

**NORTH LONDON WASTE AUTHORITY**

**REPORT TITLE:** NORTH LONDON HEAT AND POWER PROJECT UPDATE AND REPORTS

**REPORT OF:** PROGRAMME DIRECTOR

**FOR SUBMISSION TO:** AUTHORITY MEETING

**DATE:** 10 MARCH 2022

**SUMMARY OF REPORT:**

This report provides the Authority Meeting with an update on progress of the North London Heat and Power Project (NLHPP) including the Energy Recovery Facility.

**RECOMMENDATIONS:**

The Authority is recommended to note the contents of the report, and to comment on the commentary relating to the use of EcoPark House

**SIGNED:**



**Programme Director**

**DATE:** 28 FEBRUARY 2022

## **1. INTRODUCTION AND PURPOSE**

- 1.1. The North London Heat and Power Project (NLHPP) is the programme of works authorised by Development Consent Order (DCO) granted in February 2017 through which the existing energy from waste (EfW) plant at the Edmonton EcoPark will be replaced with a new Energy Recovery Facility (ERF). The programme of works includes provision of a Resource Recovery Facility (RRF) for reception and transfer of waste, incorporating a public Reuse and Recycling Centre, EcoPark House (EPH), a visitor centre which will be used to provide community / education space and back up office space. In preparing for and carrying out the works in the NLHPP programme, the management team is working closely with LondonEnergy Ltd (LEL) the operators of the EcoPark and the current EfW plant.
- 1.2. This status report provides Members with an update on progress of the NLHPP. The report structure provides a narrative in the main body with supporting information in appendices.
- 1.3. The progress data provided within the report, including the status dashboard in Appendix A, reflects the status of the programme on the 31 December 2021. This is the most recent reporting period for which project-approved data is available at the time of preparing this status report to Members. Where significant progress updates have occurred since this date, a narrative update has been included in this report.

## **2. PROGRAMME DIRECTOR'S SUMMARY**

- 2.1. The programme is forecasting achievement of the major milestone of completion of the ERF in line with the baseline programme – December 2025 for delivery of the first fire-on-waste and March 2026 for formal take over. The programme remains on target to deliver within the baseline budget established by the March 2019 baseline.
- 2.2. Meetings are on-going with the contractor for the RRF to explore opportunities to mitigate the forecast eight-week delay previously reported. This includes detailed planning of the commissioning and testing of the building services to enable it to be done efficiently with early involvement of LEL as the operator, and lead to a smooth transition of the new facilities into operation. This is critical to enable waste management operations to be transferred from the northern area of the EcoPark and the start on time of the ERF construction. Work on site is being progressed on multiple fronts as far as space and safety allows to mitigate the programme impact of the slow start to roofing, as previously reported. The installation of building services equipment within the building envelope is progressing well alongside the completion of the building facades and concrete tipping aprons and enabled by the contractors detailed planning and supervision.

- 2.3. The construction of Temporary Bulky Waste and Recycling Facility (TBWRF) is progressing well and soon entering its testing and commissioning phase which will free up the current BWRf for demolition ahead of start of the planned ERF construction in the autumn.
- 2.4. Acciona are making progress with their mobilisation and a joint kick off meeting has been held with them to establish how both our teams will work together and a common understanding of the detailed short-term schedule.
- 2.5. This paper sets out in section 4 considerations on the use of EcoPark House, including decisions from the Development Consent order process. It is recommended that consultation in the local area should take place in early summer/autumn to inform final decisions on the use of the property, and that consultation would include local ward members and residents' groups. Following that consultation, the outcome of which would be added to the considerations set out in section 4 of this report, recommendations would be made, and Members would be asked to agree a strategy for use of EcoPark House in October or December 2022, prior to the start of use of EcoPark house.
- 2.6. Safety performance remains positive with a downward trend in the Lost Time Injury Accident Frequency Rate. One near miss and two undesired circumstances have been observed on site and working practices have been adjusted to enable a continuous improvement in the safety of the working environment. Mental health and wellbeing have been promoted during the national Time to Talk day with participation of 174 people working on the project.
- 2.7. Apprenticeship opportunities have been promoted recently through two events with local schools. Both were well attended by students who were interested in the career choices and routes to employment.
- 2.8. Local communities are increasingly interested in the project and attending community briefings and meetings. Topics of interest continue to be impacts on recycling and future carbon capture and storage of the ERF 's CO2 emissions.

### **3. PROJECT DELIVERY SUMMARY**

- 3.1. This section summarises the status of the delivery of the project elements that comprise the delivery of the North London Heat and Power Project.
- 3.2. Construction has progressed well on the RRF with the rate of progress by the contractor Taylor Woodrow increasing on roofing and mechanical and electrical equipment installation. There has been good progress on the planning for handover and the start of operations in the autumn. This is a joint effort with Taylor Woodrow and LEL to align the needs of the operator for asset management information with what is being provided by suppliers.

- 3.3. The construction in the north of the EcoPark on the temporary bulky waste recycling facility (TBWRF) has now installed most of the mechanical and electrical equipment and testing is ongoing. Plans are in place for an imminent start to testing and commissioning. This is the NLHPP’s first waste management facility to be brought into service and is setting a good example for how to plan for handover to operations working with LEL as the operator.
- 3.4. DSM Demolition are mobilising for the demolition of the ERF footprint to be ready for a start on site by the ERF contractor in the autumn.
- 3.5. A current “Health Check” summary of project performance is included at Appendix A. The following paragraphs provide a project-by-project summary of progress on site.
- 3.6. The aerial view of the EcoPark shown below in Figure 2 has been marked up with features referenced in this section.



### Construction Logistics

- 3.7. Construction and operational logistics have continued to work alongside each other in the EcoPark overseen by the Site Working Group. The working group has looked at how site traffic will be routed when the RRC (Resource Recycling Centre) opens and the current EfW remains in operation.

### EcoPark South (Project E3a)

- 3.8. Once again, there have been no lost time incidents on EcoPark South in the last month and there remains strong focus on safe working from all involved on the project.

- 3.9. The Recycling Fuel and Preparation Facility (RFPF) primary steelwork installation is now complete. The current focus is on delivering the roof cladding works and the installation of Mechanical, Electrical and Plumbing (MEP) works, which is continuing on the north mezzanine floor level. Construction of the tipping hall structural floor and internal drainage is also continuing. Over the next period, works will start on the RFPF facades, starting with installation of the Precast Concrete Panels. Works for the Odour Control System will also start in the plant area on the north and south mezzanine floors.
- 3.10. The photograph in Figure 2 below shows progress of the RRF roofing, MEP (fire suppression pipework, sprinklers, and cable management) on the north mezzanine floor.



- 3.11. The RRC primary steelwork installation is also complete. The current focus is on delivering the roof cladding works and the installation of floor decking, as shown by the photograph in Figure 3 below.





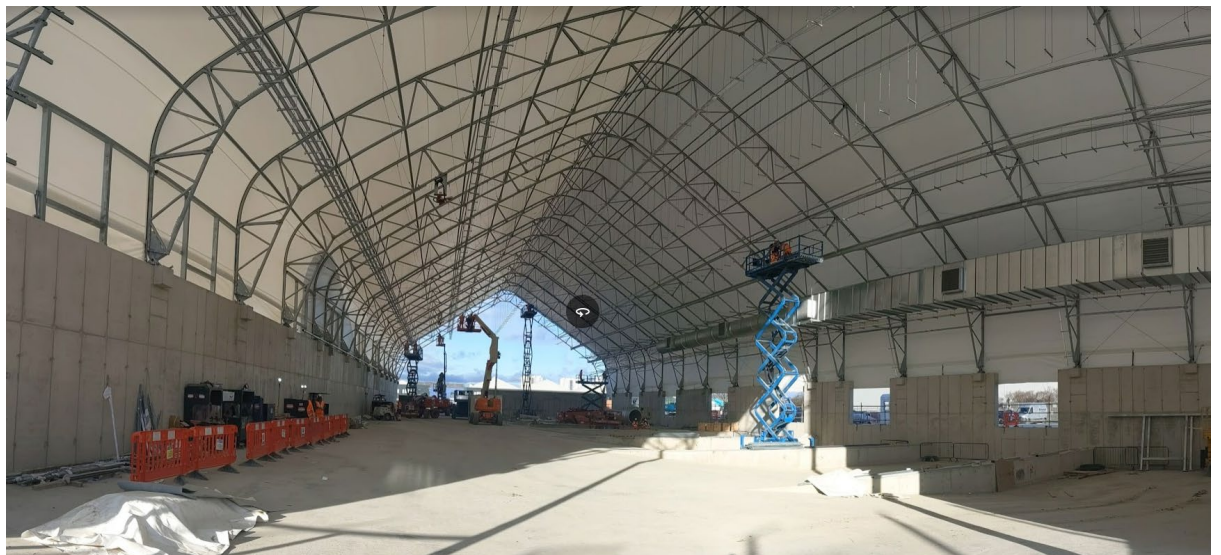
- 3.12. For EcoPark House, the floor structures and waterproof membranes have now been completed and internal blockwork has begun, as well as mechanical and electrical works starting with cable management supports. Figure 4 shows progress on the EPH ground floor.



- 3.13. The detailed design of EcoPark House to operate independently of external power supplies by generating green power from Photo-Voltaic (PV) panels and ground source heat pumps has continued, and procurement has commenced for batteries required to store power from the PV panels.
- 3.14. Focus has increased on planning the commissioning and completion of the works including the development of operational readiness and handover plans jointly with LEL, and initial reviews of the contractor's commissioning plans. Completing this work as early as possible is essential to ensure that the facility can be smoothly handed over by the contractor to the Authority and brought into operation by LEL. Work will continue over the next few months to plan the full extent of the commissioning and verify the activities required for operations to begin.

### **Temporary Bulky Waste Recycling Facility (Project E3b)**

- 3.15. Construction of the temporary bulky waste recycling facility (TBWRF) is now in its last eight weeks before trial operations commence. The installation of the mechanical and electrical services within the main buildings has progressed as programmed. The new potable mains water connection has been inspected and accepted by Thames Water, with only the final connection by Thames Water remaining. The external road network and tipping aprons construction also continues to be constructed as per the programme.
- 3.16. A new switchboard to provide the electrical point of connection for the TBWRF has been installed. Post decommissioning of the TBWRF this same point of connection will be used to provide electrical power during construction of the Energy Recovery Facility.







**Figure 6** New Electrical Switchgear



**Figure 7** Roads Under Construction



**Figure 8** Workshop Building in the foreground



- 3.18. The pre-operational measure information required by the Environment Agency (EA) to satisfy the requirement for the waste installation permit to operate the TBWRF has been submitted to the EA.

#### **Northern Area Clearance (Project E3b)**

- 3.19. DSM Demolition are mobilising for tree clearance enabling works which is due to commence onsite in late February once all necessary permits and H&S documentation is in place for a safe start on site.
- 3.20. Over the coming months and once the TBWRF is operational, the existing bulky waste and fuel preparation facilities will be decommissioned and handed over to the contractor for demolition with works due to commence in early April.

#### **Site Utility and DNO Works (Project E4)**

- 3.21. Cadent are continuing to make progress in their detailed design for the gas pipeline route, with further trial holes planned in February. Efforts will then focus on construction and phasing logistics before planned construction in winter of 2022/23.
- 3.22. An interface workshop was held with Cadent, London Borough of Enfield, Energetik and representatives from the project to discuss potential traffic and logistics co-ordination during the pipeline construction. More workshops will follow as designs and schedules develop.

#### **Energy Recovery Facility (ERF) (Project E7)**

- 3.23. The ERF team structure has been completed and is aligned with the overall NLHPP structure. This ERF team structure will fulfil the Authority's role and responsibilities under the IChemE contract as well as providing the necessary oversight and assurance across all aspects of project delivery by Acciona, the contractor appointed to deliver the ERF.
- 3.24. A roles and responsibility matrix has been developed which defines how the Authority will carry out the Project Manager's duties under the IChemE contract, including any delegations of formal duties to Project Manager's Representatives.
- 3.25. A 90-day mobilisation plan is being used to manage the early tasks necessary to establish the common working practices to deliver the combined requirements of the contract between the NLHPP ERF and Acciona teams.
- 3.26. Following the signing of the contract with Acciona, the IChemE contract documents have been compiled and stored within the Authority's common data platform, Asite. This platform provides access to both the NLHPP and Acciona teams. To facilitate a common understanding of the requirements of the IChemE contract, a

combined NHLPP and Acciona contract training programme will be delivered by the Authority's legal advisors during the early stages of mobilisation.

- 3.27. The ERF project's systems and process for commercial and documents management are based on the NLHPP's programme manual, with enhancements added to meet the requirements of the ERF contract. A combined NLHPP and Acciona training programme covering these has commenced.
- 3.28. The NLHPP Common Data Environment is being successfully used to manage the first issue of management plans from Acciona following contract signature.
- 3.29. To facilitate on-site mobilisation for the Acciona team a temporary office facility has been provide within existing laydown area on the EcoPark, this has enabled engagement with NLHPP's health, safety and wellbeing and construction management teams.
- 3.30. A kick off meeting between the Authority and Acciona teams was carried out which brought together the team leaders from both parties. The agenda allowed for parties to share their organisation structures, associated roles and responsibilities, and to review and discuss a common understanding around working practices in relation to collaborative working, social value, construction logistics, document management, Acciona's contract programme, NLHPP's technical assurance strategy and health, safety, wellbeing, and environmental matters.
- 3.31. Following this formal kick off the ERF project team will engage with Acciona through a series of workshops to progress and agree the approach to working practices across all areas of the ERF project. These engagements will be managed by the 90-day plan with a priority given to the development of Acciona's contractor programme and delivery of the early design packages to support early civils works and the procurement of long lead process equipment.

#### **4. ECOPARK HOUSE**

##### **4.1. Background and specification of EcoPark House**

- 4.2. Eco Park House is a two-storey pavilion located on the EcoPark adjacent to the River Lee Navigation. The internal dimensions will be approximately 849m<sup>2</sup>. Plans are attached to this report as appendix B.
- 4.3. The ground floor includes a boatshed, plant room, shower rooms, along with classrooms, office, and drill hall for use by the sea cadets. The first floor includes a lecture room which is approximately 10 metres by 7.5 metres, a plant room, kitchen, toilets, and an open space some 16 metres by 6 metres (shown as "exhibition hall" in the plan) which is a versatile space.

- 4.4. Construction work on EcoPark House is programmed to be completed in early 2023. Separate consideration is being given to the timing and plans for opening to visitors of EcoPark House. This is to ensure that while activities involving heavy goods vehicle movements are taking place in the vicinity of EcoPark House, the welfare of any visitors is protected.
- 4.5. **Rationale for development of EcoPark House**
- 4.6. EcoPark House was considered in the preparation for the DCO application to provide replacement facilities for Edmonton Sea Cadets, who had security of tenure under their lease of premises by the wharf on the River Lee Navigation. The Sea Cadets were entitled to compensation to allow them to relocate, but it was clear, after investigation, that no other location would be suitable for them including allowing them similar access to the water for their activities. Details of the search were set out in the Alternatives Assessment provided as part of the DCO application.
- 4.7. Having determined that there was no suitable alternative offsite, the proposal for the building was combined with the suggestion of a visitor centre which had been put forward for consultation in phase 1 (November 2014) with the suggestion that it would provide a start point for tours, information about waste management, information about energy recovery, educational resources for schools, and a meeting point for the local community, as well as forming the reception point for the RRC. This was confirmed in the Phase 2 consultation, when EcoPark House was described as *“an education and visitors’ centre for finding out about recycling resources, heat and power, as the home for the Sea Cadets, and with the potential for community use.”* At that point, office space was also proposed, within a design for a three-storey building.
- 4.8. Most responses to consultation were supportive of the idea of a visitor and education centre as proposed. Specific comments which the authority considered in developing proposals were:
- 4.8.1. support for community education and involvement;
  - 4.8.2. support for use as a meeting place;
  - 4.8.3. it should be more accessible than current facility;
  - 4.8.4. its existence and facilities should be advertised;
  - 4.8.5. it should include education facilities and materials on waste management and the EcoPark assets, for the benefit of various groups;
  - 4.8.6. should include leisure facilities such as a café, a shop, a train ride, and telephone facilities;
  - 4.8.7. it should be available to the community without booking requirements;

- 4.9. The Authority response was as follows:
- 4.9.1. EcoPark House would be a multifunctional building which provides replacement accommodation for the Edmonton Sea Cadets, office accommodation for staff, an area to receive visitors, meeting space and flexible space which can be used for education and community uses.
  - 4.9.2. EcoPark house would be located on the eastern side of the EcoPark in an area which would be open to members of the public using the RRC.
  - 4.9.3. Detailed comments on the facilities at and operation of EcoPark House are noted and will be taken into consideration in developing our proposals. This will include the potential to include a café. The lack of space on site prohibits providing a train ride on site.
  - 4.9.4. EcoPark House would be maintained to be a clean and welcoming facility.
- 4.10. Full consultation was carried out with LB Enfield as the local planning authority for the EcoPark. The Statement of Common Ground between NLWA and LB Enfield records: "The height of EcoPark House has been reduced to two storeys in response to LBE comments. LBE support the height of EcoPark House at two storeys/24.6m AOD, as shown on Works Plan C\_0005, dated October 2015."
- 4.11. The Lee Valley Regional Park Authority was consulted on the scheme, as a neighbouring authority with responsibility for the regional park which is on the opposite side of the River Lee Navigation from the EcoPark. They supported the provision of facilities for visitors, particularly with an educational purpose, which was consistent with their statutory function, as proposed for EcoPark House.
- 4.12. The design of EcoPark House includes a green roof, and has been further developed with the construction contractor, Taylor Woodrow. EcoPark House will be heated and cooled through ground source heat pumps, and power requirements will be met using the photovoltaic array from the roof of the Resource Recovery Facility and a battery room in EcoPark House. This will mean that EcoPark design ensures provision of renewable energy for the building. This is anticipated to save 97t of carbon over the life of the building.

#### **Sea Cadet Lease**

- 4.13. The Sea Cadets have surrendered their old lease and have an agreement for the new lease, which will be entered into once it is safe to do so. In the meantime, they are using space at Tottenham Academy, but without access to water.
- 4.14. The plans showing their use of the site are included in this appendix. The area edged in pink is demised to the Sea Cadets for their sole use. They also have exclusive use of the waterfront shown colored pink and can use other areas in the Building subject to any booking system, and on an exclusive basis on Tuesday and



Thursday evenings, when the Sea Cadet meetings are held. The areas edged blue on the plan are excluded from this, as they are areas reserved for use as determined by the Authority and have been designed in liaison with LondonEnergy Ltd. These areas are for utilities, two small offices (space for two desks in each) and the lecture theatre. It will be open to the Authority to agree use of the lecture theatre with both the Sea Cadets and LondonEnergy.

#### **Possible uses for EcoPark House**

- 4.15. As set out above, the Sea Cadet use of EcoPark House is defined. With the reduction in space from three to two storeys, establishing a permanent office location for an organisation is not considered practical, although use will be made of the retained four desk office space for administrative purposes or for presence on site as required. The open area on the first floor provides opportunities for employment, public and other activities. However, these would need to be undertaken on an ad hoc basis so that furniture can be moved to allow other uses. This section builds on the headline proposals put forward at the time of the DCO application and considers how to develop those.

#### **Proposed LondonEnergy use**

- 4.16. LondonEnergy propose that supplementary to educational options including science, technology, engineering, and math's (STEM) for young people, the facility could also be a location used for the training of staff to manage and operate new assets. This would be badged as the LondonEnergy Academy, highlighting that EcoPark House would be the hub for developing the technical, managerial and leadership skills which LondonEnergy will need to make the most of new facilities. Existing LondonEnergy buildings do not provide the capacity or space for a dedicated learning environment. Using the modern building to train staff on the organisational and asset operating skills will provide a strong message of serious intent to staff.
- 4.17. These aims fit well with the stated purposes for which EcoPark House was designed and is being built.
- 4.18. Authority officers would expect to use the office space for enhanced collaboration with LEL as it provides a joint space which could facilitate ad hoc coordination in addition to the regular liaison.
- 4.19. Taking account of the comments responded to in the pre-DCO application consultation, the emphasis of the use of EcoPark House is therefore suggested to be:
- 4.19.1. Ensuring through a booking system that use is managed fairly and by demand.

- 4.19.2. LondonEnergy's request for use as training space, in particular with regard to use of the lecture theatre, is pursued and considered in detail. The proposal includes training in the transition time to the new ERF operations, and thereafter on an ongoing basis, and so the arrangement is likely to be flexible to accommodate changing needs.
  - 4.19.3. NLWA working with LEL and/or boroughs on shared tasks, offering a space for coordination.
  - 4.19.4. Consider initial educational work with schools and local colleges, building on contacts made through the NLHPP Social Value Work, the Authority's ongoing education programme and LEL's engagement with local schools and colleges.
  - 4.19.5. Take account of any updated community use emerging from the proposed consultation.
- 4.20. Use of the building will be managed through a booking system run by LondonEnergy. The Lease with the Sea Cadets has been prepared, taking account of child protection requirements, and bookings relating to children would need to take similar care.
  - 4.21. The use by LondonEnergy and for education purposes would not be expected to attract a charge. If there is demand for use by community groups, consideration could be given to an appropriate charge for use of the space, to cover costs.
  - 4.22. Members will be advised on health and safety measures associated with bringing the public onto this site when asked to confirm the strategy. The strategy will be reviewed after initial implementation, and then on an ongoing basis.

## **5. HEALTH, SAFETY & WELLBEING**

- 5.1. This summary provides an overview of the Health, Safety and Wellbeing (HSW) initiatives and performance for the January 2022 period, with further significant information and updates also included up to 09 February 2022.

### **Health, Safety & Wellbeing Performance**

- 5.2. Health, Safety and Wellbeing (HSW) performance continues to remain good across the programme with construction activities managed, coordinated, and controlled.
- 5.3. The programme had an average attendance of 210 staff during January 2022.
- 5.4. The January 2022 Accident Frequency Rates (AFR) for RIDDOR reportable injuries remains at **0.00** for the programme. The construction industry recently published a provisional AFR rate for 2021, calculated at AFR **1.63**. NLHPP Lost Time Injury AFR has decreased from 0.211 to 0.190. By comparison the Lost Time Injury AFR

benchmark from peer programmes such as Tideway and HS2 (latest reports) are 0.24 and 0.10 respectively.

- 5.5. During this report period, one 'near miss' (an incident not causing harm but having the potential to cause injury or ill health) was recorded. On 31 January 2022, a drinking fountain water bottle part filled with water (approx. 20% full) rolled across a recently screeded surface, through the scaffold edge protection, falling approximately 6 meters and narrowly missing an operative below. An immediate stoppage of any similar works was undertaken, and measures put in place to prevent any similar type of incident reoccurring. This type of near miss is quite rare but is taken very seriously, and from the initial investigation the causations were attributed to a break down in the application of established HSW protocols and procedures.
- 5.6. Two 'undesired circumstances' (a set of conditions or circumstances, including poor procedures that have the potential to cause injury or ill health) were recorded. The first circumstance was related to plastic strips falling out of a mobile elevated working platform from height, and the second a delivery driver not using the correct access methods to avoid a fall from height whilst unloading a lorry. In both cases mitigation measures and briefings were undertaken to avoid future occurrences.
- 5.7. A total of 131 safety observations inclusive of 5 good practices were recorded during January. Month on month we continue to see an increase in observations reported which is one indicator of an effective HSE culture programme-wide.
- 5.8. Government COVID-19 measures were relaxed on 19 January 2022. However, during January, 454 lateral flow tests were completed with three positive cases identified with any associated close contacts asked to test. An item of note is that this was the highest monthly total of tests undertaken since inception of the programme in January 2021.

The Lateral Flow Test facility remains available on site until end of March 2022. NLHPP still encourage the use of face masks and are ensuring hygiene measures and welfare provisions are maintained.

### **Health, Safety & Wellbeing Management and Continual Improvements.**

- 5.9. Contractor Safe Start briefings take place every morning with members of NLHPP leadership in attendance. These sessions include coordination elements and hazard awareness but were also used to deliver specific toolbox talks on hazardous substances and mobile elevated working platforms this month.
- 5.10. 'Think Again' behavioural safety training was completed with 58 attendees from across the programme. The Think Again training programme focusses on how

behaviour and choice can help to drive positive outcomes in making workplaces safer.

- 5.11. 03 February 2022 was national Time to Talk Day. As part of the programme initiatives three sessions themed around awareness to Mental Health and Wellbeing were undertaken with 174 attendees from across the entire NLHPP programme. The Project Team Meeting that day as well as the intranet were also utilised to support awareness of this very important subject.

### **Health, Safety and Wellbeing Working Group**

- 5.12. One area of note is the development of the programme for Mental Health and Wellbeing campaign for 2022. The first activity was the materials developed to support the 'Time to Talk Day' on 03 February 2022. A diary of other monthly focussed mental health and wellbeing activities and communications are being planned in collaboration with our communications team.
- 5.13. The next HSW Working Group session is planned for 15 February 2022 where we expect to establish the smaller working groups to progress wider HSW initiatives based upon our 2022/23 Strategy and Implementation plan.

## **6. ENVIRONMENT AND SUSTAINABILITY**

- 6.1. This summary considers an overview of the Environment & Sustainability outcomes for the December 2021 and January 2022 period.
- 6.2. This period has seen the delivery of good practice environmental outcomes. A noise complaint from a nearby business (E Roberts Timber Ltd) located adjacent to the EcoPark was received in relation to piling works. Working practices were in accordance with project requirements and future noise and vibration monitoring is planned. The complaint investigation and subsequent environmental site inspections confirmed that project environmental aspects are being effectively managed. The relationship with the timber yard owner is good and they were amicable during investigation of the complaint.

### **Environmental Performance**

- 6.3. Over the two-month period, one noise complaint and six environmental near misses (level 3) involving a hydraulic fluid spill, water discharge, spill prevention measures, waterway protection and ground contamination. In all cases, actions to prevent environmental impact were promptly carried out and mitigation implemented to reduce risk of near miss reoccurrence.
- 6.4. Strong performance against environment and sustainability key performance indicators including for waste diversion from landfill, sustainable sourcing of



timber, observation reporting and environmental training. Continuing the historical trend, targets have been either met or exceeded across all indicators.

- 6.5. Following the second Considerate Constructors Scheme site visit in early December, a Certificate of Excellence was presented, and Ultra Site status maintained for EcoPark South. A score of 45 of 50 was achieved, which represents a score of 9 out of 9 across each of the five categories (environment, safety, workforce, appearance, and community). An additional point is offered for each category for outstanding innovations. The ultra-low carbon concrete initiative was submitted as an innovation for the environment category, but the innovation criteria was not met.

### **Environmental Management**

- 6.6. The December and January environmental site inspections and contractor meetings confirmed that overall, environmental aspects are being managed in line with good practice. The surveillance of site environmental management identified improvement opportunities in relation to waste management (segregation of construction waste), dust management (maintenance of mud on internal roads), energy management (construction lighting was on during the day) and protection measures around waterways.
- 6.7. The December and January site inspections focused on ecology and noise and vibration respectively. The December inspections confirmed that effective measures are being implemented to mitigate impacts on ecological receptors. This includes effective management of invasive flora species and managing site lighting to mitigate impacts on areas of local ecological significance. The January site inspections confirmed that the contractor is applying best practicable means in line with the Section 61 noise consent, which is good practice.

## **7. RISK SUMMARY**

- 7.1. The overall programme risk profile has increased slightly in the period, primarily reflecting the schedule position of the EcoPark South project, and the potential impact of this forecast delay on subsequent ERF delivery. The review and reassessment of the likelihood and impact of associated project risks continues each period, and this is driving the development of further mitigation actions. There remains sufficient contingency to respond to the currently assessed risk exposure.
- 7.2. The exercise to refresh the programme risks have commenced with the first risk workshop held in the period with the Senior Leadership Team, who are predominantly the owners of these strategic level risks. Several new risks were identified which will be comprehensively described, quantified and have mitigations developed over the next period. The risks identified relate to the impact

of the external environment including political influence and external industrial relations; on programme operations as well as the impact of programme activities on LEL Operations.

- 7.3. As part of the 90-day ERF mobilisation plan, an updated risk management plan will be prepared. This plan will include detail on how collaboration will be achieved with Acciona, the ERF Contractor, allowing for sharing of risk data and enabling the NLWA and Acciona to support the mitigation of each other's risks.
- 7.4. The Risk and Planning teams are working together to assess the risks to the RRF completion milestone being delivered on schedule. Collaborative efforts are being made to agree a revised schedule with the contractor and allow undertaking of a Quantitative Risk Analysis on the schedule. This will provide an assessment of the causes of delay on the RRF Project and identify possible mitigation activities. In parallel potential alternative sequence scenarios are being worked up by the project team to explore feasibility of reducing the forecast delay by re-ordering remaining works.
- 7.5. The programme team continue to take a proactive approach to managing the future uncertainties:
  - 7.5.1. Having executed the ERF contract, the focus of the 90-day plan, its contributing activities and the engagement schedule are all focussed on reducing future risks to delivery. This includes ensuring that there is close engagement between NLHPP colleagues across all disciplines, that information flows and systems will work effectively, and that process requirements are fully understood.
  - 7.5.2. There are delays to the finalisation of the Cadent route design due to access issues in Arda Road. This is being proactively managed by frequent engagement with Cadent. The NLWA's technical advisor Wood is providing support to Cadent on the route design to mitigate the delays.

## **8. SOCIAL VALUE**

- 8.1. This month's update focuses on social value activities delivered as part of the NLHPP Schools Programme and the National Apprenticeship Week.
- 8.2. The Industrial Cadets programme started on the 24 January, when the first meeting between the project team and Edmonton County School (LB Enfield) took place. This is an industry led accreditation providing skills-based school engagement. The initiative seeks to create a new talent pipeline by raising young people's aspirations, developing their employability skills and inspiring more students to consider a career in the industry. As part of the six months programme, members of the project team and Taylor Woodrow will provide mentoring and guidance to

six students as they work on a research project to establish how the NLHPP could reduce its carbon footprint.

- 8.3. As part of the National Apprenticeship week in February, a series of engagement events took place with local schools to promote apprenticeships and careers in the construction and waste management sector. This included careers fairs at Leyton Sixth Form College (LB Waltham Forest) and Haringey Sixth Form College (LB Haringey) attended by the project team and Taylor Woodrow respectively. The two colleges are in the top 20% (Haringey Sixth Form) and 30% (Leyton Sixth Form) most deprived neighbourhoods in the country (English Indices of Deprivation, Ministry of Housing, Communities and Local Government, 2019), and the project is keen to ensure the opportunities on the NLHPP are known and available to the students in these areas. Both events were well attended, with interest from students on the career choices and the different routes into employment. Moreover, the engagement actively supports the equality and diversity objectives on the NLHPP: both colleges have a large proportion of students from Black, Asian and minority ethnic (BAME) groups who are encouraged to become part of the project workforce through the opportunities on offer.



*Figure 9 Haringey Sixth form College Careers Fair*

climate. At the event, the team engaged with jobseekers looking for construction careers and helped to identify potential candidates for the trade's apprenticeship vacancies on the EcoPark South contract to support with the vacancies which are difficult to fill. In addition, the team delivered a talk as part of the event to showcase the project and the variety of roles it offers.

- 8.5. Recruitment of apprentices continues on the EcoPark South contract for roles in groundworks, mechanical and electrical apprenticeship, and other trade roles. Unfortunately, the apprentice who joined the project through EJ Parkers in December resigned due to family circumstances and a replacement candidate will be sought through Evolve (the Shared Apprenticeship Scheme provider). The project team and contractors are actively facilitating linkages of open apprenticeship vacancies with trainees who completed on-site skills training placements on the project. Furthermore, Taylor Woodrow resumed delivery of on-site skills training placements in February despite already meeting their obligations. The contractor will be looking for interested candidates from each month's training cohort to interview for the open apprenticeship vacancies.





Figure 10 NLHP at Waltham Forest JOBSFEST

## 9. COMMUNICATION

- 9.1. Communications and Stakeholder engagement has focused on engaging with the local community around the Edmonton EcoPark. There has been an increase in attending community meetings and providing briefings on the project to interested parties to ensure factual and accurate information is shared about the project. This is also to improve lines of communications directly with the community. Engagements are planned to take account of accessibility requirements and engagement preferences to ensure the project is engaging effectively within the local community. Topics of interest continue to be the plants emissions, whether recycling will be impacted and how ready the new plant will be for Carbon Capture and Storage.
- 9.2. The Community Liaison Group meeting is planned to be held on 2 March 2022 where the project team continue to provide updates on the construction progress and hear from the community representatives on areas of interest to them. The most recent meeting includes updated on the apprenticeship and training programmes and the culture for collaboration, inclusion, and diversity that the project is aiming to champion. The next community newsletter is expected to be delivered to 28,000 homes and businesses surrounding Edmonton EcoPark later in March.
- 9.3. Press interest has continued over the decision to award the Energy Recovery Facility contract and the local opposition to that decision. The team continue to engage media contacts and correct and provide information relating to the project. Further engagement with media contacts is planned to provide more in-depth briefings about the project.
- 9.4. A Westminster Hall Debate was held on 9 February 2022 lead by Sir Iain Duncan Smith on '*Potential environmental and health impacts of the proposed expansion at Edmonton EcoPark*'. The debate contained many inaccuracies about the project and a full response to the claims made about that project has been published and responded to Sir Iain Duncan Smith and the Secretary of State for Business, Energy and Industrial Strategy, Greg Hands, who was the responding Minister. A copy of these letters is on the [NLWA Scheme of Publication](#) and have been share wider to key stakeholders including, Members of Parliament involved in the debate, Council Leaders and Mayor in north London and assembly Members.
- 9.5. A market information webinar has also been published to generate interest and get feedback from potential suppliers of minor civils work associated with the North London Heat and Power Project (NLHPP). The information has been promoted through trade publications and local press to increase interest from local suppliers which could be part of the minor civils framework. More details about the minor civils framework are available on the [Suppliers page](#) of the NLHPP website.

## **10. EQUALITIES IMPLICATIONS**

- 10.1. When considering the EcoPark House future use, the equality of access is a key consideration which will be considered the community related usage and availability of the facility. There are no other equality implications of this report.

## **11. COMMENTS OF THE LEGAL ADVISER**

- 11.1. The Legal Adviser has been consulted in the preparation of this report and comments have been incorporated.

## **12. COMMENTS OF THE FINANCIAL ADVISER**

- 12.1. In February 2022, the Authority continued work to ward ensuring it could take advantage of the cheapest forms of Finance available to Finance the NLHPP and borrowed £250m from the Public Works Loan board. Officers continue to explore options for further financing.

### **Contact officer:**

David Cullen  
Unit 1b Berol House  
25 Ashley Road  
London N17 9LJ  
020 8489 2112

**APPENDIX A      PROGRAMME SUMMARY**





# Authority Meeting 10 March 2022

## Appendix A – Programme Summary





# Contents



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## Note:

- 1. Project Health Check is current at mid-February**
- 2. Schedule and Health, Safety & Wellbeing Summary current at end of December reporting period**
- 3. Social Value Dashboard is current at end-January**



# Project Health Check (at mid-February)



| Project  | Cost      |              | Schedule  |              | Risk      |              | HSW       |              | NLHPP Impact |              |
|--|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|--------------|--------------|
|  | In-period | Period Trend | In-period | Period Trend | In-period | Period Trend | In-period | Period Trend | In-period    | Period Trend |
| Laydown Area (East) - E1a1                     | n/a       |              | n/a       |              | n/a       |              | n/a       |              | Completed    |              |
| Laydown Area (West) & Eastern Access - E1a2    | n/a       |              | n/a       |              | n/a       |              | n/a       |              | Completed    |              |
| Northern Access - E1b                          | n/a       |              | n/a       |              | n/a       |              | n/a       |              | Completed    |              |
| Transport Yard - E2a                           | n/a       |              | n/a       |              | n/a       |              | n/a       |              | Completed    |              |
| Sewer Diversion (Enabling Works) - E2b         | n/a       |              | n/a       |              | n/a       |              | n/a       |              | Completed    |              |
| Sewer Diversion (Main Works) - E2c             | n/a       |              | n/a       |              | n/a       |              | n/a       |              | Completed    |              |
| EcoPark South – E3a                            | ●         | →            | ●         | ↓            | ●         | →            | ●         | →            | ●            | →            |
| Northern Area Clearance – E3b                  | ●         | →            | ●         | ↑            | ●         | →            | ●         | →            | ●            | →            |
| Utility Corridor and Main DNO connections - E4 | ●         | →            | ●         | →            | ●         | →            | ●         | →            | ●            | →            |
| Energy Recovery Facility (ERF) - E7            | ●         | →            | ●         | →            | ●         | →            | ●         | →            | ●            | →            |
| EfW demolition and decommissioning - E8        | n/a       |              | n/a       |              | n/a       |              | n/a       |              | n/a          |              |
| Southern Access Widening - E9                  | n/a       |              | n/a       |              | n/a       |              | n/a       |              | n/a          |              |

See next slide for key to RAG status





# Project Health Check – Key



| Key | Cost   | Schedule   | Risk  | HSW   | NLHPP Impact   |
|-----|--|--|---|---|--|
| ●   | Is on or below the Overall Project Cost Baseline   | When the project completion date is on time or early     | No unknown risks and low uncertainty within the risk environment  | No recorded incidents, accidents or near misses. Any issues are outside the Project's control.<br><br>Senior leadership engagement, Positive Behaviours and Safety Observations noted and recorded. | If there is no adverse impact on the ability of the NLHPP to deliver on time and within its budget.                              |
| ●   | Increase in known costs or risk of exceeding the Overall Project Cost Baseline           | One of more project milestone is late by more than a day | Newly identified risks with some impact to the risk environment in the period   | Rise in recorded accidents, lost time or otherwise, or occupational diseases. Normal scheduled HS&W advisor site visits and weekly  | If the project has the potential to adversely impact the ability of the NLHPP to deliver on time and within its budget.          |
| ●   | Unexpected costs arisen likely to cause the Overall Project Cost Baseline to be exceeded | A project critical path milestone is late                | High uncertainty within the risk environment identified by their qualitative RAG impact rating (cost, time, reputation) | Any RIDDOR incident or consistent failures to comply with CLC Site Operating Procedures version 4   | If the performance of the project is going to impact the NLHPP bringing ERF into service on time or capital cost being exceeded. |

| Key | Context  |
|-----|--|
| →   | No material change in status between the current and previous period |
| ↓   | Adverse change in status between the current and previous period     |
| ↑   | Positive change in status between the current and previous period    |



# Schedule Dashboard (at end of Decemeber)



| Milestone (Critical)   | Baseline Date | Forecast Date    | Deviation to Baseline Programme (weeks) | Recovery Plan   |
|--|---------------|------------------|---|---|
| Eco Park South - Commence steel frame installation   | 24-Jun-21     | <u>26-Jul-21</u> | -4                                      | Complete  |
| Eco Park South - Commence M&E installation   | 03-Sep-21     | <u>13-Dec-21</u> | -14                                     | Complete  |
| Eco Park South - Commence Testing & Commissioning  | 08-Apr-22     | 29-Jul-22        | -15                                     | Consequential delay and delays to SCADA (Design and procurement of long lead items) |
| Eco Park South - RFPF & RRC - Planned Sectional completion (RFPF and RRC ready for transition)         | 27-Jul-22     | 16-Nov-22        | -16                                     | EPS consequential delay   |
| Eco Park South - LEL Vacate the Temporary Bulky Waste Facility (Operational Commencement of RRF)       | 18-Oct-22     | 20-Dec-22        | -9                                      | TBWRF delays (6w), time risk allowance consumed in period (4w). Overall 2w delay.   |
| Northern Area Clearance - Eastern Section is cleared and available to the ERF Contractor (IF E7-5)     | 29-Jul-22     | 29-Jul-22        | 0                                       | TBWRF delays (6w), time risk allowance consumed in period (4w). Overall 2w delay.   |
| Northern Area Clearance - Northern Area Western Section is cleared and available to the ERF Contractor | 28-Feb-23     | 25-Apr-23        | -8                                      |   |
| ERF - Notification Of Contract Award Decision  | 17-Dec-21     | <u>17-Dec-21</u> | 0                                       | Complete  |
| ERF - Environmental Agency (EA) Approval of Pilling  | 01-Aug-22     | 01-Aug-22        | 0                                       |   |
| ERF - Procurement - Access Date - Phase 1 Eastern Area   | 03-Oct-22     | 03-Oct-22        | 0                                       | EPS TBWRF time risk consumed in period (2w) to mitigate delay to E7 ERF interface   |
| ERF - Access Date - Phase 2 Western Area   | 01-Mar-23     | 26-Apr-23        | -8                                      |   |
| ERF - Construction Complete  | 30-Sep-25     | 21-Nov-25        | -8                                      |   |
| ERF - First Fire on Waste  | 19-Dec-25     | 12-Feb-26        | -8                                      |   |
| ERF - Completion of The Take Over Certificate (Liquidated Damages Milestone)                           | 31-Mar-26     | 26-May-26        | -7                                      |   |
| ERF - Performance Guarantee Tests Complete (PGT2 Inc. availability)                                    | 25-Feb-27     | 22-Apr-27        | -8                                      |   |
| ERF - FINAL TAKE OVER (Final Certificate)  | 30-Mar-28     | 24-May-28        | -8                                      |   |
| Energy from waste (EfW) - Laydown Area Re-Instatement - Operational Acceptance Period - Complete       | 10-Jul-30     | 03-Sep-30        | -8                                      |   |
| Southern Access Widening (SAW) - Operational Handover Complete   | 15-May-31     | 09-Jul-31        | -8                                      |   |



# Health, Safety & Wellbeing (HSW) Dashboard

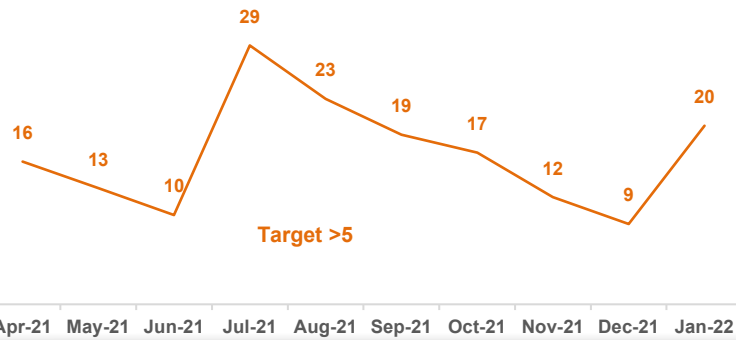
## Leading Performance Metrics



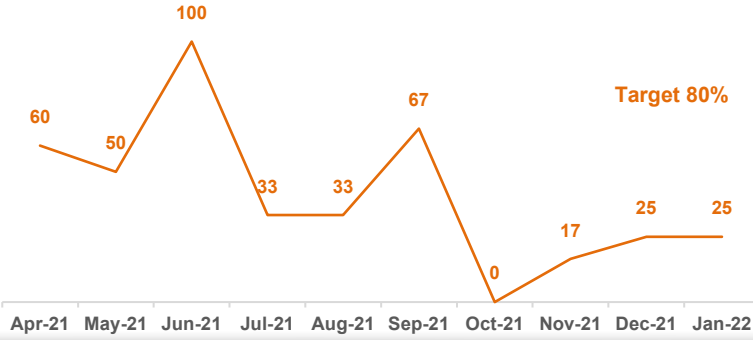
### Leading Performance Indicators

A 'leading performance indicator' is defined by the Step Change programme<sup>4</sup> as "something that provides information that helps the user respond to changing circumstances and take actions to achieve desired outcomes or avoid unwanted outcomes. Their role is to help improve future performance by promoting action to correct potential weaknesses without waiting for demonstrated failures." *source HSE UK*

#### Occupational Health Engagements



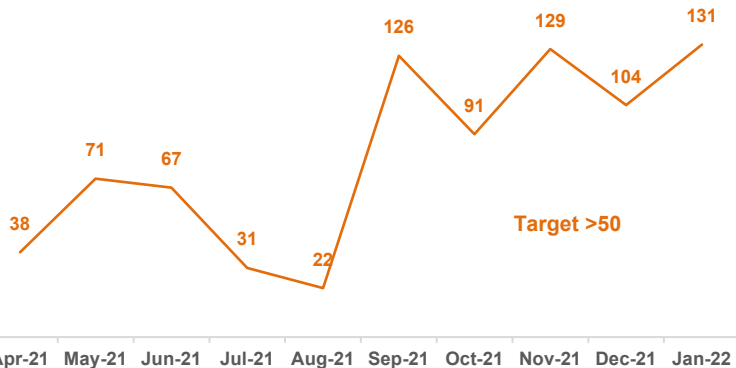
#### RAMS Submittals



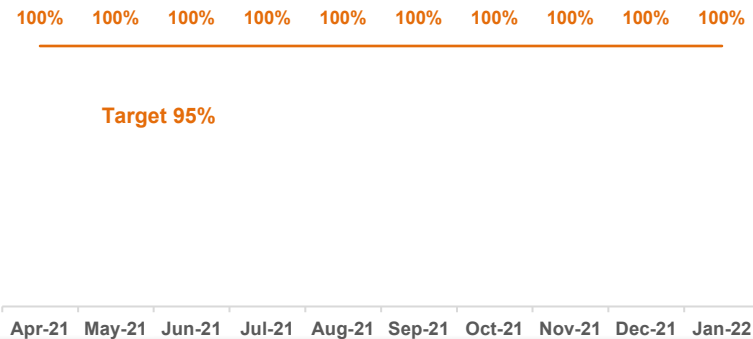
#### Weekly Site Inspections



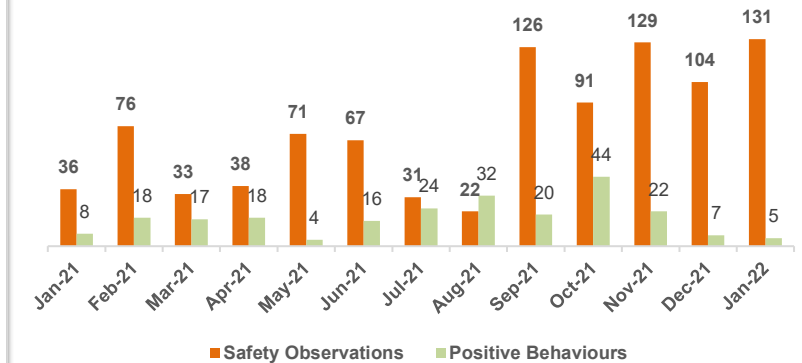
#### Safety Observations & Positive Behaviours



#### Inductions



#### Safety Observations & Positive Behaviours





# Health, Safety & Wellbeing (HSW) Dashboard

## Lagging Performance Indicators



**Lagging Performance Indicators**

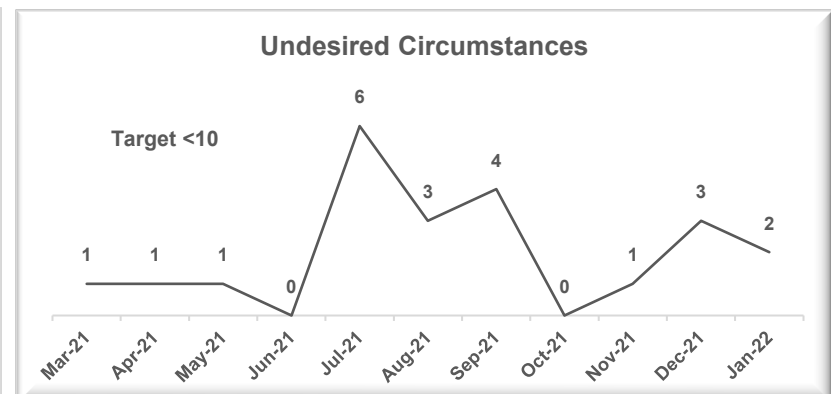
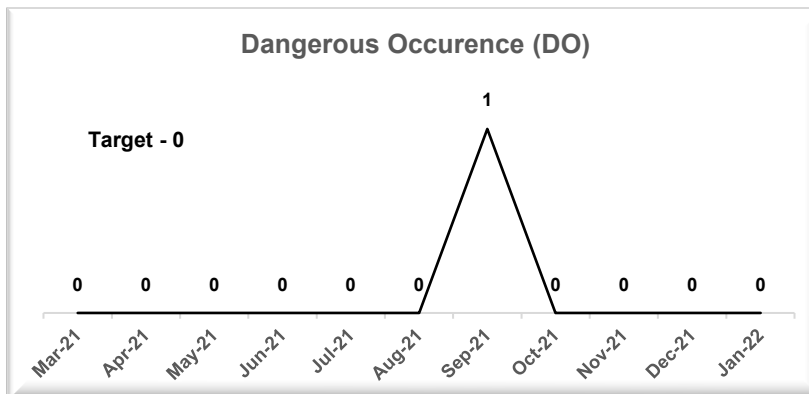
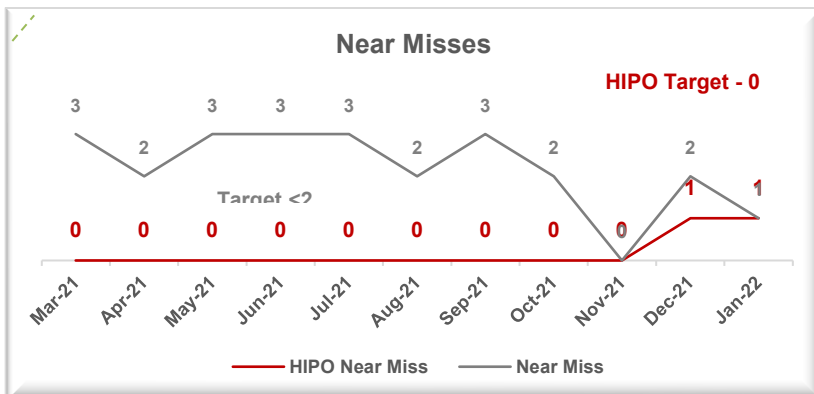
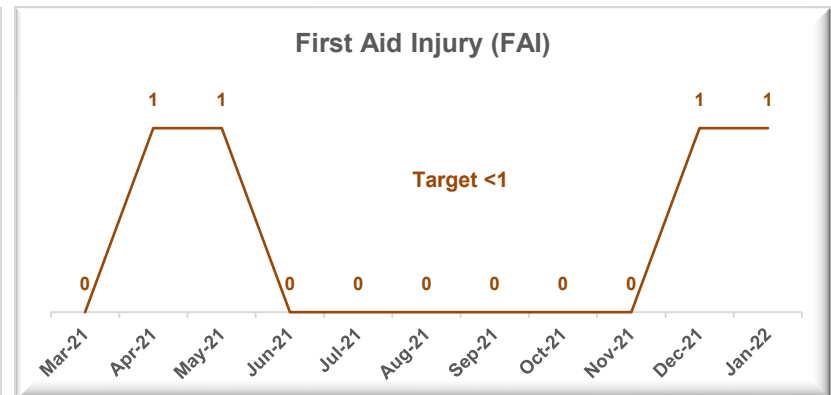
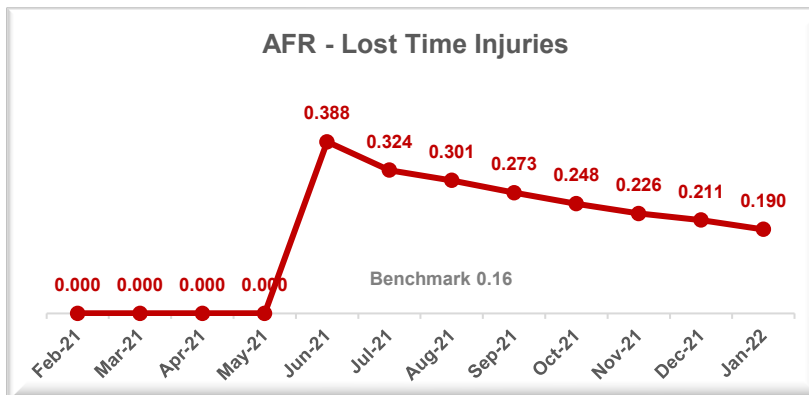
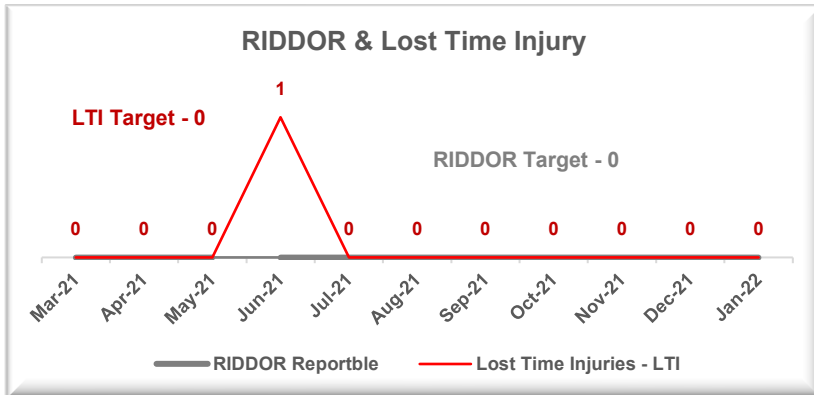
Lagging indicators have been reported as loss metrics that are already recorded and measure an organisation's safety performance in the form of past incident statistics. For example, number of incidents and reported accidents, disease incidents, failures, failures of systems or performance standards. *Source HSE UK*

**RIDDOR Accident Frequency Rate (AFR) – HSE UK**

- Calculated by: Number of injuries in a given time period / total hours worked in the period x 100,000.
- AFR for RIDDOR Reportable injuries (over 7 days away from work) to the HSE UK. As defined within the regulations.
- The AFR is calculated on a 12 month rolling basis.

**Lost Time Injuries Accident Frequency Rate - AFR**

- Calculated by: Number of injuries x 100,000 / number of hours worked in a given time period.
- These are injuries are less than 7 days away from work and not RIDDOR Reportable.
- This indicator is utilised across the construction industry and used to measure performance across similar peer programmes.





# Health, Safety & Wellbeing (HSW) Dashboard (Project Compliance Audit Results)



## Site Inspection Summary

| Site                                       | Summary Report   | Inspection Compliance Scores  |
|--|--|---|
| <b>E3A—Eco-Park South</b>                  | <p>Site activities include guttering installation, blockworks, glazing, structural concrete infill along with retaining walls and sprinkler system installation, waterproofing membrane to tipping hall slab in RFPF.</p> <p>Ground slab rebar, steel reinforcement, blinding pour for ground slab, and roofing panels installation in RRC. Adequate welfare arrangements in place. Excavation in attenuation tank and IOVS ongoing.</p> <p>Operatives are adhering to Safe Systems of Work, following RAMS, and wearing correct PPE. Generally good practices being maintained.</p> | <p>Site visit 06/01/2022 – 95.17%</p> <p>Site visit 13/01/2022 - 97.41%</p> <p>Site visit 21/01/2022 – 95.54%</p> <p>Site visit 27/01/2022 – 97.07%</p> |
| <b>E3b—Northern Area Clearance (TBWRF)</b> | <p>Groundworks on-going with plant used for levelling and drainage works, southern workshop installation progressing safely, fabric pull almost completed, northern apron – drainage excavation and installation on going, foul drainage for welfare installed.</p> <p>Welfare cabins fitted out and odour control plant install works. Concreting operations in northern apron and ducting along eastern elevation</p>  | <p>Site visit 06/01/2022 – 97.12%</p> <p>Site visit 13/01/2022 - 97.30%</p> <p>Site visit 21/01/2022 – 98.55%</p> <p>Site visit 27/01/2022 – 99.82%</p> |



# Social Value Dashboard Summary – March 2022



| Social Value Theme                                      | Definition   | Target     | Progress  |
|---|--|------------|---|
| <b>Development Consent Order (DCO) Obligations:</b>     |  |            |   |
| <b>Apprenticeships</b>                                  | S.106 obligation to provide 100 apprenticeships, each with a duration of 12 consecutive months. Apprenticeship means a training work scheme:<br>(a) offered to a person ordinarily resident in the Local Area; (b) in any sector which directly relates to, and other work associated with the Project; (c) which, once successfully completed, will result in a nationally recognised qualification for the apprentice (including but not limited to NVQ Level 3 and 2); (d) at a minimum of 30 hours per week; and (e) offered on at least equivalent terms and conditions of employment to those benefitting Equivalent Workers, including paying a wage in accordance with industry norms  | <b>100</b> | <b>57</b> years of apprentices' employment<br><b>19</b> individuals |
| <b>On-site Skills Training Placements</b>               | S.106 obligation. 'On-Site Skills Training' means no less than 225 training placements offering relevant skills training in various sectors and provided throughout the Construction and Demolition Period, each placement being:<br>(a) primarily on-site within the Application Site, but which may have an element of off-site classroom training; (b) offered on at least equivalent terms and conditions to those benefitting Equivalent Workers including paying a wage accordance with industry norms (if applicable); (c) one week duration; (d) provided to a school or college leaver, or an adult who has not been employed in the construction industry during the previous six (6) months.; and a person undertaking such a training placement shall be an 'OSS Trainee'. | <b>225</b> | <b>108</b>  |
| <b>LB Enfield targets, adopted as measure by NLHPP:</b> |  |            |   |
| <b>Local Labour</b>                                     | Target to promote local employment. Contractors should employ suitable candidates from the local area (London Boroughs of Enfield, Haringey and Waltham Forest)  | <b>25%</b> | <b>19%</b>  |
| <b>Local Businesses</b>                                 | Target to maximise contractors' expenditure within the local area (London Boroughs of Enfield, Haringey and Waltham Forest)  | <b>10%</b> | <b>23%</b><br><b>£9.99m</b><br>(local spend by contractors to date) |
|   |  |            | <b>-</b>  |
| <b>Delivery against Industry Benchmarks:</b>            |  |            |   |
| <b>Equality, Diversity &amp; Inclusion (EDI)</b>        | The project aims to promote women in on-site construction workforce. Representation of women varies across different trades and nature of the roles. Monitoring continues to establish reliable benchmark comparisons.   | <b>-</b>   | <b>4%*</b>  |
|   | The project aims to promote Black, Asian and Minority Ethnic (BAME) Groups in on-site construction workforce. Monitoring continues to establish reliable benchmark comparisons.  | <b>-</b>   | <b>18%*</b>   |

\*Not all employees have chosen to report on ethnicity and gender, and the statistics are likely an underestimate. NLHPP is working with contractors to improve data collection.

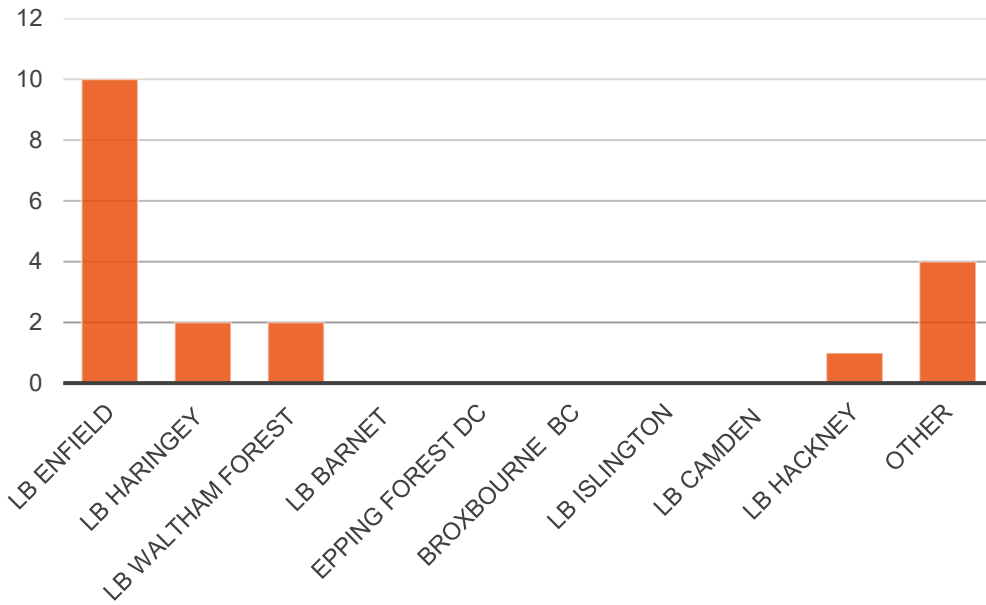


# Social Value Dashboard

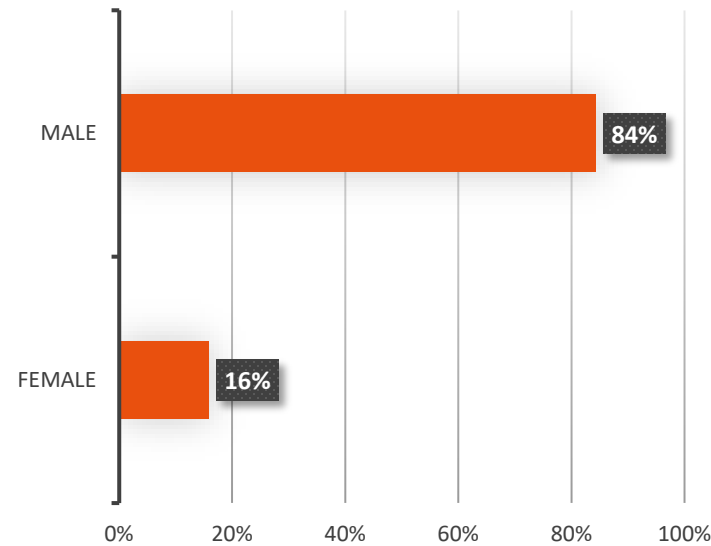
## Apprenticeships



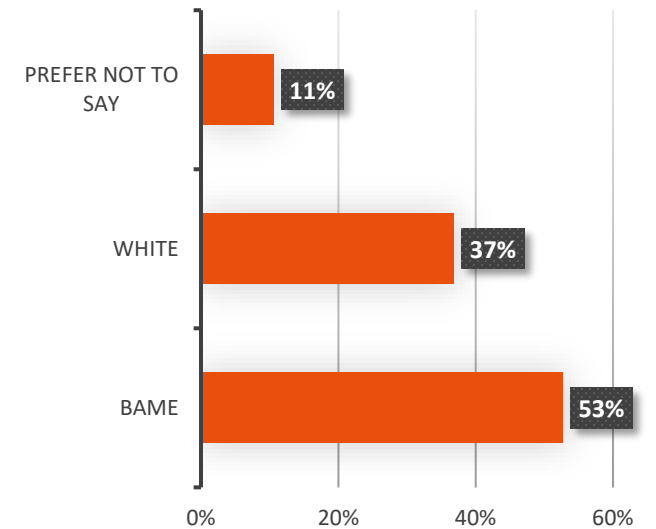
### Apprentices - Home Borough



### Apprentices - Gender



### Apprentices - Ethnicity



| Apprentices – Home Borough | Local Wards   |
|----------------------------|---|
| LB Enfield                 | Upper Edmonton (1); Turkey Street (1); Southbury (1); Palmers Green (1); Lower Edmonton (1); Jubilee (3); Grange (1); Chase (1) |
| LB Haringey                | Tottenham Hale (1); Seven Sisters (1)   |
| LB Waltham Forest          | Higham Hill (1); Larkwood (1)   |
| LB Hackney                 | Haggerston (1)  |

#### Delivery & Monitoring:

Data on origin, ethnicity and gender relating to apprentices is collected from contractors on site for monthly reporting.

Local employment and recruitment of apprentices is prioritised in the contract (in particular in LB Enfield, LB Haringey and LB Waltham Forest, followed by other north London boroughs).

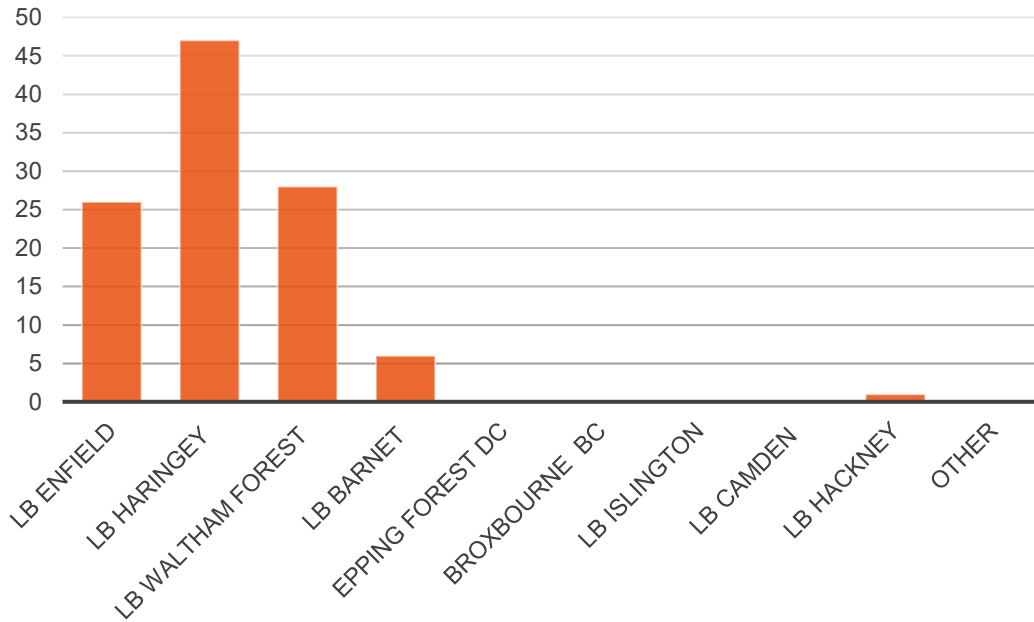
All construction contractors have policies to encourage equality and diversity in their recruitment practices. They have obligations under the contract with NLWA to eliminate all forms of discrimination in employment practices in accordance with an established single equality scheme.



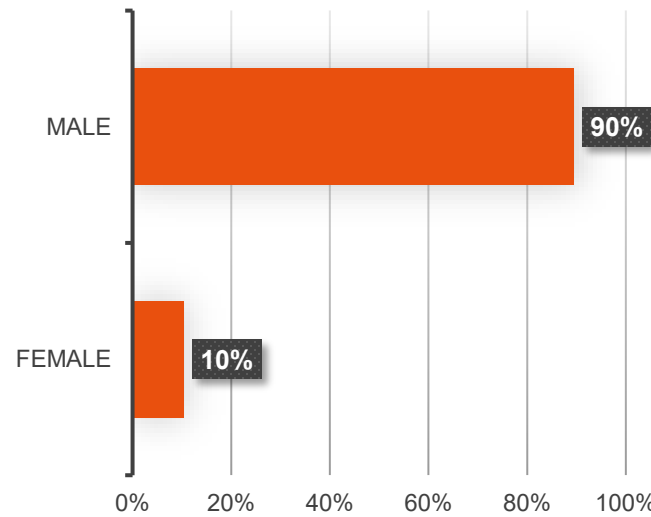
# Social Value Dashboard

## On-site Skills Training Placements

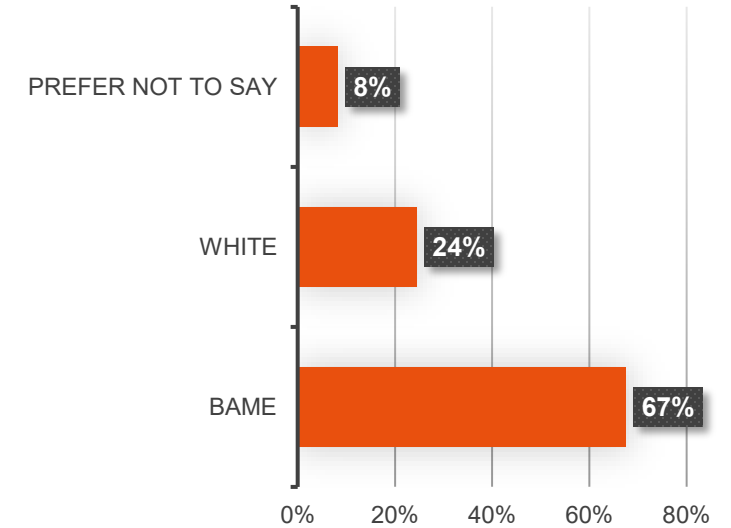
### Trainees - Home Borough



### Trainees - Gender



### Trainees - Ethnicity



#### Delivery & Monitoring:

Delivery of training placements is targeted at a variety of EDI groups. To date, all trainees are from groups forming part of our EDI categories including long-term unemployed and lone parents.

Training placements are prioritised for local residents (in particular in LB Enfield, LB Haringey and LB Waltham Forest, followed by other north London boroughs). Recruitment of trainees is facilitated through engagement with local Job Centres and agencies.

EDI data relating to the on-site trainees is collected through an end of placement survey and where possible supplemented by information from the training provider. Not all respondents have chosen to report on ethnicity and gender. Information is based on a responses from 86 out of 108 trainees (80%).

**APPENDIX B      ECOPARK HOUSE LEASING PLANS - GROUND FLOOR AND FIRST FLOOR**







This drawing must not be copied, reproduced, or used in any way without the written consent of the Design Consultant prior to work being put to tender. Any discussion should be referred to the Design Consultant prior to work being put to tender. This drawing is the property of Race Cottam Associates and shall not be used for any other project without the written consent of Race Cottam Associates Limited.  
 1 Race Cottam, Dunelm, York YO1 1JF  
 2 July 11, 2019

Part A (Structural safety)  
 See Structural Engineer's drawings and calculations.  
 Part B (Fire safety)  
 EPH is to be designed to be compliant with BS 9999: 2017  
 See drawings for smoke and heat detection layout.  
 BS5839-1: 2019 grade A category L3 automatic  
 interlinked detection system. Mains powered with battery  
 back up.  
 All structures to be 30min fire rated.  
 Hold-open devices are required for all self-closing doors  
 on escape routes in the event of a fire.  
 All automatic doors placed across escape routes are  
 required to have a monitored battery system to open the  
 doors if the mains electricity supply fails.  
 To inhibit the spread of fire within the building all internal  
 walls are to be Class 0.  
 Plaster finished to be minimum Class 1 if painted onto a  
 Class 0 fire retardant lining material.  
 Part C (Resistance to condensation and moisture)  
 Not applicable.  
 Part D (Toxic substances)  
 Not applicable.  
 Part E (Resistance to sound)  
 All new internal stud walls are to be packed with rock wool  
 solid acoustic insulation batts to resist the passage of  
 impact and airborne sounds.  
 Part F (Ventilation)  
 Fixed systems of mechanical ventilation and any  
 associated controls must be commissioned to CIBSE  
 Code M4.  
 Ventilation intake to be placed away from direct impact of  
 parking areas & loading bays.  
 Part G (Sanitation, hot water safety and water efficiency)  
 Refer to specialist consultants information.  
 Part H (Drainage and waste disposal)  
 All sanitary pipework and drainage must comply with the  
 relevant clauses in section 5 and 3 of Building Regulations  
 approved document H or BS 1203:2010, BS EN 12056  
 and BS 7527. All to be agreed with Building Control on site.  
 Part I (Water to specialist consultants information)  
 Refer to specialist consultants information.  
 Part J (Combustion appliances & fuel storage systems)  
 Not applicable.  
 Part K (Protection from falling)  
 See drawings.  
 Part L (Conservation of fuel and power)  
 See drawings for L3 release.  
 Part M (Access to and use of buildings)  
 Thresholds to entrances to be level & have appropriate  
 weather protection in place.  
 Entrance matting to be set back from threshold to not  
 impede wheelchair access. Surface of matting to be level  
 with surface of adjacent floor finish.  
 Internal doors - where needed to be opened manually, the  
 opening force at the leading edge of the door is not more  
 than 50N from the door in closed position to 30 degree  
 open, and not more than 20N for work 90 degrees to 90  
 degrees of the opening cycle.  
 All low energy powered swing door systems are capable of  
 being operated in manual mode. Is powered inside or in  
 power assisted mode.  
 Part N (Electrical safety)  
 A person or firm regulated with a Part P competent  
 person's scheme should carry out all electrical work.  
 Electrical installations to be designed, installed, inspected  
 and tested in accordance with BS 7671:2018 chapter 13 &  
 Part B, Energy Efficiency. When these parts of the work  
 are complete the appropriate BS 2017 Electrical  
 Installation Certificate is to be issued for the work and a  
 copy is to be submitted to Building Control on completion.

|          |   |    |    |
|----------|---|----|----|
| 12/02/19 | Issued for Client Review (RCA)  | MB | BT |
| 06/03/19 | Approved for construction (RCA)   | MB | BT |
| 16/12/18 | Approved for construction (RCA) (Revised RFP to EPH & FPH in Working state of building from 12/02/19. 30m x 30m x 30m. Revised RFP to EPH & FPH in Working state of building from 12/02/19. 30m x 30m x 30m. Revised RFP to EPH & FPH in Working state of building from 12/02/19. 30m x 30m x 30m.) | MB | BT |
| 13/11/18 | Issued for building   | MB | BT |

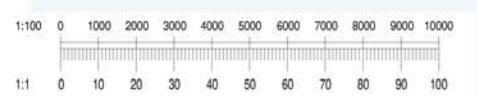
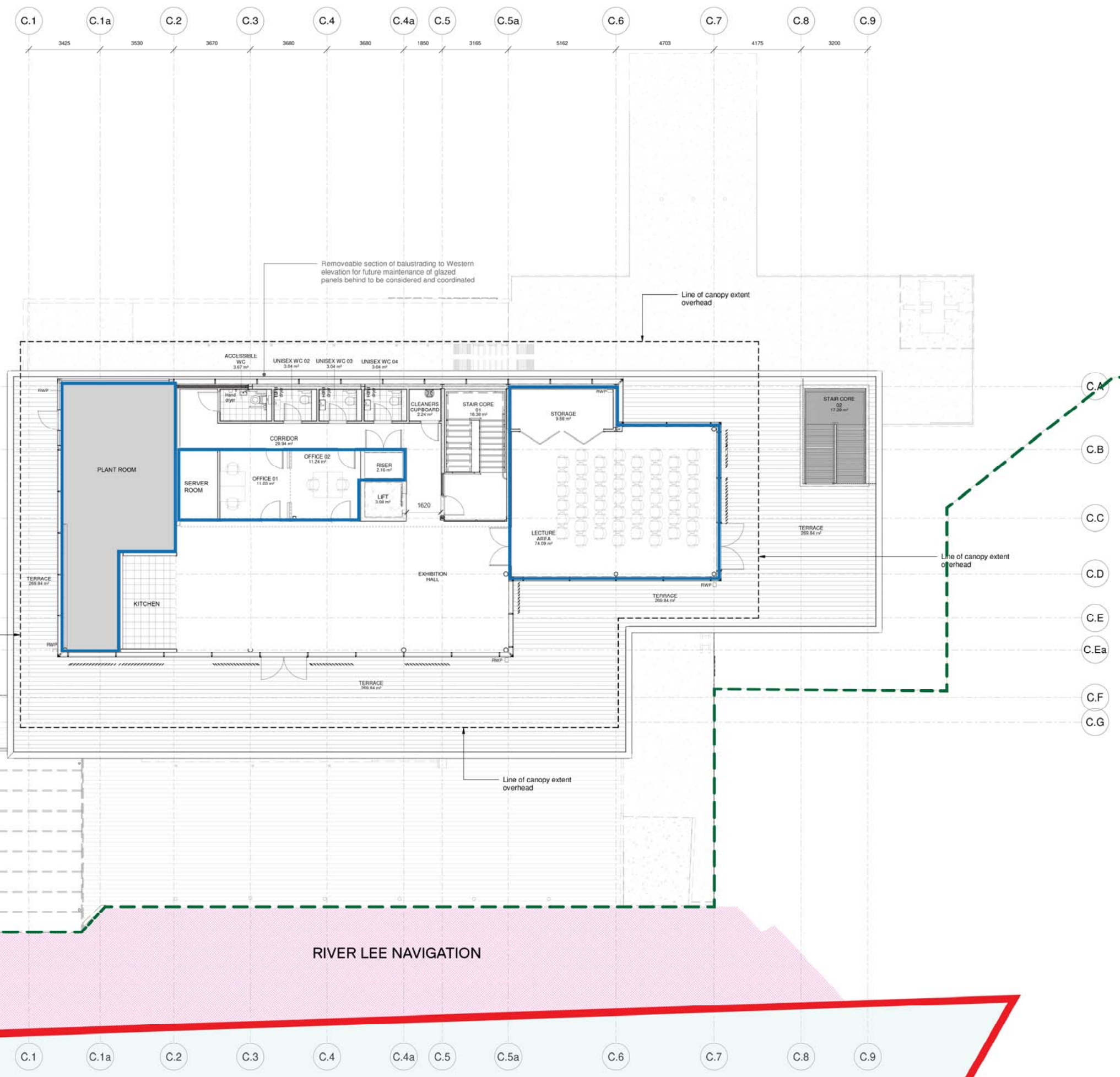
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|-------------------|------------------|-----|
| PURPOSE OF ISSUE: | REVIEW & COMMENT | 5/3 |
| PROJECT TITLE:    | EcoPark South    |     |
| DRAWING TITLE:    | EPH GA F01 Plan  |     |

Client: **north** **Power**  
 16/16/18 DERBY HOUSE  
 16/16/18 DERBY HOUSE  
 16/16/18 DERBY HOUSE  
 16/16/18 DERBY HOUSE

**Race Cottam Associates**  
 16/16/18 DERBY HOUSE  
 16/16/18 DERBY HOUSE  
 16/16/18 DERBY HOUSE

|                                 |      |
|---------------------------------|------|
| WA DWG No:                      | REV: |
| NPE3a-RCA-44AX-F01-DR-AR-200202 | P01  |
| NPE3a-RCA-44AX-F01-DR-AR-200202 |      |

- KEY:**
- DCO LIMITS
  - - - PROPERTY BOUNDARY
  - NO ACCESS FOR SEA CADETS
  - EXCLUSIVE ACCESS AND USE AT ALL TIMES FOR SEA CADETS
  - XXXX CANAL ACCESS AND USE BY SEA CADETS



Original Drawing Size - A1 DO NOT SCALE