

**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:** 11 FEBRUARY 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:** 1 February 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 25 December 2020. 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**

### **Summary Programme Status**

- 2.1. The Project remains on track to deliver to programme and cost objectives as agreed in the March 2019 baseline. Activities have continued to progress on all fronts in the reporting period, albeit with a construction pause over the Christmas holidays.
- 2.2. The new year has begun with a focus on the mobilisation of the EcoPark South contractor, Taylor Woodrow, to site and the completion of the ECI (Early Contractor Involvement) stage. This will be confirmed via the issuing of the Notice To Proceed (NTP) by the Authority, signalling a formal start to the construction phase.
- 2.3. The project has made good progress working with Taylor Woodrow towards confirming the NTP in accordance with the programme.
- 2.4. The project team have concluded their planning work concerning the co-ordination of waste management and construction traffic on the EcoPark. Traffic modelling studies have been completed and have confirmed that the planned traffic management arrangements allow waste management operations to be maintained at the EcoPark and support safe segregation of construction and waste traffic.

- 2.5. The last period has seen a continuation of progress on the multiple work sites, with Barhale (Sewer Diversion contractor) preparing to commence their third and final shaft and good progress continuing with the first two. DSM Demolition have mobilised to commence the removal of the decommissioned waste management facilities in the north of the EcoPark.
- 2.6. At the end of December, the project schedule was forecasting completion of the RRF eight weeks later than the baseline. The project team have since successfully rescheduled the RRF and Sewer Diversion programmes at key interfaces, to enable completion of the RRF in accordance with the baseline. However, the ability to coordinate construction of the RRF with the concurrent Energetik programme for their energy centre is emerging as a significant risk. The respective project teams are working to minimise the adverse impact to both programmes. Reviews are also continuing on saving time in the period after RRF building completion to preserve the baseline date for availability of the full ERF footprint for construction.
- 2.7. The increasing rates of COVID-19 in London pose an increased threat to the project. The project has further strengthened its lines of defence to keep the workforce safe whilst at work. Rapid antigen testing for the on-site workforce has been rolled out across the programme since the start of the year, with two hundred and thirty-eight tests carried out to date. This programme, together with the personnel on-site tracking technology already deployed, has so far assisted in identifying two positive COVID-19 cases on site to date and enabled speedy identification of two other workers who may have been in close contact. These workers were then required to isolate in accordance with the government guidelines.

#### **Current Key Activities**

- 2.8. The works to construct the Laydown Area and Eastern Access road are close to completion with most of the car parking area already finished. The use of the new Laydown car parking has enabled the project to take over EcoPark parking areas for construction of the Resource Recovery Facility (RRF). A staggered approach for handover of the remaining assets will complete at the end of February.
- 2.9. The initiative to develop and embed an asset management policy for the Authority has started and an asset management working group has been established to:
  - 2.9.1. Establish, align, and embed asset ownership and management for the new assets/facilities as a function (according to international best practice in ISO 55000) across the NLWA and LEL.
  - 2.9.2. Provide leadership and strategic overview to set a single vision for asset management.
  - 2.9.3. Establish a Strategic Asset Management Plan (SAMP) for the operation and maintenance of the new assets/facilities created by the project.

- 2.9.4. Specify Asset Information Requirements for the long-term benefit of operational and maintenance use and ensure these are delivered through the project.
- 2.10. Success in this initiative, will ensure alignment of project outputs with longer-term NLWA and LEL asset ownership and management need's respectively.

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

- 3.1. All worksites are operating efficiently despite the restrictions of social distancing. Other protection measures against the transmission of COVID-19 remain in place and are constantly reviewed to ensure the project is using exemplar practices.
- 3.2. Construction continues to progress well and in accordance with the baseline programme except for the Eastern Access road which has been delayed by additional work to repair latent defects in the Lee Valley Park Way bridge deck. As a consequence, traffic management arrangements in the EcoPark are being adjusted to enable the next phase of construction in the south of the EcoPark to start without the facility to bring light traffic in via the new Eastern Access road for a few weeks.
- 3.3. The volume of construction work in the EcoPark has increased in January with the mobilisation of most of the construction footprint in the southern part of the EcoPark. The detailed logistics plans for the takeover of larger areas and greater number of personnel on site are in operation.
- 3.4. The sewer diversion contractor has completed the extensive excavation for the 12m diameter access shaft for Manhole A and started the access shaft for Manhole B which is a key step forward towards the start of the tunnelling between them.
- 3.5. The modular project site offices and welfare facilities in the Laydown Area have continued being fitted out for occupation in February 2021.
- 3.6. In recognition of the planned growth in construction activity on site, plans are in place for the accommodation of waste management and construction traffic in the EcoPark in 2021. The combined construction and waste operations traffic have been modelled to demonstrate how traffic will keep flowing and assess where there could be the risk of congestion. The modelling has confirmed that the planned traffic arrangements overcome the challenges from construction taking over major areas of the EcoPark and associated construction traffic volumes. The major change comes in March when weighbridges are relocated from the Western Road to north of the energy from waste facility. The modelling results have been discussed with LEL and borough officers to assure them that their operations will be able to continue as construction progresses.

- 3.7. The project team and LEL are working in close co-operation to manage the transition of traffic routes around the EcoPark and have established how traffic will be managed to ensure smooth access to waste management operations and construction areas.
- 3.8. A current “Health Check” summary of project performance is included at Appendix A, together with a milestone summary report current at the end of the December reporting period.

### **Laydown Area and Eastern Access (Project E1a2)**

- 3.9. Construction work has made progress on site towards completion of the Eastern Access road at the end of February when it will be used to link the Laydown Area and Welfare to the construction sites in the EcoPark. Additional work to repair latent defects in the Lee Valley Park Road bridge deck has delayed the completion of the Eastern Access to the end of February.
- 3.10. The Laydown Area and Welfare offices to the EcoPark South Construction started to be handed over by the contractor Buckingham in January. Taylor Woodrow will manage the Laydown Area and Welfare Offices on behalf of the project over the next 18 months whilst they deliver the EcoPark South Construction contract.
- 3.11. The photograph below shows the projects two-story welfare offices surrounded by the completed parking area.



### **Northern Access (Deephams Farm Road) (Project E1b)**

- 3.12. Construction work has been completed and incorporated into the EcoPark. It is initially being used by construction traffic servicing the northern area demolition which started in January, with use by waste management operations to follow.
- 3.13. The photograph below shows an aerial view of the newly constructed Deephams Farm Road looking towards Ardra Road.



### **Sewer Diversion Enabling Works (Project E2b)**

- 3.14. The clearing of services in preparation for the construction of the shaft for Manhole C near the southern entrance of the EcoPark started in preparation for shaft construction at the end of January.

### **Sewer Diversion Main Works (Project E2c)**

- 3.15. The contractor Barhale has largely completed the excavation for the first of three 12-metre diameter shafts (called manholes A, B and C) which are used to install, drive and extract the Tunnel Boring Machines. The excavation for the shaft for manhole B continues and preparations are underway to start work on the shaft for manhole C.



- 3.16. The photograph above gives a view down the shaft at manhole A. At the bottom of the shaft can be seen the existing Chingford and Angel sewer pipe to which the new diverted sewer will connect. The photograph shows the shaft construction made up of concrete segments to form its circular shape to a depth of about 10 metres.

#### **EcoPark South (Project E3a)**

- 3.17. The team have continued to make good progress towards the issue of the Notice to Proceed to the contractor Taylor Woodrow. Notice to Proceed marks the start of the second stage of the Design and Build contract and will confirm the agreed scope of the works, its design and construction costs. The Notice to Proceed to Taylor Woodrow is planned for mid-February, in line with the programme, which will allow for work to be completed on the target cost and the remaining provisional sum allowances.
- 3.18. Taylor Woodrow are mobilising site operations as planned so that the foundation work can start on time and immediately following the Notice to Proceed.
- 3.19. The update report to Programme Committee in January 2021 advised that the design developed by Taylor Woodrow and their design team has been reviewed for co-ordination across design disciplines and the project team against the employer's requirements. These designs are now being taken forward to confirm the scope and deliverables from Taylor Woodrow's supply chain.
- 3.20. The co-ordination of Taylor Woodrow's construction with that of the sewer diversion by Barhale and the District Heating Energy Centre by Energetik, continues

to be managed with weekly co-ordination meetings. The forecast completion dates for the RRF take into account the dates when Barhale and Energetik need access to Taylor Woodrow's construction site.

- 3.21. The period between the scheduled completion of the construction of the RRF and the date by when transition of operations to it need to be completed remains critical to enabling the ERF construction. Work continues with LEL to establish how this can be done as efficiently as possible to de-risk delay to the ERF.

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

- 3.22. The demolition of the redundant facilities in the western side of the future ERF footprint has been started by DSM Demolition.
- 3.23. The outline design for the temporary Bulky Waste and Fuel Preparation plant continues to be finalised to enable the procurement of its design and construction in 2021. This facility enables the ERF construction to start on time in October 2022 in the footprint of the current Bulky Waste and Fuel Preparation plant.

#### **Utility Corridor & Main Distribution Network Operator (DNO) connections (Project E4)**

- 3.24. The detailed design of the future incoming gas supply main and wayleave agreements continues to be progressed by Cadent and will lead to the procurement in 2021 of the installation works.
- 3.25. The co-ordination of utilities continues with the utility master plan and survey works on site to verify the position of existing services assumed in the overall design.

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

- 3.26. The shortlisted organisations continue to work on their submissions for detailed solutions for dialogue and leading to a recommendation for an award of contract in December.
- 3.27. The tender documents issued at the start of procurement have been developed and issued to tenderers for their initial submissions.
- 3.28. Site visits by tenderers to the EcoPark scheduled for January were replaced by an updated video of the site. It has been agreed with tenderers that physical travel and site visits under the current COVID-19 situation should be avoided and that a video would be sufficient to enable initial submissions to be made.



## **Energy from Waste (EfW) demolition & decommissioning (Project E8) and Southern Access Widening (Project E9)**

- 3.29. On the basis that this work comes after the completion of the ERF after 2028, there has been no further work on these projects in the period.

### **4. HEALTH, SAFETY & WELLBEING (HSW)**

- 4.1. This summary considers an overview of the Health, Safety and Wellbeing (HSW) outcomes from December 2020 and early January 2021.

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

- 4.2. Zero serious or loss time incidents have been reported, with no near misses or reportable incidents.
- 4.3. The resurgence of COVID-19 and increasing rates of infection pose an increased threat to progress in the period and beyond. Following review and planning in the previous period through the project's COVID-19 task force, personnel on-site tracking technology has been introduced to the programme on a trial basis. This enables the programme to ensure social distancing is being observed via alarmed proximity wristbands and helps identify anyone that should isolate as a result of any positive case. In addition, antigen testing for the on-site workforce has been rolled out across the programme through January. These processes have assisted in identifying three positive COVID-19 cases as of mid-January 2021, with the necessary isolations of other workers where applicable in accordance with the government guidelines.
- 4.4. Construction Design and Management Regulations (CDM) compliance across the programme continues to be high as proven by the monitoring activities. This process ensures the programme is delivered in alignment with the Health & Safety Executive requirements and that duties under legislation are discharged.
- 4.5. Site audits have yielded good levels of compliance across five sites and nine audits in the period.
- 4.6. On 11 January 2021 an incident occurred relating to a construction vehicle undertaking prohibited access to an operational LEL route in the north of the EcoPark. This included by-passing an LEL barrier system in place to segregate high risk operations of plant and machinery. A full investigation is being undertaken looking at why the route was being used. Meanwhile the prohibited use of the route has been reinforced to all contractors associated with NLHPP works through correspondence.

## **Health, Safety & Wellbeing Management**

- 4.7. Three HSW snapshots have been communicated to the programme across a range of HSW topics relevant to the environment and operations being undertaken at site level. The purpose of these snapshots is to raise topical awareness in relation to health, safety and wellbeing with all those involved with the project.
- 4.8. The new HSW reporting system was trailed in November and December 2020 with a number of modifications made to forms and associated reporting workflows. There have been various meetings and ongoing dialogue with contractors to clarify Incident Reporting requirements. Full rollout of the digital HSW reporting system across the NLHPP programme will commence Quarter 1 2021. System requirements were covered in three NLHPP HSW Strategy Launch sessions and various Principal Contractor focus groups undertaken in December 2020.

## **5. RISK SUMMARY**

- 5.1. The project's risk environment has improved through EcoPark South retiring risks relating to the acceptance of Taylor Woodrow's foundation design following approval from Thames Water.
- 5.2. COVID-19, whilst still a threat, continues to have only a minor impact on the programme as the control measures that have been implemented are working well under current circumstances to prevent the risk level from increasing. As indicated in the Health, Safety and Wellbeing section above innovative technology for personnel on-site tracking is being trialled to ensure social distancing on site and to support track and trace where required. Further, antigen testing was rolled out on site in January adding an additional layer of defence. These additional controls, alongside those described in recent reports, are contributing to the successful management of this threat.
- 5.3. As a result of the EU-UK Trade and Cooperation agreement the uncertainty around impacts from Brexit has reduced. The focus of the risk is now on construction labour shortages and on specialist resources from Europe required to attend site in connection with the Energy Recovery Facility. The risk level has recently been assessed as low and the risk will be monitored and reviewed to ensure that any impact to the programme is minimised.
- 5.4. The risk that programme interfaces with LEL operations may significantly impact construction beyond known constraints remains but the output from traffic modelling is increasing confidence around plans to ensure that EcoPark traffic is always within capacity of access and egress infrastructure. Further, a traffic management working group was established to review and monitor the management and coordination of waste operational traffic movements and access/egress to EcoPark.

- 5.5. The risk that works on site may clash with unforeseen underground services and/or assets continues. Mitigation actions in progress include an accumulation of information of underground services and their condition through non-intrusive and intrusive surveys, utilisation of NLHPP Geographic Information System (GIS) model to capture and present relevant information in accessible ways and the monitoring of contractors permitting process to verify latest information and appropriate methodology. As part of the contingency plan, the programme has also set up a working arrangement that will provide a quick response, for identification of service owners and status encountered.
- 5.6. Risk management activities continue to progress with scheduled risk reviews taking place at programme and project level. A joint risk review was held in January with the EPSC Contractor. The contractor has submitted their Risk Management Plan for approval by officers.
- 5.7. A meeting was held recently with LEL to enable each party to highlight key risks that might impact on the other and allow both parties, in a collaborative manner, to consider how they can effectively contribute to the mitigation plans. This meeting will continue on a quarterly basis throughout 2021.
- 5.8. The NLHPP Risk Management Strategy is scheduled for a review and update. The Programme Risk Management Plan will also be updated to reflect that the risk management records will transition to the Datahub for future management which will allow more members of the team to access risk data and result in reduced administration.

## **6. SOCIAL VALUE**

- 6.1. In order to ensure that apprentices are able to complete all their training on the NLHPP, the team has worked to liaise with contractors to allow onward placement of apprentices on the NLHPP when their placement with existing projects come to an end. As such, through discussions between Buckingham and the appointed contractor on the Northern Area Clearance contract (DSM Demolition Ltd.), DSM Demolition Ltd interviewed one of Buckingham's on-site apprentices who requires onward placement and have provided positive feedback on the interview and issued an offer to the candidate. The apprentice will commence their placement on the Northern Area Clearance contract early in 2021.
- 6.2. Galldris are working to deliver an additional on-site skills training placement in January. The delivery of this training placement will take the total number of training placements delivered by the end of January to 34.
- 6.3. As Taylor Woodrow have started works on the EcoPark South contract, they have been developing a Social Value plan, which was submitted before the end of 2020. The Social Value plan sets out Taylor Woodrow's commitment to delivering

apprenticeships and training placements, which aims to deliver the remainder of its apprenticeship targets (a further 10 apprentices) by the end of 2021 in line with the next academic year. This will be done both directly by Taylor Woodrow as well as their sub-contractors. Furthermore, Taylor Woodrow plan to commence their delivery of their 60 on-site skills training placements from April 2021 and will also be working with the College of North East London to deliver these.

- 6.4. The team have had successful liaison with local schools and have presented to the Heads of Science from several schools in London Borough (LB) Enfield. However, due to the recent government announcement on the closure of schools because of the COVID-19 pandemic, there have been delays in implementing the schools' programmes due to the move back to online learning. In the interim, officers will continue to work on materials for the schools' programme, with a view to deliver this when schools reopen following the end of the national lockdown. In addition, a roll out plan for all North London boroughs is being prepared.

## **7. COMMUNICATION**

- 7.1. Recent press releases have included the announcement of a heat supply agreement with Energetik and LondonEnergy Ltd at the start of January. This marks a major positive milestone to strengthen publicity for the use of heat for local homes from the Energy Recovery Facility (ERF). Another major milestone was the conclusion of the northern access works to improve Deephams Farm Road and enable traffic access from the north on to the EcoPark. A press announcement about the completion of the road was made at the start of January.
- 7.2. News from the Committee for Climate Change's sixth carbon budget was announced in December which positively reinforced the selection of energy from waste technology for treating residual waste, in line with the UK's targets for a Net Zero Carbon economy. A statement was issued by NLHPP to show the projects alignment with the UK's strategy.
- 7.3. News stories on the NLHPP website ([northlondonheatandpower.london](http://northlondonheatandpower.london)) continue to be updated as the project progresses, including the announcement of the new contractor for clearing the north of the EcoPark for ERF construction. Further press activity in January is planned for the announcement of the EcoPark South construction, which will see the start of building recycling facilities on the EcoPark. Local adverts in print media will also be utilised to increase the awareness for local residents about the start of construction.
- 7.4. North London Members of Parliament continue to be provided with key information about the project including briefing notes and recent news stories. Next month the second ConnectNLWA newsletter is planned for MPs.

7.5. Social media activity has continued to focus on key successes across the project in 2020 and the start of 2021 has launched the 'Building Benefits' campaign. This utilises Gifs with key messages about the social value elements that the project delivers for the community. The key focus in January has been on apprenticeship training opportunities and other social value themes will be explored each month including training programmes, EcoPark House facilities, and local business opportunities.

## **8. EQUALITIES IMPLICATIONS**

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

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

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

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

10.1. The Financial Adviser has been consulted during the preparation of this report and all comments have been incorporated.

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**APPENDIX A      PROGRAMME SUMMARY**





# Authority Meeting 11<sup>th</sup> February 2021

## Appendix A – Programme Summary





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## Note:

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





# Project Health Check (at mid January)



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	●	→	●	→	●	↓	●	→	●	→
Northern Access - E1b	●	→	●	→	●	→	●	→	●	→
Transport Yard - E2a	n/a		n/a		n/a		n/a		Completed	
Sewer Diversion (Enabling Works) - E2b	●	→	●	→	●	→	●	↓	●	→
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 of the NLHPP to deliver on time and within its budget.
●	Increase in known costs or risk of exceeding the Overall Project Cost Baseline	One of more project milestone is late by more than a day	Newly identified risks with some impact to the risk environment in the period	Rise in recorded accidents, lost time or otherwise, or occupational diseases. Normal scheduled HS&W advisor site visits and weekly	If the project has the potential to adversely impact the ability of the NLHPP to deliver on time and within its budget.
●	Unexpected costs arisen likely to cause the Overall Project Cost Baseline to be exceeded	A project critical path milestone is late	High uncertainty within the risk environment identified by their qualitative RAG impact rating (cost, time, reputation)	Any RIDDOR incident or consistent failures to comply with CLC Site Operating Procedures version 4	If the performance of the project is going to impact the NLHPP bringing ERF into service on time or capital cost being exceeded.

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



# Schedule Dashboard (at end of December)



Milestone (Critical)	Baseline Date	Forecast Date	Deviation to Baseline Programme (weeks)	Recovery Plan
Complete Laydown Area (E1a2-A9000)	11-Nov-20	12-Feb-21	-11	Request a daily progress plan from BGCL and organize a phased handover and constrained start to EcoPark South Construction
Eco Park South - Taylor Woodrow Works Start on Site (E03-A7040-015)	26-Jan-21	08-Mar-21	-6	Review Traffic sequencing and site logistics
Sewer Operational to enable completion of RRF foundations (E02-A8100)	27-Sep-21	25-Oct-21	-4	Review Barhale sequencing and EPSC interface
Eco Park South - Access to West of Manhole B - CDM Phase A3 (E03-A7040015)	01-Sep-21	26-Oct-21	-6	Review Barhale sequencing and EPSC interface
RFPF and RRC ready for transition (E03-A7040-280)	04-Aug-22	29-Sep-22	-8	Early engagement with the commissioning team to expedite the handover sequence
RRF Operational Commencement (LEL Vacate Old Facility)	26-Oct-22	22-Dec-22	-8	Early engagement with the commissioning team to determine how operations may transition to the new facility
NAC - Western Section - All waste operations ceased in the temporary facility (E3b-A1445)	26-Oct-22	22-Dec-22	-8	
NAC - Northern Area Western Section is cleared and available to the ERF Contractor (IF E7-6) E3b-A9500	28-Feb-23	28-Apr-23	-8	Look at how transition of operations from the temporary bulky waste to the RRF can be done more quickly
ERF - Access Date - Phase 2 Western Area (E07-A9120)	01-Mar-23	02-May-23	-8	
ERF - Construction Complete for Cold Commissioning (E07-A7057)	29-May-25	29-Jul-25	-8	Develop a commissioning strategy to expedite ERF commissioning
ERF - First Fire on Waste (E07-A9505)	19-Dec-25	17-Feb-26	-6	Develop a commissioning strategy to expedite ERF commissioning
ERF - Performance Guarantee Tests 1 Complete (E07-A8210)	17-Feb-26	17-Apr-26	-8	
ERF - Performance Guarantee Tests Complete (PGT2 Inc. availability) E07-A8240	25-Feb-27	27-Apr-27	-8	

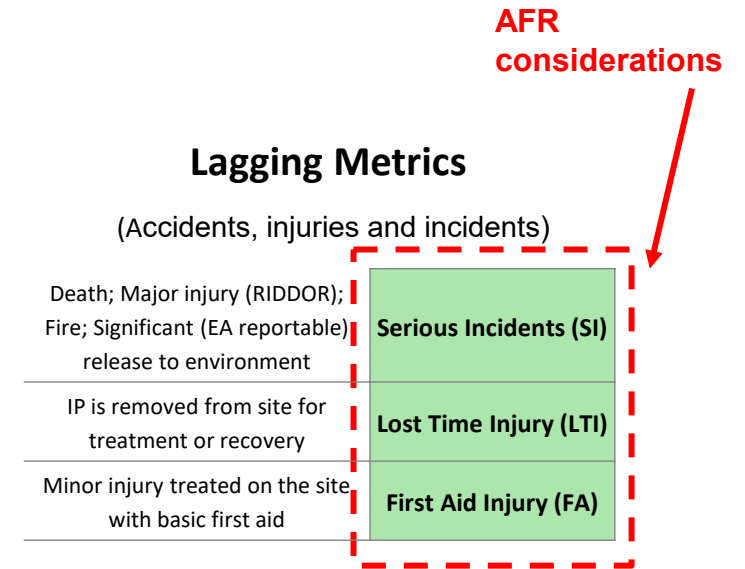


# Health, Safety & Wellbeing (HSW) Dashboard

## (Explanation of Terminology)



Terminology	Definition	Further Explanation
<b>Leading Metrics</b>	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).
<b>Lagging Metrics</b>	Accidents, injuries and incidents	
<b>Accident Frequency Rate (AFR)</b>	$\frac{[(\text{Number of injuries in the period}) / (\text{Total hours worked during the period})] \times 1,000,000}{\text{i.e. the number of injuries per million hours worked.}}$	The AFR takes into account the first 3 lagging metrics: Serious Incident (SI), Lost Time Injury (LTI) and First Aid Injury (FA), as highlighted in an exert from the Lagging Metrics table.





# Health, Safety & Wellbeing (HSW) Dashboard

## (Summary of Leading Performance Metrics)



Leading Metrics	Period December 2020							Period Nov20 20	Total to Date**	
	E1A 2	E1B	E2B	E2C	E3a	E4A	Total			
Any action or suggestion, idea, behaviour that is 'above and beyond' compliance	<b>Positive Behaviour (PB)</b>	2	6	0	1	2	0	11	19	176
Anything volunteered and not resulting from a formal assessment or audit. Positive or negative.	<b>Safety Observation (SO)</b>	4	1	0	2	1	0	8	32	188
Site visits by Senior Leadership	<b>Leadership Engagement</b>	1	1	1	1	1	1	6	5	33
Weekly site inspection visits by H&S advisors	<b>Site Inspection Visits</b>	3	2	1	2	1	0	9	20	157

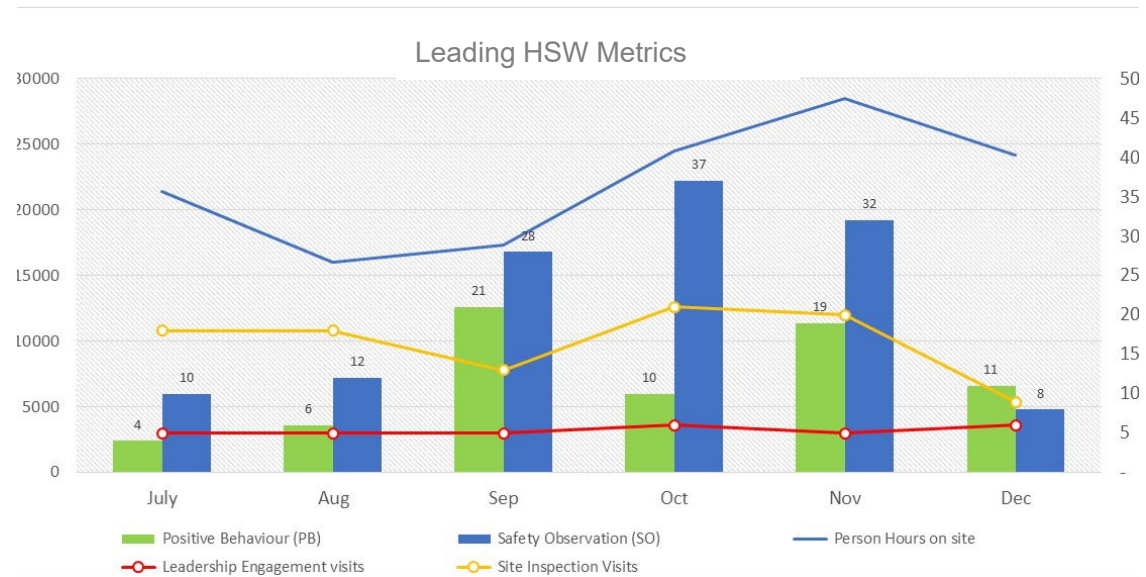


Figure represents the total hours worked on site against leading HSW metrics for each reporting period

	Period Dec2020	Period Nov2020	Total to Date*
Health, Safety and Wellbeing Alerts	3	4	41

HSW Snapshot	Date Issued
Safe Working at Height	4th December 2020
Travelling to and from work during COVID 19 using public transport.	11th December 2020
NLHPP Christmas shut down and start up 27.11.2020 - Slips, Trips and Falls.	18th December 2020

\*\*Total to date: from April 2019 to the end of the reporting period , \*\*\*Construction Leadership Council Site Operating Procedures



# Health, Safety & Wellbeing (HSW) Dashboard

## (Summary of Lagging Performance Metrics)



Lagging Metrics	Period December 2020							Period Nov 2020	Total to Date**
	E1A2	E1B	E2B	E2C	E3a	E4A	Total		
Death; Major injury (RIDDOR); Fire; Significant (EA reportable) release to environment	0	0	0	0	0	0	0	0	0
IP is removed from site for treatment or recovery	0	0	0	0	0	0	0	0	1
Minor injury treated on the site with basic first aid	0	0	0	0	0	0	0	0	18
An incident not causing harm, but had the potential to cause injury or ill health	0	0	0	0	0	0	0	0	27
As RIDDOR	0	0	0	0	0	0	0	0	4
Something outside Project control that causes us to take action e.g. nearby fire, flood, site protest, UXB	0	0	0	0	0	0	0	1	39
A set of conditions or circumstances that have the potential to cause injury or ill health, including poor procedures.	6	1	0	3	2	0	12	27	227
Abuse, physical threats or actions short of violence	0	0	0	0	0	0	0	1	2

\*\*Total to date: from April 2019 to the end of the reporting period

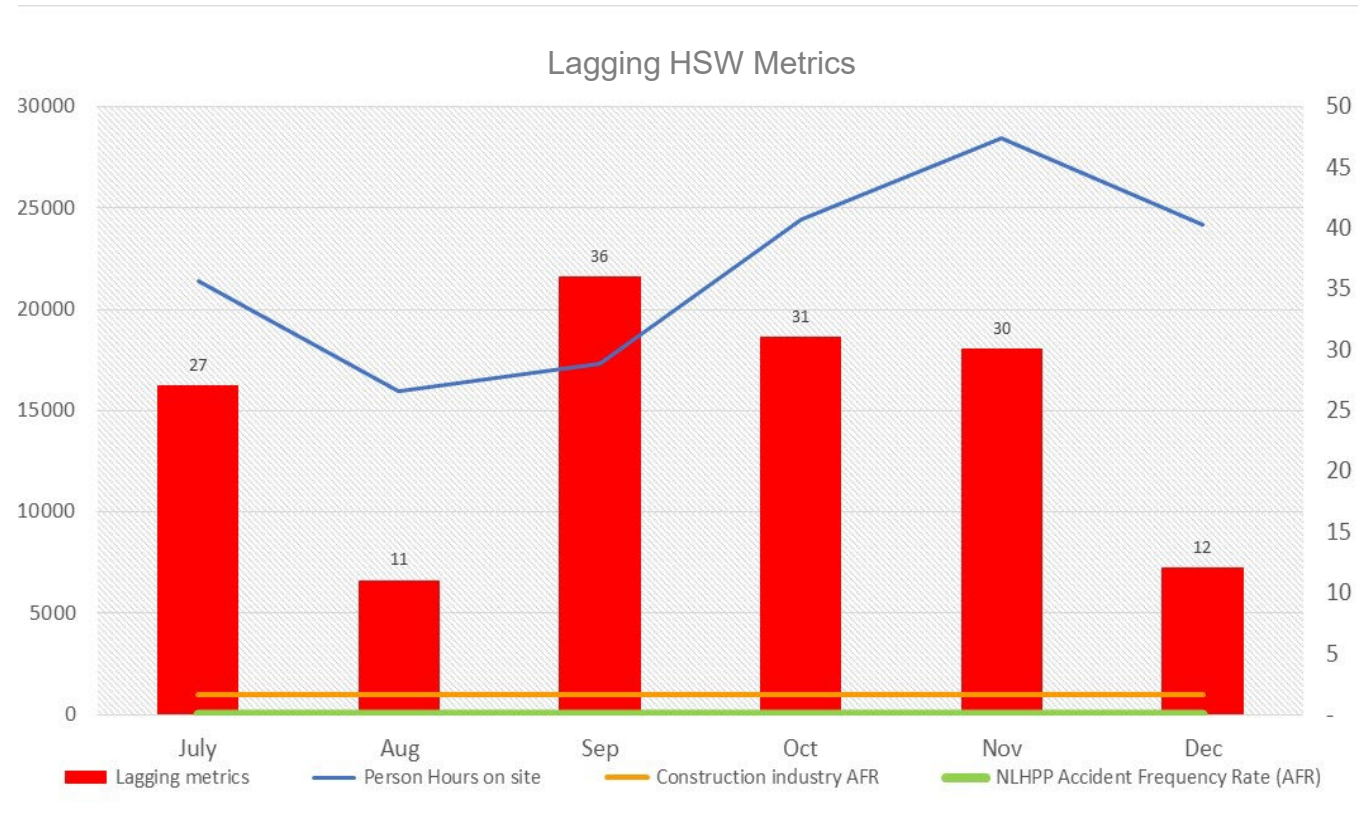


Figure 1: Lagging Metrics

Figure 1 represents the total hours worked on site against lagging HSW metrics for each reporting period and the NLHPP Accident Frequency Rate (AFR) comparing to the Construction industry AFR





# Health, Safety & Wellbeing (HSW) Dashboard

## (Accident Frequency Rate & COVID-19 Safety Performance)



### Accident Frequency Rate (AFR<sup>\*\*\*</sup>)

AFR for Reporting Period
NLHPP 0.00
Construction Industry 1.33

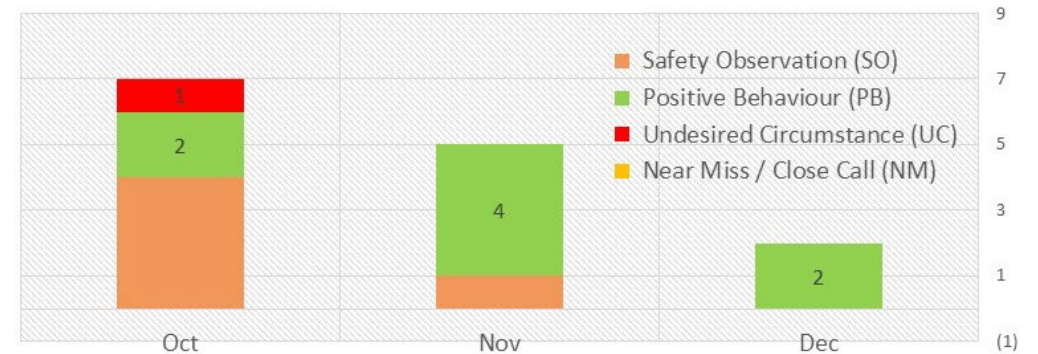
\*\*\* The Accident Frequency rate enables comparison of accident rates against hours worked rather than the number of accidents. The calculation is (number of accidents) / (number of hours worked on site) x 100 000. Thus, a project with 1 million hours worked and 3 LTIs would have an AFR of 0.3. The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

### COVID -19 RELATED (according to CLC SOP<sup>\*\*\*\*</sup>)

Incidents/Observations related to COVID-19 (positive, negative or observations)—already accounted for in the above incident reporting categories

	Period December 2020							Period Nov 2020	Total to Date <sup>**</sup>
	E1A2	E1B	E2B	E2C	E3a	E4A	Total		
<b>COVID -19 related</b>	0	1	0	0	1	0	2	5	73

### COVID-19 Metrics



This figure represents the COVID-19 related metrics for each reporting period

\*\*\*Total to date: from April 2019 to the end of the reporting period, \*\*\*\*Construction Leadership Council Site Operating Procedures



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



Site Inspection Summary		
Site	Summary Report	Inspection Compliance Scores
<b>E1A2 - Laydown West</b>	Site compliance score 94.7%. Site activities include car park groundworks, road surfacing, portakabin fit out. Site is operating safely. Site Supervisor demonstrates good approach to health and safety. Plant and pedestrians segregated. Good site access. Good welfare arrangements in place. COVID-19 arrangements working well and include full-time cleaner and dedicated marshal. Operatives following RAMS and wearing correct PPE.	27th November—94.82% 04th December—94.75% 10th December—94.95%
<b>E1B - Northern Access</b>	Site compliance score 95.7%. Site activities include utility connecting, road preparation and surfacing. Site is operating safely. Site Supervisor demonstrates good approach to health and safety. Dedicated pedestrian walkway segregates Ardra Road from access from compound to site. Good access to excavations. Good welfare arrangements in place. COVID-19 arrangements working well and include full-time cleaner and dedicated marshal. Operatives following RAMS and wearing correct PPE. Site now handed over.	03rd December—95.71% 10th December—95.71%
<b>E3A—Eco-Park South</b>	Site compliance score 99.2%. Site activities include site set up and trial pits. Site is operating safely. Site Management demonstrates good approach to health and safety. Site segregated from LEL operations. Good dust suppression on site. Good practice/initiatives implemented. Adequate welfare arrangements in place. COVID-19 arrangements working well. Operatives following RAMS and wearing correct PPE	04th December —99.22%
<b>E2B - Sewer Diversion Enabling works</b>	Site compliance score 95.1%. Site activities include trial pits and groundworks for new weighbridge. Site is operating safely. Site Management demonstrates good approach to health and safety. Site segregated from LEL operations. Good dust suppression on site. Good practice/initiatives implemented. Adequate welfare arrangements in place. COVID-19 arrangements working well. Operatives following RAMS and wearing correct PPE.	04th December —95.10%
<b>E2C—Sewer Diversion Main Works</b>	Site compliance score 95.5%. Site activities include construction of Manhole A shaft and site preparation/set up for Manhole B. Both sites are operating safely. Site Management demonstrates good approach to health and safety. Site segregated from LEL operations. Good dust suppression on site. Good practice/initiatives implemented. Adequate welfare arrangements in place. COVID-19 arrangements working well. Operatives following RAMS and wearing correct PPE.	04th December —95.62% 12th December —95.51%