

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: 16 DECEMBER 2021

SUMMARY OF REPORT:

This report provides the Authority meeting with an update on progress of the North London Heat and Power Project (NLHPP).

RECOMMENDATIONS:

The Authority is recommended to note the contents of the report.

SIGNED:  **Programme Director**

DATE: 06 December 2021

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, and 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 a dashboard.
- 1.3. The progress data provided within the report, including the status dashboard in Appendix A, reflects the status of the programme on the 24 September 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's performance continues at a high standard and remains on track to deliver against its key objectives.
- 2.2. The ERF procurement process and evaluation has concluded in this period and is reported on elsewhere on this agenda.
- 2.3. On site, the EcoPark has been transformed with the completion of the steel frame of the RRF building. The façade, roof and internal works are now the focus of those works. There is strong coordination of site activities, both in the southern area of the RRF and the northern site where the temporary bulky waste recycling facility (TBWRF) is being constructed. This has allowed progress to be made safely and in line with the schedule.
- 2.4. The approach to safety continues to be foremost in the team's mind, and a number of positive indicators have been recognised this month. The increase in safety observations reported is a notable item for two reasons. It indicates an increasingly positive engagement by workers within the NLHPP's safety culture while also delivering tangible health and safety related information to pro-actively respond to.
- 2.5. Environmental performance this month has been particularly notable for two reasons. Firstly, the Environment Agency provided acceptance of the site clearance

verification reports for the removal of the in-vessel composting facility (IVC) and Bottom-Ash processing plants. This reflects the earlier engagement and design work to ensure that a high standard of work was planned, and then delivered by the demolition contractor.

- 2.6. Secondly, an innovation in concrete production has been put into use by Taylor Woodrow on the Temporary Bulky Waste Facility construction. Ultra-low Carbon Concrete (ULCC), which uses an alternative binding agent to traditional cement, and results in up to 70% less carbon dioxide emissions. This is the first time this product has ever been used in the UK (it has previously been used in France). ULCC contains no cement. The production of cement is widely recognised as the third most damaging carbon emitter after power-generation and transport, contributing some 8% of the world's CO₂ emissions. Across the first 150m³ pour, savings totalling 24 tonnes of CO₂ were achieved.
- 2.7. Social value and community engagements have continued to accelerate. Taylor Woodrow's on-site skills training target was achieved last period with their latest round of placements. 41% of trainees on the NLHPP on-site skills training programme have confirmed that they have secured employment since completing the placement. The result is just over the College of Haringey, Enfield and North East London's own benchmark of 38% of successful employment outcomes for trainees. School engagement has been a continuing focus with multiple events taking place and planned in the coming months, although the current concerns about the new COVID-19 variant are likely to affect delivery in the short term.
- 2.8. The communications team have continued to engage with residents across the seven boroughs. A co-ordinated awareness campaign was prepared with support from all seven boroughs to share information about the NLHPP. This included an updated project website page; a video for use across the website and social media platforms to explain why the project is needed; and infographics on climate change, air quality, recycling investment and waste management, to support borough communications channels and support consistent project messaging. Further engagement in local boroughs included roadshows and careers fairs where residents in Enfield, Waltham Forest and Haringey met project team members. The events were well-received with many residents interested to find out what happens to their waste and agreeing with the benefits of avoiding landfill.
- 2.9. Reflecting on the year 2021 coming to an end, it is worth highlighting the success of the Project to date, with all enabling works completed within budget and in line with the overall schedule and the first major contract well underway. There remain major works to be completed, but success to date has demonstrated that the Authority's programme management is working effectively, with the right governance, resources, and processes enabling successful management of complexity and risk.

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. The project is continuing to make impressive progress in construction on a large scale in the EcoPark across a broad front. The RRF's primary steel structure is in place, marking the successful completion of complex lifting operations by Taylor Woodrow. This allows the roofing and cladding to start thereby creating a building to be fitted out. The photograph in Figure 1 below shows the well organised and productive construction of the RRF in progress on several parallel work fronts.



Figure 1 RRF Construction

- 3.3. In the north of the EcoPark the temporary bulky waste recycling facility (TBWRF) construction is making good progress and taking shape with the start of the erection of its superstructure.
- 3.4. For both the RRF and TBWRF, detailed plans for commissioning have started to be agreed with the contractor Taylor Woodrow and in consultation with the future operator LEL.

- 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.



Figure 2 EcoPark arial view

Construction Logistics

Over the last year the EcoPark has successfully managed to incorporate substantial construction activities into its traffic and pedestrian routes and access points. The plans for construction logistics have, for example, made provision for flexibility in using north and south EcoPark entrances if local traffic congestion occurs.

EcoPark South (Project E3a)

- 3.7. On-site construction productivity has been positive in the last month with no safety incidents.
- 3.8. The RRF steelwork installation has made strong progress and been completed to enable the follow-on roof cladding which is due to commence late November followed by the start of the mechanical and electrical works. The north mezzanine structure floor slab has also been completed, and the ground levels have been reduced within the RRF to enable the laying of the waterproofing and start of the RRF flooring.
- 3.9. The photograph in Figure 3 below shows progress of the RRF steelwork and mezzanine floor slab on site.



Figure 3 RRF mezzanine floor slab (17th Nov. 2021)

- 3.10. For the Reuse and Recycling Centre (RRC) building at the RRF, both the basement tank walls, and cover slab were completed to enable the start of the primary steelwork (see Figure 4 below). The piling to the south of the RRC has been also completed and the follow-on pile caps and associated ground beams have progressed.



Figure 4: Progress of steelwork for the public Reuse and Recycling Centre (RRC) (17th Nov. 2021)

- 3.11. As noted previously the construction programme outlook is being impacted by availability of construction materials, particularly steel and roof cladding. This is

attributable to world-wide disruption to supply chains during the COVID-19 pandemic and the subsequent boom in construction works. Resequencing of activities and additional resource mobilisation has been undertaken to mitigate the impact of this delay as far as practical. Progress on site to date is about 5 weeks behind schedule.

Focus has increased on planning the commissioning and completion of the works including the development of an operational readiness plans jointly with the operator (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 operational readiness.

Temporary Bulky Waste Recycling Facility (Project E3b)

- 3.12. All long lead items to be procured have been delivered to site, are anticipated to be delivered to site in this period or are being manufactured with a confirmed delivery date. The factory acceptance test for the odour control panel was successfully completed and attended by LEL.



Figure 5 Bulky Waste Recycling Facility under construction

- 3.13. The main impact to the schedule has been the discovery of hydrogen in the ground. The contractor has now successfully completed the construction of the buildings slab for which protection against hydrogen is required. Construction of the walls for the main building are practically complete, with the first of the roof steel trusses now installed as can be seen in the photograph in Figure 5 below. The site wide

infrastructure for the drainage, below ground utilities and the road network construction are progressing as planned.

- 3.14. Installation of the building services, which includes the odour and fire management systems is expected to commence in December 2021. The focus of the schedule planning has moved to the phases of commissioning and operational readiness for handover to the Authority and operation by LEL. Workshops have been held with key stakeholders to develop the plan of works for these phases, which are being monitored weekly to ensure critical matters are resolved expediently.
- 3.15. Ultra Low Carbon Concrete has been used by Taylor Woodrow in the construction of the TBWRF. Taylor Woodrow's Ultra Low Carbon Concrete uses an alternative binder to traditional Portland cement, and reduces CO₂ up to 70% compared to traditional concrete.

Northern Area Clearance (Project E3b)

- 3.16. The demolition and site clearance verification reports for the In-Vessel Composting and Bottom Ash facilities (Phase 1) have been accepted as complete by the Environment Agency thereby enabling the areas as suitable for the ERF construction. The same information has been issued to the London Borough of Enfield to discharge the relevant Development Consent Order condition for ground remediation of the Phase 1 demolition. No issues are anticipated with attaining this conditions discharge.
- 3.17. The planned dates for commencement of the demolition of the existing bulky waste facility have been rescheduled by four weeks to allow LEL operational flexibility whilst installing their new EfW switchgear. Namely, that LEL are planning to continue to use the existing bulky waste facility until the switchgear project is complete as the primary facility for managing waste during the outage. The impact of this delay will not currently affect the planned completion of the northern area clearance. The handover date of this area of the EcoPark is expected to be achieved to allow commencement of the ERF project.

Site Utility and DNO Works (Project E4)

- 3.18. Cadent have completed the ground radar and trial trench surveys for their new gas supply pipeline design in the western sections of the route outside the EcoPark but there are some remaining surveys to complete in Ardra Road. This will allow Cadent to complete their design and continue with their plans for construction.

4. HEALTH, SAFETY & WELLBEING

- 4.1. This summary considers an overview of the Health, Safety and Wellbeing (HSW) initiatives and performance for the September 2021 period, with further updates included to the time of writing in mid-November.

Health, Safety & Wellbeing Performance

- 4.2. Health, Safety and Wellbeing (HSW) performance continues to be robust across the programme with construction activities well managed, coordinated and controlled.
- 4.3. There have been no Lost Time Injuries (LTI) with the Accident Frequency Rate (AFR) at zero for the period of this report. The rolling 12-month AFR remains at 0.12 owing to the previously reported LTI in June 2021.
- 4.4. There has been a substantial increase from August to September 2021 of submitted safety observations. This increase lends itself to the increased volume of works and site activities coupled with initiatives to encourage the workforce to speak up. There is good evidence of a maturing safety culture as the programme of works increases. This is testament to the continual vigilance of workers through the maturing HSW culture and intensive HSW management.
- 4.5. Safe Start briefings that take place each morning continue to have a positive impact. This has allowed workers and supervisors to address safety concerns and engage in proactive planning and management of daily activities to mitigate the likelihood of incidents or undesired circumstances occurring.
- 4.6. The programme had an average of 190 workers during the month of October 2021 with a steady increase in November. These numbers will continue to increase in line with growing activity on the RRF building, including significant steel erection. Health, safety, and wellbeing continues to be managed, coordinated, and performed well with consistently high standards of HSW applied.
- 4.7. Traffic management and pedestrian segregation safety remains an area of strength and are being well maintained.
- 4.8. Antigen tests for COVID-19 supported by awareness campaigns are key initiatives to the management and minimisation of COVID-19 transmission across the site. A total number of 621 Rapid Lateral Flow (RLF) COVID-19 tests were undertaken during the month the from 25 September to 31 October 2021 a 42% increase from the month of September. A further two workers received a positive test result to COVID-19. The total number of RLF tests since January 2021 currently stands at 3,899 with a total of cases eleven cases reported in that period.
- 4.9. A strong focus remains on encouraging the workforce to undertake the two rapid antigen COVID-19 tests per week.

Health, Safety & Wellbeing Management

- 4.10. A HSW focus week initiative on TBWRF delivered during the week of 18 October 2021 saw a 99% (67 people) attendance throughout the site for the 5-day period.

- 4.11. The Safety week initiatives included safety briefings addressing specific topics around competence, plant interfaces and inspections, occupational noise, Hand Arm Vibration Syndrome, working at height, and power tools and environment.
- 4.12. This initiative also led to HSW rewards and recognition of six workers and two supervisors for their positive approaches to HSW on the programme.

5. ENVIRONMENT AND SUSTAINABILITY

- 5.1. This summary considers an overview of the Environment & Sustainability outcomes for the period ending September 2021.
- 5.2. Throughout the period, project contractors have continued to identify and deliver good practice environmental outcomes. This helps to maintain good relationships with project stakeholders, and is essential to being a good neighbour.

Environmental Performance

- 5.3. No environmental complaints were reported. There were three minor environmental incidents (Level 2) relating to consent conditions, management of site drainage, and management of works near waterways, and one environmental near miss. These items were promptly rectified and appropriate action taken to mitigate against future occurrence. This has included additional training and communications to workers.
- 5.4. Waste management performance continues to exceed the project stretch target with more than 99% of non-hazardous construction, demolition and excavation waste (CDEW) diverted from landfill in September. This compares favourably with other construction projects.

Environmental Management

- 5.5. With the exception of the three minor environmental incidents and one near miss, the monthly environmental site inspections and meetings with the contractor identified that environmental issues are being well managed in line with good practice. The vigilance on environmental management matters has continued to deliver good outcomes.
- 5.6. The September site inspections focused on waste management. The reviews were undertaken to confirm whether the contractors are meeting project and other applicable waste requirements including those listed in the waste Duty of Care Code of Practice.
- 5.7. The review of waste management practices confirmed that contractors are aware of their requirements and measures are in place to effectively manage waste. This

is supported by the very good performance against the projects landfill diversion key performance indicator.

- 5.8. Progress on environmental awareness initiatives is continuing. Initiatives planned include an environmental briefing to the project delivery team on environmental requirements and environmental legislation and a workshop focused on identifying construction related environmental and sustainability opportunities.

6. RISK SUMMARY

- 6.1. The overall risk position of the programme has reduced in the period, with successful implementation of mitigation measures and review and assessments of live risks continuing.
- 6.2. With the procurement phase for the Energy Recovery Facility nearing completion, related risks have been critically assessed across ERF and Programme. The dialogue has resulted in greater clarity over the programme, and as a result, the risk profile for the programme has been reduced with many risks being best managed at the ERF level.
- 6.3. The programme team continue to take a proactive approach to managing the future uncertainties:
 - 6.3.1. There has been progress on the delivery timeframe of the LEL switchgear. Regular sessions have been undertaken between the EcoPark South team and LEL to manage the LEL Switchgear. To date, the update to delivery schedule for HV power created in October has committed LEL to two feeds of power supply. Both dates are before Taylor Woodrow programme date for power. There are risks that remain regarding extent of removal of asbestos in the turbine hall by their contractor, but these are being proactively managed.
 - 6.3.2. The national shortage of materials and the consequent variation in prices remains a key risk to the programme. The programme is still forecasting a potential five-week delay to the EcoPark South contract because of this risk. To mitigate this the contractors, have re-sequenced and brought forward deep drainage and concrete floor works. There was a review of materials and provision for early procurement of items not yet purchased.

7. SOCIAL VALUE

- 7.1. This section updates Members on the activity in the social value workstream. This month's update highlights the progress which has been made with the delivery of on-site skills training placements and engagement with local schools.

- 7.2. Taylor Woodrow, the EcoPark South contractor, has met its contractual requirement and provided a total of 62 on-site skills training placements which completed earlier this month. The placements were delivered in partnership with The College of Haringey, Enfield and North East London (CONEL) and the London Academy of Sustainable Construction Centre in Waltham Forest engaged for the final cohort of trainees. This takes the total number of training placements achieved on the NLHPP to 107. The Social Value Dashboard in Appendix A shows that 66% of trainees are from Black, Asian and minority ethnic (BAME) groups and 11% are women.
- 7.3. The social value team has been liaising with CONEL to capture the outcomes for trainees. CONEL has undertaken a telephone survey of trainees who completed placements with NLHPP contractors to date. The findings of the survey show that 41% of trainees had secured employment since completing the placement. The result is just over CONEL's own benchmark of 38% of employment outcomes for trainees. The findings are based on 27 responses secured from a sample of 89 trainees (30%) which is in line with CONEL's expectations for this type of survey.
- 7.4. Throughout October and November, the delivery of the schools programme made further progress with a number of face to face engagements. On 21 October, NLHPP engineers presented to A-level students at Haringey Sixth Form College on routes into engineering as well as the apprenticeship and training opportunities on the NLHPP. On 11 November, the team attended a careers event at Leytonstone School to speak to Year 10 and 11 students (see Figure 6 below). Further sessions are scheduled to take place in late November and December with Heathcote School and Science College and Haringey Sixth Form College.



Figure 6 NLHPP at Leytonstone School Careers Event

- 7.5. Engagement with a local school is also taking place through the Industrial Cadets project. Over the next six months, Taylor Woodrow and members of the EcoPark South project team are working with Edmonton County School students on a research project on how to reduce the carbon footprint on the NLHPP. As part of the initiative, students will receive mentoring from the project team and a site visit.
- 7.6. The team is looking to expand the delivery of the schools programme to deliver sessions on science topics to Key Stage 3 students. Discussions continue with Arts & Media School Islington to plan for delivery of science topics to Year 8 students from January.
- 7.7. In addition to engaging with young people in schools, the team is expanding the reach of careers talks to deliver face to face sessions for students at CONEL's Enfield and Tottenham sites in December. The sessions will allow students to hear from role models about their roles on the NLHPP to inspire underrepresented groups such as women and individuals from BAME background to enter the construction industry.
- 7.8. The delivery of apprenticeships remains a priority on the project. The social value team is working with Taylor Woodrow to establish a pipeline of new apprenticeship roles which will be coming forward on the EcoPark South contract over the next few months. This will include a number of trade apprenticeships which the team will share with partners at the local boroughs in advance to help with recruitment. This will be done to allow for sufficient time to identify and if necessary, prepare

potential candidates (for example, where candidates need additional pre-employment support or upskilling).

8. COMMUNICATION

- 8.1. Over the last period the communications team have continued to engage with residents across the seven boroughs. A co-ordinated awareness campaign with support from all seven boroughs to share information about the North London Heat and Power Project was prepared. This included an updated project website page which provided a high-level narrative about the need for the project. A video was also created for use across the NLHPP website and social media platforms to explain why the project is needed. This has been promoted in North London to increase opportunities for residents to see. This is supported by a series of infographics on key topics including climate change, air quality, recycling investment and waste management, which have been developed to provide boroughs with key information that can be used across their own borough communications channels and support consistent project messaging.
- 8.2. Further engagement in local borough communities across November has delivered roadshows and careers fairs where residents can meet and engage with project team members including in Enfield, Waltham Forest and Haringey. The events have been well-received with many residents interested to find out what happens to their waste and agreeing it is good to be diverting waste away from landfill.
- 8.3. The most recent news updates from the project have included the apprenticeship programme, an innovative technique to reduce carbon emissions in concrete for the temporary bulky waste facility and a review of black history month activities within the project team raising awareness about BAME people in construction.
- 8.4. Councillor briefings have been shared on a new topic each week to ensure councillors across north London are aware of the project and why it is needed. This month also saw the MP engagement take a new form of an update email with links to key information on the project website and further engagement opportunities are planned.
- 8.5. A community newsletter was prepared for 28,000 homes and businesses in the area immediately surrounding Edmonton EcoPark. This is coupled with continuing adverts in Edmonton Green Train station for apprenticeship placements.
- 8.6. The communications team continue to respond to enquiries and keep channels up to date with the latest information on the project.

9. EQUALITIES IMPLICATIONS

- 9.1. There are no impacts on equality to be noted arising from the content of this report.

10. COMMENTS OF THE LEGAL ADVISER

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

11. COMMENTS OF THE FINANCIAL ADVISER

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

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APPENDIX A PROGRAMME SUMMARY



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Note:




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




Project Health Check (at mid-November)

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	●	➡	●	➡	●	➡	●	➡	●	➡
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. Senior leadership engagement, Positive Behaviours and Safety Observations noted and recorded.	If there is no adverse impact on the ability if 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 September)



Milestone (Critical)	Baseline Date	Forecast Date	Deviation to Baseline Programme (weeks)	Recovery Plan
Complete Sewer Diversion Enabling Works	01-Sep-21	01-Sep-21	0	Complete
Eco Park South - Commence steel frame installation	24-Jun-21	26-Jul-21	-4	Complete
Eco Park South - Commence M&E installation	03-Sep-21	06-Dec-21	-13	EPS materials shortage delays roof cladding procurement (-13w)
Eco Park South - Commence Testing & Commissioning	11-Apr-22	30-Jun-22	-11	EPS roof cladding consequential delay including (2w) mitigation
Eco Park South - RFPF & RRC - Planned Sectional completion (RFPF and RRC ready for transition)	04-Aug-22	13-Oct-22	-10	EPS roof cladding delays impact the project critical path.
Eco Park South - LEL Vacate the Temporary Bulky Waste Facility (Operational Commencement of RRF)	26-Oct-22	06-Dec-22	-6	EPS roof cladding delays impact the project critical. TRA consumed to mitigate overall impact to 6w (E03-A9000)
Northern Area Clearance - Eastern Section is cleared and available to the ERF Contractor (IF E7-5)	29-Jul-22	29-Jul-22	0	EPS consequential delay
Northern Area Clearance - Northern Area Western Section is cleared and available to the ERF Contractor	28-Feb-23	12-Apr-23	-6	EPS consequential delay
ERF - Notification Of Contract Award Decision	17-Dec-21	17-Dec-21	0	
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 consequential delay
ERF - Access Date - Phase 2 Western Area	01-Mar-23	13-Apr-23	-6	EPS consequential delay
ERF - Construction Complete	30-Sep-25	10-Nov-25	-6	EPS consequential delay
ERF - First Fire on Waste	19-Dec-25	30-Jan-26	-6	Note: Tender dialogue to define First Fire on Waste completion criteria
ERF - Completion of The Take Over Certificate (Liquidated Damages Milestone)	31-Mar-26	12-May-26	-5	EPS consequential delay
ERF - Performance Guarantee Tests Complete (PGT2 Inc. availability)	25-Feb-27	09-Apr-27	-6	EPS consequential delay
ERF - FINAL TAKE OVER (Final Certificate)	30-Mar-28	11-May-28	-6	EPS consequential delay
Energy from waste (EfW) - Laydown Area Re-Instatement - Operational Acceptance Period – Complete	10-Jul-30	20-Aug-30	-6	EPS consequential delay
Southern Access Widening (SAW) - Operational Handover Complete	15-May-31	25-Jun-31	-6	EPS consequential delay

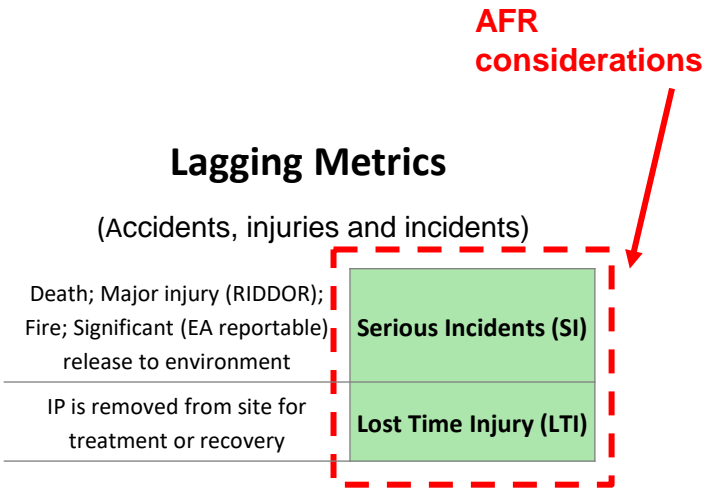


Health, Safety & Wellbeing (HSW) Dashboard

(Explanation of Terminology)



Terminology	Definition	Further Explanation
Leading Metrics	Actions that help to prevent accidents, injuries and incidents	The Health & Safety Executive's (HSE) and others' research has shown that increasing awareness and noting of both good and bad health, safety and wellbeing issues by <u>any and all of</u> the workforce (leading indicators) has shown a significant effect on the reduction in lost time accidents and other untoward events (lagging indicators).
Lagging Metrics	Accidents, injuries and incidents	
Accident Frequency Rate (AFR)	$\left[\frac{\text{Number of injuries in the period}}{\text{Total hours worked during the period}} \right] \times 100,000.$	The AFR takes into account the first 2 lagging metrics: Serious Incident (SI) and Lost Time Injury (LTI), as highlighted in an excerpt from the Lagging Metrics table.



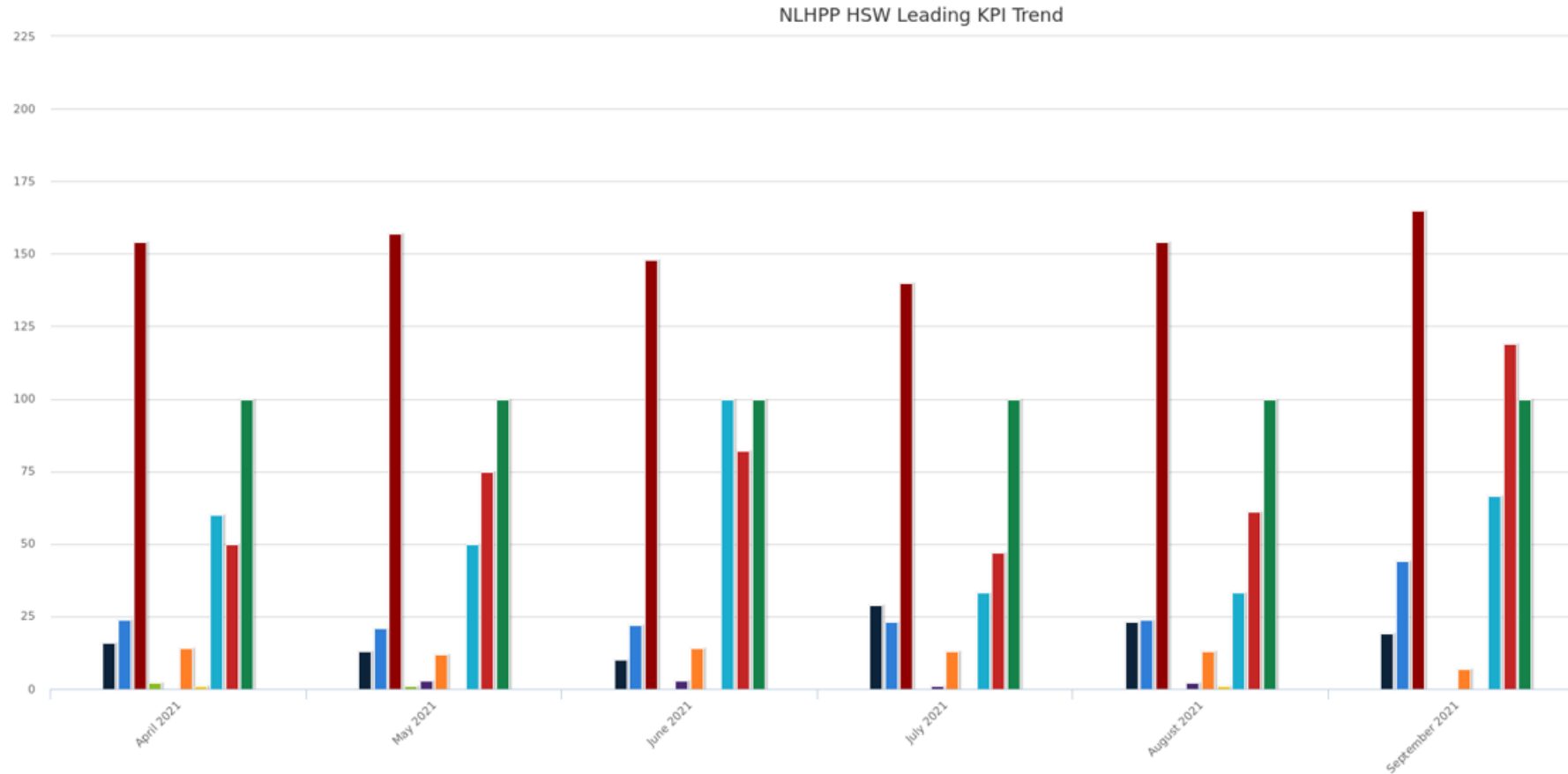


Health, Safety & Wellbeing (HSW) Dashboard

(Summary of Leading Performance Metrics)

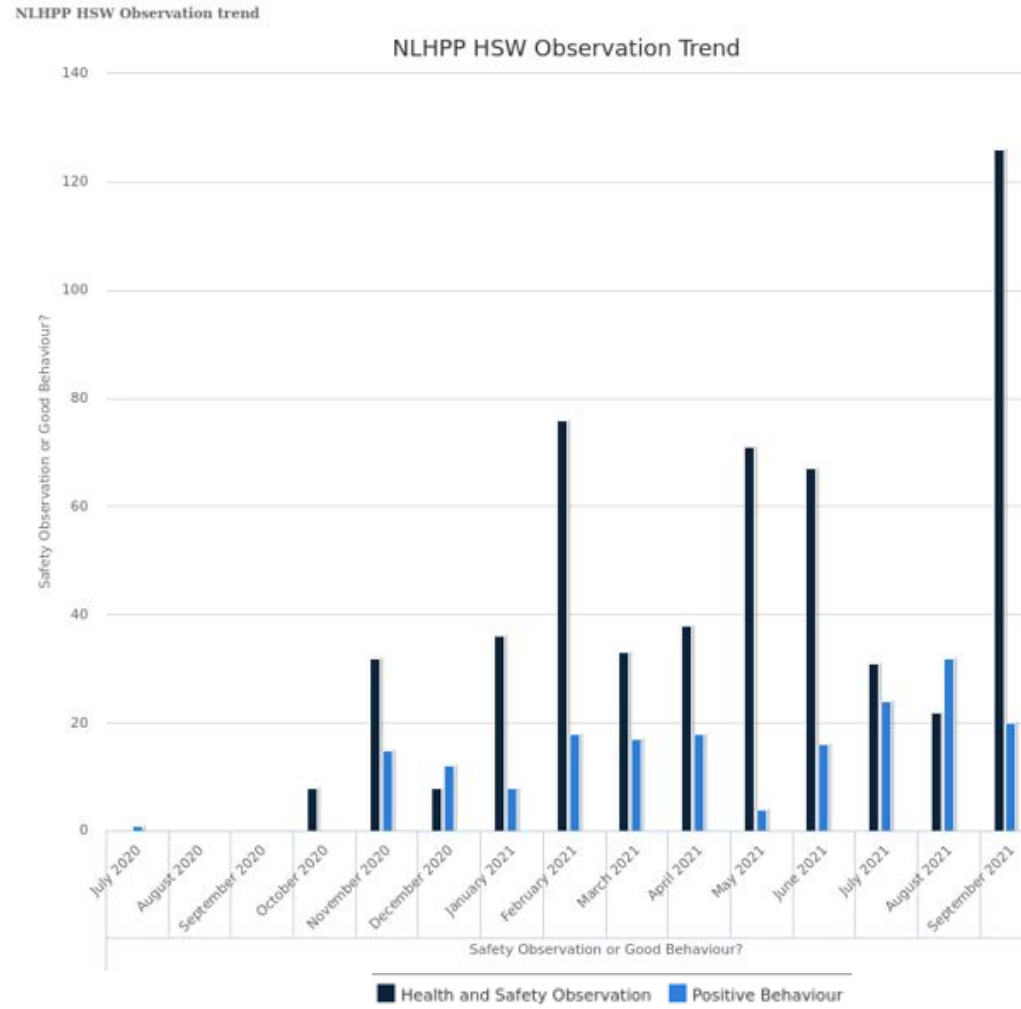


NLHPP HSW Leading KPI Trend



■ Occupational Health Engagements (Surveillance, Checks, Mental Health training, Visits, Surgeries, Promotions etc.) ■ Health, Safety & Wellbeing Training (Toolbox Talks, RAMS Briefings, W@H, Confined Space, CDM Etc) ■ Safe Start ■ Lessons Learned
■ SLT Safety Tour Visits (No of Persons and Feedback Forms) ■ Audits ■ Design Risk Management - Red Items in Live RAG List ■ HSW RAMS Acceptance Success Rate - Pass 1st Time ■ Safety-Observation ■ Percentage of Workers Inducted (Average)

Health, Safety & Wellbeing (HSW) Dashboard (Observation Trend)





Health, Safety & Wellbeing (HSW) Dashboard

(Accident Frequency Rate)



Accident Frequency Rate (AFR^{***})

**** The Accident Frequency rate enables comparison of accident rates against hours worked rather than the number of accidents. The calculation is (number of accidents) / (number of hours worked on site) x 100 000. Thus, a project with 1 million hours worked and 3 LTIs would have an AFR of 0.3. The values shown below represent the AFR corresponding to the reporting period, the rolling 12 month and the construction industry average.*

NLHPP
September Period End

0.00

NLHPP
Rolling 12 Month

0.12

Construction Industry

1.33

Health, Safety & Wellbeing (HSW) Dashboard

(Project Compliance Audit Results)

Site Inspection Summary		
Site	Summary Report	Inspection Compliance Scores
E3A—Eco-Park South	Site compliance score 94.64%. Site activities include steel work erecting in RPPF, RRC and EPH. Steel erection continuing with complex crane lifts planned. Rebar works in cofferdam and concreting continuing. Adequate welfare arrangements in place, now with enhanced cleaning. COVID-19 arrangements working well. Operatives are adhering to Safe Systems of Work, following RAMS and wearing correct PPE. Unsafe act detected while working near an excavation with immediate corrective actions implemented. High Risk RAMS need to be submitted following the existing procedure in place and uploaded to A-site for comments at a suitable time to allow appraisals and comments	22nd Sept 2021 – 93.91% 15th Sept 2021 – 97.67% 8th Sept 2021 – 92.33% 31st Aug 2021 – 94.18%
E3b—Northern Area Clearance (TBWRF)	Site compliance score 96.49%. Site activities include pouring slabs onto blinding. Groundworks ongoing with plant used for levelling. Site logistics have been changed with satellite welfare now available on-site in addition to the existing welfare/offices. Traffic management is changing to facilitate easier access on to site from the south. Conditions are clean and site management including the contractor are diligent and cooperative.	22nd Sept 2021 – 99.65% 16th Sept 2021 – 95.52% 8th Sept 2021 – 95.62% 3rd Sept 2021 – 95.18%



Social Value Dashboard

Summary – November 2021



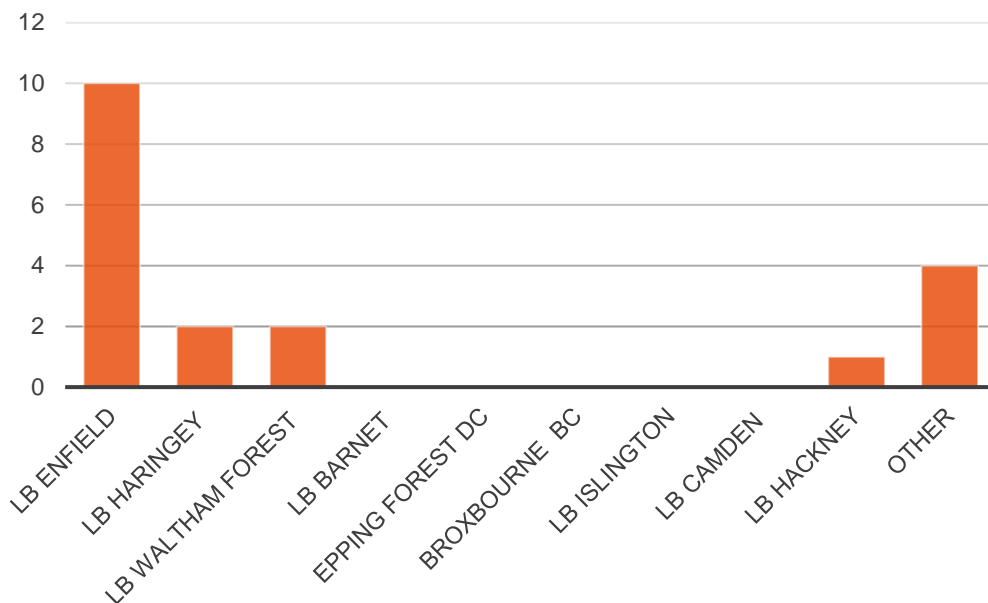
Social Value Theme	Definition	Target	Progress
Development Consent Order (DCO) Obligations:			
Apprenticeships	S.106 obligation to provide 100 apprenticeships, each with a duration of 12 consecutive months. Apprenticeship means a training work scheme: (a) offered to a person ordinarily resident in the 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	100	52 years of apprentices' employment
			19 individuals
On-site Skills Training Placements	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: (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’.	225	103
LB Enfield targets, adopted as measure by NLHPP:			
Local Labour	Target to promote local employment. Contractors should employ suitable candidates from the local area (London Boroughs of Enfield, Haringey and Waltham Forest)	25%	26%
Local Businesses	Target to maximise contractors’ expenditure within the local area (London Boroughs of Enfield, Haringey and Waltham Forest)	10%	25% £7.29m (local spend by contractors to date)
		-	£16.40m (local spend by NLWA & contractors to date)
Delivery against Industry Benchmarks:			
Equality, Diversity & Inclusion (EDI)	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.	-	4%*
	The project aims to promote Black, Asian and Minority Ethnic (BAME) Groups in on-site construction workforce. Monitoring continues to establish reliable benchmark comparisons.	-	20%*

*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.

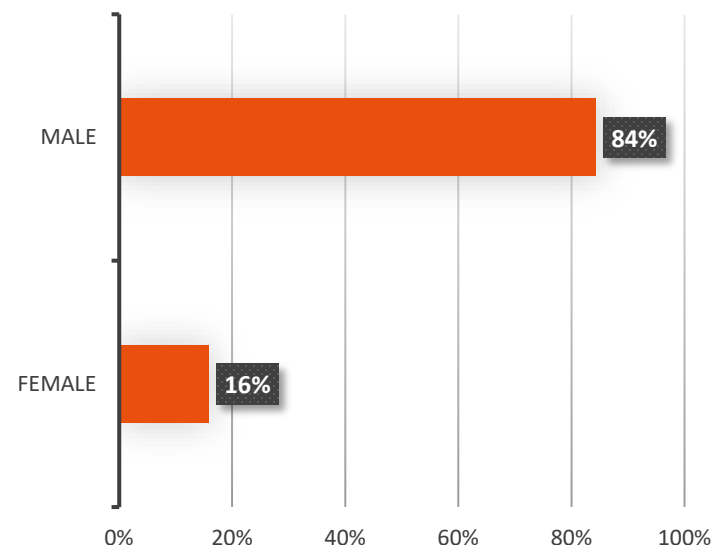
Social Value Dashboard

Apprenticeships

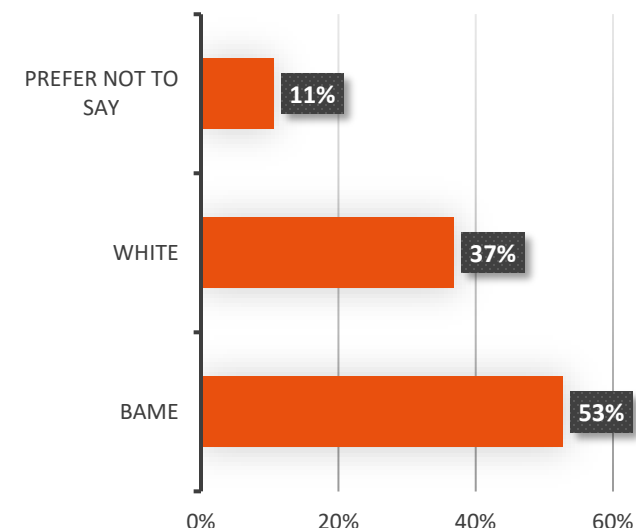
Apprentices - Home Borough



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); Larkswood (1)
LB Hackney	Haggerston (1)

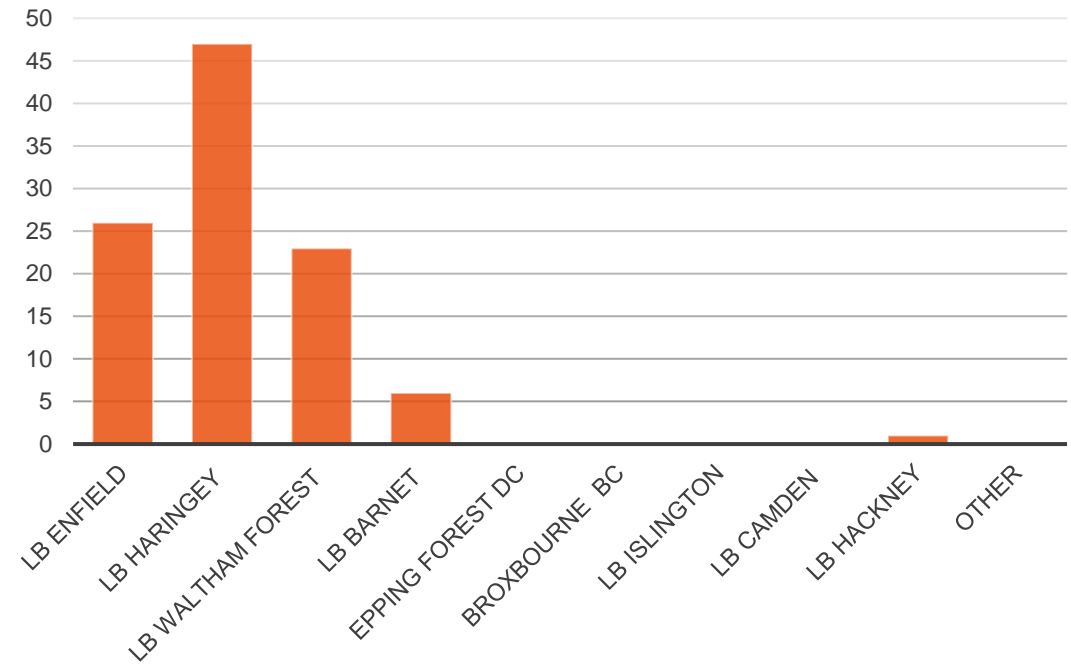
Delivery & Monitoring:

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

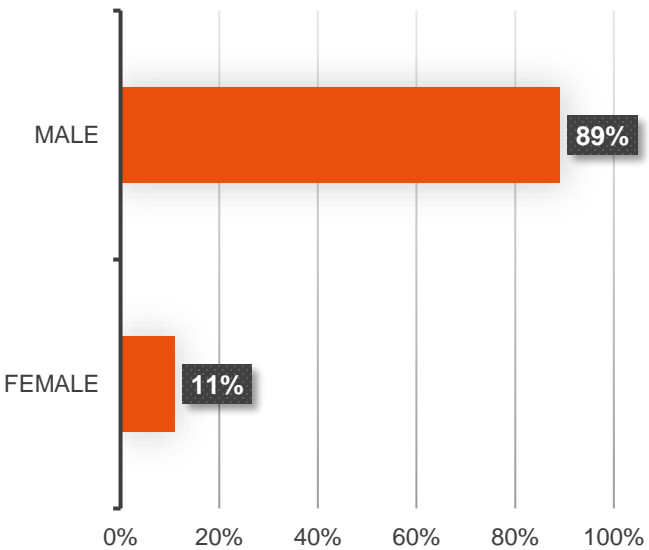
Local employment and recruitment of apprentices is prioritised in the contract (in particular in LB Enfield, LB Haringey and LB Waltham Forest, followed by other north London boroughs).

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.

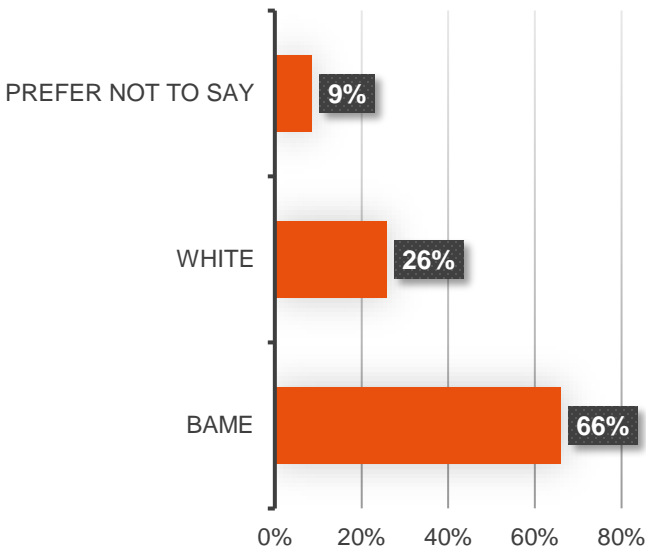
Trainees - Home Borough



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 82 out of 103 trainees (80%).