Gatwick Airport Northern Runway Project

The Applicant's Response to Written Representations on Project Changes 1-3

Book 10

VERSION: 1.0

DATE: MAY 2024

Application Document Ref: 10.23

PINS Reference Number: TR020005

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1 Introduction

1.1 Overview

1.1.1. The Applicant's Response to Written Representations on Project Changes 1-3 has been prepared in support of the examination phase for the proposed Gatwick Airport Northern Runway Project (NRP, or Project). The Application was made by Gatwick Airport Limited (the Applicant) to the Secretary of State pursuant to Section 37 of the Planning Act 2008.

1.1.2. This document has been prepared to provide a response to comments or Written Representations on Project Changes 1-3 (comprising Change Request 1) submitted at Deadline 3, namely:

- **Airport Industrial Property Unit Trust's Comments on Deadline 2 Submissions** [REP3-154]
- **Communities Against Gatwick Noise Emission's Response to Further Information Received at Deadline 2** [REP3-113]
- **Joint Surrey Council's Written Representations on the Applicant's Proposal to amend its DCO Application** [REP3-133]
- **Joint West Sussex Council's Written Representations on the Applicant's Proposal to Amend its DCO Application** [REP3-116]
- **Joint West Sussex Council's Written Representations Summary** [REP3-118].
- **Mole Valley District Council's Written Representations on the Applicant's Proposal to Amend its Development Consent Order Application** [REP3-136].
- **National Highways' Written Representations on the Applicants Proposal to Amend its Development Consent Order Application** [REP3-139]
- **Nutfield Conservation Society's Written Representations on the Applicants Proposal to Amend its Development Consent Application** [REP3-144]

1.1.3. The Applicant notes that East Sussex County Council also responded on the Project Changes 1-3 in its **Written Representations on Project Changes** [REP3-125] advised that it does not consider that the Project Changes would have a material impact on East Sussex and therefore has no comment to make. As such, no further comment in made on ESCC's submission, but the Applicant notes the response.

1.1.4. Where matters have already been addressed within the Applicant's submitted documents (for example, in Deadline 3 submissions), the Applicant has provided signposting.

2 Airport Industrial Property Unit Trust

2.1.1. **Table 2.1** sets out the Applicant's response to the matters raised in **Airport Industrial Property Unit Trust's Comments on Deadline 2 Submissions** [REP3-154].

Table 2.1 Response to AIPUT on the Project Changes 1-3

Topic	Matter Raised	Applicant's Response
Project Change 2 – Reduction in height of the proposed replacement CARE facility and change in its purpose		
Construction	Reduction in height of the proposed replacement CARE facility and change in its purpose. AIPUT previously noted the changes to the Indicative Construction Sequencing (ES Appendix 5.3.3 [APP-088]). AIPUT reiterate their previous comment, that despite the removal of the two proposed biomass boilers and the associated flue of up to 48 metres, for an overall reduction in the maximum height of the main facility building, the footprint of the replacement facility building is unchanged from the DCO Application. Therefore, AIPUT query the rationale for changing the CARE facility construction phase(s) and request further information on the intensity of construction over the continuous phase of work as well any changes to logistical requirements (increases in HGV movements, workforce numbers, workforce travel, etc.).	The demolition of the existing CARE facility and construction of the replacement facility will take place during 2024 – 2029, as stated in paragraph 4.1.6 of the **Change Application Report** [AS-139]. The removal of the biomass boilers and the associated flue for the design does not significantly change the overall duration of the construction works and therefore does not significantly impact the construction duration nor does it impact the busiest period of construction traffic. The anticipated construction and operational vehicle movements associated with the new CARE facility are expected to be very low. It is anticipated the operational traffic of the CARE facility will be an average of up to six vehicle movements (three arrivals and three departures) a day. For further information on the constructions works associated with the replacement CARE facility, please refer to paras 8.6.6 to 8.6.9 of **ES Appendix 5.3.1: Buildability Report – Part A** [REP2-013].
Waste Management Traffic and Transport	AIPUT notes that details on the access into the CARE Facility have been provided in 5.6.12 (Access) of Design and Access Statement Vol. 3 (Version 2). However, AIPUT previously requested that in relation to the CARE Facility (which no longer proposes the incineration of waste), off airport processing sites, travel routes, and the frequency of trips anticipated are provided by GAL and considered within the relevant transport assessments, so as to demonstrate that the CARE facility proposals will not have a detrimental effect on the Airport Road network. No information on routeing or the number of anticipated trips has been provided to date.	The management of operational waste from the Airport is explained in the **Operational Waste Management Strategy** (OWMS) [REP3-073], with a final Operational Waste Management Plan to be submitted for approval in substantial accordance with the OWMS under DCO Requirement 25. The biomass boilers at the existing CARE facility were only used to manage food waste and a proportion of CAT 1 waste (subject to levels of contamination). The remainder of waste is taken off site for re-use, recycling or energy recovery and a small proportion is sent for disposal. The biomass boilers were switched off during 2019 due to insufficient quantities of organic waste being generated at the Airport, making the boilers inefficient. The boilers have not been switched back on since. Food waste has been taken off site to be recycled via anaerobic digestion and the other waste streams continue to be processed off site. Various waste management facilities are used to process operational waste from the Airport: e.g. CAT 1 waste is taken to Newhaven Energy Recovery Facility (Mondays to Saturdays) and Chineham Energy Recovery Facility (Sundays). Where possible, waste is taken to the closest facility that permitted and consented

Topic	Matter Raised	Applicant's Response
		to manage that particular waste stream. Waste is only transported by registered waste carriers and the travel routes use the strategic road network. The number of vehicle trips associated with waste varies according to the time of year and the type of waste being transported. During 2023, on average one vehicle a day transported CAT 1 waste from the airport to Newhaven / Chineham Energy Recovery Facilities, however during the peak periods of summer, the number increased to three vehicles a day. Other wastes may be temporarily stored at the CARE facility until there is enough waste to fill a load to maximise load efficiencies. Table 4 of the **Change Application Report** [AS-139] explains that there would be fewer than six vehicle trips a day associated with the replacement CARE facility when in operation. This level of traffic is not expected to be perceptible on the highway network.
Waste Management Traffic and Transport	It is noted that Design and Access Statement Vol. 1 (Version 2.0) submitted in light of the Project Changes on 28th March 2024, states that Option 1 for the CARE Facility was favoured due to 'shorter journey times for rubbish vehicles', amongst other benefits. Design and Access Statement Vol. 3 (Version 2) states, "Waste material would continue to be taken off-airport to a dedicated waste processing centre(s) and not be processed on the airport". AIPUT would again request that the airport processing sites, travel routes, and the frequency of trips are made clear by GAL within their proposals and impacts properly assessed.	The **Operational Waste Management Strategy** [REP3-073] identifies how operational waste is currently managed at the airport and taking account of the Project, with a final Operational Waste Management Plan to be submitted for approval in substantial accordance with the OWMS under DCO Requirement 25. . As explained above, various waste management facilities are used to manage/process operational waste from the Airport e.g. CAT 1 waste is taken to Newhaven Energy Recovery Facility (Mondays to Saturdays) and Chineham Energy Recovery Facility (Sundays). Where possible, waste is taken to the closest facility that permitted and consented to manage that particular waste stream. Waste is only transported by registered waste carriers and the travel routes use the strategic road network. Table 4 of the **Change Application Report** [AS-139] explains that there would be fewer than six vehicle trips a day associated with the replacement CARE facility when in operation. This level of traffic is not expected to be perceptible on the highway network, regardless of the location of processing sites or the routes taken between those and the Airport. Furthermore, it will not have a material impact on the outcomes of the assessment presented in **ES Chapter 12: Traffic and Transport** [REP3-106].
Project Change 3 – Revision to the proposed water treatment works		
Construction	AIPUT previously noted that the indicative construction sequencing in the DCO Application (ES Appendix 5.3.3 [APP-088]) for the proposed water treatment works were amended from 2027 to 2028 and are now proposed to be constructed between 2025 and 2026.	Noted.
Traffic and Transport	GAL states in the Notification of Proposed Changes (Application Document Ref: 9.1) that there would be approximately one to two more HGV movements	Table 6 of the **Change Application Report** [AS-139] explains that there would be one to two construction HGV movements an hour related to the peak construction

Topic	Matter Raised	Applicant's Response
	per hour in the 3-month construction period for the water treatment works compared to the construction HGV movements assessed in the DCO Application "being up to 220 movements". AIPUT previously raised that the numerical comparison is not written clearly though the addition appears to be a high proportion of the base; clarity was requested and is still required.	period of the water treatment works, comprising a 3-month period. For clarity, this relates to an expected figure of around 220 vehicles arriving and 220 vehicles departing (440 vehicle movements in total) per month associated with construction of the water treatment works. This represents a very small number of HGV movements when considered in the context of the construction of the Project as a whole which would not have a material impact on the outcomes of the assessment presented in **ES Chapter 12: Traffic and Transport** [REP3-106].
Traffic and Transport	AIPUT also noted that the Transport Assessment (Tracked) - Version 2 submitted alongside the Notification of Proposed Changes does not consider additional HGV movements arising from Change 3 and no updated version of the Outline Construction Traffic Management Plan (ES Appendix 5.3.2 Annex 3) or Outline Construction Workforce Travel Plan (ES Appendix 5.3.2 Annex 2) have been submitted to consider the scale and impacts of the additional movements. AIPUT would query as to how the Applicant has determined that the additional movements would not generate new significant effects on severance, driver delay, pedestrian and cyclist delay and amenity, accidents and safety, hazardous loads, or effects on public transport amenity (as stated in paragraph 3.1.11 in Doc. Ref 9.1).	The number of construction vehicle movements, and operational vehicle movements, associated with the water treatment works is extremely small when considered in the context of the construction of the Project as a whole and not material in the context of the assessment which is presented in the **Transport Assessment** [REP3-058] and the **ES Chapter 12: Traffic and Transport** [REP3-106], which considers the effects related to all construction activities that form part of the Project. It is therefore not necessary to update either of those documents.
Traffic and Transport Construction	Despite the updated suite of documents submitted by the Applicant on 28 March 2024 to reflect the Proposed Project Changes, the requested documents stated above were not updated. AIPUT requests that HGV movements relating to Project Change 3 are considered within an updated Transport Assessment, updated Outline Construction Traffic Management Plan and Outline Construction Workforce Travel Plan.	The number of construction vehicle movements, and operational vehicle movements, associated with the water treatment works is extremely small when considered in the context of the construction of the Project as a whole and not material in the context of the assessment which is presented in the **Transport Assessment** [REP3-058] and the **ES Chapter 12: Traffic and Transport** [REP3-106], which considers the effects related to all construction activities that form part of the Project. It is therefore not necessary to update either of those documents, nor to update **ES Appendix 5.3.2: Code of Construction Practice Annex 3 - Outline Construction Traffic Management Plan** [APP-085] or **ES Appendix 5.3.2: Code of Construction Practice Annex 2 - Outline Construction Workforce Travel Plan** [APP-084], as the principles contained in those documents remain unchanged.

3 Communities Against Gatwick Noise Emissions

3.1.1. **Table 3.1** sets out the Applicant's response to the matters raised in **Communities Against Gatwick Noise Emission's Response to Further Information Received at Deadline 2** [REP3-113].

Table 3.1 Response to CAGNE on the Project Changes 1-3

Topic	Matter Raised	Applicant's Response
Project Change 3 – Revision to the proposed water treatment works		
Project Description	The Applicant originally included provision for a new Moving Bed Biofilm Reactor ("MBBR") treatment facility located at the pollution lagoons adjacent to the Thames Crawley STW, to treat surface water runoff potentially contaminated with de-icer. The Applicant has now replaced this water processing site with reed beds to tackle flooding.	Noted.
Water Environment	CAGNE is concerned that there is no evidence before the Examination that this mitigation will work in practice. In particular, there is a lack of evidence that the size of proposed reed beds being offered is large enough to deal with an increasing amount of surface water, run off, and contaminated water, from a new runway and highway. The size of the reed beds will need to be considerable, would need a large silt sump and would also need to be managed carefully.	Runoff from the airfield that is of insufficient quality to discharge directly to the River Mole is currently pumped to the long-term storage lagoons for subsequent treatment. Prior to pumping it passes through an API interceptor which removes silt. Any remaining silt would settle out .in the 320,000m^3 long-term storage lagoons This process would continue under this proposal but instead of final treatment by Thames Water's Crawley STW, treatment would be via a new nature-based active treatment system. Runoff would continue to be from the airfield only and would not include runoff from the surface access highways improvement works. The inflow from the lagoons would be designed to 100l/s where it would be treated prior to discharge to the Gatwick Stream, as secured by Design Principle DDP14 of the **Design Principles** [REP3-056] under DCO Requirement 4. The inflow is limited and levelled (attenuated) via the storage provided by the lagoons to avoid overwhelming the treatment system. The outflow from the treatment system would be discharged to the Gatwick Stream via an existing overflow pipe from the lagoons. If the effluent is of insufficient quality for discharge, it would be pumped back to the lagoons and passed through the treatment system again for further treatment. The discharge will require a new discharge consent and detailed Operating Technique consented by the Environment Agency that will stipulate the minimum quality the effluent needs to meet to be discharged to the Gatwick Stream. This is anticipated by Gatwick to be more stringent than the existing discharge consent for Crawley STW. The Operating Technique will also stipulate how the system must be maintained to ensure it remains effective. The size of the reed beds incorporates redundancy, so the system would still be able to meet the water quality treatment criteria if one of the three treatment beds was out of action (e.g. for maintenance). Aerated wetlands are attached growth biological reactors designed for accelerated degradation of organic compounds such as de-icing chemicals. Naturally occurring bacteria attach to the surfaces of the gravel media forming biofilms. The wastewater is distributed across the surface area of the beds subsequently

Topic	Matter Raised	Applicant's Response
		percolating vertically down through the saturated gravel media. Retention within the media provides sufficient contact between the contaminants and the biofilms, resulting in biological contaminant degradation and reduced concentrations of organic matter (BOD5, COD & TOC) in the treated effluent. The degradation is more efficient under aerobic conditions and the Forced Bed Aeration (FBA™) system will be designed to evenly distribute oxygen across the entire working volume of media to maintain aerobic conditions when necessary. The reed beds will be lined to prevent any ingress of groundwater and infiltration of potentially untreated or partially treated effluent to ground. This technology is tried and tested and is used at Heathrow Airport to treat deicer contaminated runoff for over 10 years.
Design	CAGNE notes that the Applicant has provided only high-level information about the proposed reed beds at Deadlines 1 and 2. • At Deadline 1, the ES Chapter 5 Project Description was updated to include the proposed water treatment works being a constructed wetland system using reed beds with Forced Bed Aeration technology to treat the de-icer contaminated waters. This gave an approximate footprint of the reed beds of 16,000m^2 and stated that the system "would draw at least 100 l/sec from the de-icer pollution storage lagoons and treat this to a standard that would allow discharge to the Gatwick Stream". • At Deadline 2, the Design and Access Statement was updated to indicate again that the system would be "approximately 16,000m^2" and provide only small, contextless, indicative layout images of the water treatment works. The Applicant should provide the ExA with significantly more information about the proposed reed beds, including full details of volumes and capacity and the information on which the Applicant relies to demonstrate that they will be capable of performing the very significant pollution removal function asserted.	The constructed wetland treatment system uses Forced Bed Aeration (FBA) technology to provide maximum treatment capacity within the specified area. These wetlands are growth biological reactors engineered to increase oxygen availability using an aeration system to distribute oxygen evenly across the working area, which increases the treatment capacity. The nutrient dosing system will provide the supplementary nutrients required for optimal biomass growth and management. Flow from the existing pollution lagoon will be conveyed by new submersible pumps, through a new rising main, into a new hydraulic flow splitter chamber located within the proposed reed bed area, which will ultimately split flow equally between the six hydraulically independent reed bed cells. The total footprint of the six wetland cells is approximately 1.27ha and their depth is approximately 2m. Under maximum volumetric loads of 8,640m3/d the wetland beds have approximate hydraulic loading rates of 0.96m d-1 and hydraulic retention times of 12hrs within the gravel media pore space. The Applicant would also draw CAGNE's attention to the **Design Principles** [REP3-056], which are secured under Requirement 4 of the **Draft DCO** [REP3-006]. This includes Design Principle DDP14 which sets out further detail on the design components and features to be part of the constructed wetland treatment system.
Water Environment	CAGNE notes the concern of other interested parties: • The Statement of Common Ground between the Applicant and Thames Water shows that there are still ongoing discussions about the fact that part of the function of the reed bed treatment will be to "completely	The intention of the new treatment system would be to cease sending the de-icer contaminated flows to Crawley STW from the storage lagoons and to increase the volume treated to provide additional storage capacity in the system to address the potential increase in de-icer use due to the increase in air traffic movements due to the Project.

Topic	Matter Raised	Applicant's Response
	remove the need to send glycol contaminated waters to Thames Water CSTW". • The Environment Agency flagged that more details need to be provided before the reed bed system can be scoped and agreed as a form of water treatment system. Any new discharge activity would also require and Environmental Permit application.	A meeting was held with the Environment Agency on 3 April 2024 to explain the function of the reed bed system and GAL has contacted the Environment Agency's national permitting team to commence discussion of the likely discharge connect application requirements.
Climate Change Water Environment	Furthermore, the scant information provided by the Applicant does not address adaptation to climate change and the increase in extreme rainfall events predicted to occur, which potentially impacts the ability of the reed beds to function given potentially high volumes of runoff and/or potential flooding from the reed beds themselves.	Existing and embedded mitigation for climate resilience are detailed in the Design Principles in the **Design and Access Statement Appendix 1** [REP2-037] which will be used to ensure the Project's resilience to climate change, alongside the **Outline Landscape and Ecology Management Plan** [REP3-031, REP3-033 and REP3-035] and the adverse weather measures for construction as part of the **Code of Construction Practice** (Doc Ref. 5.3) which all apply to the constructed wetland (reed bed) system. This is intended to ensure that the reed beds are resilient to climate change including increasing extreme rainfall events and also covers all climate hazards (including accommodating increasing temperatures, extreme cold, drought, heavy rainfall, high winds and lightning strikes) as stated in paragraph 3.1.13 of the **Notification of Proposed Project Changes** [AS-113]. The design of the constructed wetland system should be considered holistically with other measures included in the Project that provide mitigation for the predicted increase in rainfall due to climate change: • the additional storage provided across the airfield drainage network; and • the below-ground storage tank at Car Park Y (see **ES Chapter 11 Water Environment, Table 11.8.1** [APP-036]). Additionally, the inflow to the wetland system for treatment is limited to a maximum flow of 100l/s, to maintain a reasonably constant operational inflow. Fluctuations in inflow in the system before (upstream of) this point would be managed by the additional storage in the drainage system provided by the Project referred to above and the existing long-term storage lagoons. The reed bed design also includes a freeboard above the design water level.
Water Environment Design	Finally, much more detail is required on the maintenance of the proposed reed beds, including: • Annual inspection of the main basin areas of reed beds for sediment and to ensure it is kept clear of any encroaching vegetation such as shrubs and trees which if left unchecked will gradually reduce storage capacity.	The wetland system will be designed, installed and subsequently maintained by a specialist contractor. Management of the reed beds will be as per both the supplier's instructions and the general principles set out within Annex 2 Landscape Maintenance Schedule of the **Outline Landscape and Ecology Management Plan** [REP3-031, REP3-033, REP3-035].

Topic	Matter Raised	Applicant's Response
	• Once established, the reed beds will need to be cut back seasonally to ensure that they do not deteriorate. Cutting back 25% of the area on a rotational 4 yearly cycle will rejuvenate the reed growth and prevent the accumulation of litter from causing the bed to rise over time (which will impede the ability to conduct flows). • Given the increase in storms and continual rain, the potential for overflow of the reed beds must be considered. Monthly inspections must be put in place to clear any debris such as fallen branches or other detritus that may have escaped from roads, runway, waste sites, and passing traffic. • Connections to the Gatwick Stream (and any other waterways) should be checked to ensure that they are free to rise and fall with the changing water level. The surrounding vegetation must be mowed seasonally to maintain the grass and weed height. There should not be any trees or shrubs growing anywhere within the beds.	As with all water infrastructure at the airport, overall responsibility for the operation and compliance of the wetland system will rest with the Principal Environmental Water Engineer. The specialist constructed wetlands contractor will be responsible for ensuring the system continues to operate at optimum levels. This will include specific site works, nutrient dosing, and advising GAL where other works are required. As a requirement of existing water infrastructure, GAL already employs skilled engineers who will also monitor the system 24/7 via our SCADA IT system and deal with any issues or regular maintenance tasks. The system will also incorporate TOC (Total Organic Carbon) monitoring equipment. Again, this is technology that our in-house engineers are familiar with and in addition will be supported by specialist contractors where required. Finally, our specialist landscape contractors will be employed to maintain the associated vegetation as required and directed by the specialist wetland contractor.

4 Joint Surrey Councils

4.1.1. **Table 4.1** sets out the Applicant's response to the matters raised in the **Joint Surrey Council's Written Representations on the Applicant's Proposal to amend its DCO Application** [REP3-133], comprising responses from Surrey County Council, Mole Valley District Council, Reigate and Banstead Borough Council and Tandridge District Council.

Table 4.1 Response to Joint Surrey Councils on the Project Changes 1-3

Topic	Matter Raised	Applicant's Response
General		
General	The JSCs recognises that the Examining Authority has accepted the Applicants proposed project changes to its application for DCO for the Northern Runway Project. As requested in the Rule 8 letter, we wish to submit the following joint Written Representation in response to these proposed changes.	Noted.
Consultation	All four authorities responded to the consultation by the Applicant in January 2024, however we note that comments from Reigate and Banstead Borough Council, Tandridge District Council and Surrey County Council have not been included in the Consultation Report Addendum [AS-142, para 3.1.6].	The Applicant did not receive consultation feedback from Reigate and Banstead Borough Council, Tandridge District Council or Surrey County Council on the proposed changes consultation.
Consultation	Chapter 2 of Application document [AS-142] states at 2.1.2, that relevant Local Authorities (LAs) were consulted on the proposed changes. However, it is not transparent in specifying that LAs were not notified directly and individually, but via the Gatwick Officer Group, chaired by Crawley Borough Council (CBC) and GATCOM.	Through the Gatwick Officer Group, which the Joint Surrey Councils are a member of, the Councils were invited to the briefing session and consulted on the Project Changes. The Applicant considered this to be an adequate means by which the relevant JSCs were informed of the Project Changes.

Topic	Matter Raised	Applicant's Response
Consultation	There are a number of parishes who raised concerns that they were also not contacted and therefore prevented from commenting. No list of contacted consultees is included within either of the Consultation Responses documents [AS-142/3] and therefore the JSCs are unable to verify the extent and efficacy of the proposed consultation exercise with any certainty beyond our own experiences which were insufficient.	The list of Parish / Town Councils and Groups that were invited to the briefing session before the start of the consultation period are listed in paragraphs 2.2.2 to 2.2.3 of the **Consultation Report Addendum** [AS-142]. More generally, the approach to consultation was carried out in line with the **Notification Report** [AS-113] and taking account of the ExA's advice in its **Procedural Decision** [PD-008] dated 04 December 2023.
Consultation	The Applicant's processes in this matter are not considered to accord with good and robust consultation.	As explained in **Consultation Report Addendum** [AS-142] (paras 1.1.4 to 1.1.6), the consultation was carried out in line with the **Notification Report** [AS-113] and taking account of the ExA's advice in its **Procedural Decision** [PD-008] dated 04 December 2023. Within the **Procedural Decision** [PD-008], the ExA confirmed that the Applicant's proposed scope of consultation activities *"provides an appropriate basis for the non-statutory consultation".*
Project Change 1 – Extension to the design parameters for the NT IDL proposed southern extension		
General	The JSCs have no comments to make on this change.	Noted.
Project Change 2 – Reduction in height of the proposed replacement CARE facility and change in its purpose		
Waste Management	As Minerals and Waste Planning Authority for Surrey, SCC has particular interest in the changes proposed relating to the CARE facility. In our January 2024 response we requested that supplementary information be provided detailing the process of how such waste material would be taken off site, how the waste material would be transported to waste processing centre(s) and the distances involved, a list of the waste processing centre(s) which would be used, and the processes that would be used to the manage the waste. Similar queries were raised by the other JSCs.	An **Operational Waste Management Strategy** (OWMS) [REP3-073] was submitted at Deadline 3. The OWMS sets out existing waste arisings and management of waste from the Airport, with a final Operational Waste Management Plan to be submitted for approval in substantial accordance with the OWMS under DCO Requirement 25. The OWMS also includes forecasts of future baseline arisings and waste arisings with the Project. The proposed replacement CARE Facility will initially process waste from the Airport before it is sent off site for re-use, recycling, energy recovery and disposal. CAT 1 waste is sent to Newhaven Energy Recovery Facility (Mondays to Saturdays) and Chineham Energy Recovery Facility (Sundays). The waste management facilities that will be used to manage other types of waste will be set out in the Operational Waste Management Plan, as explained in the OWMS. Waste is only transported by registered waste carriers.
Waste Management Consultation	Table 5 of [AS-142] states that locations had been provided by the Applicant to those parties who had requested them, however, the JSCs have not received any information on this, despite this being asked for through responses to the Applicant-led consultation. This information has been withheld for unknown reasons and must be available for the Applicant to be able to identify the number of trips associated with the proposed change.	Table 5 of the **Consultation Report Addendum** [AS-142] states that two organisations requested information on the location of each change, i.e. the location of Project Changes 1 to 3, which was provided. However, the Applicant understands that this comment relates to the location of off-site waste processing facilities where material from the CARE facility is transported. On this matter, a response is provided in the row above.

Topic	Matter Raised	Applicant's Response
Waste Management	In the February 2024 change documents submitted by the Applicant, it is noted that some additional information regarding waste management has been provided, although there is still a noticeable lack of detail relating to the points set out above. The Change Application Report [As-139] states that the replacement CARE facility would be expected to generate approximately 6 additional vehicle movements per day (3 trips in and 3 trips out of the site). The level of vehicular movements is not particularly high and implies that the scale of waste transported offsite to be managed would not be of particular concern in the context of the capacity of existing facilities in Surrey and the other surrounding areas. However, no detail has been provided on the specific facilities that waste would be taken to, the distances materials would be transported or the type of waste management processes that would be used. Therefore, it is difficult to comment on the sustainability of the proposal. In this regard we would draw the applicant's attention to the proximity principle for waste management and the requirements of the waste hierarchy, as referenced in paragraphs 1 and 3 respectively of the National Planning Policy for Waste 2014.	The **Operational Waste Management Strategy** (OWMS) [REP3-073] was submitted at Deadline 3. Various waste management facilities are used to process operational waste from the Airport: e.g. CAT 1 waste is taken to Newhaven Energy Recovery Facility (Mondays to Saturdays) and Chineham Energy Recovery Facility (Sundays). Where possible, waste is taken to the closest facility that permitted and consented to manage that particular waste stream. Waste is only transported by registered waste carriers and the travel routes use the strategic road network. Forecasts of the future baseline waste arisings and the arisings with the Project are set out in the **OWMS** [REP3-073]. The waste will be managed in accordance with the waste hierarchy principle. The waste facilities used to manage the future operational waste arisings will be confirmed in the Operational Waste Management Plan that will be approved by the relevant planning authority under DCO Requirement 25 and substantially in accordance with the OWMS. The number of vehicle trips associated with waste varies according to the time of year and the type of waste being transported. During 2023, on average one vehicle a day transported CAT 1 waste from the Airport to Newhaven / Chineham Energy Recovery Facilities, however during the peak periods of summer, the number increased to three vehicles a day. Other wastes may be temporarily stored at the CARE facility until there is enough waste to fill a load to maximise load efficiencies. No new likely significant effects related to traffic and transport are expected as a result of the proposed change.
Waste Management	It is unclear how the export of waste from the site would contribute to Gatwick Airport's 2nd Decade of Change to 2030. Goal 9 seeks to; 'Ensure that by 2030 all materials used at Gatwick in operations, commercial activity and construction, are repurposed for beneficial use i.e. repaired, reused, donated, recycled, composted or converted to fuel for heating or transport. The now removed biomass boilers could have been contributing to Goal 6: Airport emissions, by making a contribution to Gatwick's heat network as part of its move towards reducing its Scope 1 emissions.	The **Operational Waste Management Strategy** (OWMS) [REP3-073], secured under DCO Requirement 25, sets a target that a minimum of 50% of municipal waste from the Airport will be diverted from landfill. The Project will seek to exceed this target by aiming for exemplar performance in waste management, to align with the principles of the EU Action Plan for the Circular Economy and the initiatives to achieve sustainable waste management in GAL's Second Decade of Change. Further detail on the proposed CARE facility and its relationship to the Second Decade of Change, alongside GAL's other waste management initiatives are set out in Section 5 of the **OWMS** [REP3-073]. Food waste that was managed in the biomass boilers is being diverted from landfill and is being recycled through anaerobic digestion.

Topic	Matter Raised	Applicant's Response
Waste Management	The Joint West Sussex LIR [REP1-069] sets out (at Paragraph 22.6) that the applicant should submit an outline operational waste management plan, which should include the necessary information to understand the amounts of operational waste expected, how waste will be managed with reference to targets and the Waste Hierarchy and should allow for the understanding of potential impacts. We agree that an outline operational waste management plan should form a requirement of the DCO.	The **Operational Waste Management Strategy** (OWMS) [REP3-073] was submitted at Deadline 3. The OWMS sets out the baseline waste arisings at the Airport and how the wastes are managed. Forecasts of waste for the future baseline and arisings with the Project are also set out in the OWMS together with a target to divert waste from landfill. The waste will be managed in accordance with the waste hierarchy principle. The waste facilities used to manage the future operational waste arisings will be confirmed in the Operational Waste Management Plan that will be approved by the relevant planning authority. Requirement 25 was added to the draft DCO at Deadline 3 stating that an Operational Waste Management Plan must be submitted to the relevant planning authority for approval within six months after the commencement of dual operations. The Operational Waste Management Plan will be in accordance with the **OWMS** [REP3-073] and Airport will be operated in accordance with the Plan unless otherwise agreed with the relevant planning authority.
Landscape and Visual	It is self-evident that the removal of the CARE facility stack and slight reduction in size of this building will reduce its visual impact from within Surrey, and this has been adequately addressed within the applicant's addendum LVIA information. The JSCs do welcome the lessening of air quality impacts.	Noted.
Project Change 3 – Revision to the proposed water treatment works		
Ecology	It is noticeable that the proposed reedbeds would undermine existing grassland ecology and risks attracting birds to the extended water environment. Such action appears to be at odds with current Gatwick Safeguarding advise on new development applications to local planning authorities.	The loss of the grassland habitats within the Land East of the Railway (LERL) biodiversity area to create the reed beds is mitigated through the extensive new grassland creation within Brook Farm. As set out in the **Outline Landscape and Ecology Management Plan** (oLEMP) [REP3-031, REP3-033 and REP3-035], the grassland within Brook Farm will comprise a similar neutral grassland mix that will be managed as wildflower grasslands. The LERL biodiversity area, which extends outside the Project boundary, will still include large areas of grassland of varying types but will also include reed bed habitats that are not currently present to any extent within the airport or surrounding landscape. As such, they will improve the overall habitat diversity present both on site and more broadly. Although they will form valuable habitats for a range of smaller bird species, the reed beds are designed to ensure that there is no open water that might attract wildfowl and will be maintained in this manner moving forwards. They are also located within an area of the site surrounded by mature tree lines that further limit their attractiveness to wildfowl. The concept of reed beds being built in this location

Topic	Matter Raised	Applicant's Response
		has been agreed with Gatwick Safeguarding and, as such, there is no increased risk of bird strike from their construction.

5 Joint West Sussex Councils

5.1.1. **Table 5.1** sets out the Applicant's response to the matters raised in the **Joint West Sussex Council's Written Representations on the Applicant's Proposal to Amend its DCO Application** [REP3-116], comprising responses from Crawley Borough Council, West Sussex County Council, Horsham District Council and Mid Sussex District Council.

5.1.2. In response to matters raised in the **Joint West Sussex Council's Written Representations on the Applicant's Proposal to Amend its DCO Application** [REP3-116], **Table 5.1** covers the matters raised in the **Councils' Written Representations Summary** [REP3-118].

Table 5.1 Response to Joint West Sussex Councils on the Project Changes 1-3

Topic	Matter Raised	Applicant's Response
Adequacy of Consultation		
Consultation	The Authorities are disappointed to note that despite responding to the Applicant with detailed points during its consultation period in January 2024, little additional information has been supplied to address the matters raised. Therefore, the Authorities are expressing in their comments below many concerns already raised with the Applicant. A copy of each Authorities' correspondence is attached as Appendix 1 at the end of this report.	Each consultation response received by the Applicant was reviewed, analysed and responded to through the **Consultation Report Addendum** [AS-142]. An explanation of the process of reviewing and analysing the consultation responses is provided in para 4.2.1 of the **Consultation Report Addendum** [AS-142], with the Applicant's response then set out in Tables 4 and 5. To avoid repetition, the tables set out the number of times a particular comment/issue was raised rather than repeating the comment/issue and the response.
Consultation	While the Applicant did revise the Project description in Chapter 5 Version 2 of its Environmental Statement (ES) [PDLA-007] at procedural Deadline A on 6 February 2024, it is noted that at that time it included the additional reed bed works compound prior to the submission of its change request. It also amended the description of the existing CARE building to update the fact that the current biomass boiler is no longer operational and therefore addressing some gaps in its change consultation information. As a consequence, it is considered that the revised project description and project change submission to Chapter 5 Version 3 [AS-134] is somewhat misleading as some information for this change application had already been fed into the DCO documentation. The changes introduced are not apparent in the most recent tracked change document Chapter 5 Version 4 [REP1-017]. It would have been more helpful to the Authorities if all relevant change application information had been submitted on one revision document on one date rather than incrementally.	No response required. The latest version (Version 4) of the **ES Chapter 5: Project Description** [REP1-017] provides the description of the Project taking account of the accepted Project Changes 1-3.
Project Change 1 – Extension to the design parameters for the NT IDL proposed southern extension		

Topic	Matter Raised	Applicant's Response
Project Description	The land is located on the south western side of North Terminal, to the east of Pier 5, north of Pier 4 and in its south-east corner is immediately north of the link bridge serving Pier 6 (Works Area 22 b). The extent of the land shown within the Works and Parameter Plan is covered by a mixture of airfield infrastructure including Piers, Commercially Important Passenger (CIP) Lounge, Circulation Building, various link routes and corridors and hardstanding. The proposed project change is set out in section 3.1 in GAL's Change Application Report [AS-139].	Noted.
Landscape and Visual Design	In visual terms there are no concerns with increased height and massing of the building as this is set well within the DCO project boundary and away from sensitive receptors such as residential uses. There is concern that there is still very limited information provided on the layout and visual appearance of the works and the impact this would have on the North Terminal. The Design and Access Statement Appendix 1 – Design Principles document [REP2-037] provides little information or control on the design of the building and the lack of design detail for works in general has been highlighted by the Authorities in the WSLIR [REP1-068] Section 24 and includes this project change (listed at paragraph 24.73). The Authorities fully support the request made by the ExA ExQ1 GEN 1.19 [PD-012] for GAL to provide further design information on this extension.	The Applicant notes that the Joint West Sussex Councils has no concerns with the increased height and massing of the extension building. The **Design Principles** [REP3-056] were updated at Deadline 3 in response to ExQ1 DCO.1.57 and which are secured under Requirement 4 of the Draft DCO [REP3-006]. The updated **Design Principles** [REP3-056] include specific built-form design principles (DBF1 and DBF2) for the North and South Terminal buildings, including the approximate floorspaces and design features of the extensions, such as matters relating to the appearance, materials and aspects from the buildings. The built-form design principles function alongside the project-wide principles in Table 1.11.1 of the **Design Principles** [REP3-056].
Water Environment	It is noted that the footprint of the works area has increased and, as the site is within Floodplain, the Applicant should ensure that this does not impact upon any assumptions and calculations made within its drainage strategy.	The footprint of the IDL is within the fluvial floodplain, however, the building is elevated so that the ground flood story is open and would not remove floodplain storage.
Project Change 2 – Reduction in height of the proposed replacement CARE facility and change in its purpose		
Project Description	This change (Works Area 9) proposes a decrease in the height of the building from 22m to 15m, the removal of 2 biomass boilers proposed within the building and the removal of the associated biomass boiler stack (with a maximum height of 48m) and changes to the phasing of the development of the CARE facility, now a single phase running from 2024-2029. All other parameters remain as described (footprint, maximum depth, and location) and further detail is set out in GAL's Change Application report section 4.1 [AS-139].	Noted.
Planning Policy	This change is considered significant as the Applicant is removing from its Project the potential to generate decentralised energy and has failed to demonstrate its compliance with adopted policy in the Crawley Borough Local Plan 2015-2030. Policy ENV7 encourages the promotion of decentralised energy networks to support new development within the Borough. The policy requires that:	The Applicant submitted a series of **Local Planning Policy Compliance Tables** [REP3-055] at Deadline 3. Annex A relates to Crawley Borough Council's local policies and sets out the Project's position against Policy ENV7 of the Crawley Borough Local Plan 2015-2030. This states: "*Policy ENV7 is listed in the Joint West Sussex Local Impact Report [REP1-068] (para 16.27 and 24.24 and page 248) as forming part of the policy context for the Project.*

Topic	Matter Raised	Applicant's Response
	"Any major development within the borough..... should demonstrate how they have considered the following hierarchy: *(i) where a network is in place in the immediate area: connect to an existing District Energy Network; or* *(ii) where a network is not yet in place, development should:* *(a) consider developing its own system for supplying energy to any surrounding existing or planned buildings. Any system installed should be compatible with a wider district energy network and developments should ensure that connection to a wider network is facilitated in the future through good design and site layout; or* *(b) consider how it may include site-wide communal energy systems; or* *(c) be "network ready", optimally designed to connect to a District Energy Network on construction or at some point after construction.* *An alternative approach to securing decentralised low carbon energy may be justified, on a case-by-case basis, where developments demonstrate that the objectives of Policy ENV7 cannot be achieved in line with the criteria above, due to technical or financial viability, or due to site or development specifics.* *All development subject to the requirements of Policy ENV7 must be supported through the submission of a Sustainability Statement in compliance with the Planning and Climate Change SPD."*	*The Project is not located within the allocated priority area for District Energy Networks.* *Notwithstanding this, ES Appendix 5.4.2: Carbon Action Plan [APP-091] incorporates an ABAGO carbon reduction measure for considering the viability of developing a heat network for the airport. The Project therefore does not conflict with the aspirations of Policy ENV7."*
Planning Policy	Furthermore, the Modifications Crawley Borough Local Plan policy SDC2 states: "*The development of district energy networks and associated infrastructure is encouraged and should be approved unless it results in significant adverse impacts on the environs..... Any major development within the borough meeting the thresholds for submitting a Sustainability Statement detailed in Policy SDC1....., must incorporate an energy strategy developed in accordance with the following hierarchy:* *i. where a network is in place in the immediate area: connect to an existing District Energy Network;* *ii. where a network is not yet in place:* *a) incorporate within the development a system for supplying energy to any surrounding existing or planned buildings. Any system installed should be layout; or* *b) include site-wide communal energy systems; or* *c) demonstrate that the development will be "network ready", i.e. optimally designed to connect to a District Energy Network on construction or at some point after construction.* *iii. where a development has demonstrated that the preceding options*	As above, the Applicant submitted a series of **Local Planning Policy Compliance Tables** [REP3-055] at Deadline 3. Annex A relates to Crawley Borough Council's local policies and sets out the Project's position against Draft Policy SDC2 of the emerging Crawley Borough Local Plan 2030-2040. This states: "*Draft Policy SDC2 is listed in the Joint West Sussex Local Impact Report [REP1-068] (para 7.13 and 24.35 and pages 52 to 53) as forming part of the policy context for the Project.* *The Project is not located within the allocated priority area for District Energy Networks.* *Notwithstanding this, ES Appendix 5.4.2: Carbon Action Plan [APP-091] incorporates an ABAGO carbon reduction measure for considering the viability of developing a heat network for the airport. The Project therefore does not conflict with the aspirations of Draft Policy SDC2."*

Topic	Matter Raised	Applicant's Response
	cannot be achieved, due to technical feasibility, or due to site or development specifics, an alternative approach to incorporating low- or zero-carbon technology energy may be justified, on a case-by-case basis. *These developments will be required to supply a proportion of their regulated energy needs from low- or zero-carbon sources located on or near the site as follows:* *a) For major developments within a DEN priority area: at least 20%;* *b) For major developments outside a DEN priority area, ...at least 10%.* *Where a connection to an existing District Energy Network is proposed, the council may secure the implementation of this by means of a planning obligation. All development within the categories identified above must be supported through the submission of a Sustainability Statement in compliance with the Planning and Climate Change SPD".*	
Planning Policy	The DCO as originally submitted was considered by the Authorities to address this policy as while the details provided were limited, the proposed biomass boilers were providing an element of decentralised energy for the Project. It is now unclear how GAL intends to address policy ENV7 or meet its sustainability goals with the biomass boilers removed from the CARE facility building. CBC raised this matter at consultation stage and notes that there is no reference to the policy in the Applicant's Project Change submission or any explanation as to how this change improves the sustainability of the airport. The Applicant is requested to explain how this addresses policy ENV7 and to supply further information to explain what is being done to mitigate for the loss of the biomass facility. It is noted that the Carbon Action Plan has not been amended and it is unclear how this change impacts upon the airport's sustainability targets.	Please refer to the Applicant's response above regarding adopted CBC Policy ENV7.
General	The removal of the biomass boilers is a significant project change, which would result in a greater amount of waste requiring management off-site (para 4.2.2 of the Change Application Report 9.2 [AS-139]), with the proposed CARE facility only being used as a Material Recycling Facility (MRF) for the sorting of waste. There are some benefits to the changes: ▪ Visual impact and landscape views, as there would no longer be a 48m stack and the building height would be lower (Table 4 of the Change Application Report 9.2[AS-139]); ▪ Potentially lower in Air Quality impacts from removal of boilers (Table 4 of the Change Application Report 9.2[AS-139]); and ▪ The Applicant references health and well-being improvements as a result of these project changes; Effects on air quality would be similar or improved for public health compared to that predicted in the ES (Table 4 of the Change Application Report 9.2[AS-139]).	As explained in para 4.2.1 of the **Change Application Repor**t [AS-139], the biomass boilers were switched off in 2019 as a result of the Covid-19 pandemic and waste material has been taken off-airport to dedicated waste processing centre(s) since then. The removal of the biomass boilers is therefore not considered to be a significant project change, given they have not been in use for circa 4 years, and acknowledging the change has now been accepted by the ExA. The Applicant's welcomes the list of benefits recognised by the Joint West Sussex Councils.
Waste Management Design	The Authorities raised a number of concerns relating to the CARE facility building (as originally submitted) within the WSLIR [REP1-068] and many	Each point is responded to in turn:

Topic	Matter Raised	Applicant's Response
Planning Policy	remain valid when considering the project changes: ▪ There is no baseline information provided on current operations (para 22.28 and 22.37, REP1-068), including: ◦ No tonnages, information on waste steams etc per annum, how much is managed on-site/off-site; ◦ Hours of operation of existing facility (and proposed); ◦ Existing technologies; and ◦ Existing mitigation measures. ▪ There are no waste projections/forecasting (with and without the NRP) that would enable understanding the needs of the airport (paras 22.28 and 22.37, REP1-068). ▪ There is limited information provided on the proposed technologies and whether they are consistent with the waste hierarchy (para 22.29, REP1-068). ▪ Limited information is provided on design within the Design and Access Statement/Design Principles (paras 22.35-22.36, REP1-068). ▪ There are no links to local planning policy [para 22.34, REP1-068].	▪ Baseline information – baseline waste arisings and forecasting is set out in the **Operational Waste Management Strategy** [REP3-073]. ▪ Proposed Technologies and Waste Hierarchy – waste will be managed in accordance with the waste hierarchy. The list of waste technologies that will be used for the management of operational waste at the Airport will be set out in the Operational Waste Management Plan. ▪ Design information – the Applicant disagrees. Design material on the replacement CARE facility is contained in Section 5.6.4 of the **Design and Access Statement (Volume 3)** [REP2-034] including a CGI image, indicative massing drawing and a ground floor plan. These can be read alongside the updated **Design Principles** [REP3-056] and figures within the **Change Application Report** [AS-139]. ▪ Local Planning Policy – as above, the Applicant submitted a series of **Local Planning Policy Compliance Tables** [REP3-055] at Deadline 3.
Waste Management	Following the acceptance of the changes, there are further issues of concern as follows: ▪ All waste would now require management off-site, which has implications on traffic and transport (see comments below); ▪ How will the Applicant ensure that waste is managed in line with the Waste Hierarchy, given that it would all be exported? ▪ How far would the HGVs have to travel to waste sites? ▪ What sorting technologies are proposed to be used?	As described in the **Operational Waste Management Strategy** (OWMS) [REP3-073], operational waste is currently processed in the existing CARE Facility. The biomass boilers at the existing CARE facility were only used to manage food waste and a proportion of CAT 1 waste (subject to levels of contamination). The remainder of waste is taken off site for re-use, recycling or energy recovery and a small proportion is sent for disposal. The biomass boilers were switched off during 2019 due to insufficient quantities of organic waste being generated at the Airport, making the boilers inefficient. The boilers have not been switched back on since. Food waste has been taken off site to be recycled via anaerobic digestion and the other waste streams continue to be processed off site. An Operational Waste Management Plan will be prepared and approved by the relevant planning authority, as secured through Requirement 25 of the **Draft DCO** [REP3-006]. The Plan must be substantially in accordance with the OWMS, which states that operational waste will be managed in accordance with the waste hierarchy. The waste management facilities to be used will be set out in the Operational Waste Management Plan.
Waste Management	The project change proposes the removal of the incineration of waste by changing the replacement CARE facility to become a waste sorting facility only. This would result in waste material being taken off-airport to a dedicated waste processing centre. The proposed change would result in waste material being taken off-airport, where previously it would be managed within the airport, this is	Operational waste from the Airport will be managed in accordance the **Operational Waste Management Strategy** (OWMS) [REP3-073]. The biomass boilers at the existing CARE facility were only used to manage food waste and a proportion of CAT 1 waste (subject to levels of contamination). The remainder of waste is taken off site for re-use, recycling or energy recovery

Topic	Matter Raised	Applicant's Response
	going to result in an increase in vehicle movements associated with the CARE facility.	and a small proportion is sent for disposal. The biomass boilers were switched off during 2019 due to insufficient quantities of organic waste being generated at the Airport, making the boilers inefficient. The boilers have not been switched back on since. Food waste has been taken off site to be recycled via anaerobic digestion and the other waste streams continue to be processed off site. Various waste management facilities are used to process operational waste from the Airport: e.g. CAT 1 waste is taken to Newhaven Energy Recovery Facility (Mondays to Saturdays) and Chineham Energy Recovery Facility (Sundays). Where possible, waste is taken to the closest facility that permitted and consented to manage that particular waste stream. Waste is only transported by registered waste carriers and the travel routes use the strategic road network. Forecasts of the future baseline waste arisings and the arisings with the Project are set out in the **OWMS** [REP3-073]. The waste will be managed in accordance with the waste hierarchy principle. The waste facilities used to manage the future operational waste arisings will be confirmed in the Operational Waste Management Plan that will be approved by the relevant planning authority under DCO Requirement 25 and in substantial accordance with the OWMS. The number of vehicle trips associated with waste varies according to the time of year and the type of waste being transported. During 2023, on average one vehicle a day transported CAT 1 waste from the Airport to Newhaven / Chineham Energy Recovery Facilities, however, during the peak periods of summer, the number increased to three vehicles a day. Other wastes may be temporarily stored at the CARE facility until there is enough waste to fill a load to maximise load efficiencies. Table 4 of the **Change Application Report** [AS-139] notes that there would be fewer than six vehicle trips a day associated with the replacement CARE facility when in operation. This level of traffic is not expected to be perceptible on the highway network.
Traffic and Transport	The Applicant has concluded that the project change would not materially result in an increase in construction or operational trips stating that the operational trips, are expected to be small, in the region of six vehicles trips a day. The Applicant, however, does not provide supporting information or an explanation, including tonnage information, to help justify why this number of vehicles a day are required. This additional information is required to fully understand the impact of the proposals and explain how the CARE facility is going to operate in practice.	Information on forecast waste tonnages of operational waste from the Airport (future baseline and with the Project scenarios) is set out in the **Operational Waste Management Strategy** [REP3-073].

Topic	Matter Raised	Applicant's Response
Waste Management	The Applicant has explained that the waste vehicle movements occur on the strategic road network, where possible and appropriate, and that Project Change 2 would not materially change the existing routes used by waste management vehicles. However, the Authorities previously asked where the waste was likely to be taken when travelling off-site. The location of the waste management facilities has not been provided. This information would assist in understanding the most likely routes waste vehicles would take.	Operational waste from the Airport is initially processed in the existing CARE Facility before it is sent for re-use, recycling, energy recovery or disposal off-site. The proposed CARE Facility will perform a similar function. Management of existing and future waste arisings is described in the **Operational Waste Management Strategy** [REP3-073].
Project Change 3 – Revision to the proposed water treatment works		
Project Description.	Project Change 3 proposes to change from the originally proposed surface water treatment works (a Moving Bed Biofilm Reactor plant solution) to a constructed wetland (reed bed) solution. The area required for the water treatment works would increase from up to 5,600m2 to approximately 16,000m2. Six reedbed areas are proposed to be created along with the accompanying plant comprising a blower kiosk enclosed by an acoustic fence, a cabin and storage unit and a site access with car park.	Noted.
General	The Authorities note the key environmental constraints for this works site including that the land is managed as a Biodiversity Area (designated under policies ENV1 and ENV2 of the Crawley Borough Local Plan), the existence of trees protected by a Tree Preservation Order to the southwest and that the site is a known archaeological area (Iron Age Cremation Cemetery) which the Applicant has acknowledged would have a potential major adverse impact. It is also close to Public Rights of Way, is adjacent to Crawley Sewage Treatment Works to the north and there are residential properties (closest approximately 100m from the works boundary) and a traveller site to the south (approximately 55m from the works boundary).	Noted.
Design Construction	The Applicant also refers to the requirement for a temporary (0.5 hectare) construction compound. The only diagrammatic reference to the temporary compound is on ES Figure 5.2.1f Rev 2 [AS-135] which shows its location to the west of the reedbeds, this conflicts with the written information in the ES Chapter 5 paragraph 5.3.113 [REP1-017] which suggests the compound is located to the north-east of the reedbeds. The Authorities request further information on the precise location of the compound and further information on its visual appearance including any groundworks and tree/landscape clearance, compound layout, means of access to the land, as well as detail on how the site would be operated.	The correct location of the temporary construction compound associated with the reed beds is shown on **ES Figure 5.2.1f** [AS-135] and within Figure 59 of the **Buildability Report (Part A)** [REP2-013], to the west of the reed beds. The temporary compound will be for the construction of the reed beds only. The layout of the compound will be developed by the construction contractor after completion of the detail design; however, it is likely to include circa 6 site cabins (toilets, mess facilities, drying rooms, office and secure storage). The compound area is currently grassland, it will be levelled and a hardstanding area constructed and a security fence installed on the perimeter. A detailed survey of the existing trees will be completed to ensure the route between the compound and the worksite is designed and constructed to minimise any impact.
Design Construction	The Authorities are concerned about the lack of detail as the illustrative information [AS-139] suggest a fairly flat landscaped reedbed while the	The current outline design anticipates an excavation depth of approximately 1.6m and a fill height of approximately 2.0m. During the detailed design stage,

Topic	Matter Raised	Applicant's Response
	parameter plans [AS-131] show the works are up to 3m high and the permanent cabin and storage facilities for the reedbeds up to 4m high. There is no information on current site levels, the amount of excavation and engineering needed to excavate the reedbeds and whether any soil would be retained and reused at the site or exported elsewhere. The final profile of the reedbeds and how they relate to the wider landscape setting (including any protected trees) is unclear, as is the depth of the lagoons and whether more fencing than is shown will be required to restrict access to the reedbeds. It is not clear whether the fencing shown is a realistic representation of what would be delivered. It is noted that the other nearby pollution control lagoons are fenced and netted to deter birds but the Applicant has not indicated the likely visual appearance and finish of the reed beds, the site car park, cabin storage and blowers.	the Applicant will endeavour to minimise the need to import / export material to this working area. The detailed design will be developed once the DCO has been confirmed in accordance with the **Design Principles** [REP3-056] and will include the following: landscaping, additional fencing, netting to deter birds, arrangements for ongoing operations and maintenance activities.
Water Environment	A constructed wetland solution is a preferred method for water treatment compared to the originally proposed Moving Bed Biofilm Reactor Plant Solution, as it would provide additional biodiversity benefits and is likely to be more carbon efficient. However, the Authorities consider there is currently insufficient detail provided to demonstrate that there would be no impact on flood risk to the site or elsewhere. Evidence should be provided demonstrate that the reedbeds could draw 100 l/sec from the de-icer pollution storage lagoons.	The inflow from the lagoons would be limited to 100l/s where it would be treated prior to discharge to the Gatwick Stream, as secured by Design Principle DDP14 of the **Design Principles** [REP3-056] under DCO Requirement 4. The inflow is limited and levelled (attenuated) via the storage provided by the lagoons to avoid overwhelming the treatment system. The outflow from the treatment system would be discharged to the Gatwick Stream via an existing overflow pipe from the lagoons. If the effluent is of insufficient quality, it would be pumped back to the lagoons and passed through the treatment system again for further treatment. The discharge will require a new discharge consent and detailed Operating Technique consented by the Environment Agency that will stipulate the minimum quality the effluent needs to meet to be discharged to the Gatwick Stream. This is anticipated by Gatwick to be more stringent than the existing discharge consent for Crawley STW. The Operating Technique will also stipulate how the system must be maintained to ensure it remains effective. The size of the reed beds incorporates redundancy, the system would still be able to meet the water quality treatment criteria if one of the three treatment beds was out of action (e.g. for maintenance). Aerated wetlands are attached growth biological reactors designed for accelerated degradation of organic compounds such as de-icing chemicals. Naturally occurring bacteria attach to the surfaces of the gravel media forming biofilms. The wastewater is distributed across the surface area of the beds subsequently percolating vertically down through the saturated gravel media. Retention within the media provides sufficient contact between the contaminants and the biofilms, resulting in biological contaminant degradation and reduced concentrations of organic matter (BOD5, COD & TOC) in the

Topic	Matter Raised	Applicant's Response
		treated effluent. The degradation is more efficient under aerobic conditions and the Forced Bed Aeration (FBA™) system will be designed to evenly distribute oxygen across the entire working volume of media to maintain aerobic conditions when necessary. The reed beds will be lined to prevent any ingress of groundwater or exfiltration of potentially untreated or partially treated effluent into the surrounding ground. This technology is tried and tested and is used at Heathrow Airport to treat deicer contaminated runoff for over 10 years. The existing long-term storage lagoons have a combined capacity of 320,000m^3. They gradually fill as de-icer is applied across the airfield from typically October to April, and then they currently drain to empty during August each year. The constant outflow of 100l/s equates to 8,640m^3 per day flowing to the new treatment system. With the Project, this approach would be adapted by GAL to ensure that there is sufficient water in the storage lagoons to ensure the health of the treatment system, particularly during late summer months.
Water Environment Alternatives	The Authorities seek clarification on the following matters: ▪ Paragraph 5.1.2 in the Project Change document [AS-139] mentions that the proposed water treatment works will increase in footprint due to an additional area of land for the reed bed system and an additional temporary construction compound. Paragraph 5.1.9 [AS-139] also states that a cabin, secure storage unit and car parking area will be needed. It is unclear from the information submitted by the Applicant whether the addition of these structures will increase the impermeable area of the water treatment works and, if so, whether this been considered in the surface water drainage model and calculations for the proposed development site. ▪ Table 6 [AS-139] indicates that there will not be a flood risk interaction as the proposed works are located outside of the floodplain of the Gatwick Stream. The Authorities request clarification as to whether the proposed works are also located outside of an area at risk of surface water flooding. ▪ Further layout details should be provided for the proposed water treatment works, such as the locations of any structures (temporary or permanent) and proposed drainage arrangements including the outfall location. ▪ Further detail is required to understand if the Applicant has considered the use of a constructed reedbed wetland solution for water treatment elsewhere in the DCO Limits. The Authorities consider this would be beneficial in place of the new pumping station proposed in the southwest	The Applicant responds to each point in turn: • Drainage from the temporary construction compound would be subject to the same limits as others included in the Project and would therefore follow the requirements of the **ES Appendix 5.3.2 Annex 1 – Water Management Plan** [REP3-020]. The permanent works are considered small enough not to require a permanent drainage system, car parking would be of reinforced grass to replicate the natural conditions. The site is located within an area of clay geology and therefore would not be anticipated to alter the existing discharge characteristics. • A review of the Environment Agency's long-term flood risk service indicates that the location is not within an area at risk of surface water flooding. • An aerial design of the new treatment system was provided at Figure 8 to the **Change Application Report** [AS-139], with labels to identify the various components of the system. • GAL responded to the query relating to the new pumping station in **The Applicant's Response to the Local Impact Reports** [REP3-078]. A reed bed in such close proximity to the runway would not be acceptable to airport safeguarding. In comparison the proposed location for the de-icer treatment wetland is acceptable because the reeds would 'disguise'

Topic	Matter Raised	Applicant's Response
	zone, south of the existing runway in the former Pond A catchment, to remove the need for a pumping station (see paragraph 10.46 and 10.47 in the WSLIR [REP1-068]. ▪ The Applicant is also requested to provide further information on water quality and measures to ensure that surrounding water courses are protected from the de-icer and pollution from the existing pollution storage lagoons which are proposed to be treated by the reedbeds.	the water to wild fowl and it is in a lower risk location from a safeguarding perspective. • The operation of the new treatment system includes a water quality monitoring system prior to the discharge to the outfall pipe to the Gatwick Stream, so that effluent of insufficient quality would be returned to the storage lagoons for further treatment.
Ecology	In principle, a reedbed is likely to be a more environmentally sustainable solution, which could deliver some ecological benefits provided that the right location can be found. However, the site lies within the "Land East of the Railway Line (LERL)" Biodiversity Area. This land is currently known to be of biodiversity interest and is managed by the Applicant to maintain and enhance its biodiversity value. The area falls within the DCO Limits and is included in the Phase 1 Habitat Survey [APP-048, Fig. 9.6.3], where it is recorded as semi-improved neutral grassland. This habitat type is of value and of limited extent within the DCO Limits.	The loss of the grassland habitats within the Land East of the Railway (LERL) biodiversity area to create the reed beds is mitigated through the extensive new grassland creation within Brook Farm. As set out in the **Outline Landscape and Ecology Management Plan** (oLEMP) [REP3-031, REP3-033, REP3-035], the grassland within Brook Farm will comprise a similar neutral grassland mix that will be managed as wildflower grasslands. As such, the overall resource of this grassland type within the Airport will be retained. The LERL biodiversity area will still include large areas of grassland of varying types but will also include reed bed habitats that are not currently present to any extent within the airport or surrounding landscape. As such, the inclusion of reed beds will improve the overall habitat diversity present both within the LERL and more broadly.
Ecology Water Environment	The Authorities are unable to assess the potential ecological impacts without further information. The schematic drawing showing blocks of reedbeds is of limited use and further information is needed to understand the construction of the reedbeds. Furthermore, there is no information on the drainage arrangements, including water supply to feed and maintain the reedbeds, and where the outflow would be discharged. It is presumed that the water quality would need to be regularly monitored at both the inflow and outflow to the reedbed filtration system however this detail is not provided by the Applicants.	The inflow from the lagoons would be limited to 100l/s where it would be treated prior to discharge to the Gatwick Stream, as secured by Design Principle DDP14 of the **Design Principles** [REP3-056] under DCO Requirement 4. The inflow is limited and levelled (attenuated) via the storage provided by the lagoons to avoid overwhelming the treatment system. The outflow from the treatment system would be discharged to the Gatwick Stream via an existing overflow pipe from the lagoons. If the effluent is of insufficient quality, it would be pumped back to the lagoons and passed through the treatment system again for further treatment. The discharge will require a new discharge consent and detailed Operating Technique consented by the Environment Agency that will stipulate the minimum quality the effluent needs to meet to be discharged to the Gatwick Stream. This is anticipated by Gatwick to be more stringent than the existing discharge consent for Crawley STW. The Operating Technique will also stipulate how the system must be maintained to ensure it remains effective. The size of the reed beds incorporates redundancy, the system would still be able to meet the water quality treatment criteria if one of the three treatment beds was out of action (e.g. for maintenance).

Topic	Matter Raised	Applicant's Response
		Aerated wetlands are attached growth biological reactors designed for accelerated degradation of organic compounds such as de-icing chemicals. Naturally occurring bacteria attach to the surfaces of the gravel media forming biofilms. The wastewater is distributed across the surface area of the beds subsequently percolating vertically down through the saturated gravel media. Retention within the media provides sufficient contact between the contaminants and the biofilms, resulting in biological contaminant degradation and reduced concentrations of organic matter (BOD5, COD & TOC) in the treated effluent. The degradation is more efficient under aerobic conditions and the Forced Bed Aeration (FBA™) system will be designed to evenly distribute oxygen across the entire working volume of media to maintain aerobic conditions when necessary. The reed beds will be lined to prevent any ingress of groundwater or exfiltration of potentially untreated or partially treated effluent into the surrounding ground. This technology is tried and tested and is used at Heathrow Airport to treat deicer contaminated runoff for over 10 years.
Ecology	The proposed location of the construction compound comprises semi-improved neutral grassland which also lies within the LERL Biodiversity Area. There is no information provided on habitat reinstatement. The Authorities would expect the area to be reinstated to species-rich grassland.	Details of the reinstatement of the grassland within the construction compound post development will be set out within the LEMP for that area, which must be substantially in accordance with the principals within the **Outline Landscape and Ecology Management Plan** [REP3-031, REP3-033, REP3-035]. It is intended that the reinstatement in this area will be as species-rich grassland.
Ecology	The Authorities seek detailed information on the current biodiversity value of the area, precisely what habitats and features would be lost, mitigation, compensation and enhancement, and measures for long-term management.	As set out in Section A3 of **ES Appendix 9.6.2 Ecology Survey Report** [APP-125 to APP-130], the area where the reed bed is proposed currently comprises a series of semi-improved neutral grassland fields. These are dominated by false oat grass with areas of ruderals present. The grasslands are managed for a taller sward structure. As set out in Section 3 of **ES Appendix 9.9.2 Biodiversity Net Gain Statement** submitted at Deadline 2 to account for the change to a reedbed in this location [REP2-029], circa 1.295ha of grassland will be lost with the grassland considered to be of moderate habitat condition. Of this loss, 0.475ha will be reinstated around the reedbeds. The loss of this grassland will be mitigated through the creation of grassland within Brook Farm that will be a similar neutral grassland mix. Management of the reed beds will be as per both the supplier's instructions and the general principles set out within Annex 2 Landscape Maintenance Schedule

Topic	Matter Raised	Applicant's Response
		of the **Outline Landscape and Ecology Management Plan** [REP3-031, REP3-033, REP3-035].
Construction	The Applicant has indicated in ES Project Description Figure 5.2.1f, Proposed Temporary Construction Compounds, that an additional Reed Bed Treatment System Compound is to be provided to cater for the construction of the reed bed. The Authorities previously asked for clarification as to the means of access to this compound. It is noted that the Applicant states the means of access will be provided if the project change is accepted by the ExA. The access appears to be from Radford Road but clarification from the Applicant is still required. Should access be taken from Radford Road the Authorities wish to fully understand the implications of the proposed change on construction routing. The Outline Construction Traffic Management Plan (OCTMP) [APP-085] states at paragraph 6.4.1 that, "*The usage of local roads will be restricted for construction vehicle access to minimise disruption to local communities and traffic*." The OCTMP identifies Radford Road as a Restricted Use access, meaning that it would only be used where local suppliers need to use it, for emergency use or where construction is happening on the local road network. The project change appears to alter the status of Radford Road meaning that it could be used as a primary construction route to access the Reedbed Compound. Clarification is sought from the Applicant.	The inclusion of the reed bed compound in Table 4.1 of the **Code of Construction Practice** (Doc Ref. 5.3) was made in error as it is not a main temporary construction compound and has been removed in the updated CoCP submitted at Deadline 4. The detailed Construction Traffic Management Plan (CTMP) will be developed once the DCO has been consented and will be subject to consultation and approval by the applicable Highway Authority, in accordance with Requirement 12 of the **Draft DCO** [REP3-006]. The CTMP will consider the most appropriate construction traffic routes and any mitigation measures that may need to be put in place on the use of local roads
Traffic and Transport	The Applicant states in the Change Application Report [AS-139], that the peak construction associated with the reeds bed would be over a three-month period. During the peak construction period, there would be approximately one to two HGV movements an hour. Although construction would take place earlier than assumed in the Application, the Applicant concludes that this level of vehicle trips would not change the effects identified in the ES chapter for the period of airfield construction. However, it is not clear from the information provided what the total additional construction vehicle numbers associated with this project change would be.	Table 6 of the **Change Application Report** [AS-139] explains that there would be one to two construction HGV movements an hour related to the construction of the reed beds. For clarity, this relates to a total number of movements. It is expected that there would be around 220 vehicles arriving and 220 vehicles departing (440 vehicle movements in total) per month associated with construction of the water treatment works. This represents a very small number of HGV movements when considered in the context of the construction of the Project as a whole which would not have a material impact on the outcomes of the assessment presented in **ES Chapter 12: Traffic and Transport** [REP3-106].
Traffic and Transport	The Applicant states that "*there would be approximately one to two HGV movements an hour in the 3-month construction period for the reed bed construction*". It is not clear whether this is the total number of movements or the additional number of movements above that associated with the previously proposed moving bed biofilm reactor plant solution. It is also not clear if the one to two movements an hour is a one-way movement and that in actuality all HGV movements would make two-way movements (into and out of the site) and therefore the total number of movements would be doubled. The Applicant should provide detail of the total number of vehicle movements associated with the	Table 6 of the **Change Application Report** [AS-139] explains that there would be one to two construction HGV movements an hour related to the construction of the reed beds. For clarity, this relates to a total number of movements. It is expected that there would be around 220 vehicles arriving and 220 vehicles departing (440 vehicle movements in total) per month associated with construction of the water treatment works. This represents a very small number of HGV movements when considered in the context of the construction of the Project as a whole which would not have a material impact on the outcomes of

Topic	Matter Raised	Applicant's Response
	reedbed solution and the likely difference in vehicle movements associated with the reedbed solution, compared to that with the previously proposed moving bed bio-film reactor plant solution.	the assessment presented in **ES Chapter 12: Traffic and Transport** [REP3-106].
Air Quality	The Authorities note that the submitted air quality assessment for Project Change 3 [AS-141] relates only to Non-Road Mobile Machinery activity during the reedbed construction period. The Authorities remain concerned about odour emissions from the reedbeds as the Applicant states in paragraph 5.1.11 [AS-139] that blowers are required to be operated particularly in the winter months to ensure the de-icers are so degraded that there would be no odour.	The Applicant has considered odour in the environmental assessment of Project Change 3 in Table 6 and in Paragraph 5.1.11 of the **Change Application Report** [AS-139]. Paragraph 5.1.11 sets out that the reed beds would be inspected weekly during the winter and any necessary maintenance would be carried out. As set out in the **Mitigation Route Map** [REP2-012], best practice measures would be followed in the maintenance of the constructed wetland (reed bed) systems to minimise any potential odour effects.
Air Quality	The Authorities have previously requested further information on the proposed reedbed technology and potential odour nuisance to nearby residents and users of the adjoining public footpaths. Further detail is required on odour and gas emissions from the reedbeds. The Authorities also request that the Applicant provides information on how it proposes to ensure the blowers are effectively maintained to ensure odour levels are controlled.	The Applicant has considered odour in the Environmental Assessment of Project Change 3 in Table 6 and in Paragraph 5.1.11 of the **Change Application Report** [AS-139]. Paragraph 5.1.11 sets out that there would be no associated odour of the reed beds. The reed beds would be inspected weekly during the winter and any necessary maintenance would be carried out to ensure the blowers are operating correctly. As set out in the **Mitigation Route Map** [REP2-012], best practice measures would be followed in the maintenance of the constructed wetland (reed bed) systems to minimise any potential odour effects.
Air Quality	Further detailed information should also be provided on dust management for the works.	The Applicant has considered odour in the Environmental Assessment of Project Change 3 in Table 6 of the **Change Application Report** [AS-139]. Dust management for the construction of the works will follow the mitigation and monitoring of dust included in the **Code of Construction Practice** (CoCP) [REP1-021], to be secured under the requirements of the DCO. A Construction Dust Management Plan for the works will be prepared in accordance with the CoCP to reflect any site-specific conditions or measures to mitigate dust impacts.
Noise	The Authorities note that very limited acoustic information has been provided on construction noise and vibration impacts. The report is considered to be of limited value as there are no maps or plans to accompany Appendix D showing precisely where the noise measurements have been taken from or where the proposed 2.4 high metre acoustic barrier would be positioned or what it would be constructed of. CBC property mapping does not show a Hoots Cottage or Hoots	The Baseline and Receptors section in **ES Chapter 14: Noise and Vibration** [APP-] identified the location of Hoots Cottage as follows: *Baseline noise levels were measured at Hoots Cottage, Radford Road, approximately 170m east along Radford Road. ES Appendix 14.9.6 Baseline Noise Survey Report gives details of the survey and results, referring to the Hoots Cottage site as Location 15.*

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	Lane in Radford Road and, therefore, is unclear where these measurements are taken from. Further detail is required to verify the information.	ES Appendix 14.9.6 describes the survey location on page 6; Hoots Cottage is located approximately 300 metres west down Radford Road from the junction with Balcombe Road. The property is on the south side of Radford Road giving the coordinates as (OSGB36 Grid Ref. 529554 139832) and shows it in Figure 16. The Construction Noise and Vibration section describes the noise barrier as follows: *Noise modelling shows a 2.4m high noise barrier located along the south side of the southern pond construction area*. The exact location will be determined by the contractor in accordance with the CoCP requirement. No significant noise impacts are reported.
Noise	The Applicant's conclusions on noise are based on the assumption that works would take place during daytime hours. The restriction of construction operation hours for this sensitive area are supported but it is unclear to the Authorities how the Applicant intends to incorporate such a control into the DCO.	Work is not required outside of normal working hours, so in accordance with the **Code of Construction Practice** (Doc Ref. 5.3) no work will take place during night-time hours. If it were, the Council would be consulted for prior approval under Section 61 of the Control of Pollution Act 1974 and could consider restricting the hours if needed.
Noise	The information on the noise blowers is also very limited, along with any acoustic hoods and enclosures. Without seeing detail of the equipment, the Authorities cannot verify the assumptions within the acoustic report and are not satisfied that there are no adverse noise impacts from the development on nearby occupiers. The Applicant should also provide additional information on the maintenance of the blowers in order for the Authorities to be satisfied that these can be operated within the specified acoustic levels and remain in good working order to mitigate odour.	Based on the treatment requirements, calculated oxygen demand and airflow rates, the indicative calculated power requirements are 30kW per pair of wetland cells (90kW in total). The proposed blowers are positive displacement blowers housed within acoustic enclosures with approximate dimensions of 2.5m x 2.0m x 2.m (L x W x H) and can operate at 75dB(A) (one meter distance with acoustic hood closed) as indicated by the example supplier's data below.

Topic	Matter Raised	Applicant's Response
		 **Type** Positive displacement blower **Design** Overpressure **Volume flow** 30 bis 14.640 m³/h **Overpressure** up to 1.000 mbar **Conveying medium** Air, Neutral gases **Handling** oil-free *Figure:* *Delta Blower GM 25 S - Assembly without acoustic hood* **Performance data - DELTA BLOWER - overpressure operation**

Blower size	Differential pressure max. mbar	Volume flow max. m³/h *	Motor rating max. kW	Sound pressure level max. dB(A) **
GM 3 S	1000	240	11	70
GM 4 S	1000	334	15	70
GM 7 L	700	488	15	70
GM 10 S / DN 80	1000	600	30	72
GM 10 S / DN 100	1000	684	30	72
GM 15 L	700	1020	30	72
GM 25 S	1000	1446	55	73
GM 30 L	700	2058	75	75
GM 35 S	1000	2388	90	75
GM 50 L	700	3288	90	76
GM 60 S	1000	3528	132	78
GM 80 L	700	4968	160	80
GM 90 S	1000	5352	200	81
GM 100 S	1000	6288	250	82
GM 130 L	700	7920	250	84
GM 150 S	1000	9000	355	84
GM 220 L	600	12570	315	84
GM 240 S	800	14640	500	86

** Volume flow (corresponds to the delivery volume flow measured according to ISO 1217 and converted to the reference suction conditions according to the (informative) Annex F of ISO 1217 (inlet pressure = 1.0 bar / inlet temperature = 20°C, RH = 0%))*
*** Machine noise at a distance of 1m with acoustic hood and connected, insulated pipe, tolerance ± 2 dB(A)*

Cumulative Impacts	Crawley Sewage Treatment works are located to the north of this works site and has its access to Radford Road along the eastern side of the site. The proposed works would potentially reduce the ability to expand the capacity of the treatment works to meet increasing demand, including from the growth of the airport, planned growth with Crawley such as Gatwick Green and strategic housing sites on its boundaries including West of Ifield. Further information is referenced in paragraph 22.39 in the WSLIR [REP1-068].	Land has been left by GAL between the wetland treatment system and Crawley STW for the latter to expand if required.
Conclusions		
General	The Authorities require additional information to be provided on all of Project Changes as detailed above.	These points summarise the JWSC's comments, which the Applicant has responded to above.
General	Concerns remain about the potential negative environmental impacts of Project Change 2 in respect of compliance with local planning policies, the lack of baseline information on the existing operations, the lack of detail for the proposed building (including waste management practices and proposed	

Topic	Matter Raised	Applicant's Response
	technology), the sustainability of the facility and future traffic movements once operational.	
General	The Authorities raise concerns about the potential negative environmental impacts of Project Change 3 due to the overall lack of detail about the reedbeds, their construction and the technology being proposed to manage the de-icer pollution in this environmentally sensitive location. There is also uncertainty about the environmental mitigation proposed in particular for the loss of semi-improved grassland habitat.	
Construction	There is a general lack of detail on construction of the reedbeds including removal of soil, drainage arrangements, engineering details and vehicle movements along with the measures proposed to protect nearby residents from and dust from the works. Clarity is needed on the siting of the temporary site construction compound along with full details of its layout, appearance and level of use and hours of working.	
Water Environment	Once operational, there are concerns about the management of the reedbeds both in terms of drainage, water quality odour and noise. It is uncertain what measures and mitigation the Applicants are proposing to implement to ensure the safe environmental standards are maintained.	
General	The Authorities consider that further evidence must be prepared by the Applicant to address these concerns, without which the full impacts of the Project Changes 2 and 3 cannot be adequately understood and without which the mitigation proposed by the Applicant cannot be assessed and any necessary Requirements or controls in respect of these changes be imposed.	

6 Mole Valley District Council

6.1.1. **Table 6.1** sets out the Applicant's response to the matters raised in **Mole Valley District Council's Written Representations on the Applicant's Proposal to Amend its Development Consent Order Application** [REP3-136].

Table 6.1 Response to MVDC on the Project Changes 1-3

Topic	Matter Raised	Applicant's Response
General		
General	Mole Valley District Council (MVDC, or 'the Council') recognises that the Examining Authority (ExA), has accepted the Applicants (Gatwick Airport Limited (GAL)) proposed project changes to its application for a Development Consent Order (DCO) for the Northern Runway Project (NRP). The Council wishes to submit the following Written Representation (WR) in response to these proposed changes.	Noted.
Consultation	Chapter 2 of Application document AS-142 states at 2.1.2, that relevant Local Authorities (LAs) were consulted on the proposed changes. However, it is not	Through the Gatwick Officer Group, which Mole Valley District Council is a member of, the Councils were invited to the briefing session and consulted on the Project

Topic	Matter Raised	Applicant's Response
	transparent in specifying that LAs were not notified directly and individually, but via the Gatwick Officer Group, chaired by Crawley Borough Council (CBC), and GATCOM. However, the Council did make comment and acknowledges that the Applicant has registered MVDC's comments on the proposed project changes consultation (AS-142/3).	Changes. The Applicant considered this to be an adequate means by which the Council was informed of the Project Changes.
Consultation	However, there are a number of parishes who have raised concerns that they were not contacted and therefore prevented from commenting. No list of contacted consultees is included within either of the Consultation Responses documents (AS-142/3) and therefore the Council is unable to verify the extent and efficacy of the proposed consultation exercise with any certainty beyond our own experiences which were insufficient.	The list of Parish / Town Councils and Groups that were invited to the briefing session before the start of the consultation period are listed in paragraphs 2.2.2 to 2.2.3 of the **Consultation Report Addendum** [AS-142]. More generally, the approach to consultation was carried out in line with the **Notification Report** [AS-113] and taking account of the ExA's advice in its **Procedural Decision** [PD-008] dated 04 December 2023.
Consultation	The Applicant's processes in this matter are not considered to accord with good and robust consultation and MVDC would ask the ExA to ensure that the Applicant is held to account when conducting any further exercises.	As explained in **Consultation Report Addendum** [AS-142] (paras 1.1.4 to 1.1.6), the consultation was carried out in line with the **Notification Report** [AS-113] and taking account of the ExA's advice in its **Procedural Decision** [PD-008] dated 04 December 2023. Within the **Procedural Decision** [PD-008], the ExA confirmed that the Applicant's proposed scope of consultation activities *"provides an appropriate basis for the non-statutory consultation".*
Project Change 1 – Extension to the design parameters for the NT IDL proposed southern extension		
General	The Council does not consider that this project change will have a material impact on the district and has no comments.	Noted.
Project Change 2 – Reduction in height of the proposed replacement CARE facility and change in its purpose		
General	MVDC welcomes this amendment which should result in the lessening of negative visual and air quality impacts than those originally proposed.	Noted. The Applicant welcomes MVDC support for the change.
Waste Management	However, the Council continues to seek clarity on the location of the processing facility which would be utilised for the off-site processing of the organic waste, necessitated by the proposed change. This detail was not provided during the consultation, nor is it provided in the updated AS-133, AS-142, or AS-143.	Operational waste from the Airport is managed in accordance the **Operational Waste Management Strategy** [REP3-073], with a final Operational Waste Management Plan to be submitted for approval in substantial accordance with the OWMS under DCO Requirement 25. . The biomass boilers at the existing CARE facility were only used to manage food waste and a proportion of CAT 1 waste (subject to levels of contamination). The remainder of waste is taken off site for re-use, recycling or energy recovery and a small proportion is sent for disposal. The biomass boilers were switched off during 2019 due to insufficient quantities of organic waste being generated at the Airport, making the boilers inefficient. The boilers have not been switched back on since. Food waste has been taken off site to be recycled via anaerobic digestion and the other waste streams continue to be processed off site.
Waste Management	Table 5 of AS-142 states that locations had been provided by the Applicant to those parties who had requested them, however, the Council has not received	Table 5 of the **Consultation Report Addendum** [AS-142] states that two organisations requested information on the location of each change, i.e. the

Topic	Matter Raised	Applicant's Response
	any information on this, despite this being asked for through its response to the Applicant-led consultation. This information has been withheld for unknown reasons and must be available for the Applicant to be able to assert in Tables 4 and 5 of AS-142 that "*The Change Application Report (Doc Ref. 9.2)* [AS-139] *confirms the number of additional vehicle trips associated with the proposed change, is expected to be up to six vehicle movements (three arrivals and three departures) a day for the new CARE facility to transport waste off airport*".	location of Project Changes 1 to 3, which was provided. However, the Applicant understands that this comment relates to the location of off-site waste processing facilities where material from the CARE facility is transported. On this matter, a response is provided above.
Waste Management	In addition, the Council would expect that, in addition to the location and routing of the additional HGV movements, operating hours would also have been made available and a relevant consideration in any modelling/planning relating to the proposed change. This was not the case and is requested,	Operational waste from the Airport is transported by registered waste carriers to permitted waste facilities. Details of the management of the existing waste is described in the **Operational Waste Management Strategy** (OWMS) [REP3-073]. The waste management facilities that will be used to manage operational waste from the Project will be set out in the Operational Waste Management Plan, to be agreed with the relevant planning authority in accordance with DCO Requirement 25 and in substantial accordance with the OWMS.
General	While the Applicant considers this to be a non-material change to the status quo and that of the proposed application, it is not possible for parties to comment on any such impacts without understanding the context and location of the off-site facility and the Council is unable to be assured that there will be no impacts for Mole Valley and its communities.	Please see the Applicant's response to MVDC's comments on Project Change 2 above.
Project Change 3 – Revision to the proposed water treatment works		
General	The Council does not consider that this project change will have a material impact on the district and has no comments.	Noted.
Conclusion		
General	MVDC remains unclear on details regarding proposed change 2 which could result in environmental impacts for the District. As such, the Council reserves the right to raise issues regarding transit of organic waste to an off-site facility until the location is known and concerns can be allayed.	Please see the Applicant's response to MVDC's comments on Project Change 2 above.

7 National Highways

7.1.1. **Table 7.1** sets out the Applicant's response to the matters raised in **National Highways' Written Representations on the Applicant's Proposal to Amend its Development Consent Order Application** [REP3-139].

Table 7.1 Response to National Highway on the Project Changes 1-3

Topic	Matter Raised	Applicant's Response
Project Change 1 – Extension to the design parameters for the NT IDL proposed southern extension		

Topic	Matter Raised	Applicant's Response
General	National Highways has reviewed the material submitted by the Applicant and can confirm that it has no representations to make on the proposed extension to the North Terminal International Departure Lounge.	Noted.
Project Change 2 – Reduction in height of the proposed replacement CARE facility and change in its purpose		
Traffic and Transport	National Highways has reviewed the material submitted by the Applicant and would request further clarity in regard to the number of operational movements that have been assessed and any subsequent implications on the Strategic Road Network.	Table 4 of the **Change Application Report** [AS-139] notes that there would be fewer than six vehicle trips a day associated with the replacement CARE facility when in operation. This level of traffic is not expected to be perceptible as a change on the highway network, regardless of the location of processing sites or the routes taken between those and the Airport. Furthermore, it will not have a material impact on the outcomes of the assessment presented in **ES Chapter 12: Traffic and Transport** [REP3-106].
Traffic and Transport	With the removal of the biomass boilers, this will result in an increase in organic waste having to be transported offsite for safe disposal. In the Change Application Report **[TR020005/AS/140]** the Applicant outlines that the proposed changes would result in a negligible increase of fewer than six vehicles per day. With the Applicant's proposals forecasting to increase passenger numbers from the existing baseline of 46.6 million passengers per annum (mppa) to 80.2 mppa by 2047, National Highways anticipate that this would result in a corresponding increase in the number of vehicle movements per day to cater for the increase in waste generated. National Highways therefore requests clarification from the Applicant whether these vehicle numbers have been based upon the existing baseline figures or the 80.2 mppa by 2047 and subsequently how these increase in vehicles have been derived.	Table 4 of the **Change Application Report** [AS-139] notes that there would be fewer than six vehicle trips a day associated with the replacement CARE facility when in operation. This level of traffic is not expected to be perceptible as a change on the highway network, regardless of the location of processing sites or the routes taken between those and the Airport. Furthermore, it will not have a material impact on the outcomes of the assessment presented in **ES Chapter 12: Traffic and Transport** [REP3-106].
Project Change 3		
Water Environment	National Highways notes the Applicants reporting in the Change Application Report **[TR020005/AS/140]** and welcomes the implementation of a more sustainable solution being adopted by the Applicant**.** Whilst the Applicant has reported no change in the effects as a consequence of this change in system, National Highways requests that the Applicant provides quantifiable data that compares the effectiveness of the two proposed systems in the treatment of de-icing agents prior to discharge into the Gatwick Stream in order for National Highways to assess the operational performance of the two systems and any potential changes to downstream water quality as a consequence.	The quality of the final effluent discharged to the Gatwick Stream would be set by the conditions of the discharge permit agreed with the Environment Agency. Gatwick has contacted their national permitting team to commence pre-application discussions to understand their likely requirements, but it is anticipated that the limit is likely to be higher (better quality) than currently exists for the discharge from the Crawley STW that currently treats the de-icer contaminated runoff.
Water Environment	National Highways also requests that the Applicant sets out what contingency plans would be in place in the event that pollutant concentrations became too high in order to ensure that polluted water is not discharged into Gatwick Stream which may impact downstream water quality and aquatic species.	The new system will monitor the quality of the effluent once it has passed through the treatment facility prior to discharge to the Gatwick Stream. Should it not meet the quality criteria of the discharge consent agreed with the Environment Agency, the effluent would be pumped back to the long-term storage lagoons to provide dilution and further treatment in the facility until of sufficient quality to be discharged to the watercourse.

Topic	Matter Raised	Applicant's Response

8 Nutfield Conservation Society

8.1.1. **Table 8.1** sets out the Applicant's response to the matters raised in **Nutfield Conservation Society's Written Representations on the Applicants Proposal to Amend its Development Consent Application** [REP3-144].

Table 8.1 Response to Nutfield Conservation Society on the Project Changes 1-3

Topic	Matter Raised	Applicant's Response
Project Change 1 – Extension to the design parameters for the NT IDL proposed southern extension		
Design	In the context of Project Change 1: Increase to the design parameters for the North Terminal International Departure Lounge proposed southern extension, we invited the Project Team to consider to what extent the provision of retail space should play a part in reducing consumption and GAL's contribution to that.	This is not considered relevant to the acceptance of the Change, which relating to the change in maximum built form design parameters, and the demolition and remedial works of associated buildings/structures.
Project Change 2 – Reduction in height of the proposed replacement CARE facility and change in its purpose		
Climate Change Water Management	The management and conservation of resources, and the methodologies of waste management, are increasingly the focus of concern in the area of climate change, such that they are attracting the attention of, and recommendations by, the Committee on Climate Change. An increase in passenger numbers is likely to lead to an increase in climate change impacts through the consumption of resources at the airport and through a corresponding increase of wastes which require to be managed. The airport is, effectively, the size of a small city, and as such we are sure there must be a waste management strategy in place.	Noted.
Climate Change Waste Management	What strategy there is must presumably be in the process of change, given the proposal to abandon the quite recently built EfW facility and move waste processing and disposal off-site after an on-site pre-sort. The climate change impacts of this proposal do need to be included in any overall assessment of the proposed changes at Gatwick, particularly as the changes are intended to permit an effective doubling of passenger numbers by the late 2030s.	The GHG impacts associated with waste management are small when considered in the context of the wider NRP application. However, measures to manage overall impacts arising from waste management would be expected to deliver wider benefits, including benefits with regards to Greenhouse Gas emissions, therefore it is not considered necessary to seek specific mitigation beyond the waste management strategy (see the response directly below on waste management). The Project change effects on Climate Change (resilience) and on GHGs, are not expected to be significant. Along with other relevant environmental topics, they will be assessed as part of the environmental appraisal of the Proposed Change Application submission (see paragraph 6.1.1 of the **Notification of Proposed Project Changes** [AS-113]).
Waste Management	We take as our starting point Gatwick Airport's online newsletter dated January 17th 2017 on Airport Technology, available to view at https://www.airport-technology.com/features/featuregatwick-turning-waste-to-energy-5711024/.	Information on existing and forecast waste arisings and management of operational waste is described in the **Operational Waste Management Strategy** [REP3-073].

Topic	Matter Raised	Applicant's Response
	This tells us that in 2016 the airport handled 40.8 million passengers, generating 2,200 tonnes of Category 1 waste, which represented 20% of the total waste. That would mean around 11,000 tonnes of waste in total. The Category 1 waste is dried and consigned straight into the incinerator. The other 8,800 tonnes of waste are sorted, with recyclables being sent for recycling, and those items deemed non-recyclable being dried and turned into RDF pellets for incineration. The incinerator is described as a biomass boiler, but this term is misleading since the non-recyclables almost certainly include a proportion of mixed plastics derived from fossil fuels. Indeed the calorific value of food waste tends to be low, and the energy derived therefore also low, whereas plastics have a high calorific value but also produce large volumes of fossil fuel CO2e when burnt, typically up to 2 tonnes of CO2e per tonne of plastics incinerated. Food waste and biowaste generally is considered to be carbon neutral when burnt, and the overall carbon intensity of RDF (Refuse Derived Fuel) depends on the ratio of biowaste and non-biowaste in the pellets. The Environment Agency works on a 50/50 ratio as a rule of thumb, but this may change as more biowaste is diverted from RDF manufacture.	Prior to 2019, organic waste from the Airport was sorted to remove metal fragments and oversized plastic waste, then it was shredded and dried, before being processed in the biomass boilers at the existing CARE Facility. RDF pellets are not manufactured at the existing CARE facility. Subject to the levels of contamination, a proportion of CAT 1 was also processed through the biomass boilers, with the remainder sent for energy recovery at facilities at Newhaven and Chineham. The biomass boilers at the CARE Facility were turned off in 2019 due to a fall in organic waste levels at the Airport. Food waste is now recycled off-site at an anaerobic digestion facility. All CAT 1 waste is sent to Newhaven and Chineham Energy Recovery Facilities.
GHG	To make a reasonable assessment of the climate impacts of the proposed increase in passenger numbers, with the proposed change in waste handling, we would expect to see an Environmental Impact Assessment which includes an estimate of the greenhouse gas emissions associated with the entire waste management cycle. We would also hope to see a Waste and Resources Strategy for the airport, benchmarked to 2042, the target date by which the UK government wishes to see residual waste arisings halved, with targets built into that strategy showing how the airport will itself reduce residual waste by half per passenger.	The GHG emissions associated with the waste arising and handling changes as a result of the Change are not considered likely to affect the assessment undertaken due to the relatively small scale of these compared to other emissions within the scope of the Assessment. Information on existing and forecast waste arisings and management of operational waste is described in the **Operational Waste Management Strategy** [REP3-073]. The Strategy sets a target that at least 50% of municipal waste generated by the Project will be prepared for re-use or recycling. Other waste management initiatives (including waste minimization measures) are being implemented at the Airport through its Second Decade of Change.
Waste Management	We would expect the EIA to include such information as the following: ▪ Whether Category 1 and other wastes will continue to be dried at Gatwick before being sorted and moved off-site to other facilities, and if so the GHG impact of such drying treatment. ▪ Whether non-recyclable waste will continue to be converted into RDF pellets at Gatwick, and if so the GHG impact thereof, plus the estimated ratio of biowaste to non-biowaste. ▪ Whether all non-recyclables will be incinerated, or some (eg fines) consigned to landfill. ▪ Whether non-Category 1 biowaste will be sent for treatment other than by incineration, and if so the estimated GHG impacts thereof.	Responses to the bullet points are as follows: • CAT 1 waste is currently sent to the energy recovery facilities at Newhaven and Chineham • The existing CARE Facility does not convert non-recyclable waste into RDF pellets. Food waste is sent for recycling offsite at an anaerobic digestion plant. • CAT 1 waste has to be managed separately from other waste streams and is treated in accordance with strict safety standards set by Defra. Due to the nature of CAT 1 waste it must be treated in high temperature incinerators. The waste management facilities that will be used to manage operational waste from the Project will be set out in the Operational Waste Management Plan that will

Topic	Matter Raised	Applicant's Response
	▪ The approximate distances and GHG impacts of transport of non-recyclables and recyclables to their places of disposal or processing.	be prepared and approved by the relevant planning authority pursuant to requirement 25 of the DCO . This Plan must be substantially in accordance with the **Operational Waste Management Strategy** [REP3-073].
GHG Waste Management	Without such data we cannot reasonably estimate the cumulative impact of the airport's expansion, and in particular the expansion of passenger numbers, on the GHG emissions associated with waste arisings. While it may be expected that a near doubling of passenger numbers could lead to a near doubling of waste arisings, 11,000 tonnes to 22,000 tonnes, it is to be hoped that a pro-active waste management strategy, in line with UK government aspirations to halve residual waste, could mitigate that increase in arisings. We would hope that GAL will be mindful of the high carbon impact of incinerating plastic, and indeed of the many negative impacts associated with the manufacture of plastics, and will therefore strive to minimise the amount of single use plastic used and discarded by the many and varied operations within the airport. We look forward to seeing the Waste Management Strategy and Environmental Impact Assessment as part of the document set to be assessed by the Planning Inspectorate.	With regards to the GHG impacts arising from this Project change please refer to the point set out two rows above on the materiality of such emissions to the assessment. As set out in the **Operational Waste Management Strategy** (OWMS) [REP3-073] operational waste from the Airport will be managed in accordance with the waste hierarchy principal. The OWMS sets a target that at least 50% of municipal waste generated by the Project will be prepared for re-use or recycling, secured under DCO Requirement 25. Other waste management initiatives (including waste minimisation measures) are being implemented at the Airport through its Second Decade of Change strategy.
Waste Management	In our response to GAL's previous consultation for this change to the DCO, we invited GAL and the North Runway Project Team to consider the research work done Circle Economy, a respected environmental consultancy based in Amsterdam which has worked on projects commissioned by UK local government, Zero Waste Scotland, and many government agencies round the world. In particular we invited study of the Circularity Gap Report 2023 (available at https://www.circularity-gap.world/2023), and the 2024 report published on 24 January. Circle Economy estimates that, to maintain global warming within a 2 degrees Celcius boundary and to keep human life extant within planetary boundaries, resource consumption needs to fall globally by around 30%. At present consumption is rising rather than falling. Though this issue may fall outside the direct remit of the Planning Inspectorate, we would hope that GAL, as responsible corporate citizens, will wish to play their part in achieving the necessary 30% reduction, by planning their own activities accordingly and by seeking to influence the behaviour of their staff and clients – the passengers and freight carriers. We would welcome open acceptance of the need to live within planetary boundaries by GAL, and discussion of how GAL will contribute to this in the airport's overall strategy and in its Waste Management Strategy.	**ES Appendix 5.3.2 CoCP Annex 5 - Construction Resources and Waste Management Plan** [APP-087] sets out the principles for resource use and management during the construction of the Project. Resource Management Plans will be prepared during detailed design and will be available to the relevant planning authority on request.