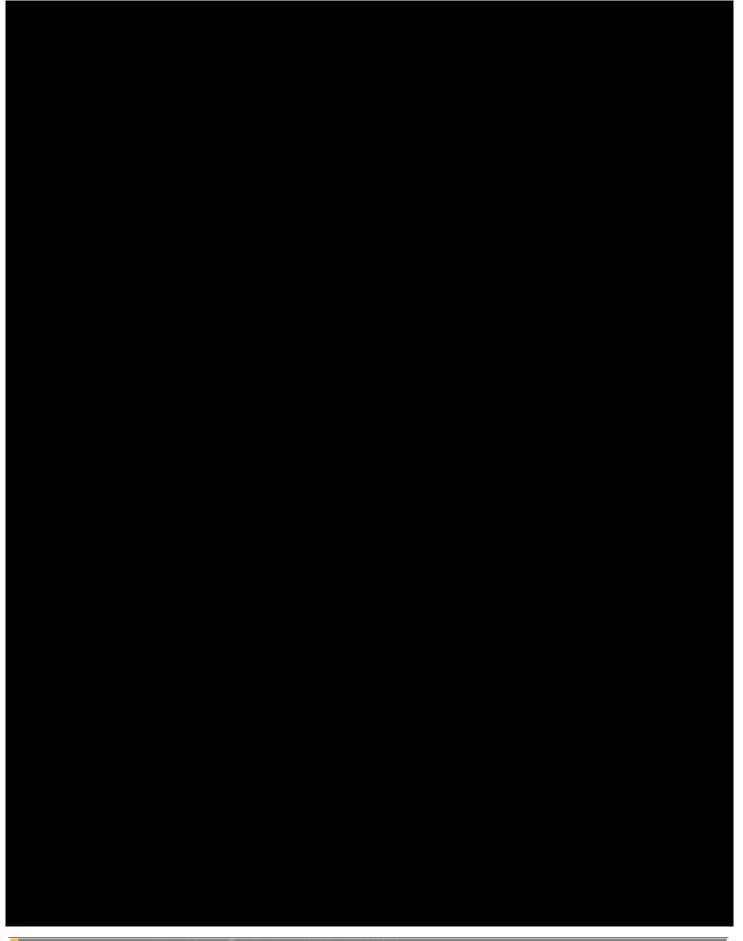
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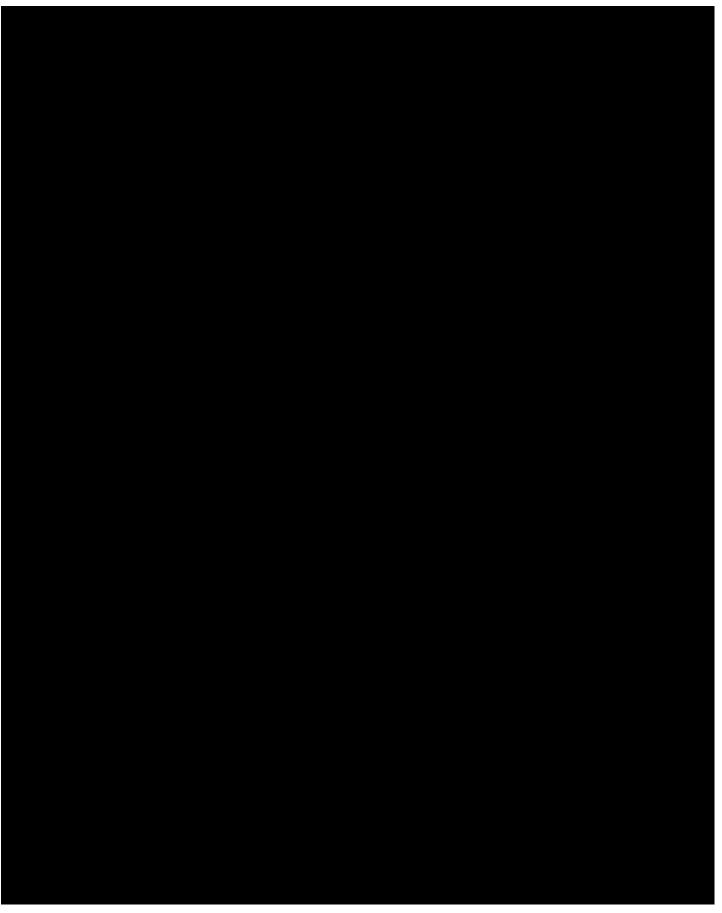
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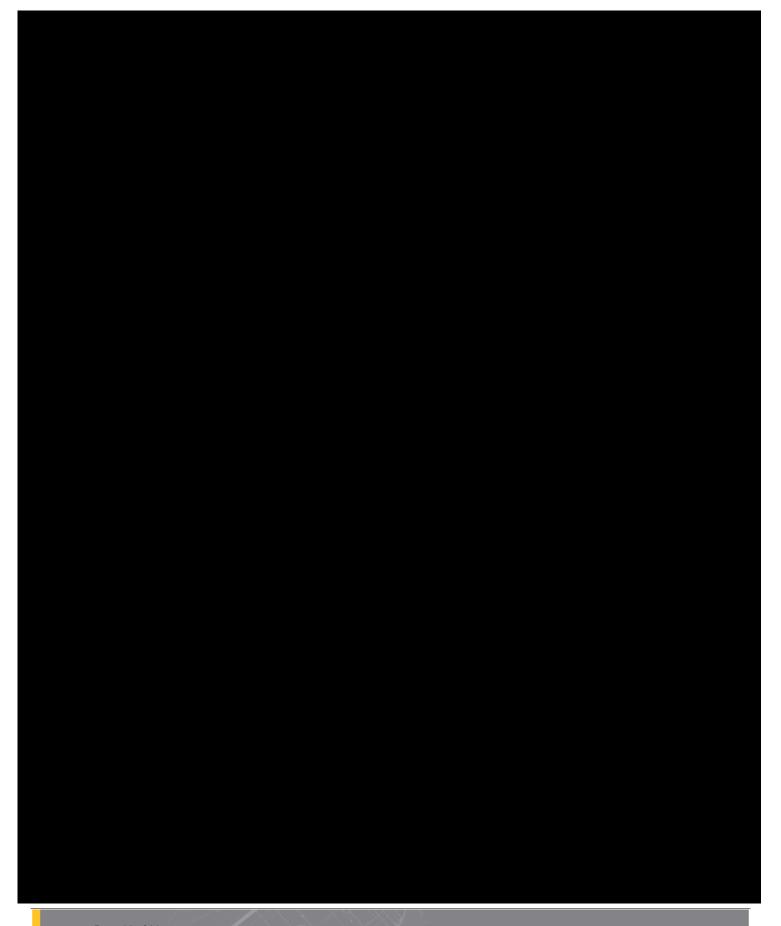


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## 2.2.2 Method Statement



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DEVELOPMENT CORPORATION



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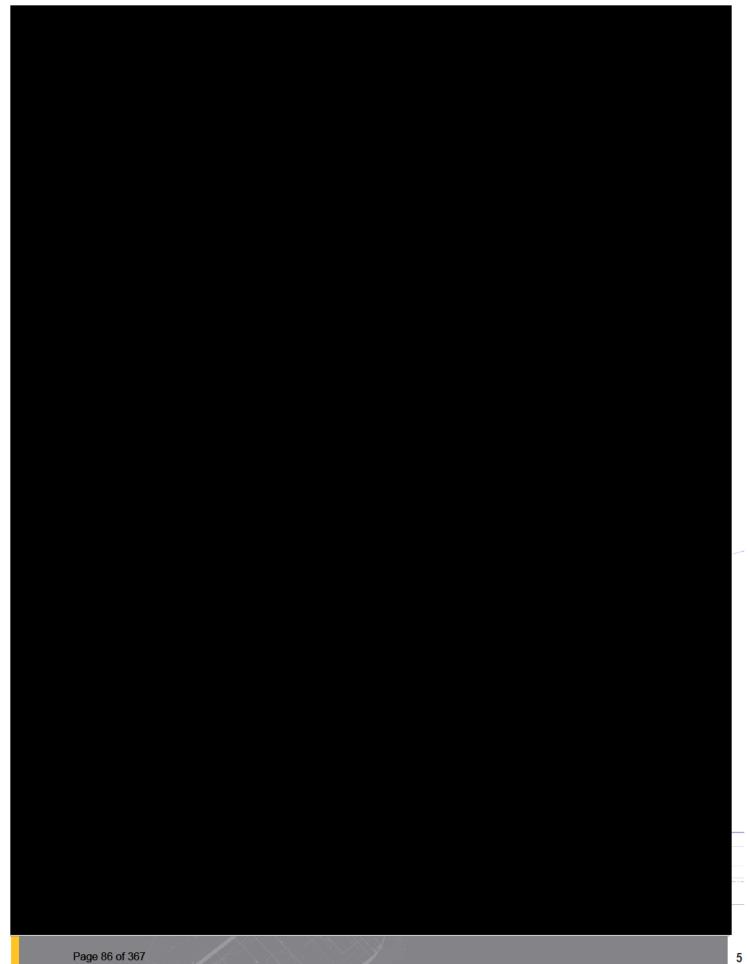






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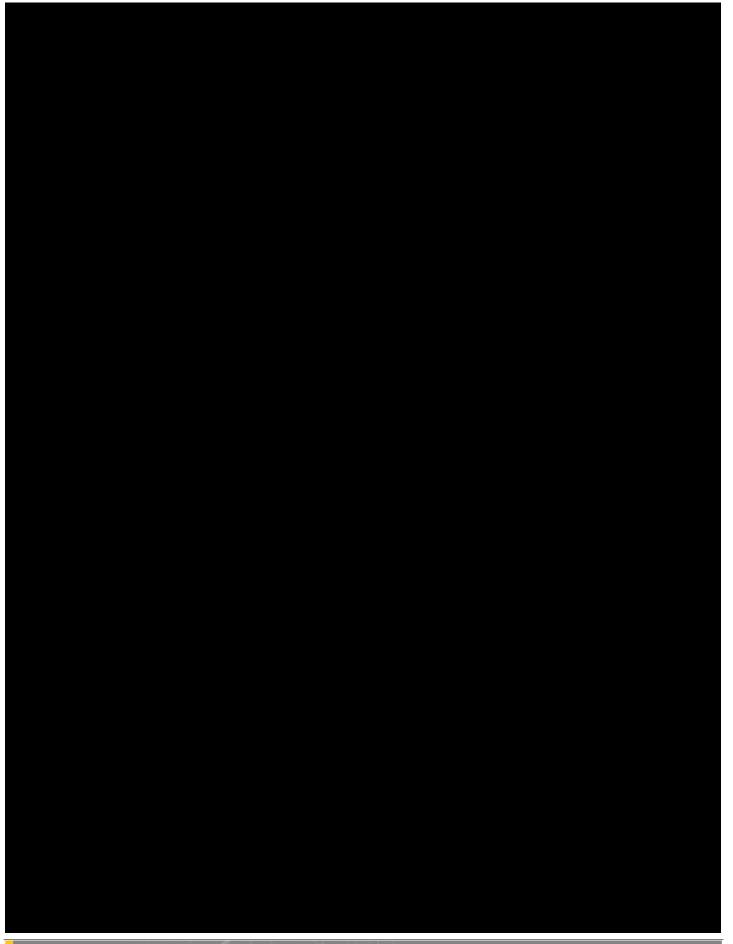






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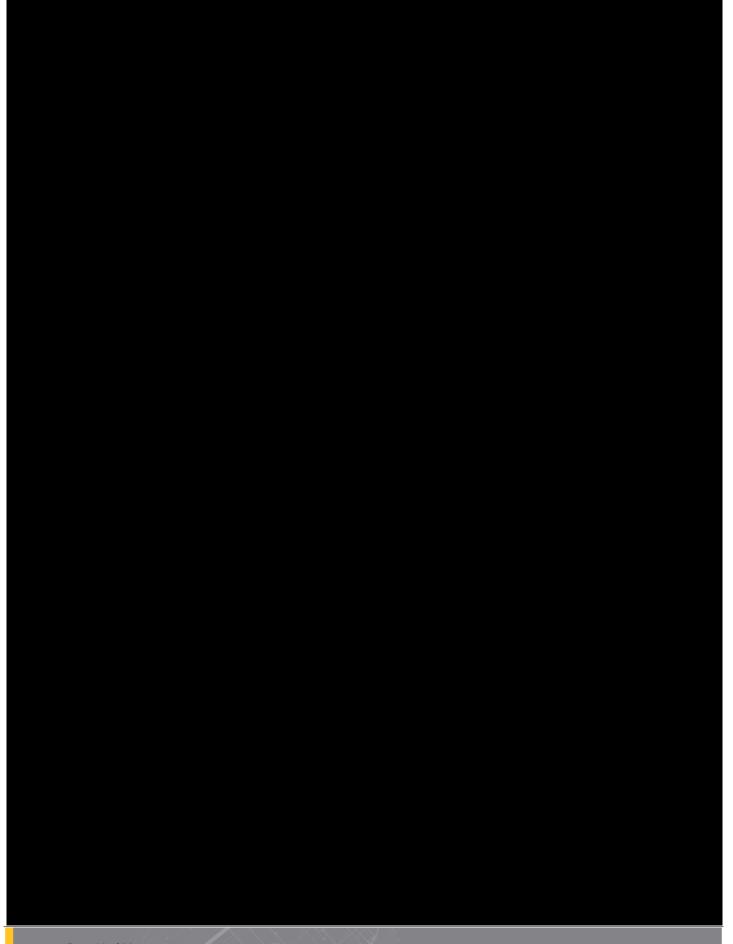






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## 2.2.3 Project Execution Plan











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Balfour Beatty



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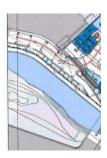




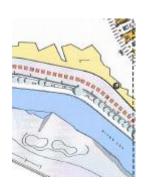


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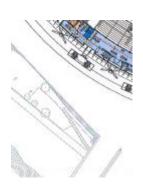
## Appendix 1. Room control under the FM contract. Ground Floor (B1)



## Podium Level (00)



## Level 1 (L01)



## Level 2 (L02)

