Baggage Product Service - Capability Statement

GEBLER TOOTH

Over 30 years of practice experience

Offices in London and Heathrow

50+ staff

High quality and high profile client list

£5.2m turnover YE 2017

£4.95m turnover YE 2018

£5.6m turnover YE 2019

BSI certified ISO 9001 Quality Assured

RIBA Chartered Practice

RIBA Chartered Practice

bsi. ISO 9001 Quality Management

arb Architects Registration Board

GEBLERTOOTH

1. INTRODUCTION

Gebler Tooth is a RIBA Chartered Practice of Baggage Designers and Architects with offices based in London and Heathrow. The practice was established in 1984 by Sasha Gebler and David Tooth and combines specialisms in various market sectors including aviation, commercial, hospitality and retail sectors.

With our team of some 50 professionals, including BHS designers and Architects, Traffic and MHE Specialists, Planners and Construction Managers. We are able to offer a range of services that include BHS design, architectural design, space planning and interior design and further specialist services that, in their combination, are unique. We have over twenty years of continuous experience working at Gatwick and Heathrow Airport for airport operators, airlines and contractors.

We firmly believe that our size, specialisation and commitment to continuous director level involvement in every project give our clients a unique service that is hard to match.

At Gebler Tooth we combine many varied design skills under one roof, and are able to present a rounded approach to design and consultancy commissions.

We combine design flair with pragmatism. We take pride in understanding Client needs, and being thorough in investigating processes, evaluating and prioritising requirements in order to determine designs that are complete and an accurate reflection of the Client brief.

1. INTRODUCTION

Aviation Services Include:

- Baggage Systems & Materials Handling
- Capacity Planning
- Operational Planning
- Design and Stakeholder Management
- Airfield Planning, Traffic & Roads
- Architectural Design
- Interior Design
- Masterplanning
- Building Information Modelling (BIM)
- 3D Visualisation
- Point Cloud Surveys

AVIATION

Designing for live operational environments and integrating new facilities into existing operational environments is our forte. We are familiar with all aviation processes, and relish the challenges of designing building and facilities for them.

The consultancy services we can provide you extend from initial feasibility studies through detailed design and project coordination to handover and occupation for projects ranging from the simple to the highly complex.

Baggage System Design

Baggage projects are driven by an understanding of process; we have specialist process designers who assist in design and definition of all baggage and stakeholder processes, forming the solid foundation for projects.

Passenger, Baggage and Integrated Simulation

Our affiliated company AIQ offers a wide range of simulation solutions to planning and operational problems ranging from full 3D visualisation software like CAST and Massmotion, to first principle spreadsheet analyses.

2. BAGGAGE SERVICES

Demand Analysis:

- Flight schedule analysis
- Demand profiles
- Design capacities
- Throughput analysis
- Material flow diagrams

BHS System Design:

- Volumetric Planning
- Concept (RIBA 2)
- Developed (RIBA 3)
- Phasing Plans
- Operational & Maintenance Strategies
- BHS Safety Systems

Requirements Definition:

- Business & User
- System & Technical
- Gathering & Elicitation
- Validation & Assurance
- Document Management

Baggage Integration:

- Traffic & Roadway Design
- Vehicle Tracking
- Access & Means of Escape
- Docks & Infrastructure Design
- Manual Handling Equipment
- Building Regulations Assurance
- ULD Management

Feasibility Studies:

- Establish Objectives
- Data Analysis
- Operational Assessments
- Cost Advice
- Risk & Opportunities

Design Management:

- Management of Multi-Discipline Design Teams
- CDM Principle Designer
- Client & Stakeholder Engagement
- Programme & Cost Interface
- Building Control Interface

3. RELEVANT EXPERIENCE - BAGGAGE

Baggage Handling & Screening

Terminal 5 Baggage System Upgrade, Heathrow	£270m
New Baggage System South Terminal, Gatwick	£50m
ECAC Standard 3 HBS, Heathrow	£290m
Baggage System Upgrade, T4 Heathrow	£105m
New Baggage System, T2 Heathrow	£150m
ECAC Standard 3 HBS Design/Installation, Birmingham Int'l	£12m
New Arrivals Terminal Stansted	£90m
Terminal 2 Phase 2, Heathrow	£400m
Taif Airport Baggage System, Saudi Arabia	£30m
Narita Baggage Masterplan, Tokyo Japan	£250m
Sydney T1 & T2 Baggage Expansion, Australia	£40m
Vijayawada Airport Baggage System, India	£65m
RGIA Hyderabad Baggage System Expansion, India	£70m
KLIA Baggage Transfer Link, Sepang Malaysia	£65m
Red Sea Airport, Saudi Arabia	£20m
Manchester Terminal 1 Baggage System	£120m
Sepang Transfer Baggage, Malaysia	£40m

4. CASE STUDIES

Standard 3 Upgrade Project | London Stansted Airport

Gebler Tooth Architects were appointed as the overall design integrator/ coordinator for the STN Standard 3 Upgrade Project by BUK, who were the Principal Contractor for Stansted Airport.

GTA responsibilities throughout the design stage were to;

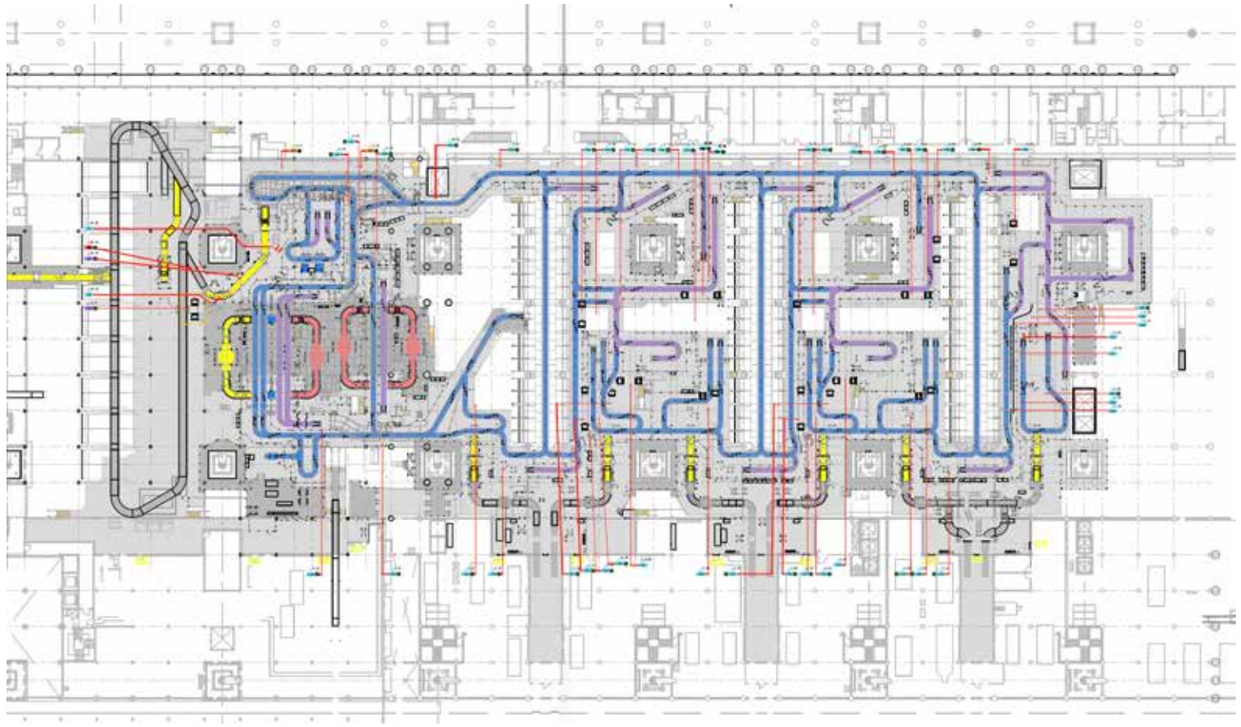
• Define the Baggage Hall Fire Strategy, including gaining agreement from authorities for MoE routes, Fire Signage, Bump Protection requirements.

• Lead the design for the new steel mezzanine floor to be installed to the existing baggage hall, which would cover the complete departures area.

• Lead all non-baggage disciplines (MEP, Steelwork, Fire) to ensure that the design solutions from each discipline were integrated into the pre-construction model with the baggage system components.

• Construct and manage the integrated model file for all disciplines including baggage, thereafter identify and eliminate constraints/clashes from the overall design by analysis of the model throughout the design phase.

• Architectural design for new Out of Gauge baggage line enclosures within the check-in area and design of new HBS Screening Room Facility.



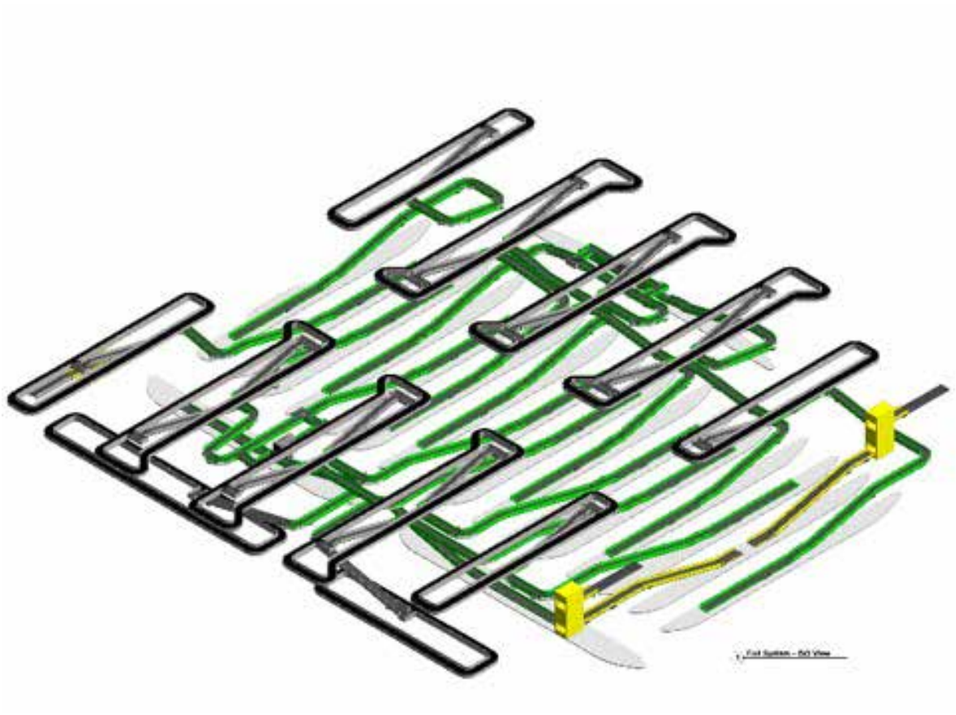
4. CASE STUDIES

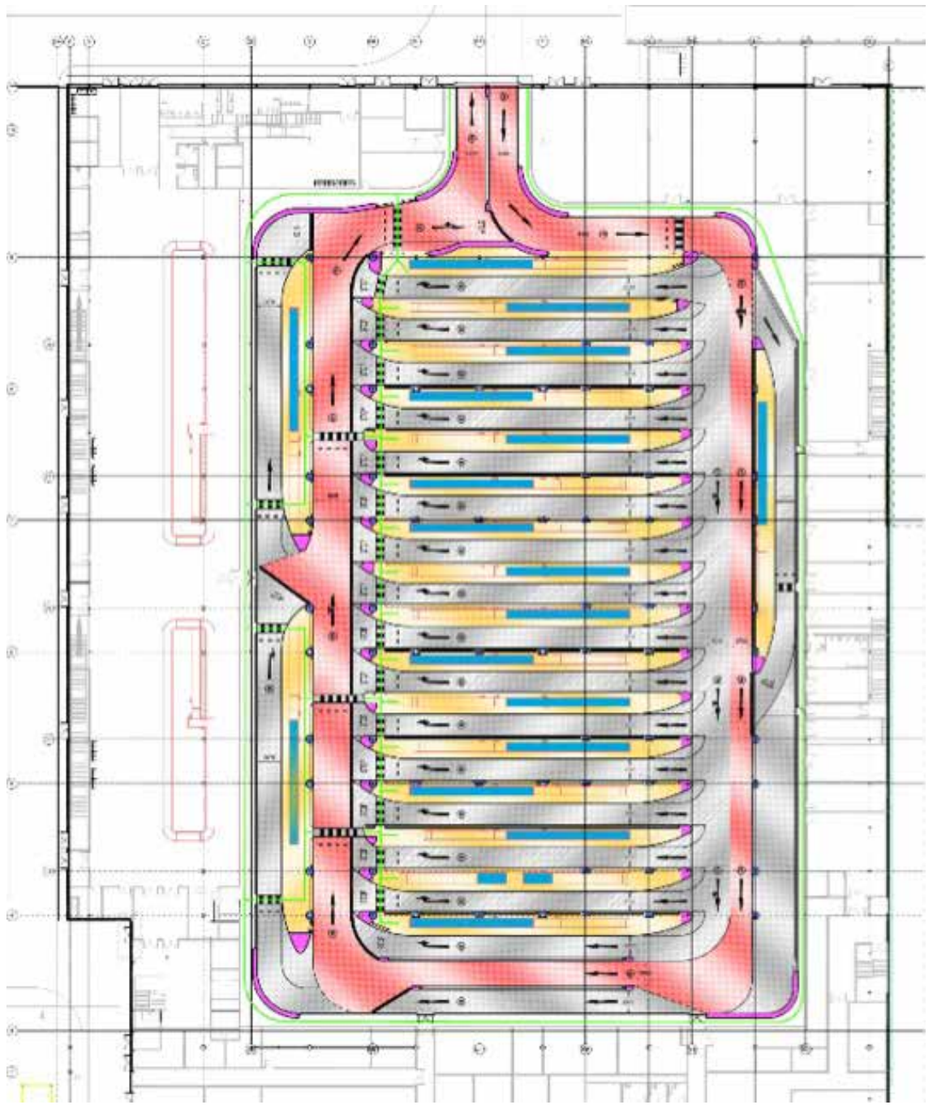
Stansted Arrivals Terminal | Manchester Airport Group | Contract value : £90m

Development of New Arrivals Terminal, including 12 no baggage reclaim belts, of-floads, reclaim halls for international and domestic passengers.

Details of services:

We are providing baggage system design, infrastructure design, and traffic and vehicle design services. In addition we are also providing reclaim belt sizing analysis and confirmation, derived from flight schedule forecasting. All design information is being prepared in a full BIM environment. The project is proceeding through developed design to detailed design stage.





4. CASE STUDIES

Red Sea Airport | Saudi Arabia | Contract value : £20m

GTA was employed to produce a baggage system specification and reference design for tendering purposes.

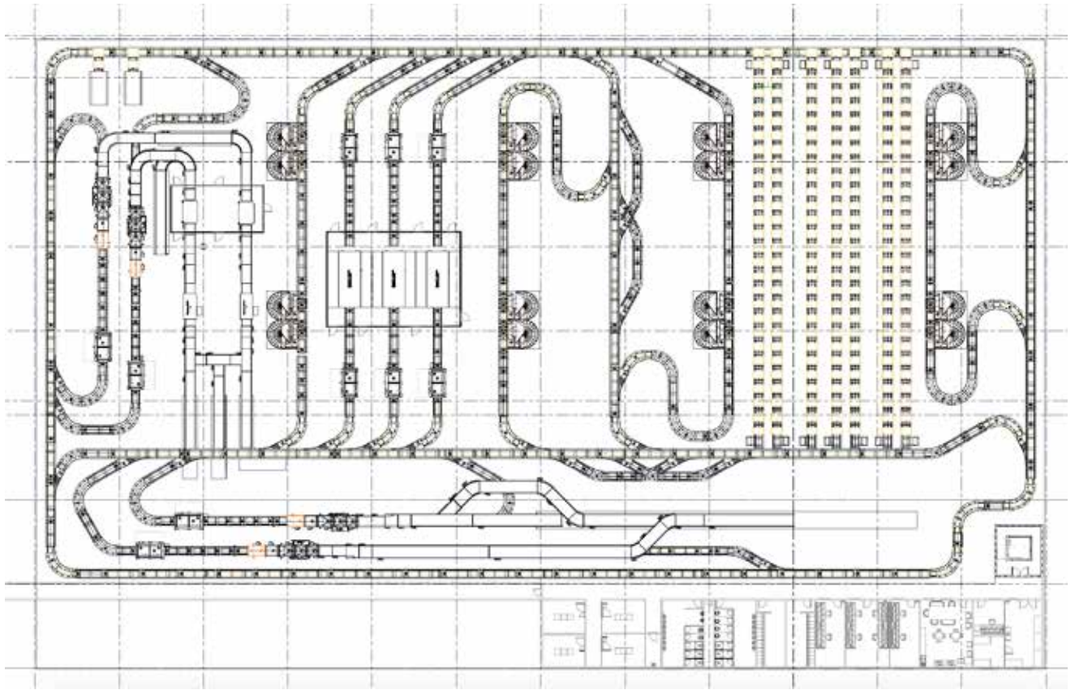
Details of services:

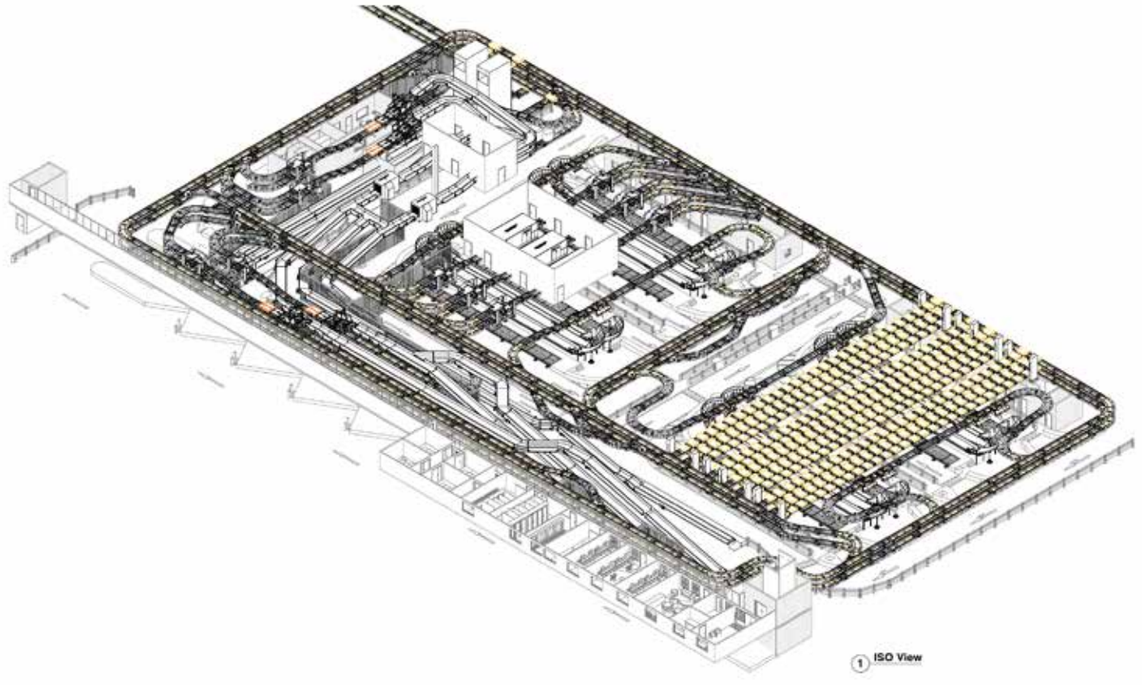
From the baggage brief, GTA developed a Basis of Design for the baggage handling system. The concept for the airport operation was for visitors to the Red Sea resorts to have their luggage processed to and from their resort rather than at the airport. A separate baggage factory was defined to process outbound and inbound baggage at the airport.

Baggage demand and process were determined from the information available and design starting points defined. The baggage process and solution was developed to include specific requirements for the Red Sea operating concept, requiring some novel approaches to the baggage handling system design. GTA produced a Basis Of Design document to direct the design team in the function, performance and technology requirements for the system together with supporting operational facilities.

GTA prepared a reference design for the baggage processing system in the baggage factory and passenger terminal together with the airside and landside baggage operational areas. A detailed system specification was prepared to accompany the design.

GTA coordinated the production of the design and specification with the project engineering and architectural disciplines and the client.





4. CASE STUDIES

Baggage System, Terminal 2 | Heathrow | Contract Value - £150m

The delivery of an integrated baggage system spread across 2 terminals, new and existing.

The brief called for the development of T2 baggage system and support infrastructure from concept phasing diagrams, through scheme design to completion and handover involving the delivery of an integrated baggage system spread across 2 terminals, new and existing.

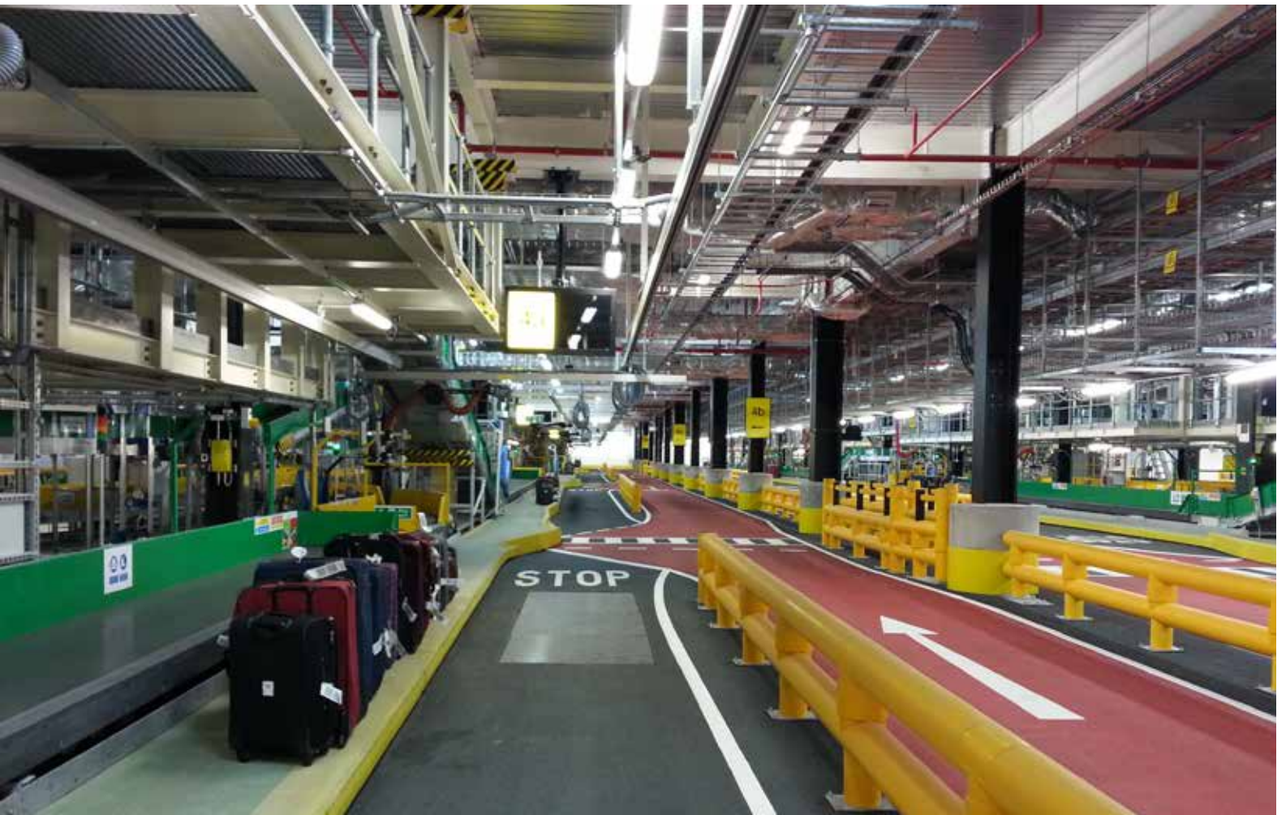
The commission included significant extension and modification works to T1 baggage system and full arrivals baggage system in T2, operator accommodation, access and egress strategies, ergonomics, manual handling equipment, vehicle interfaces and routes, information systems and protection.

Baggage System Upgrades, Terminal 4 | Heathrow | Contract Value - £60m

Expansion of the baggage capability of T4 to meet growing Premium Airline requirements and add longevity to the Terminal.

We have been involved with Terminal 4 baggage since 1993 during that time we have completed a wide number of projects; firstly for British Airways when they were the major occupant, and latterly to enable the Terminal to accept the challenge of multiple handlers and airlines, with larger aircraft (A380). This has included HBS Standard 2 installation (and now Standard 3), sorter replacements, installation of container stillage, additional reclaim belts and the complete refurbishment of the Reclaim Hall. In all cases we have provided Architecture, Roads and Traffic design, Fire Strategy, Stakeholder Engagement, Process Design.

Capacity analysis for make up planning, reclaim belt allocation planning and traffic management has also been provided.



4. CASE STUDIES

Narita Baggage Masterplan | Narita International Airport, Japan | Contract Value - £250m

Scope of works

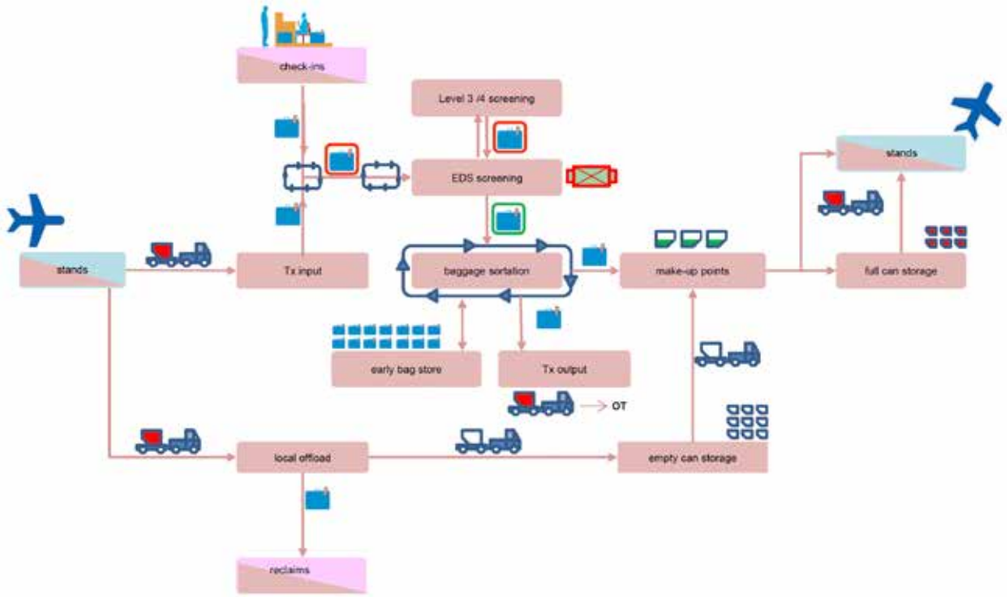
Development of Baggage and Passenger masterplan for extension of four existing terminals and new terminal with two remote piers.

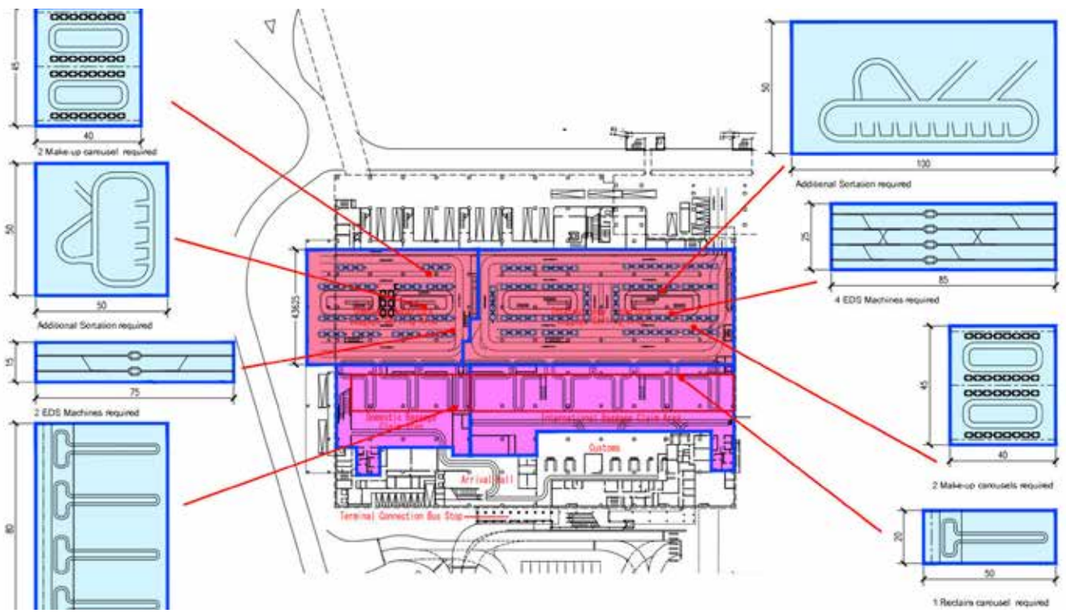
Details of services

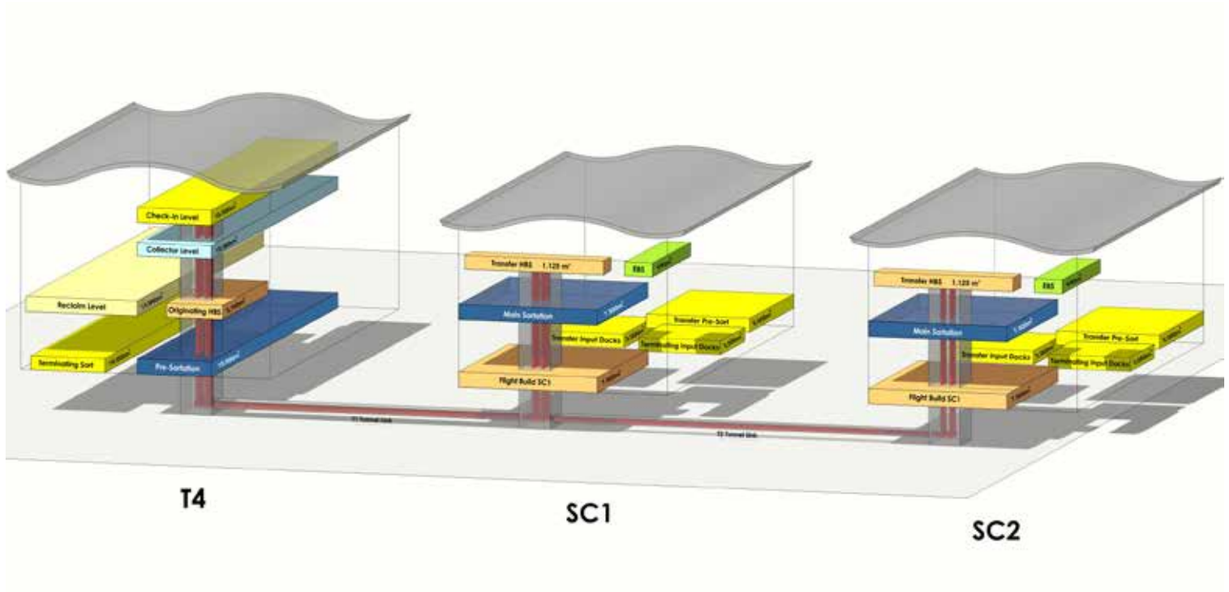
We are providing baggage system developmental consultancy for the project, including flight schedule analysis and development of baggage capacity requirements, volumetric planning, material flow development and baggage system technology choice.

The favoured option for development includes a new terminal system with a capacity of 35mppa, tray based baggage distribution and storage, and robotic build in one central and two remote piers.

We are also advising on out of system elements of the design including optimised SSBD check in, AGV usage, vehicle and container management. The project is proceeding through feasibility to concept stage.







4. CASE STUDIES

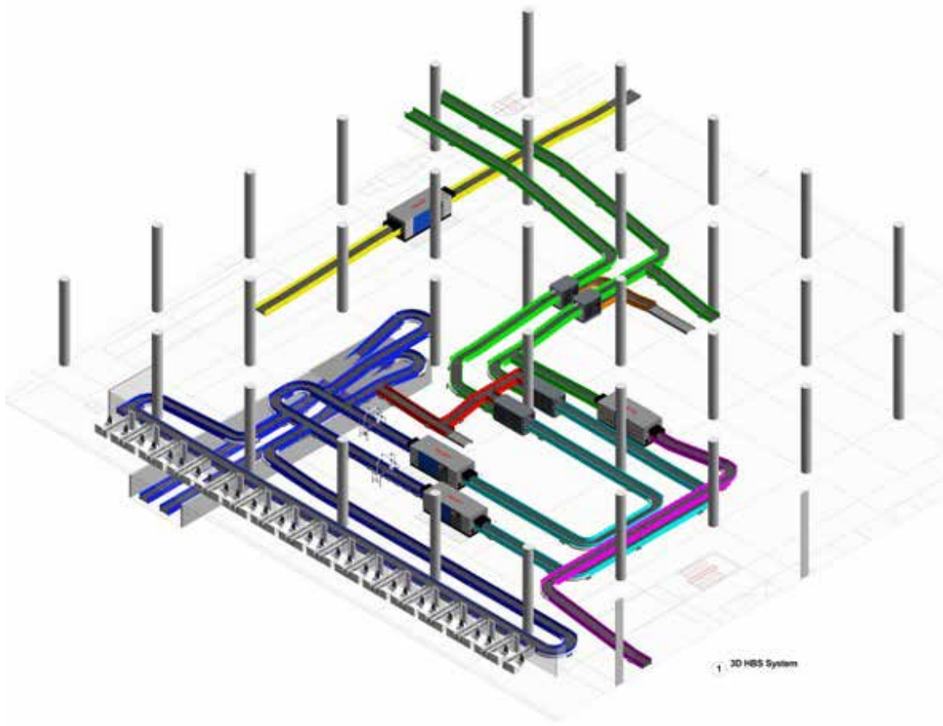
Taif Airport Baggage System | Saudi Arabia | Contract Value - £30m

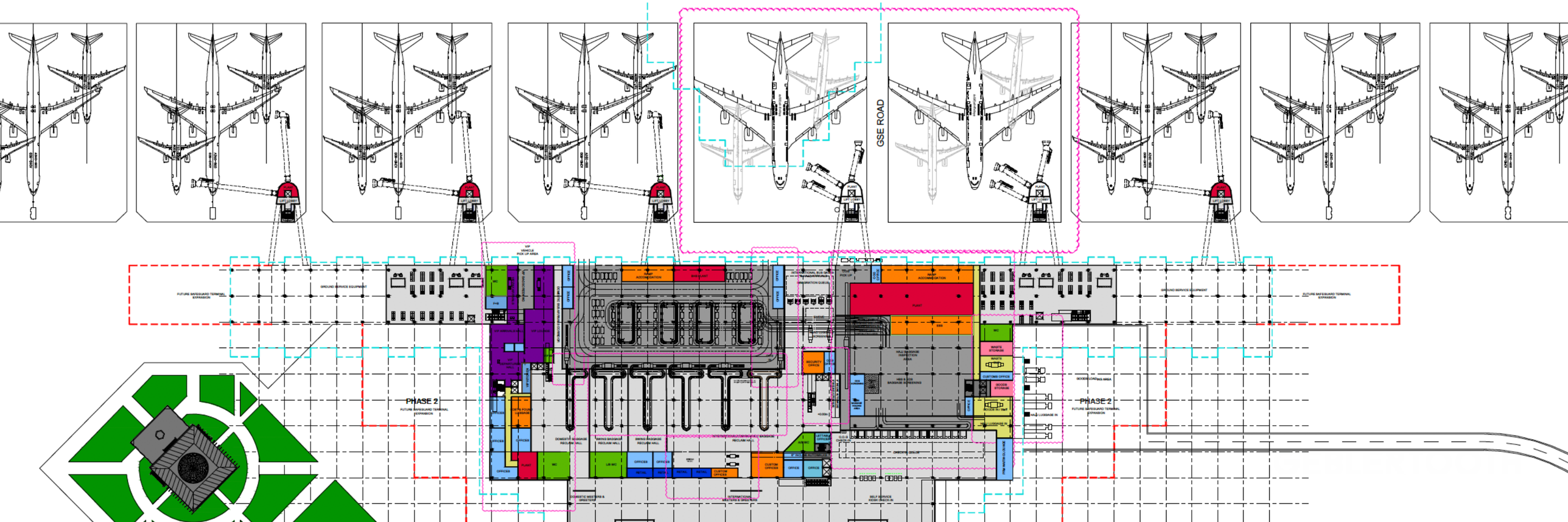
Scope of works:

Development of New Terminal building, including full departures and arrivals baggage system.

Details of services:

We are providing baggage system design, infrastructure design, and traffic and vehicle design services to take the design from concept to tender stage. We have also been engaged with the rest of the design team in terms of design coordination. All information has been prepared in a full BIM.

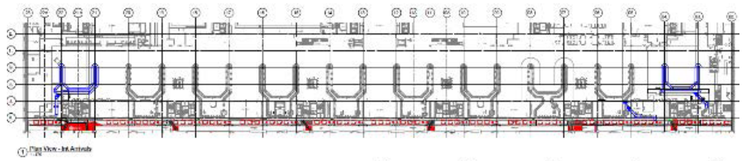


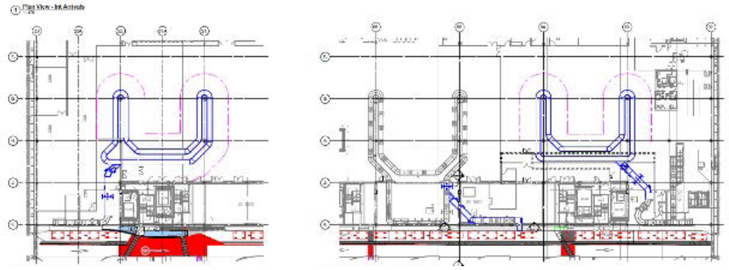


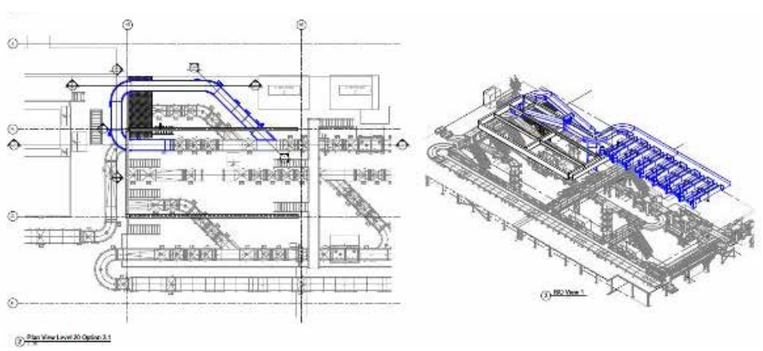
4. CASE STUDIES

LHR T5 Baggage Reclaim Hall

- Baggage System RIBA 2 Design
- Option Design & Evaluation
- Traffic & Infrastructure RIBA 2 Design
- Baggage System Controls & Interfaces
- Concept of Operation
- Baggage Maintenance Strategy
- Access, Egress & Means of Escape







LHR Baggage Requirements

- Baggage Requirements Authors
- Business/User/System/Technical
- Gathering,Elicitation & Assurance
- Stakeholder Engagement with Asset Owners, Development, Process, Operations & Engineering Managers
- Baggage Standards Evaluation
- Project Works Information Alignment

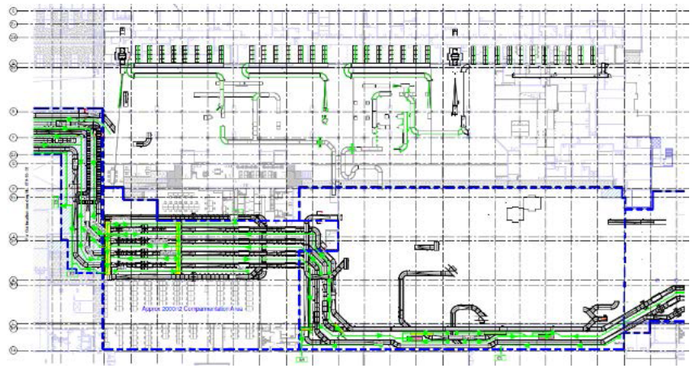
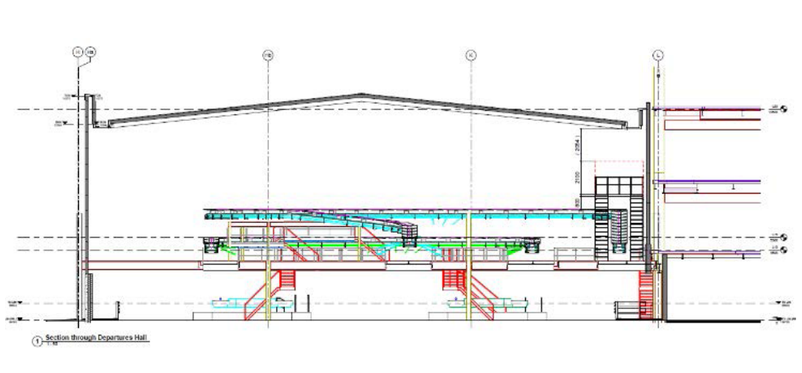
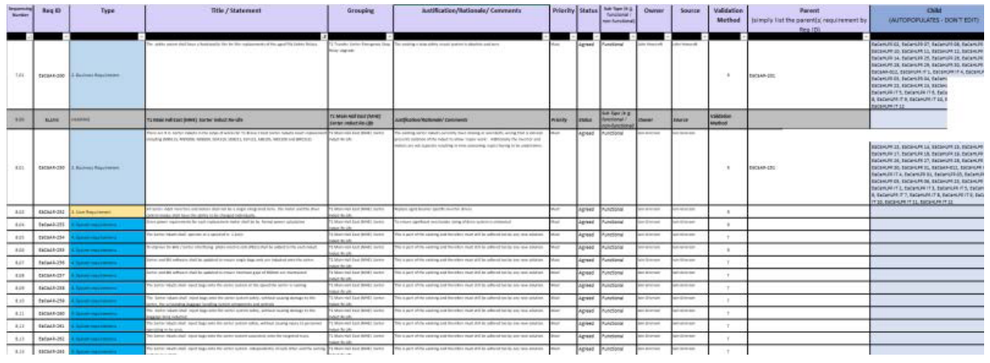


Figure 1: A summary of the requirements hierarchy used by Baggage projects.

MAN T2 Expansion Phase 1 & 2

- Lead Design for Baggage Integrator
- Supply of Structural, MEP, Principle Designer, Traffic & Integration (RIBA 2)
- Departures, HBS Standard 3, Transfers, Arrivals & Customs Screening
- Programme & Phasing Evaluation
- Cost Integration





5. RELEVANT EXPERIENCE - AVIATION

Passenger Facilities

London Olympics Terminal, Heathrow	£10.8m
Kuwait Temporary Terminal, Kuwait	£75m
Sao Nicolau Terminal, Cape Verde	£6m
American Airlines Arrivals Lounge, Heathrow	£2.8m
Cathay Pacific Lounge, T3 Heathrow	£3.4m
Personal Rapid Transport (PRT), Heathrow	£30m
British Airways Exec Club Lounge FCC Heathrow	£2.3m
British Airways Terrace Lounge, T4 Heathrow	£2.8m
BAA Arrivals Lounge, Hilton Paddington, London	£3m
IDL Refurbishment, T4 Heathrow	£26m

Airline and Airfield Operations

IAG Cargo Facility, Heathrow	£45m
Passenger Airbridge Replacement, T3 Heathrow	£30m
Cargo Centre, UK Airport	£45m
Eastern Campus Stand planning, Heathrow	£23m
British Airways Cargo Extension, Cargo Centre, Heathrow	£4m
North Terminal, External Planning, Gatwick	£7.5m
Private MRO Hangar, UK Airport	£12m
Gulfstream MRO Hangar, Farnborough Airport	£36m
Marshalls Aerospace Masterplan	£250m

7. OUR CLIENTS

American Airlines · ARUP · BAA · Benetton Formula 1 Racing Team · Birmingham Airport · bmi

British Airways · British Olympic Association · British American Racing Honda · Cathay Pacific · The FA · Ferrero

Gatwick · Gatwick Express · GE Oil & Gas · GlaxoSmithKline · Gulfstream · Heathrow

Heathrow Express · Hyderabad Rajiv Gandhi International Airport · IAG Cargo · London City Airport · mace · MAG Manchester Airport

PolyGram Filmed Entertainment · Soho House · SOHO · Southampton Airport · Sydney Airport · Thomas Cook Group

Universal A Comcast Company · Wembley · Working Title

8. COMPANY INFORMATION

We are collaborators

Our affiliated companies AIQ and C-TAS offer complimentary consultancy services in the fields of capacity and simulation planning, airfield vehicle and traffic design, which enable us to offer an integrated and unique suite of design services that can be utilised as required for each project.

For more information on our services please contact

David Tooth
Managing Director
T: +44 (0) 208 600 2800

or email hello@geblertooth.co.uk or info@geblertooth.co.uk

Heathrow Office
T: +44 (0) 208 600 2800
www.geblertooth.co.uk