

Market Information Day — Southern Area Construction June 2019



Introduction

Presented by Martin Capstick, NLWA Managing Director



To be covered today

Safety moment and programme overview

David Cullen, Programme Director

Description of NLHPP Programme

Euston Ling, Technical Lead

Scope of work packages

Doug Kay, Wood

Site management

Mark Beattie, LondonEnergy Ltd / Marjan Gholamalipour, Delivery Lead

Project delivery and organisation

Mat Ray, Project Manager

Form of contracts and procurement

Ursula Taylor, Legal and Governance Lead

Our contractors

David Cullen, Programme Director

Questions & feedback









Martin Capstick
Managing
Director

David Cullen Programme Director

Euston Ling Technical Lead

Doug Kay Wood Technical Advisor



Mark Beattie LondonEnergy Ltd Operator



Marjan Gholamalipour Delivery Lead



Mat Ray Project Manager



Ursula Taylor Legal and Governance Lead





- Consulting the market about our plans, including:
 - Resource Recovery Facility
 - EcoPark House
 - Clearance of the northern area of the EcoPark
 - Associated utilities
- Asking the market for feedback
- Explaining next steps
- Opportunity for networking





- NLWA disposes of all household waste collected by the north London Boroughs – Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest, as well as C&I waste collected by those boroughs
- Total waste arisings within 7 boroughs at present approx. 850ktpa
- Estimated amount required to be treated at new Energy Recovery Facility (ERF) rising from current 550ktpa to over 600ktpa over period to 2050
- Existing facility at Edmonton aging need new facilities to ensure ongoing ability to manage waste
- Sizing does not crowd out recycling assumes 50% household recycling across area, which is a stretch target
- Consent granted in 2017 to build the new ERF with supporting infrastructure

Safety Moment and Programme Overview
Presented by David Cullen, NLHPP Programme Director



Safety Moment



Management Safety Tours

Lessons from the Gulf of Mexico oil well blowout



national research centre for OHS regulation



Working Paper 79

Management Walk-Arounds: Lessons from the Gulf of Mexico Oil Well Blowout

Professor Andrew Hopkins, Australian National University

February 2011







About 7 hours before the Gulf of Mexico oil well blow out of 2010, a group of 4 company VIPs helicoptered onto the Deepwater Horizon and were actively touring when disaster struck.

The visit had a variety of specific safety-related purposes; slip hazards; harnesses; hand injury, drops from height, and to give a safety award.

It became clear during the visit that there was confusion amongst the drillers; but the VIPs (all expert drillers) did not intervene.





How can we account for this failure?

- The VIPs checked on conditions rather than behaviours; occupational safety rather than process safety; checking that "pushing the button" was safe for the individual concerned rather than whether it was the right thing to do.
- Concerned not to interfere; they did not want to disrupt activities nor undermine authority on the rig.

Imagining a more effective management safety visit

- Prior to the visit the VIPs could have reminded themselves of the major accident events that were possible on the rig
- They could have talked to employees in such as way as to elicit the right information and not give the impression that speed and productivity was the priority

All Managers need to look at details from time to time

NLHPP Programme Vision



"Create a waste management facility in which local communities take **pride**, which demonstrates **value**, and is a model for **public sector project delivery**."

We are building a flagship facility to continue recovering energy from waste for north London.

This will be one of the most efficient and advanced facilities of its kind in the UK.







- Preparatory works currently being procured or constructed:
 - Laydown Area and Access points; Sewer Diversion; UKPN Grid Connection; Salmons Brook Utilities Corridor; Transport Yard
- Southern Area Construction subject of today's Market Information Day:
 - Resource Recovery Facility waste reception, bulking and pre-treatment;
 Recycling and Reuse Centre for public
 - EcoPark House visitor reception, education and office
- ERF Construction Works:
 - Energy Recovery Facility at the Edmonton EcoPark
- Post-ERF Works:
 - Decommissioning & demolition of existing Energy from Waste facility;
 widening of southern access; restoration of Laydown Area



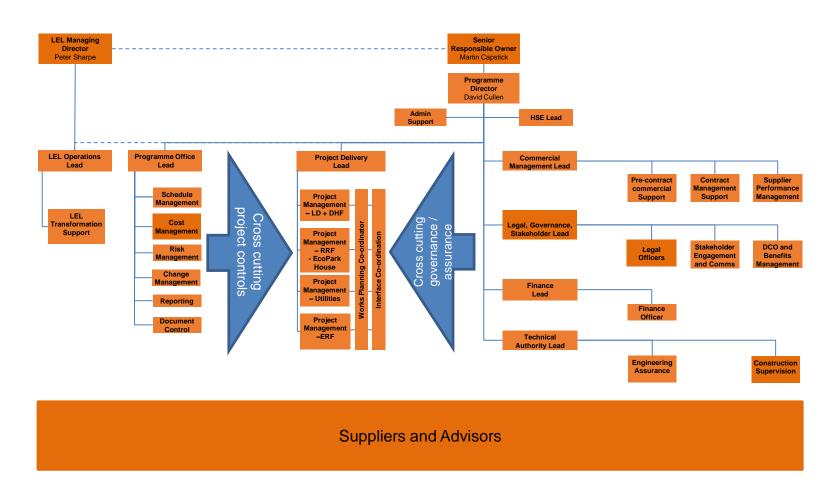


- Planning in place Development Consent Order (DCO) granted for works in February 2017
- Land issues managed through DCO
- Site operational LondonEnergy Ltd operating existing Energy from Waste Plant
- Site Operates under Environment Agency Permit
- Phasing of works to allow for construction of Energy Recovery Facility at north of site
- Programme management arrangements and liaison with LondonEnergy to ensure:
 - Ongoing site health and safety maintained
 - Construction and operational use and traffic coordinated and managed



NLHPP Programme Management An integrated, capable client organisation

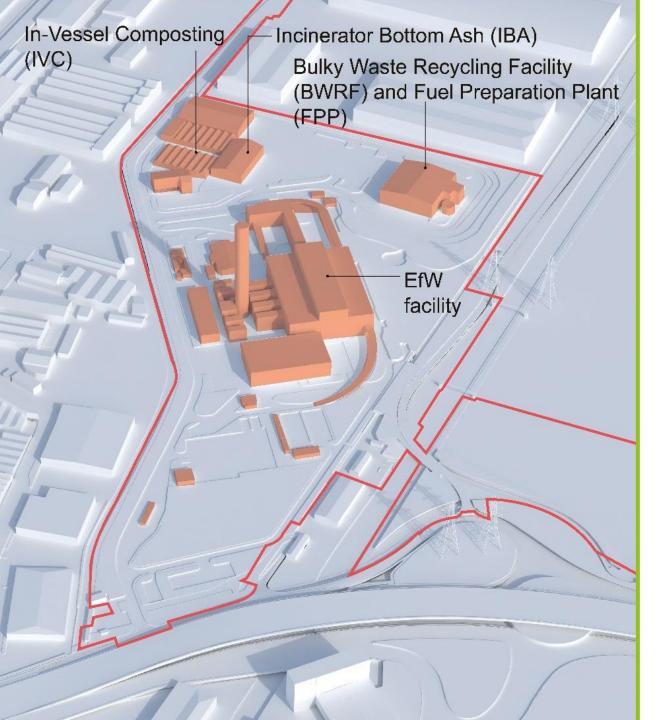




Description of NLHPP Programme

Presented by Euston Ling, Technical Manager



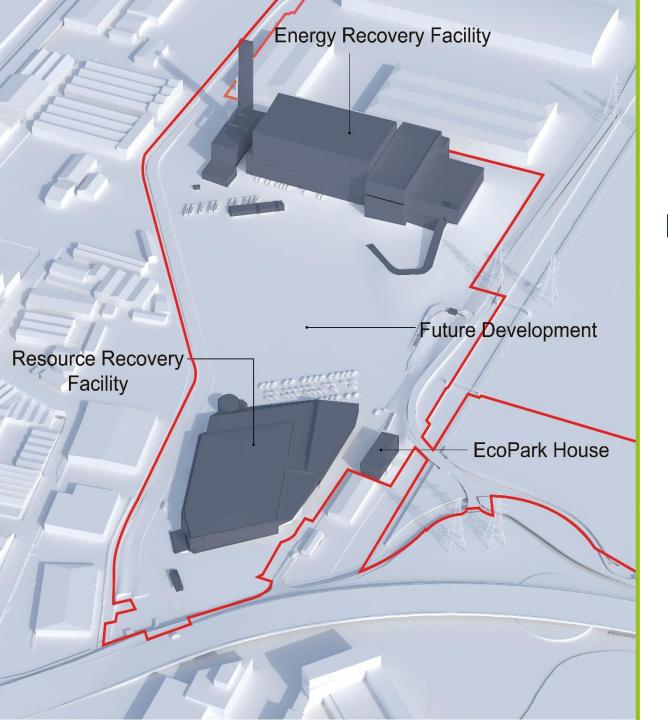




Edmonton EcoPark & Current Operations

 NLWA's wholly owned company, LondonEnergy Ltd (LEL) operate the EcoPark

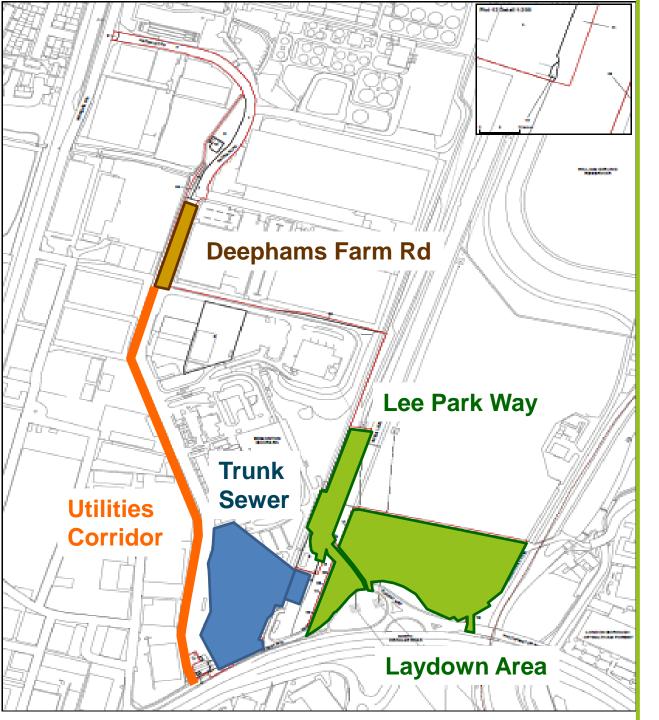
- 16 ha operational site
- Energy from Waste (EfW) facility operating since 1970 with a capacity of ~550ktpa (continuous operation)
- Incinerator Bottom Ash Reprocessing facility (to be relocated off-site) – will have ceased operations
- Bulky Waste Recycling & Fuel Preparation to maximise recycling and energy recovery (relocated on-site)





NLHPP and Future Site Operations

- Energy Recovery Facility will dispose of 700,000 tonnes pa producing up to 78mW of electricity, enough to power 127,000 homes
- Resource Recovery Facility (including new public Reuse and Recycling Centre)
- EcoPark House (visitor centre, admin and community space)

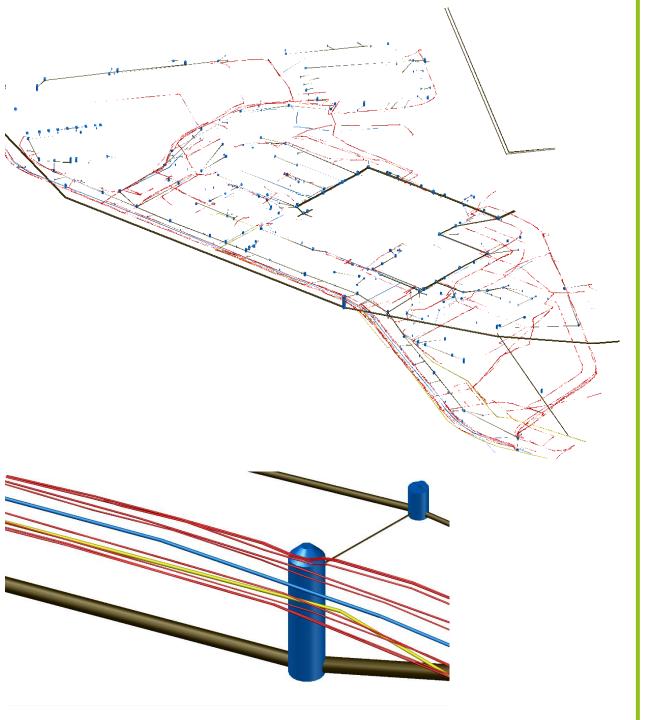




NLHPP Site Preparatory Works

• 22.2 ha site with multiple statutory stakeholders

- South of site underlain by Chingford and Angel sewers
- 3.3 ha Laydown Area to east for materials storage and fabrication, contractors' compound, and vehicle parking
- Upgrade of Lee Park Way to separate operational and non-operational areas on EcoPark
- Utilities corridor along edge of Salmons Brook to enable transition from EfW to ERF without break in disposal service
- Reinstatement of Deephams Farm Road to separate construction traffic from operational traffic





NLHPP and future site operations

 Aim is to transition to a new state-of-the-art Energy Recovery Facility by end 2025.

- Production and finalisation of a 3D utilities model for the entire project site
- Potential interaction with onsite decentralised energy facility
- Demolition of existing EfW after ERF becomes operational
- Currently no plans for area left vacant by demolition of EfW
- Landscaping and restoration of laydown area and open areas operational site





Working on an operational site

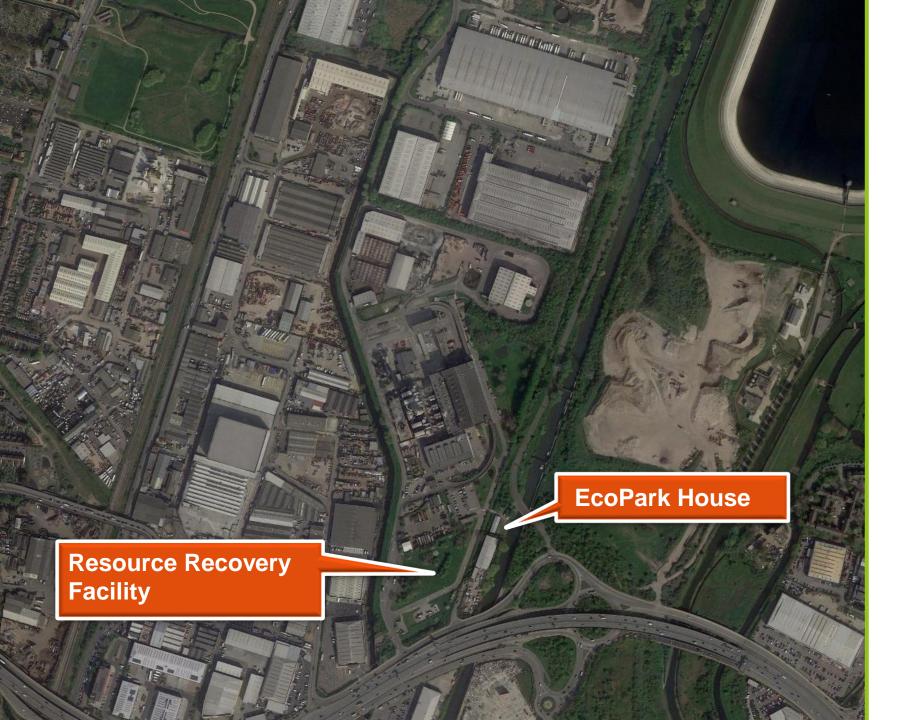
 The health and safety of everyone associated with the NLHPP is an absolutely priority

- Site will remain operational throughout the construction period
- While logistics may be difficult at times, safety violations will not be tolerated
- Contractors will be responsible for all aspects of health and safety within their physical battery limits but must adhere to LEL's safety rules and procedures outside these areas
- Day to day liaison with LEL will be through NLWA's programme managers and site supervisor

The Works Presented by Doug Kay, Waste and engineering TA









EcoPark, Advent
Way –
Southern Area
Construction

Resource Recovery Facility





We are building a facility capable of processing over 430,000 tonnes of waste per year.

The RRF will accommodate:

- Recycling and Fuel Preparation Facility
- Re-use and Recycling Centre
- Offices and staff welfare facilities
- Fire control water tanks and pump house and equipment

Odor abatement and dust suppression plant and equipment for the facility

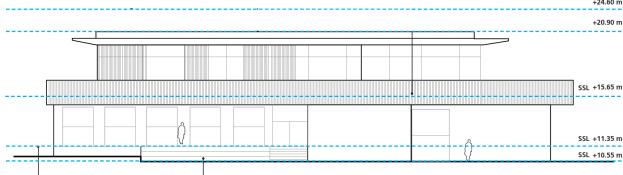






EcoPark House







A two-story building located within the south-east of the EcoPark adjacent to the River Lee Navigation. It will provide:

- A visitor centre
- Community and education facilities
- Stores and facilities for Edmonton Sea Cadets.

The premises will provide community space, including dedicated lecture rooms, exhibition space and accommodation for the Edmonton Sea Cadets, as well as classrooms, toilets, showers, changing rooms.

The external area and existing wharf will be refurbished and secure storage provided for canoes, toppers and dinghies

Northern Area Clearance





To enable the transfer of the current operations from the north to the RRF, we need to demolish and clear the northern site.

This area includes the following:

- Fuel Preparation Plant (FPP)
- Bulky Waste Recycling Facility (BWRF)

Utilities

RRF work package includes utilities across the south of the site, including:

- Potable Water
- Waste water drainage
- Foul water drainage
- Surface water drainage
- Raw water supply
- Electrical supply
- CCTV
- Telecoms and Data



This will involve diverting, repositioning, decommissioning, removing, replacing, modifying and upgrading existing utilities.

This phase will also include constructing service culverts, installing new services, and creating connections between new and existing utilities.

Working on the EcoPark

Presented by Mark Beattie, LondonEnergy and Mat Ray, Project Manager



Background

- Limited Company with NLWA as shareholder. Arms length company with independent Board
- 2. Based at EcoPark, N18 3AG
- 3. Provide waste reception, recycling and processing services for NLWA and other local authorities across 9 sites in North London
- 4. 330 staff employed
- 5. Generates electricity powering 80k homes











Site-wide Construction Management Plan

- Construction will be managed in conjunction with the operations.
- Site Working Group
 - Contractor's areas and LEL operation
 - Health and Safety
 - Security
 - Emergency procedures
 - Access
 - Deliveries
- DCO requirements and obligations
- Statutory bodies
- Community engagement

Project Delivery

Presented by Mat Ray, Project Manager







Baseline 01-Mar-19							2019	9 2020	020	2021	2022	2022	2023	3	2024	2025	5 2	2026	2027	20	28	2029	2030	0	2031
Project	Description	Start	Finish	TL		Q1 OL	Q3 C	04 Q1 Q2	Q3 Q4 C	Q1 Q2 Q3	Q4 Q1 Q	2 Q3 Q4	Q1 Q2 Q3	3 Q4 Q1	Q2 Q3 Q4	Q1 Q2 Q3	04 Q1 Q	Q2 Q3 Q4	Q1 Q2 Q3	Q4 Q1 Q2	Q3 Q4 Q	1 Q2 Q3 Q	4 Q1 Q2 C	3 Q4 Q1 (Q2 Q3 C
E1a1	LAYDOWN AREA EAST WORKS (LAE) - Transition & Commissioning	08-Jan-18	06-Aug-19	_	0	E1	a1															-			
E1a2	LAYDOWN AREA (WEST) AND EASTERN ACCESS (LAW)	05-Feb-18	30-Oct-20	_	0			E1	a2																
E1b	NORTHERN ACCESS	13-Nov-17	07-Oct-20	_	0	I	E	E1b																	
E2a	TRANSPORT YARD RELOCATION (Interim/Permanent)	21-Jan-19	22-Jun-20	•	-55	EŻ	la 📗																		
E2b	SEWER DIVERSION ENABLING WORKS	03-Dec-18	30-Oct-20	•	-175		E	2b																	
F7c	SEWER DIVERSION (SWD)* Main Works	07-Jan-18	04-Διισ-21	_	-87				F2																
E3	RESOURCE RECOVERY FACILITY (RRF)	18-Jun-18	31-Mar-23	_	0						E3														
E4a	UTILITIES: SALMON'S BROOK CORRIDOR & STAT UNDERTAKERS	07-Jan-19	15-Feb-21	•	-6																				
E4d	NEW MEDIUM PRESSURE GAS MAIN (Cadent)*	26-Apr-18	06-Feb-25	_	0											E4d									
F4e	LIKPN 33KV GRID CONNECTION	06-Mar-17	24-Apr-25	_	0			-				\blacksquare				E4e									
E6	ECO PARK HOUSE (EPH)	03-Sep-18	25-Nov-22	_	0						E6		1												
E7	ENERGY RECOVERY FACILITY (ERF) *(Inc Defects Liability Period)	29-Aug-18	21-Dec-27		0											E7									
E8	EFW DECOMMISSIONING AND DEMOLITION (EFW)	01-Jun-23	19-Jun-30	_	0	I															E8				
E8	LAYDOWN AREA RE-INSTATEMENT	23-Jan-26	19-Jun-30	_	0	1															>		E8		
E9	SOUTHERN ACCESS WIDENING (SAW)	07-Apr-26	14-May-31	-	0	- !																		E9	•
Title Bloc	k:																						•		
North London Heat & Power Project - Plan on a Page*							DE	ESIGN		CC	ONSTRUC	T/DESIG	5N		OPER	ATIONS				Status					
Integrated Master Programme (IMP) Report 31-May-19						PF	ROCURE	MENT	_	ONSTRUC		MISSION		_	DLITION/ SRAMME				PERIOD E	ND					



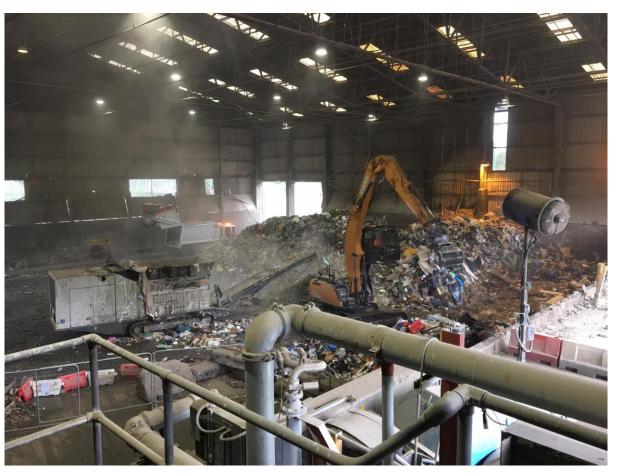


Work Element	Details	Procurement Commences	Works Commencement	Works Completion
RRF	Piling Steel Frame Offices & plant rooms Weighbridges Roads Hardstanding Waste Water Management Drainage	September 2019	October 2020	December 2022
EcoPark House	Steel frame building High quality interior fitout Surrounding paths River bank landscaping	September 2019	September 2021	December 2022
Northern Area Clearance	Demolition of structures Ground remediation	September 2019	December 2022	June 2023
Southern Site Utilities	Disconnection & Relocation of existing services Installation of: - Power - Potable Water - Drainage - Gas - Telecoms & Data	September 2019	October 2020	December 2022

Risks: Mitigating Together



- Operational Site
- Previous Site Uses
- Uncharted Services
- Site Utilities
- Construction Over & Around Sewer
- Operational Transfer
- Community Liaison





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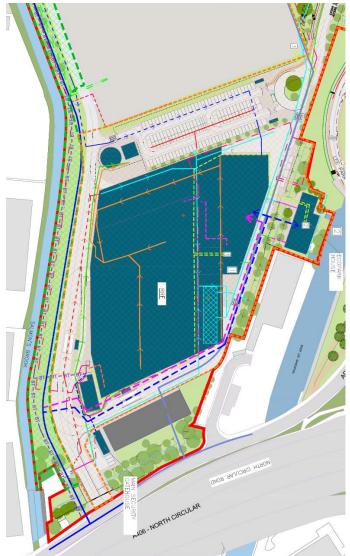


- Operational Site
- Previous Site Uses
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- Site Utilities
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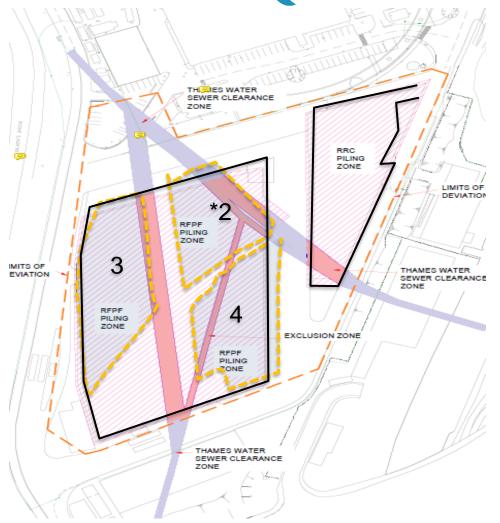
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- Operational site
- Previous site uses
- Uncharted services
- Site utilities
- Construction over & around Thames Water sewers
- Operational transfer
- Community liaison





Safety Snorth Power Project

- Operational Site
- Previous Site Uses
- Uncharted Services
- Site Utilities
- Construction Over & Around Sewer
- Operational Transfer
- Community Liaison



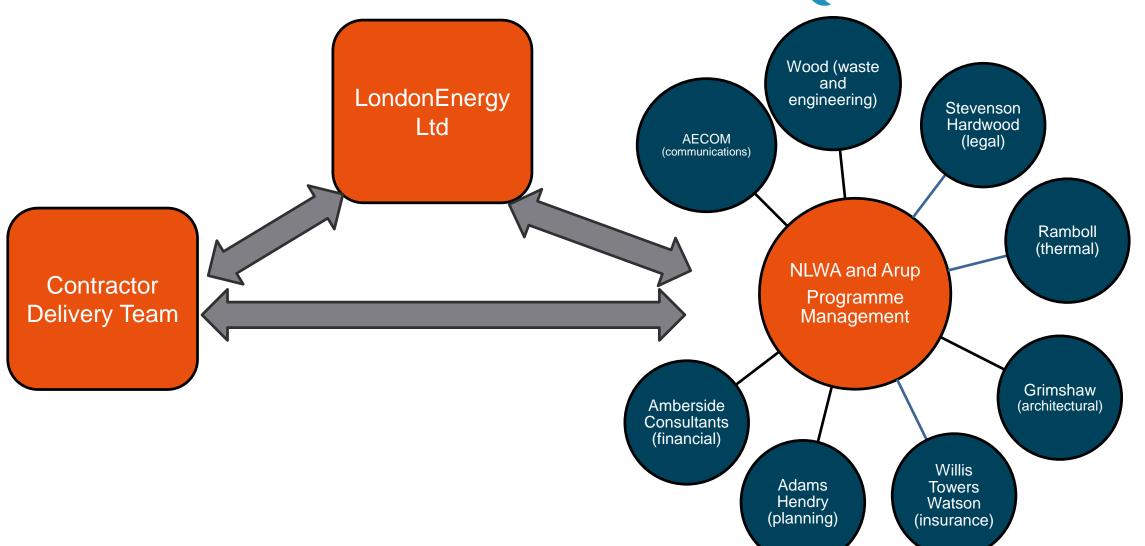
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Role of NLHPP advisers



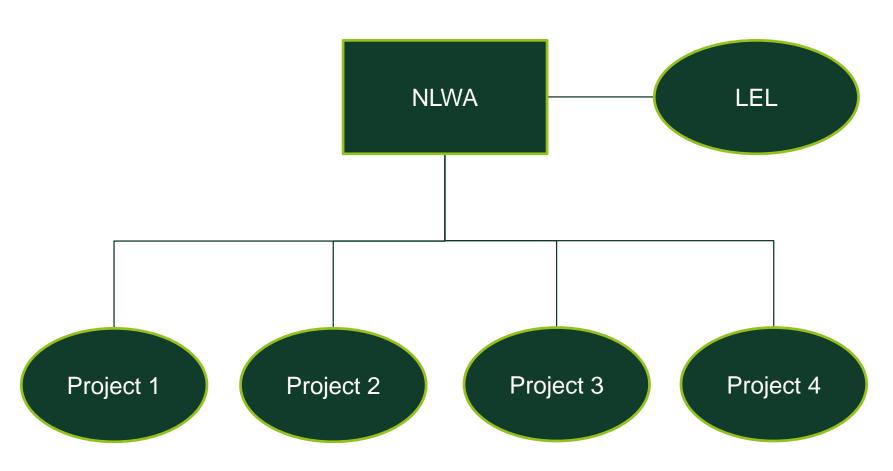


Contracts Approach Presented by Ursula Taylor, Head of Legal and Governance









Our standard form contract

- We are adopting a common form where possible
- Chosen NEC4 because:
 - Promotes collaborative working
 - proactive risk management
 - a project management tool not gathering dust in a drawer
 - Government endorsed for use by the public sector
 - Contractors working together have similar agreements
- NEC4 Z clauses will be drafted to be commercially realistic this means:
 - No negotiation of contract terms where restricted procedure is used
 - Limited need for discussion of terms, and negotiation scoped clearly, where competitive dialogue procedure is used
- Owner Coordinated Insurance Programme (OCIP) to be procured by NLWA
 - Contractors "All Risks" Insurance (including Terrorism)
 - Delay In Start Up Insurance (including Terrorism)
 - Third Party Public Liability Insurance
 - Contractors Pollution Liability Insurance







RRF Contract Package	Contract Content	Public Procurement Route	Design Approach	NEC Option
1	RRF Southern Site Utilities	Competitive Dialogue – 1 or 2 stage dialogue	Design and Build	Option A
2	EcoPark House & landscaping	Restricted Procedure	Design and Build	Option A
3	Northern Area Clearance	Below OJEU: 2 stage selection Above OJEU: Restricted Procedure	Traditional	Option A or C

RRF Procurement documents and timescales



- Common procurement documents across NLHPP whenever possible
 - Standard Selection Questionnaire (Cabinet Office + PAS91)
 - ITT with NEC4 forms for completion (e.g. Contract Data)

Work Element	Procurement Commences	Contract Execution	Works Commencement	Works Completion
RRF	September 2019	September 2020	October 2020	December 2022
EcoPark House	September 2019	September 2020	September 2021	December 2022
Northern Area Clearance	September 2019	September 2020	December 2022	June 2023
Southern Site Utilities	September 2019	September 2020	October 2020	December 2022

- Our procurement programme will be updated on website
- Market information update during September 2019





Work Element	Start of procurement (Indicative)	
ERF Works		
ERF	Q2 2020	
Post-ERF Works		
Decommissioning and Demolition of EfW Facility	Q3 2026	
Southern Access Widening	Q3 2029	

Our Contractors

Presented by David Cullen, Programme Director







- Help us deliver the NLHPP Vision
- Support the Health, Safety & Well-being Excellence
- Be a Positive Model for Employment Relations
- Be Welcomed By The Community
- Provide Apprenticeships, Training and Local Employment Opportunities

Support Health, Safety and Wellbeing Excellence

The NLHPP is leading new standards of excellence in Health & Safety in construction, where everyone can take pride in the absence of incidents, and one of the most advanced safety cultures to work in. This is a result of everyone treating Health & Safety as a number one priority. On this project, Health & Safety is ingrained in every plan we make and every task we do.





Safety First Culture

- We are committed to delivering a project that puts the health, safety and wellbeing of everyone involved in the project and those working and living in the local community as the number one priority.
- We want you to share our goals and achieve sustained Health & Safety excellence through collaboration and continuous improvement. We will articulate our expectations of you through our statement of requirements, and will measure the effectiveness and drive excellence through our safety assurance programme.
- Our 'Safety First' campaign underpins our safety leadership identity.





What Will Safety Mean at NLHPP?



Rigorous investigations to learn for the future

Training for safety success

s to

Adoption of industry best practice

Proactive safety monitoring

Each contract is part of a wider programme

Encourage safety leadership from the workface Evidence of positive safety culture

Positive health and wellbeing

Investment in behavioural safety

Joint management safety tours

Focus on long term health impacts

Monitoring of hours worked

Be a Positive Model for Employment Relations

- It is the intention for the NLHPP to be a positive role model for good employment practice in London's construction sector, avoiding commonly seen abuse and exploitation at the lower-wage end of the market and ensuring protection and enforcement of employment rights.
- We, as Client, will not get involved in the day to day running of Employment Relations within Contractor organisations.
- But, from the position of ensuring fair employment standards on a public sector funded project, and for the avoidance of disruption through failing to secure positive industrial relations, we have a legitimate interest in assuring ourselves that Contractors are managing matters appropriately and in accordance with contractual obligations.







Be a Positive Model for Employment Relations



- We are developing our Employment Relations Policy to ensure the construction workforce employed on the NLHPP Programme and associated works are treated with respect and fairness and not exploited in any way.
- The policy and other operational requirements will be developed into a
 Project Employment Relations Code of Practice which will be incorporated in
 all construction contracts. We will not interfere in the employment
 arrangements between project employers and their employees but will have
 a contractual right to audit all site employers for compliance with the above
 policy.

Be a Positive Model for Employment Relations



- To achieve this all contractors will be contractually required to comply with the following,
 - Ensure their employees have a legal right to work in the UK
 - Prohibit false self employment and other forms of questionable employment.
 - Ensure their employees receive terms and conditions of employment that are no less favorable than an appropriate industry national working rule agreement and the London Living Wage.
 - Ensure suitably qualified applicants from the local communities receive preferential consideration for employment.
 - Ensure their employees are fully aware of the workforce confidential helpline.
 - Recognise the right of employees to be members of a trade union.
 - Implement a robust Health and Safety Plan.

Be Welcomed by the Community

- The project will treat waste for over 2 million residents in the most cost-effective way. We will generate up to 78 megawatts of electricity.
- We are committed to being a positive community partner and delivering the project considerately, cost-effectively and on time.
- We hold Community Liaison Groups through the year to discuss key topics with local community representatives.
- We provide timely and regular construction updates to the local community, via newsletter, roadshows web updates, social media and meetings.







Provide Apprenticeships, Training and Local Employment Opportunities

The NLHPP Programme will:

- Support a training programme for over 100 apprenticeships and 225 on-site skills training opportunities.
- Create over 2,500 job opportunities during construction and operation.
- Promote employment opportunities for the local community





Feedback Sought
Presented by Martin Capstick, Managing Director





Questions?







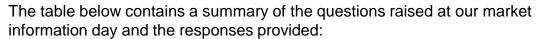
- Thank you for attending our event
- We seek your feedback to help NLHPP shape its procurement
 - General feedback on our proposals (positive or negative)
 - Responses to our 7 specific questions
 - Feedback on today's event
- Feedback will be collated:
 - Using paper forms today
 - via our Form or Survey Monkey Link emailed to all of today's attendees





Scope of RRF contract	1) Are RRF and EcoPark House works sufficiently similar for there to be a contractor/market advantage in procuring together? 2) Could the RRF and EcoPark House works be carried out without the associated utilities being incorporated? 3) Northern area clearance must be carried out immediately after completion of the RRF, is this best achieved by inclusion?	
Public Procurement Route	4) Assuming the RRF buildings and Utilities are procured together, would you foresee a 1 or 2 stage Competitive Dialogue	
Treatment of Design	5) Based on the designs presented, does the approach of design and build present you any concerns? 6) Is there anything that concerns you about the constructability of our presented designs	
NEC Contract Option	7) Is the maturity of the RRF / Utilities / EcoPark House / utilities design sufficient for the residual risks to be assessed and managed under an NEC Option A contract	

Questions







Question Posed	Response Provided
What is the expected value of these works?	We will be providing this figure following approval from our Authority Members – at the next Market Information Day planned for September.
Is the laydown area flat?	The laydown area is flat and is available for the use of all contractors engaged on the NLHPP Programme.
Are we expecting off site manufacture?	That will be very helpful.
How would a competitive dialogue work for procurement of the RRF be approached?	We are still determining the most appropriate procurement route. NLWA's view is that where it is not envisaged that there will be issues that require dialogue or negotiation as part of the procurement process then the restricted procedure can be used. However, NLWA does not have significant experience in the delivery of major capital projects and we seek your views on the most appropriate procurement route. We are looking at the areas that may require dialogue/negotiation (in which case competitive dialogue would be required) and welcome your feedback on this.
What discussions are we in with UKPN?	UKPN's involvement is with the installation of export cables for the ERF. We anticipate these will enter the site from the north and therefore have no impact on the RRF. Electrical works within the RRF contract will be local site distribution.
Will NLWA consider using PAS91 process during procurement?	We are reviewing our selection questionnaire, and will take account of this in our review.
Are we looking for a lowest price or "right price" outcome to the process?	We will set our evaluation criteria to reflect the required quality and price split, and will want a bid that reflects the quality elements while providing value for money for the residents of our seven boroughs.