

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: 7 OCTOBER 2021

SUMMARY OF REPORT:

This report provides the Authority Meeting with an update on progress of the North London Heat and Power Project (NLHPP) and seeks agreement to the amendment to Financial Standing Orders associated with borrowing for the NLHPP.

RECOMMENDATIONS:

The Authority is recommended to:

- (a) note the contents of the report; and
- (b) agree the amendment to Financial Standing Orders set out in Section 7 of this report and Appendix B.



SIGNED: Programme Director

DATE: 27 September 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 report also seeks Member agreement to an amendment to Standing Orders associated with the process of future borrowing for the NLHPP.
- 1.4. The progress data provided within the report, including the status dashboard in Appendix A, reflects the status of the programme on the 30 July 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 remains on track to deliver its objectives as defined in the Project baseline agreed by Members in 2019.
- 2.2. A major achievement was delivered at the start of September with the completion of the Sewer Diversion works by the contractor, Barhale. The complex tunnelling and diversion works were completed on time and within budget, reflecting a strong collaborative approach between Barhale, LEL and the project management team. Thames Water formally agreed the successful completion of the works, indicating their recognition of the achievement of a major milestone in the project.
- 2.3. The demobilisation from site has allowed Taylor Woodrow to take over the remainder of the southern part of the EcoPark needed to complete their works. Taylor Woodrow have made significant progress in erecting the steel frame of the RRF buildings, including the first of the large span roof trusses. This notable achievement involved two 750 tonne cranes working carefully in tandem.

- 2.4. While good progress has been made on site, the overall schedule position continues to forecast a six-week delay to the completion of the RRF, arising from industry-wide uncertainty in future materials supply. The team continue to monitor the external impact for further impact, while assessing future opportunities to recover time.
- 2.5. The reporting period saw three notable health, safety and environmental “near miss” incidents; the detection of unforeseen hydrogen levels in the ground at the site of the Temporary Bulky Waste Facility; the cracking of footing pad for a mobile crane undertaking steel erection; and the appearance of a sink hole in the vicinity of the new sewer in Advent Way. In each case, a timely and effective response by the team avoided escalation of the event. In each case, immediate action was taken to reduce the risk of harm to site workers and thorough investigations have been undertaken, actions taken, and lessons learned.
- 2.6. Environmental performance has been a source of pride for the programme recently, with Taylor Woodrow being awarded Ultra status following their first Considerate Constructors Scheme site audit. This represents the highest standard of performance and complements the ongoing high standard of diversion of construction waste from landfill which remains at 99%.
- 2.7. In this paper, Members are asked to agree the amendment to Financial Standing Orders that will support the increasing expenditure that the project will incur in the coming months – both with increased on-site activity and in the early stages of the ERF contract. This is a proactive step in managing the financial risks of delivery.
- 2.8. The NLHPP social value activities continue, with further engagement with boroughs on the Schools Programme and plans confirmed to restart the public roadshows in September. This will help re-establish face-to-face engagement with the local community.
- 2.9. Diversity of the workforce remains as a focus for the team, and the gender balance of the project has been receiving attention. In particular, the team are reviewing steps to improve the balance of female applicants and recruits for the apprenticeship and on-site skills training schemes.

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 construction of the project on-site continues to make substantial progress on all fronts. In the southern area of the EcoPark, the construction of the Resource Recycling Facility (RRF) has started the erection of the steel frame whilst the reinforced concrete elements of the buildings continue to be constructed.

- 3.3. The worksites that were used to construct the rerouted Chingford and Enfield sewers have been vacated by the contractor Barhale and handed over to the RRF contractor Taylor Woodrow on time. This is a critical step in the schedule allowing the RRF to be completed. The Chingford and Enfield Sewer is now flowing through the diversion and the new access manholes are under construction.
- 3.4. In the north of the EcoPark, the construction of the temporary Bulky Waste Recycling Facility has been started by Taylor Woodrow. This facility will enable the current bulky waste operations to vacate their current facility so that it can be cleared ready for construction of the ERF.
- 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 has been marked up with features referenced in this section.



Figure 1 EcoPark arial view

Construction Logistics

- 3.7. The critical flow of construction and waste management traffic through the EcoPark southern entrance continues to run smoothly and effectively, managed through collaboration between the project, its contractors, LEL and Energetik who are building the District Heating Energy Centre in the EcoPark. The new Northern Entrance, completed earlier in the year, is also being used for construction traffic working in the north of the EcoPark and as an exit for some waste management operations.

Laydown Area and Eastern Access (Project E2A)

- 3.8. The reopening of Lee Park Way to pedestrians and cyclists is being planned following the completion of additional road safety works.

Sewer Diversion Main Works (Project E2c)

- 3.9. The construction works for the Sewer Diversion completed on time, and the contractor, Barhale, handed over the site locations back to the Authority on 1 September. The assets are in operational use. Thames Water asset engineers have been on site and confirmed satisfactory completion. Barhale have now demobilised from site and the commercial contract completion activities are underway.

EcoPark South (Project E3a)

- 3.10. Design and construction of the RRF and EcoPark House have continued with detailed design now 65% complete.
- 3.11. Submissions continue to be made to London Borough (LB) of Enfield as part of the ongoing DCO discharge process. This includes the external appearance, the design for which has been amended during development to incorporate the necessary odour control equipment.
- 3.12. Steel frame erection has now commenced with installation of the north plant area. Construction of the steel frame and completion of pile caps and ground beams will now continue concurrently working from north to south. Concrete works to the RRC basement tanks have also continued.
- 3.13. The photograph below shows progress of the RRF steelwork on site.



Figure 2 RRF steelwork construction site progress

- 3.14. 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, as well as the implications of Brexit on supply chains. Resequencing of activities and additional resource mobilisation has been undertaken to mitigate the impact of this delay as far as practical. The specific impact on Taylor Woodrow's activities is an 8-week delay to receipt of key materials. With agreed mitigations, the contractor now forecasts a 6-week delay to completion next year. As a critical path project, there is a potential impact on the following Northern Area and ERF works. The NLHPP team are therefore examining mitigations to the long-term programme with the aim of recovering this time in due course.

Northern Area Clearance (Project E3b)

- 3.15. Construction works for the temporary bulky waste recycling facility (TBWRF) mobilised on site at the start of August but were subsequently put on hold. This was a result of the identification of the presence of hydrogen levels in the ground that had previously not been identified during monitoring of the ground gases. The source of the hydrogen is unknown, with ground gas specialists suggesting it is a result of the previous use of the land to store and process incinerator bottom ash that has reacted with the ground water.
- 3.16. Following a review of the design and construction methods for mitigating the risk of ground gases, construction works have recommenced, with good progress being made. The crushed demolition waste produced from the NAC zones 1 and 2 project is being used to construct the base of the TBWRF.
- 3.17. The tender event for clearance of the remaining eastern areas of the northern area and demolition of TBWRF in due course was published on the 3 September 2021, on schedule.

Site Utility and DNO Works (Project E4)

- 3.18. Detailed design work on the incoming gas supply pipeline that is necessary to commission the future ERF continues well. The procurement and delivery approach will be finalised this month leading to construction works commencing in summer 2022.
- 3.19. Further surveys are underway in the north of the site, focussing on the existing water infrastructure. This is intended to ensure visibility of the location of these assets prior to any further excavation works being completed and ultimately de-risk the remaining Northern Area Clearance works.

Energy Recovery Facility (ERF) (Project E7)

- 3.20. The project has completed the final dialogue cycle (Cycle 3) in the procurement period. It is expected that the Invitation to submit final tenders will have been issued prior to this meeting, in line with the programme, for tender return on 25 October 2021.
- 3.21. Dialogue has been positive, and the Authority has confidence that it will receive a tender that meets its needs. A decision is expected within the timeframe previously released – in December 2021.

4. HEALTH, SAFETY & WELLBEING

- 4.1. This summary considers an overview of the Health, Safety and Wellbeing (HSW) outcomes for the July 2021 period, with updates included to the end of August 2021.

Health, Safety & Wellbeing Performance

- 4.2. Health, Safety and Wellbeing (HSW) continues to perform well across the programme and Members can take confidence that HSW is being managed and implemented to very high standards. There have been no Lost Time Injuries (LTI) across either period resulting in Accident Frequency Rates (AFR's) of zero for both months. The rolling 12-month AFR remains at 0.12 owing to the previously reported LTI in June 2021. This is still ahead of the 2012 Olympics, Tideway and Crossrail most recently available reported rates of 0.16, and the construction sector average of 1.33.
- 4.3. Three near miss incidents were reported in July, with two further incidents reported in August. The reporting of near misses continues to be encouraged in the pursuance of continual improvements and the Safety First vision for the programme. All near misses continue to be subject of investigation to identify root causes, lessons learned and action through improvements to prevent reoccurrence.
- 4.4. An uplift in “undesired circumstance” reports were noted in the period. The uplift is likely a consequence of the increasing number of people on site, with new higher risk work activities commencing, for example that of steel erection. Generally minor in nature, but not to be ignored, these incidents are informing ongoing strategies and initiatives with the contractors to reinforce the Safety First culture.
- 4.5. Since the on-site rapid antigen testing facility commenced in January 2021, a total number of 2901 tests of workers, supervisors and staff working on the frontline of NLHPP have been undertaken. A total number of 398 tests were undertaken during the month of July 2021 on NLHPP, with two workers receiving a positive

test result to COVID-19. Further immediate action was taken to assess workers with whom they had been in contact. A total number of 425 tests were undertaken during the month of August 2021, with no positive cases. The testing provision has been extended to NLHPP visitors to prevent potential spread of COVID-19 to NLHPP workforce on site.

- 4.6. The supply-chain workforce commitment to the proximity technology use and uptake of the on-site COVID-19 testing, has wavered since the cessation of mandatory government-led restrictions. The Project continues to employ appropriate lines of defence to mitigate the potential for COVID-19 transmission through the workforce. The Project has thus avoided a breakout of cases amongst the workforce and an adverse impact on the ability to work safely on site.
- 4.7. Health and safety observations and positive behaviours continue to be submitted each month. This supports and evidences the programme's maturing health and safety culture, with the information then utilised to inform the ongoing HSW initiatives rolled out in collaboration with the supply chain.

Health, Safety & Wellbeing Management

- 4.8. A working group has now been established to interpret the results of the NLHPP HSW Culture Survey and develop an action plan from the findings. This will be developed in line with NLHPP Safety-First Principles and HSW Maturity Culture Development Plan Strategy for 2021-2022. The outputs and action plan will be delivered early in the October 2021 period.
- 4.9. Recent HSW campaigns covered Sun Safety & Hydration in July and Safe Lifting operations in August were designed to align with the commencement of EcoPark South steelwork erection. These campaigns include communications, stand-downs/safety talks, engagement and raising awareness of hazards and risk.

5. ENVIRONMENT AND SUSTAINABILITY

- 5.1. This summary considers an overview of the Environment & Sustainability outcomes for the period ending July 2021.
- 5.2. Project contractors are seeking to deliver good practice environmental outcomes, which go beyond the minimum standard. The principal contractor for EcoPark South secured Ultra Site status (Considerate Constructors Scheme), which represents exceptional performance at the forefront of industry best practice. Sustainability opportunities to deliver enhanced environmental outcomes are routinely identified and assessed for implementation where possible on the project.

Environmental Performance

- 5.3. Zero environmental incidents and environmental related complaints have been reported in the last period. The regular site inspections detected two environmental near misses within the EcoPark South site. A hose on a compaction roller burst which resulted in a small leak of fuel. The fuel was cleaned up using a spill kit and the plant was repaired. The second environmental near miss involved the discharge of rainwater, collected as part of construction work activities, into the road drainage system without appropriate measures in place. This activity was promptly stopped after the pumping started, a Permit to Pump was then put in place and the rainwater pumped into an existing sewer under the existing discharge permit.
- 5.4. Each contractor either met or exceeded the stretch target of 95% for the diversion of non-hazardous Construction, Demolition and Excavation Waste (CDEW) from landfill. This performance exceeds the minimum target of 85% diversion from landfill. Across the project to date, more than 99% of non-hazardous CDEW has been diverted from landfill. Waste diverted from landfill has been recycled, reused or recovered. For example, excavated soil has been used in backfilling applications at Elsenham Quarry. More than 50,000 tonnes have been reused at Wanstead Rugby Club.

Environmental Management

- 5.5. The monthly environmental site inspections and meetings with the contractors identified that environmental issues are being well managed in line with good practice. Opportunities for improvement were identified in relation to pollution prevention (capture devices under plant and storage of plant near drainage features); and waste management (capacity of waste skips).
- 5.6. The July site inspections focused on ecology. The review of ecology items confirmed that contractors are implementing measures in line with project requirements. This includes fencing and other barriers to prevent mammals (e.g. badgers etc.) from accessing the work area and excavations, or provision of slopes which mammals could walk out of.
- 5.7. As a function of the nature and location of the work activities, there were few ecological issues identified that require management. The lighting units near to the River Lee were assessed and measures were in place to mitigate light spill toward adjacent ecological features. The works to clear the Himalayan balsam infestation (which is an invasive species) within the Enfield Ditch and adjacent area were reviewed. The contractor has followed due process and was effectively managing risk of seed spread and reinfestation.

6. RISK SUMMARY

- 6.1. The overall risk position of the programme remains largely unchanged in the period, with review and assessments of live risks continuing and mitigation plans underway.
- 6.2. With the construction works for the Sewer Diversion completing, related risks have now been closed. The associated risks of delay to the following EcoPark South works have also been successfully avoided. The delivery of this complex undertaking is a positive demonstration of the effectiveness of the risk management approach being delivered across the NLHPP.
- 6.3. Ground risks have received particular attention in the period. The progression of foundation works in the southern areas of the site has reduced the remaining risk in the area. Conversely new areas in the north of the EcoPark have been identified as potentially containing underground services which could be impacted by planned demolition works. Surveys are being undertaken to assess and plans will be generated dependent on the results received.
- 6.4. The programme team continue to take a proactive approach to managing the future uncertainties:
 - 6.4.1. Regular sessions are being undertaken between LondonEnergy, the EcoPark South team and Energetik to manage the interface risks on site. To date, these sessions have greatly improved coordination between design development, construction and operational interface requirements and subsequently the delivery of works.
 - 6.4.2. Project risks for ERF are being monitored throughout the procurement process and after its conclusion, the risk position will be reassessed with the knowledge of the future contract approach.
 - 6.4.3. The national shortage of materials and the consequent variation in prices remains a key risk to the programme. The programme is currently forecasting a potential 6-week delay to the EcoPark South contract because of this risk. To mitigate this the contractors are looking at opportunities on resequencing the programme and bring forward key activities where possible. There is also an exercise planned to review materials and make provision for early procurement.

7. FINANCING

- 7.1. The Authority has a strategy in place to support the financing of the NLHPP. The strategy seeks to ensure that the Authority has the best value options available to it at the point that it needs to undertake further borrowing. This will allow the Authority to obtain finance at the lowest levels of interest available to it.

- 7.2. The strategy identified that it would be prudent to obtain a credit rating to ensure that the Authority could take advantage of the best value option. At the point that this report was published, three quotations had been received from credit ratings agencies. These are being evaluated.
- 7.3. Following Member comments at the Programme Committee on 3 September, the following change is proposed to Financial Standing Orders to ensure the engagement of Members and of the constituent Borough Directors of Finance. The wording is to be inserted as a new Section D8:

D.8 NORTH LONDON HEAT AND POWER PROJECT

- a) This section applies to borrowing of sums of £100M and above required to finance the North London Heat and Power Project (NLHPP borrowing)
- b) For NLHPP borrowing, the following process will apply:
- i. The Financial Adviser will advise Members in a report to a meeting of the Authority or of the Programme Committee of anticipated borrowing and the anticipated borrowing route in advance of the borrowing being made, in the context of the capital programme set annually in the Authority's budget as updated from time to time
 - ii. In advance of making the application for funds, the Financial Adviser will provide details of the proposed borrowing, the anticipated source of borrowing (PWLB or Municipal Bond) and the anticipated range of rates at which the borrowing is expected to take place, to the Chair and Vice Chair, and in addition to Directors of Finance of the constituent boroughs, by way of consultation.
 - iii. Subject to consideration of any comments received as a result of such consultation, the Financial Adviser will carry out such borrowing and enter into such documentation as is required to support the borrowing.
 - iv. Thereafter, executive decisions on borrowing, investment or financing for such borrowings are delegated to the Financial Adviser.
- 7.4. In accordance with Standing Orders, any exercise of this delegation would be reported to a meeting of the Authority or of the Programme Committee. The proposed route is expected to be either the Public Works Load Board or a Municipal Bond, and Members would be advised of the likely route, the information requirements to obtain a Municipal Bond, and the relative costs as part of the Member report referred to in sub paragraph (b)(i) above.
- 7.5. Financial Standing Orders showing this proposed amendment are contained in Appendix B.

8. SOCIAL VALUE

- 8.1. The project is creating new apprenticeships opportunities. A new quantity surveying apprentice started with the EcoPark South contractor, Taylor Woodrow, at the beginning of August. Taylor Woodrow have also appointed a new civil engineering technician who will commence their apprenticeship next month. In total, 18 apprentices have been appointed on the project so far. The Social Value Dashboard in Appendix A shows that two apprentices are women (11%) and 44% are from Black, Asian and Minority Ethnic (BAME) backgrounds. The project is keen to support gender diversity among apprentices as well as the project workforce on the whole. To encourage greater representation of women on the project, the team is organising a dedicated careers session for female students at the College of Haringey, Enfield and North East London (CONEL) to promote apprenticeship opportunities on the project as well as career opportunities within the construction sector more generally. An additional session open to all students and genders at CONEL will also be held.
- 8.2. Recruitment of new apprentices will continue into the autumn. Two further apprenticeship opportunities are currently live on the EcoPark South contract to fill carpentry and business administration apprenticeship roles. In addition, a pipeline of approximately 10 further apprenticeship opportunities will be coming forward in the autumn and into the new year. The NLHPP team and contractors are working with LB Enfield, LB Haringey and LB Waltham Forest to source candidates, encouraging applications from a diverse range of local candidates. The council officers use their network of contacts (including database of residents looking for employment, schools, colleges, Job Centres, youth hubs, and groups of interest such as Women in Construction networks and groups focused on finding employment for BAME residents) and advertise the opportunity on their respective websites to help reach as many local people as possible. In addition, outdoor advertising has commenced on buses around north London and in Edmonton Green Overground Station for promoting apprenticeship opportunities, training placements and the construction progress onsite within the local community.



Figure 3 Advertising at Edmonton Green Overground Station



Figure 4 Close-up of advertising promoting apprenticeship opportunities

- 8.3. NLHPP apprentices are connecting on the project through the monthly Apprentices Network sessions, which allows them to share experiences, get to know each other as well as learn more about their respective organisations. The third monthly event was held in August, which included a presentation from the EcoPark South project manager about his role.
- 8.4. The next Apprenticeship Forum session which connects NLHPP contractors is due to take place in September to support organisations on the project who have taken on apprentices.
- 8.5. The social value team is engaging with NLWA boroughs and local schools to plan the delivery of the NLHPP The Schools Programme. Over the month of August, the team has engaged with officers at LB Haringey, LB Camden, LB Islington and LB Barnet to promote schools' programme offer. Schools in LB Islington are now able to book NLHPP schools sessions through the LB Islington activity menu.
- 8.6. The Project continues to exceed its targets for local employment and expenditure in the local economy. The targets were set by the Project at the outset of construction work in consultation with officers in the LB Enfield. The Project is revisiting the targets based on lessons learned to date to determine or validate their suitability. The Project will take into consideration the local availability of specialist skills that may be required as the balance of on-site work moves away from civil engineering towards the mechanical, electrical and process engineering disciplines.

9. COMMUNICATION

- 9.1. Stakeholder Engagement with key stakeholders including Members of Parliament and Councillors from the constituent boroughs has continued throughout August and September with opportunities to see the progress of Construction works at the EcoPark. At the time of this report, 30 individuals had participated in a tour.
- 9.2. In September the communications team facilitated engagement with nearby stakeholders of the EcoPark over the closure and re-opening of Advent Way due to unforeseen and urgent works. In conjunction with the Construction Management Team all parties were notified ensuring efficiency of closing the road. Regular stakeholder updates were issued with clear instructions to alternative routes to minimise the disruption as repairs were undertaken and the road was successfully re-opened without any formal complaints about the closure.
- 9.3. A programme was broadcast on BBC Radio 4 in early September about local community involvement in democratic processes and featured the North London Heat and Power Project. The 30-minute show included an interview with Councillor Clyde Loakes discussing the merits of the project and referenced the

actions taken for consulting the public throughout the Development Consent Order for the project.

9.4. Further community engagement is planned in September with the Community Liaison Group for representatives of the community to hear about updates from the project team and share feedback about the construction work. A roadshow plan has been re-instated for face-to-face community engagement to restart on Thursday 23 September at Edmonton Green Shopping Centre for the first time since the COVID-19 outbreak.

9.5. The communications team continue to provide up to date information about the project on the NLHPP website, social media feeds and letters to residents. The Authority continues to work with the boroughs communications colleagues to keep responding to enquiries from residents with up-to-date information about the project.

10. EQUALITIES IMPLICATIONS

10.1. There are no impacts on equality to be noted arising from the content 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 taken into account.

12. COMMENTS OF THE FINANCIAL ADVISER

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

Contact officer:

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

APPENDIX A PROGRAMME SUMMARY



Authority Meeting 7 October 2021

Appendix A – Programme Summary





Contents



Contents	#
Project Health Check	3
Project Health Check - Key	4
Schedule Dashboard	5
Health, Safety and Wellbeing Dashboard	6
Social Value Dashboard	11

Note:

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



Project Health Check (at mid-September)



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 July)



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	
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. This has impacted the building water tight date consequentially delaying commencement of M&E installation.
Eco Park South - Commence Testing & Commissioning	11-Apr-22	30-Jun-22	-11	EPS 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 consequential delay including (1w) mitigation. Preliminary resequencing exercise has been undertaken with the Contractor to optimise the overall programme which has partially mitigated the critical path delay on the project.
Eco Park South - LEL Vacate the Temporary Bulky Waste Facility (Operational Commencement of RRF)	26-Oct-22	06-Dec-22	-6	EPS consequential delay due to industry-wide shortage of roof cladding materials impacting temporary bulky waste facility demolition.
Northern Area Clearance - Eastern Section is cleared and available to the ERF Contractor (IF E7-5)	30-Sep-22	30-Sep-22	0	
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 due to industry-wide shortage of roof cladding materials impacting temporary bulky waste facility demolition.
ERF - Notification Of Contract Award Decision	17-Dec-21	17-Dec-21	0	
ERF - Construction Complete	30-Sep-25	10-Nov-25	-6	
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	-6	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

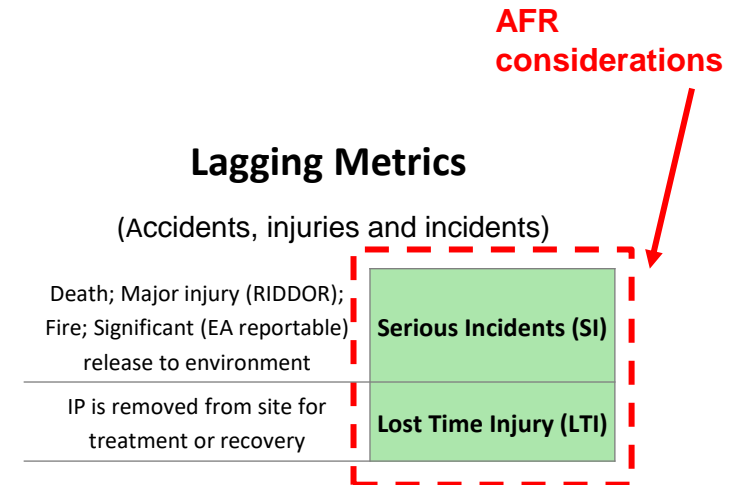


Health, Safety & Wellbeing (HSW) Dashboard

(Explanation of Terminology)



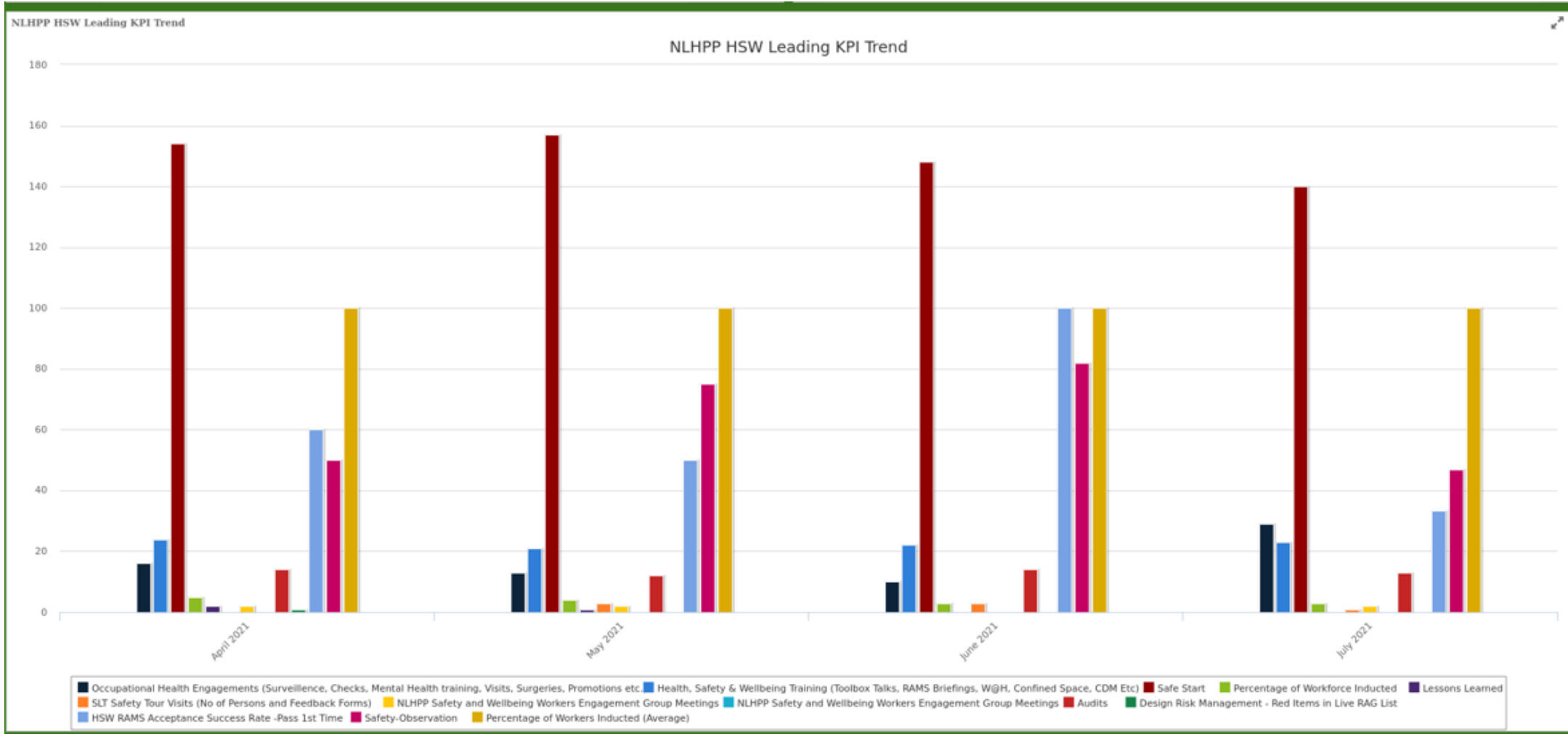
Terminology	Definition	Further Explanation
Leading Metrics	Actions that help to prevent accidents, injuries and incidents	The Health & Safety Executive's (HSE) and others' research has shown that increasing awareness and noting of both good and bad health, safety and wellbeing issues by <u>any and all 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)	$[(\text{Number of injuries in the period}) / (\text{Total hours worked during the period})] \times 100,000.$	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

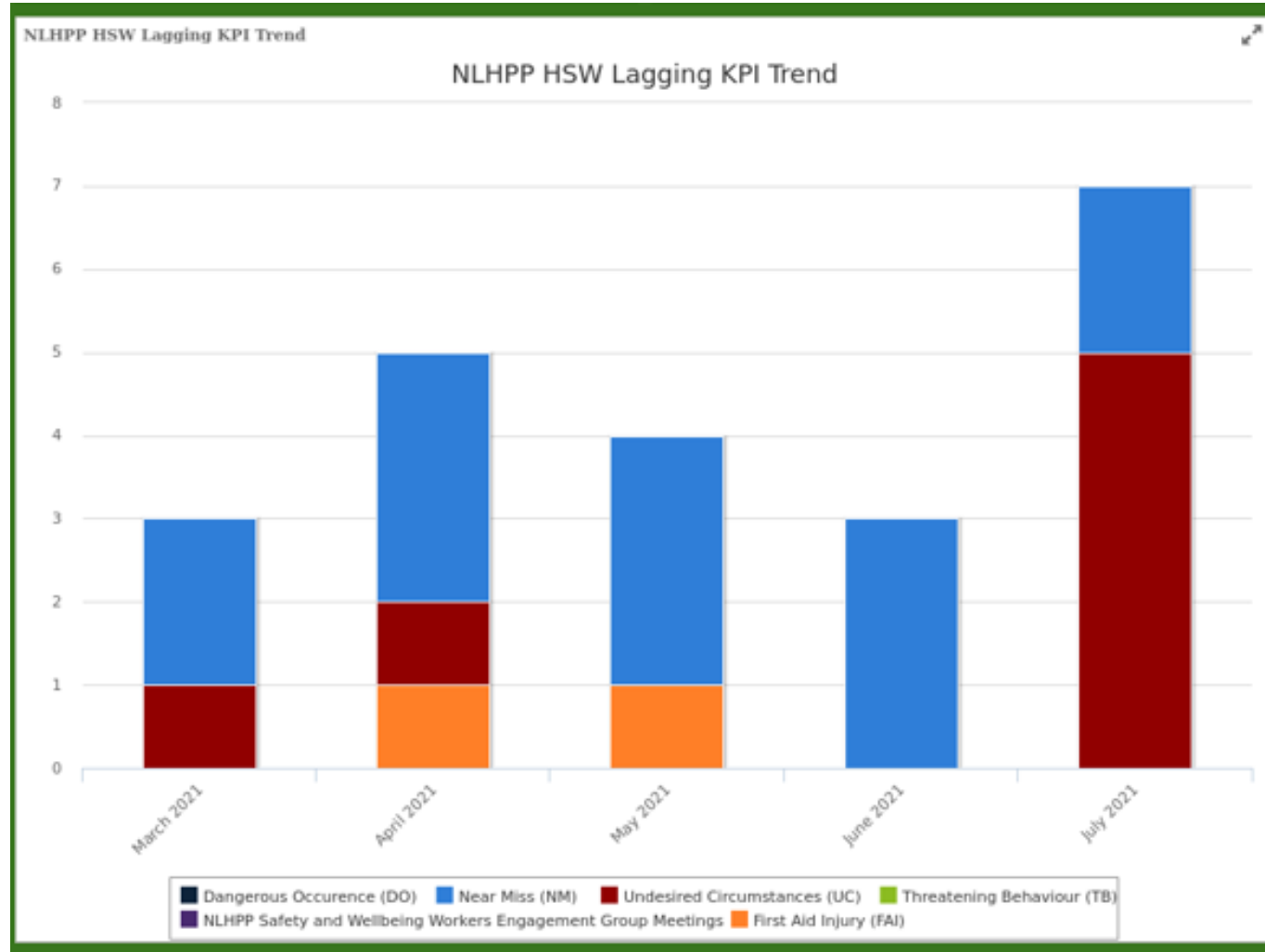
(Summary of Leading Performance Metrics)





Health, Safety & Wellbeing (HSW) Dashboard

(Summary of Lagging Performance Metrics)





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.*





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



Site Inspection Summary		
Site	Summary Report	Inspection Compliance Scores
E2C—Sewer Diversion Main Works	Site compliance score 95.68%. All 3 sites (Shafts A, B, C) are operating safely, with backfilling and topping operations in progress. Shaft A, site welfare and offices have been moved to the west laydown area and shaft B site welfare has been reduced allowing room to complete. Management and Engineering staff demonstrates a good approach to health and safety. Site segregated from LEL operations. Adequate welfare arrangements in place. COVID-19 arrangements working well and being reconciled as part of the welfare movements. Operatives following RAMS and wearing correct PPE.	29 th July 2021 - 96.69% 21 st July 2021 - 96.72% 14 th July 2021 - 98.18% 8 th July 2021 - 93.72% 1 st July 2021 - 93.33%
E3A—Eco-Park South	Site compliance score 94.23%. Site activities include ground beam in RFPF, RRC and EPH. Steel erection commencing involving lifting operations characterised by the use of high-capacity cranes. Rebar works in cofferdam and concreting. Sites operating safely. ACB and AIB found in EPH, pending to be removed; area signposted and fenced off. A general deterioration was detected during the month of July, but an improvement was reflected in the last site visit report in July. As a good practice/initiative it is worth mentioning the good safety breakfast provided to the staff on 28th July, running through important topics regarding Health and Safety, in terms of works at height, COVID-19, etc. There were two awards for those people showing commitment with Health and Safety. Adequate welfare arrangements in place. COVID-19 arrangements working well. Operatives following RAMS and wearing correct PPE.	27 th July 2021 – 99.51% 20 th July 2021 – 94.44% 13 th July 2021 - 90.14% 7 th July 2021 - 92.69%
E3b—Northern Area Clearance	Site compliance score 99.68%. The site is currently secure while gas testing is being undertaken. Crush is stockpiled on site, with gas testing tubes protruding the ground. There are no welfare facilities currently on site, however during imminent mobilisation and prior to commencement, welfare with COVID-19 arrangements will be installed. The relevant health and safety compliance documents have either been appraised and approved or in the final process of approval.	29 th July 2021 - 100% 21 st July 2021 - 100% 14 th July 2021 – 99.31% 9 th July 2021 - 99.47%



Social Value Dashboard

Summary – 08 September 2021



Social Value Theme	Definition	Target	Progress
--------------------	------------	--------	----------

Development Consent Order (DCO) Obligations:

Apprenticeships	Section 106 obligation to provide 100 apprenticeships, each with a duration of 12 consecutive months. Apprenticeship means a training work scheme:	100	53 years of apprentices' employment
	(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		18 individuals
On-site Skills Training Placements	Section 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	72

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%	27%

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.	-	22%*

*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.

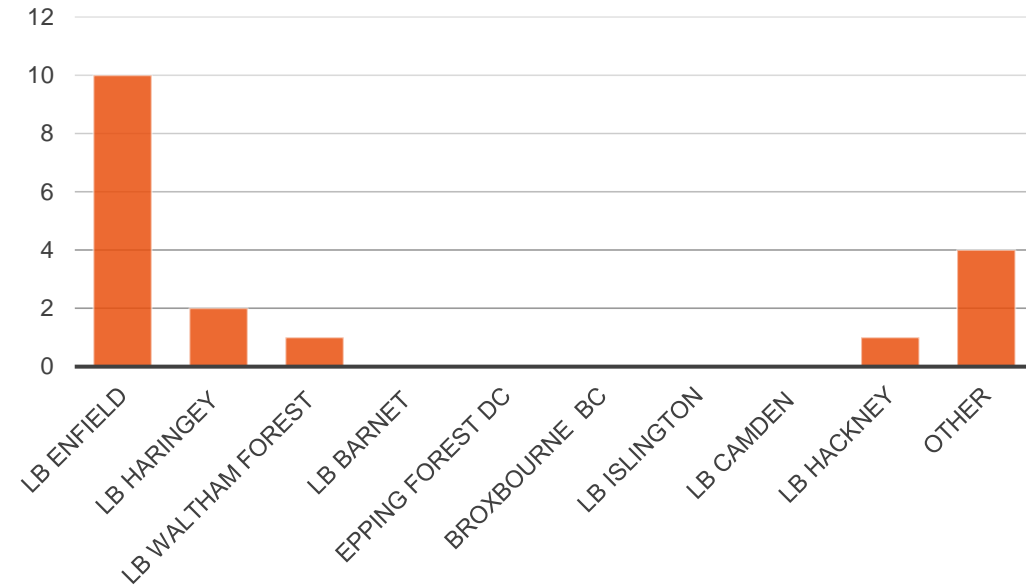


Social Value Dashboard

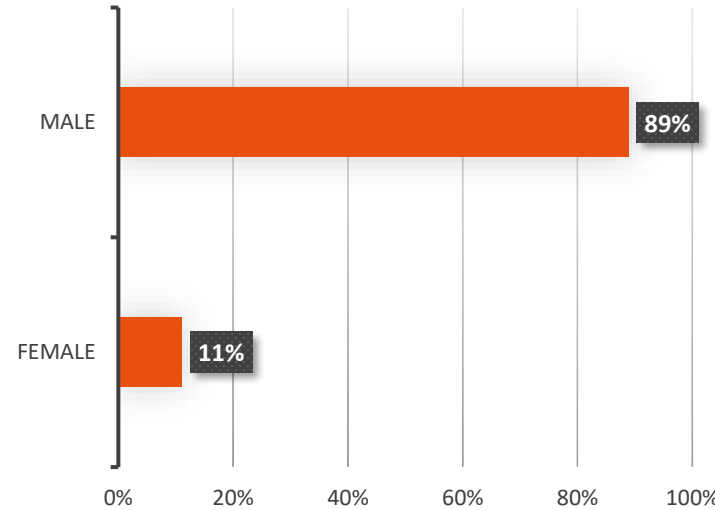
Apprenticeships



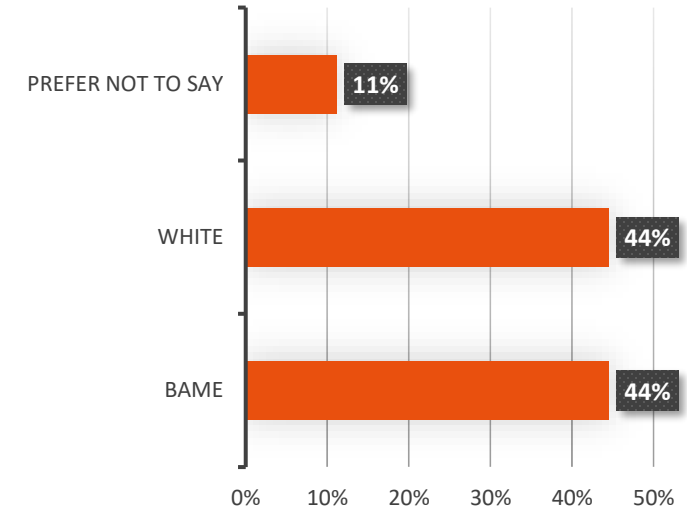
Apprentices - Home Borough



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)
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.

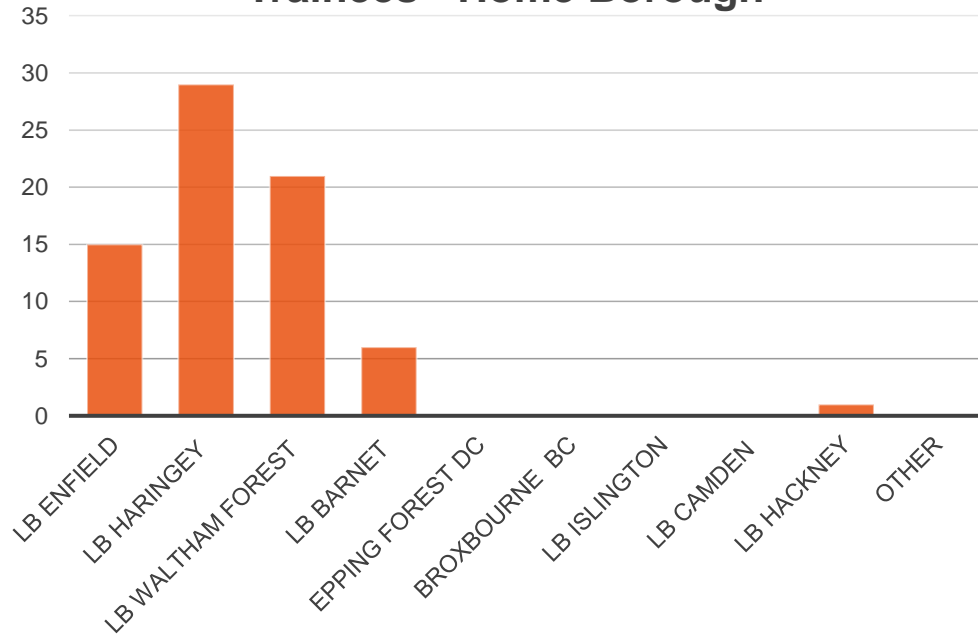


Social Value Dashboard

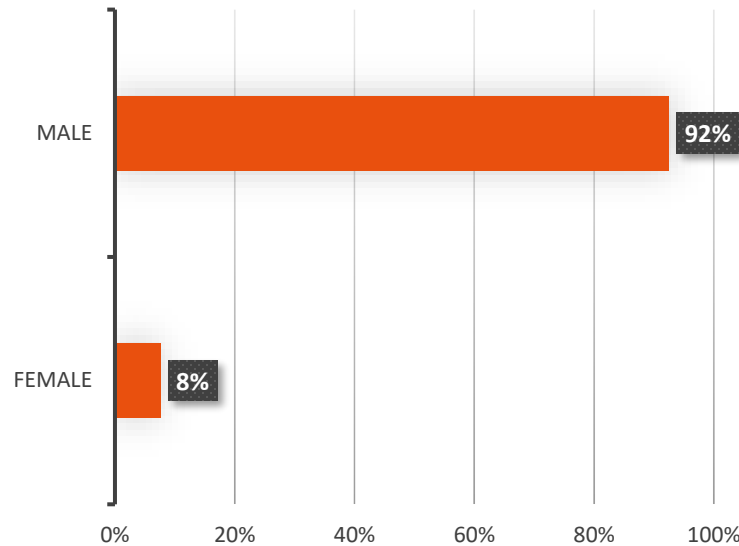
On-site Skills Training Placements



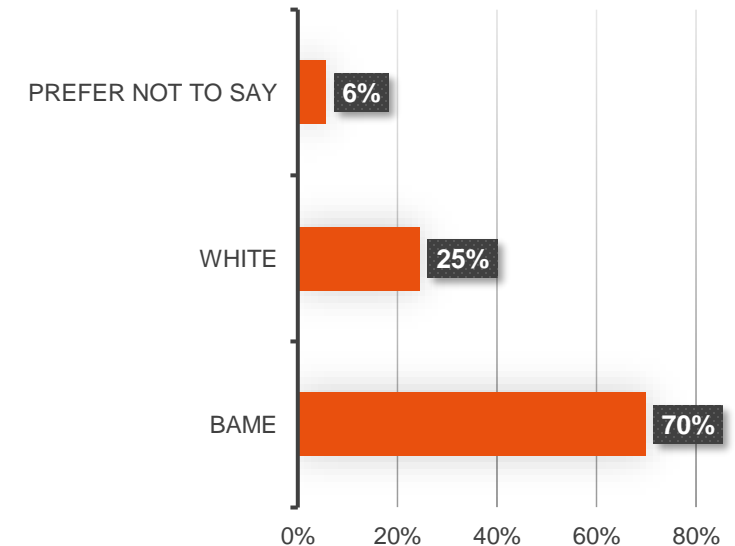
Trainees - Home Borough



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 53 out of 72 trainees (74%).

APPENDIX B NLWA FINANCIAL STANDING ORDERS

NLWA STANDING ORDERS

SECTION D – FINANCIAL STANDING ORDERS

INTRODUCTION

The Authority prepares both its revenue and capital accounts on an accruals basis, and monitors accounting commitments on both revenue and capital budgets. All references to income and expenditure in the Financial Standing Orders and Financial Regulations include accrued income and expenditure in addition to cash receipts and payments. A short glossary of other terms is appended to the Financial Standing Orders for ease of reference.

D.1 FINANCIAL ADMINISTRATION

(a) Financial Adviser

(i) The Financial Adviser is the officer appointed by the Authority in accordance with Section 73 of the Local Government Act 1985, the Accounts and Audit Regulations 2015, Section 114 of the Local Government Finance Act 1988 and Sections 25 to 27 of the Local Government Act 2003. The post-holder must ensure that the Authority's financial affairs are administered in a proper manner, in compliance with all relevant professional codes of practice, and all statutory obligations;

(ii) All matters connected with the financial administration of the Authority's affairs are the delegated responsibility of the Financial Adviser, except any matters which are delegated to other officers or reserved to committees of Authority Members or to the Authority itself. The Financial Adviser may authorise other officers to carry out matters delegated to him/her except the statutory responsibilities; in particular, the Head of Finance will have day-to-day responsibility for ensuring the proper administration of the Authority's financial affairs.

(b) Officers (See Glossary)

Officers must maintain financial controls and secure the accuracy and integrity of financial information and systems operating for the benefit of the Authority. Officers must ensure compliance with procedural instructions on financial administration issued by the Financial Adviser or the Head of Finance

(c) Financial Advice to Authority/Committees

The Financial Adviser will provide financial advice to the Authority and its committees.

(d) Financial Regulations

Staff working for the Authority must comply with the Authority's Financial Regulations. 44 NLWA Standing Orders: April 2019

(e) Fees and Charges

Changes in all fees and charges and the introduction of new fees and charges, require Authority approval.

(f) Debt Write Offs

The Financial Adviser may write off bad debts, and must report action taken to the Authority at least twice a year.

(g) Internal Audit

(i) The Financial Adviser is responsible for:

- Determining the annual internal audit plan;
- The content and distribution of internal audit reports; and
- The form and frequency of reports which may be made to the Authority arising from internal audit activity;

(ii) It is the responsibility of all officers working for the Authority to provide, upon the request of the Financial Adviser or a person nominated by him or her for this purpose, any information, explanation or document under the control of the officer concerned which is required for the purposes of or in connection with an internal audit inquiry, project, or investigation; and

(iii) The Financial Adviser will report to the Authority any serious breach of Financial Standing Orders.

D.2 FINANCIAL PLANNING

(a) Planning Process

The Financial Adviser will report to the Authority each February a three year forecast and update the forecast for the following year in December.

D.3 PREPARATION OF THE REVENUE BUDGET

(a) Financial Adviser Responsibilities

The Financial Adviser is responsible for the overall co-ordination of the budget process and for obtaining the Authority's approval of the budget. The Financial Adviser is responsible for monitoring and reporting on the adequacy of the Authority's reserves under the terms of Sections 25 to 27 of the Local Government Act 2003. 45 NLWA Standing Orders: April 2019

(b) The Head of Finance is responsible for providing day to day support to the Financial Adviser in relation to the co-ordination of the budget process, the monitoring thereof, and reporting to the Authority.

(c) Officer Responsibilities

Officers (see Glossary) are responsible for preparing the revenue budget for their functions having regard to the Authority's relevant strategies, policies and previous decisions and in accordance with the requirements of the Head of Finance.

(d) Budget Working Papers and Final Estimates

(i) All working papers and final estimates must be prepared in accordance with procedural instructions issued from time to time by the Head of Finance. The instructions will include information in respect of inflation, capital financing costs and other variables outside the control of service departments.

(ii) The revenue estimates must include forecast expenditure and income for the year. (e) Budget Timetable As part of the Authority's arrangements for medium-term financial planning and budget preparation, the Authority may, from time to time, give guidance on

the budget and the resource constraints within which service plans and budget estimates must be prepared.

D.4 SETTING THE ANNUAL BUDGET AND THE LEVY AND CHARGES

(i) The Financial Adviser will make recommendations to the Authority regarding the annual budget for the following financial year and the levy and charges required to finance it; and

(ii) At a meeting on or before 14 February each year, the Authority will approve the budget and set the levy and charges for non-household and chargeable household waste for the following financial year.

D.5 MONITORING AND CONTROL OF THE REVENUE BUDGET

(a) Budget Spending

Following approval by the Authority of the annual revenue estimates, Officers are free, subject to complying with contract standing orders, to spend within the agreed budget for their functions. They must ensure that the net expenditure for their functions does not exceed the approved budget. 46 NLWA Standing Orders: April 2019

(b) Monitoring

(i) Officers shall make arrangements to ensure that in each month they are aware of, and can report on, the actual expenditure and income for their functions under each budget heading, and the projected outturn for the financial year, having regard to any contingent liabilities for which financial provision may be required. Officers shall provide the Head of Finance with up to date summary projections each month or as otherwise determined;

(ii) The Financial Adviser will report on the overall financial position to the Authority as required, but not less than four times a year. This report will include any concerns he or she may have about the budget projections being made by officers or about financial controls affecting the Authority's finances; and

(iii) The Financial Adviser will report to the Authority, not later than July of each year, on the financial outturn for the previous financial year.

(c) Virements

Officers are free to vire budget provision between budget headings within their functions for the Authority in accordance with the Authority's scheme of delegation. Officers must report such virements to the Authority at the earliest practicable opportunity.

(d) Transferred Functions

Where responsibility for a function is transferred from one borough or contractor to another, the Financial Adviser will consult interested parties and advise the Authority of the financial implications.

(e) Budget Adjustments

The Authority may at any time during a financial year, having considered a report of the Financial Adviser, vary the budget limits either:

- (i) to require mid-year savings to compensate for a projected overspend;
- (ii) to allocate sums included within corporate provisions or budgets; or

(iii) following transfer of service(s).

(f) Carry Forward of Underspend

The Financial Adviser may, on consideration of the overall financial position of the Authority at the end of a financial year; recommend to the Authority that underspend by relevant officers should be made available for specific projects or carried forward to the subsequent financial year. 47 NLWA Standing Orders: April 2019

(g) Accuracy of Accounts

It is the responsibility of Officers, having regard to any guidance which may be issued by the Financial Adviser and Head of Finance, to ensure that all items are correctly coded and only expenditure classified as revenue expenditure in accordance with proper accounting practices or as defined as such under the Local Government Act 2003 is charged to revenue.

D.6 PREPARATION OF THE CAPITAL PROGRAMME

(a) Capital Programme

The Authority will, on consideration of reports from the Financial Adviser which will be at least annual to coincide with the setting of the Revenue Budget, make decisions in respect of the capital programme. The reports from the Financial Adviser will consider the capital resources available to the Authority in the context of the CIPFA Prudential Code for Capital Finance in Local Authorities, and any other relevant information. The Authority will, on the advice of the Financial Adviser, set and monitor the Authority's Prudential Indicators.

(b) The Head of Finance is responsible for providing day to day support to the Financial Adviser in relation to the co-ordination of the budget process, the monitoring thereof, and reporting to the Authority.

(c) Financing of Schemes

Within the overall approved capital programme, the Financial Adviser will decide the method by which any particular scheme will be financed.

(d) Budget Working Papers

All working papers must be prepared in accordance with issued procedural instructions.

D.7 MONITORING AND CONTROL OF THE CAPITAL PROGRAMME

(a) Control Officers must ensure that their total capital spending on the Authority's functions in any financial year does not exceed the relevant provision within the capital programme, except where approved by the Financial Adviser.

(b) Reporting Requirements

(i) The Financial Adviser will report at least four times each year to the Authority on capital expenditure incurred to date in the financial year 48 NLWA Standing Orders: April 2019 and the projected outturn for the financial year compared to budget. This report will include details of the projected outturn for the financial year and the total capital resources available to the Authority with which to finance such expenditure.

(ii) The Financial Adviser must report to the Authority not later than July each year on the actual capital expenditure incurred in the previous financial year compared to budget together with a comparison between the approved total cost and the projected total cost for

(c) Variations to the Capital Programme

Officers may vary the budget for individual schemes or block provisions and may add schemes from the reserve list subject to any increase in budget being met by virements or additional resources and subject to the agreement of the Financial Adviser. They must report such variations to the Authority at the earliest opportunity.

(d) Major Overspends

Officers must report to the Authority on any schemes in progress which are forecast to overspend by 25% or more compared to the contract sum unless the overspending amounts to less than £75,000. The report must give the reasons for the overspending.

(e) Accuracy of Accounts

It is the responsibility of Officers, having regard to any guidance which may be issued by the Financial Adviser and Head of Finance, to ensure that all items are correctly coded and only expenditure classified as capital expenditure in accordance with proper accounting practices or as defined as such under the Local Government Act 2003 is charged to capital.

D.8 NORTH LONDON HEAT AND POWER PROJECT

a) This section applies to borrowing of sums of £100M and above required to finance the North London Heat and Power Project (NLHPP borrowing)

b) For NLHPP borrowing, the following process will apply:

i. The Financial Adviser will advise Members in a report to a meeting of the Authority or of the Programme Committee of anticipated borrowing and the anticipated borrowing route in advance of the borrowing being made, in the context of the capital programme set annually in the Authority's budget as updated from time to time

ii. In advance of making the application for funds, the Financial Adviser will provide details of the proposed borrowing, the anticipated source of borrowing (PWL or Municipal Bond) and the anticipated range of rates at which the borrowing is expected to take place, to the Chair and Vice Chair, and in addition to Directors of Finance of the constituent boroughs, by way of consultation.

iii. Subject to consideration of any comments received as a result of such consultation, the Financial Adviser will carry out such borrowing and enter into such documentation as is required to support the borrowing.

iv. Thereafter, executive decisions on borrowing, investment or financing for such borrowings are delegated to the Financial Adviser.

D.9 LEASES

(a) Inclusion in Capital Accounts

The taking or granting of a lease on any asset may form part of the Authority's capital expenditure or receipts, and must, therefore, be provided for.

(b) Financial Adviser's consent

The taking or granting of a lease on any asset, other than short term leases on property, will be subject to the consent of the Financial Adviser.

D.109 TREASURY MANAGEMENT

(a) CIPFA Code of Practice 49 NLWA Standing Orders: April 2019

The Financial Adviser will ensure that all Authority borrowings and investments are conducted in accordance with the CIPFA Code of Practice on Treasury Management in the Public Services. To this end, all money in the hands of the Authority will be aggregated for the purposes of treasury management and will be under the control of the Financial Adviser, referred to in the Code as the "Chief Financial Officer".

(b) Decisions on Borrowing Executive decisions on borrowing, investment or financing are delegated to the Financial Adviser.

(c) Treasury Management Policy Unless otherwise agreed by the Authority treasury management arrangements will mirror the strategy and borrowing limits approved from time to time by the Financial Adviser's employing borough.

(d) Pooling of investments The Financial Adviser will make arrangements for any surplus funds to be pooled with funds belonging to his/her employing borough and invested and for interest to be allocated to the Authority on an equitable basis.

GLOSSARY

Capital Programme: The capital programme is a medium term statement of the Authority's proposals for capital expenditure, including leasing, having regard to the likely level of resources.

Prudential Code: The key objectives of the Prudential Code are to ensure, within a clear framework, that the capital investment plans of local authorities are affordable, prudent, sustainable and in accordance with good professional practice – or, in exceptional cases, to demonstrate that there is a danger of not ensuring this, so that the Authority can take timely remedial action.

Officers

- Clerk
- Managing Director and Deputy Clerk
- Financial Adviser
- Legal Adviser
- Programme Director
- Head of Governance and Legal
- Head of Strategy and Services
- Head of Finance

Treasury Management: In order to maximise the return on temporary surplus cash balances and minimise the cost of short-term borrowing, the Authority pools any surplus funds with those belonging to the Financial Advisers employing borough, which are then invested in accordance with the CIPFA Code of Practice on Treasury Management in Public Authorities.

Virements: A virement is an agreed re-allocation of budgetary provision which has been approved for one purpose to another designated budget.