



Market Information Day – Preparatory Works

March 2018



Overview

Presented by Martin Capstick, Managing Director

To be covered today



- North London Heat and Power Project – NLHPP Scheme Overview
- Site management issues
- Scope of contracts / work packages
- Form of contracts and procurement
- Future procurements
- Questions

NLHPP – the rationale



- 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 doing well, but aging – need new facilities to ensure ongoing ability to manage waste
- Sizing does not crowd out recycling – assumes 50% recycling across area, which is a stretch target
- Application for permission to build new ERF with supporting infrastructure

NLHPP Project Overview



- New Energy Recovery Facility (ERF) at the Edmonton EcoPark 2025/2026
- Preparatory works – more detail today:
 - Laydown Area and Access points; Sewer Diversion; Utility Bridge and Corridor; UKPN Grid Connection
- Other buildings on site:
 - Resource Recovery Facility (RRF) – waste reception, bulking and pre-treatment; Recycling and Reuse Centre for public
 - EcoPark House – visitor reception, education and office
- Works after ERF construction:
 - Decommissioning & demolition of old EfW; finalisation of site wide works including landscaping; restoration of Laydown Area

NLHPP Project Overview



- Planning in place – Development Consent Order (DCO) granted for works in February 2017
- Land issues managed through DCO – and site is under control
- Site operational – LondonEnergy Ltd (LEL) operating existing Energy from Waste Plant
- Phasing of works to allow for construction of ERF on 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
- We will be seeking to encourage apprenticeships during the project

Purpose of today

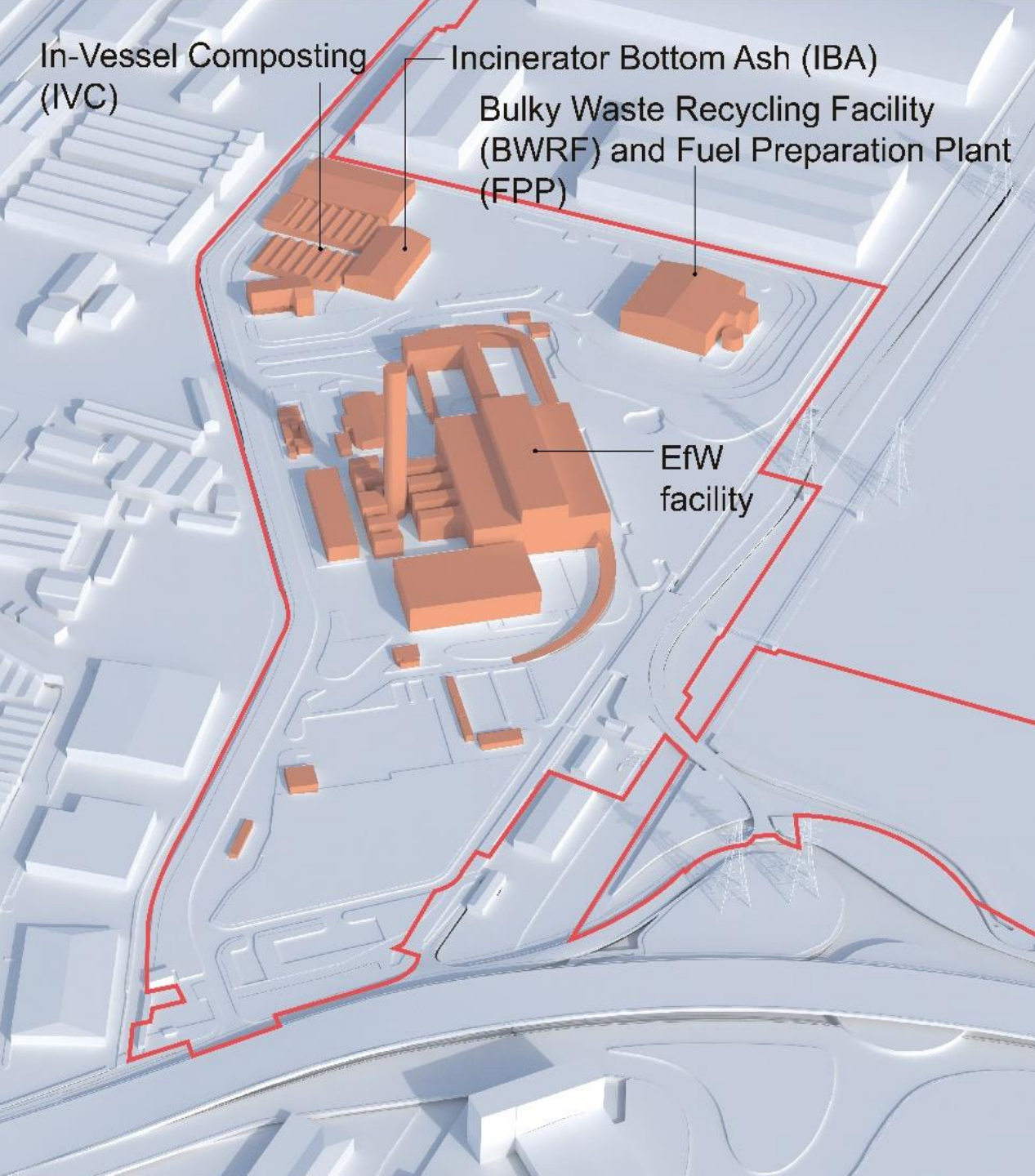


- Planning to procure in June for the following:
 - Laydown Area
 - Northern and Eastern Accesses
 - Sewer Diversion
 - Utilities packages
- The next sections of the presentation will cover these in more detail



Site Management

Presented by Euston Ling, Technical Manager

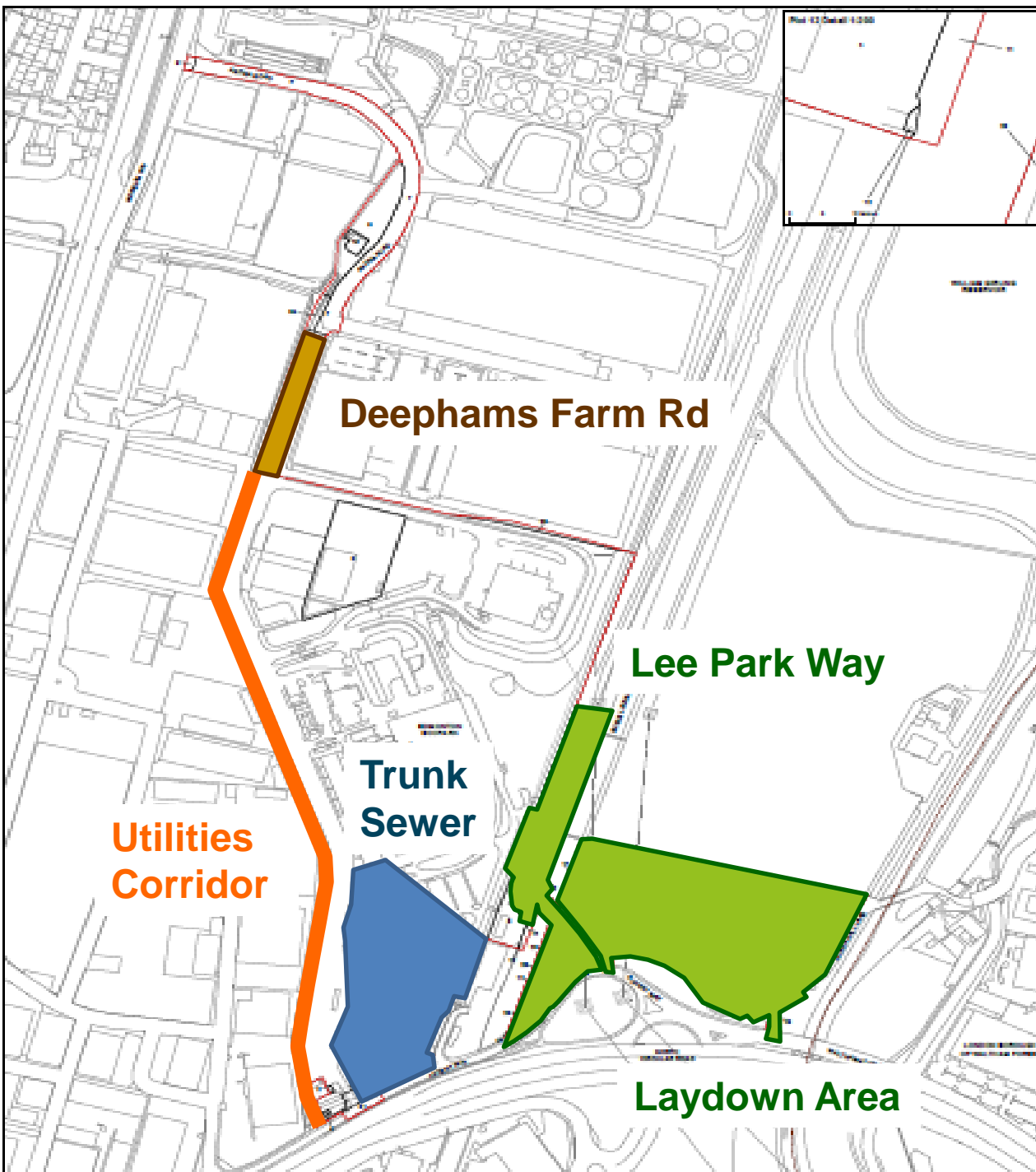


Edmonton EcoPark & Current Operations

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

Key facts:

- 16 ha operational site
- Energy Centre (EfW) operating since 1970 with a capacity of ~550ktpa (continuous operation)
- In-vessel composting facility processing mixed food and garden waste (to be relocated off-site)
- Incinerator Bottom Ash Reprocessing facility operated by Ballast Phoenix (to be relocated off-site)
- Bulky Waste Recycling & Fuel Preparation to maximise recycling and energy recovery (relocated on-site)

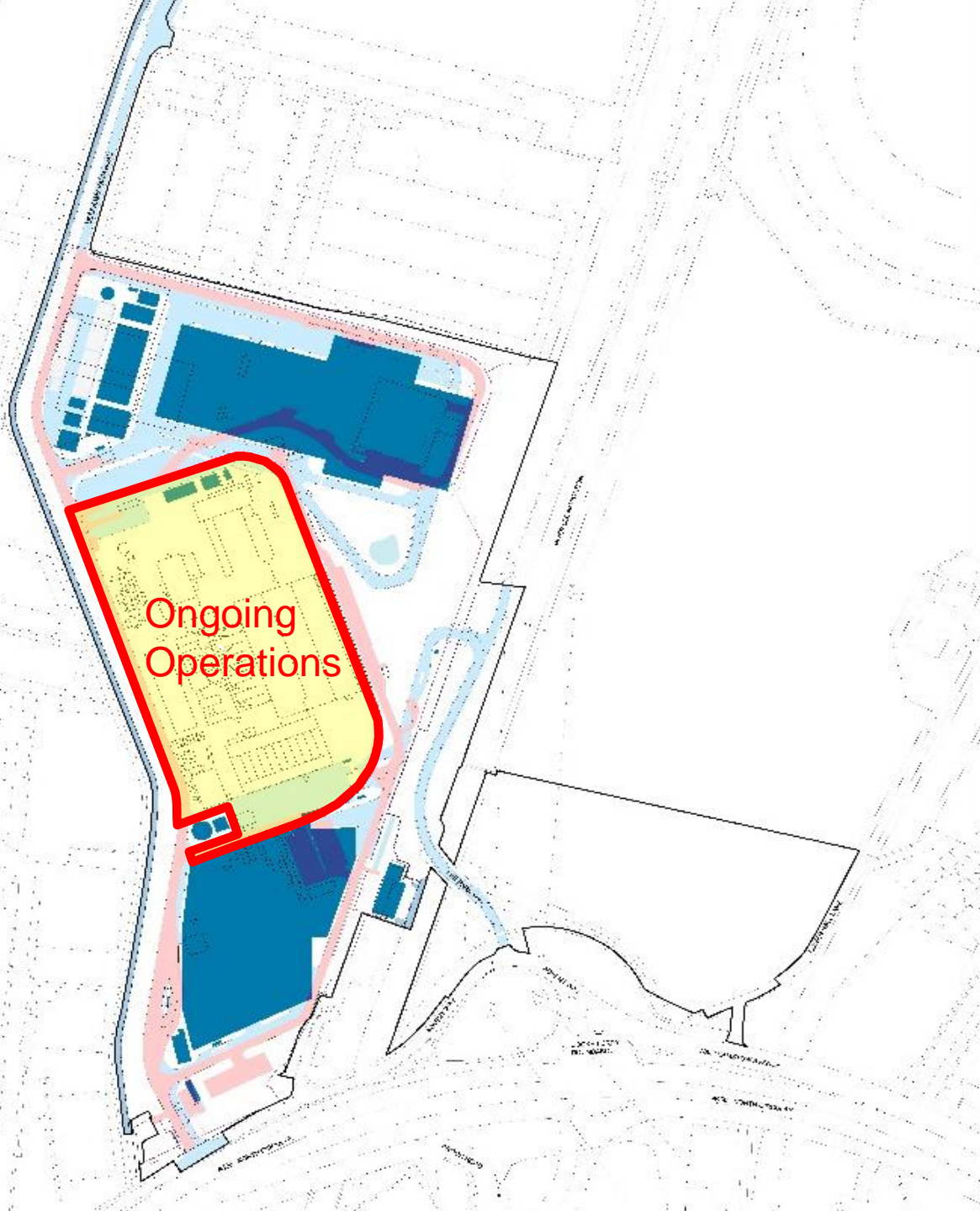


NLHPP Site Preparatory Works

- 22.2 ha site with multiple statutory stakeholders

Key facts:

- 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

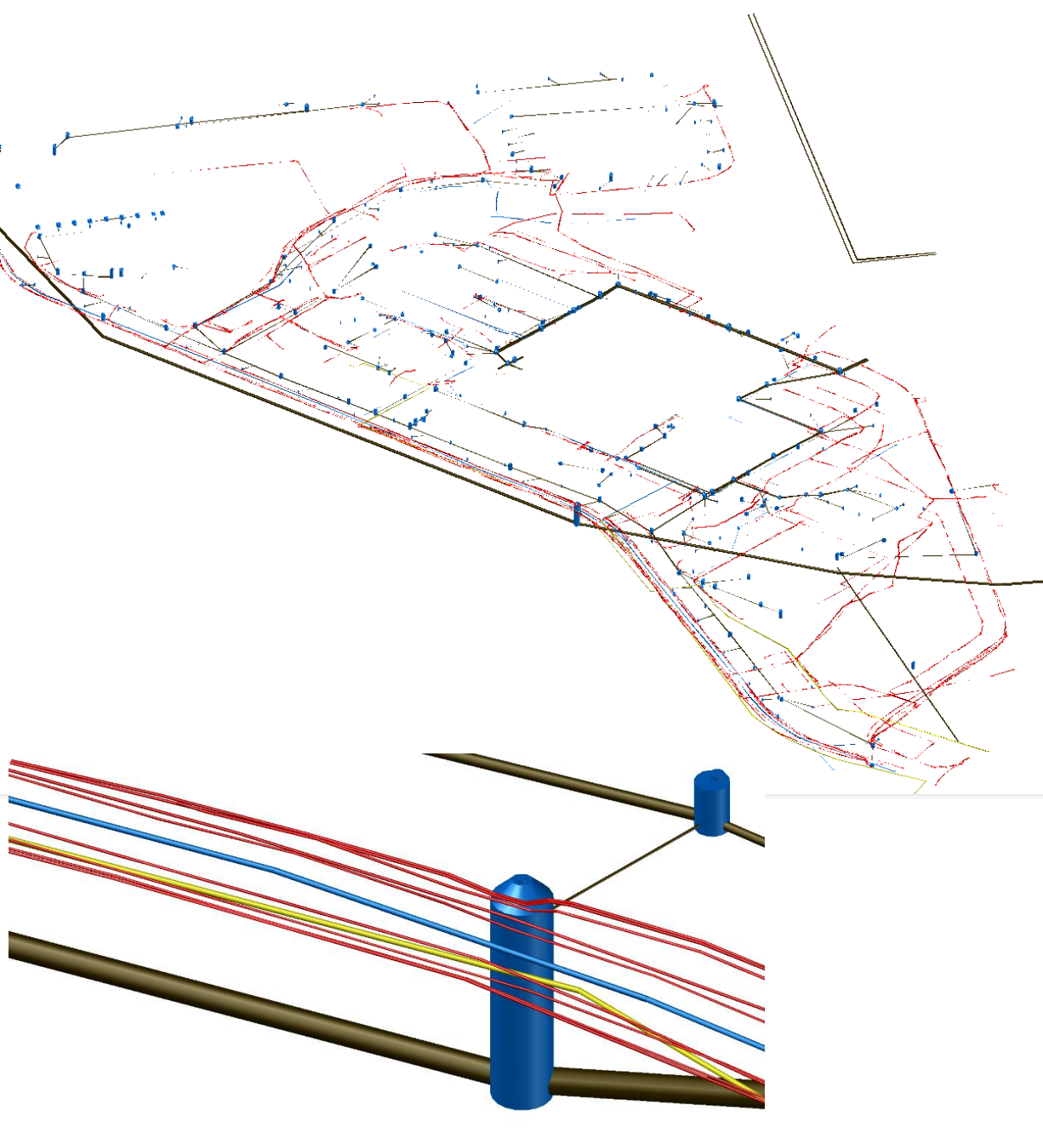


Health & Safety

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

Key facts:

- Site will remain an operational site throughout 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



NLHPP and Future Site Operations

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

Key facts:

- Production and finalisation of a 3D utilities model for the entire project site
- Potential interaction with Lee Valley Heat Network's 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



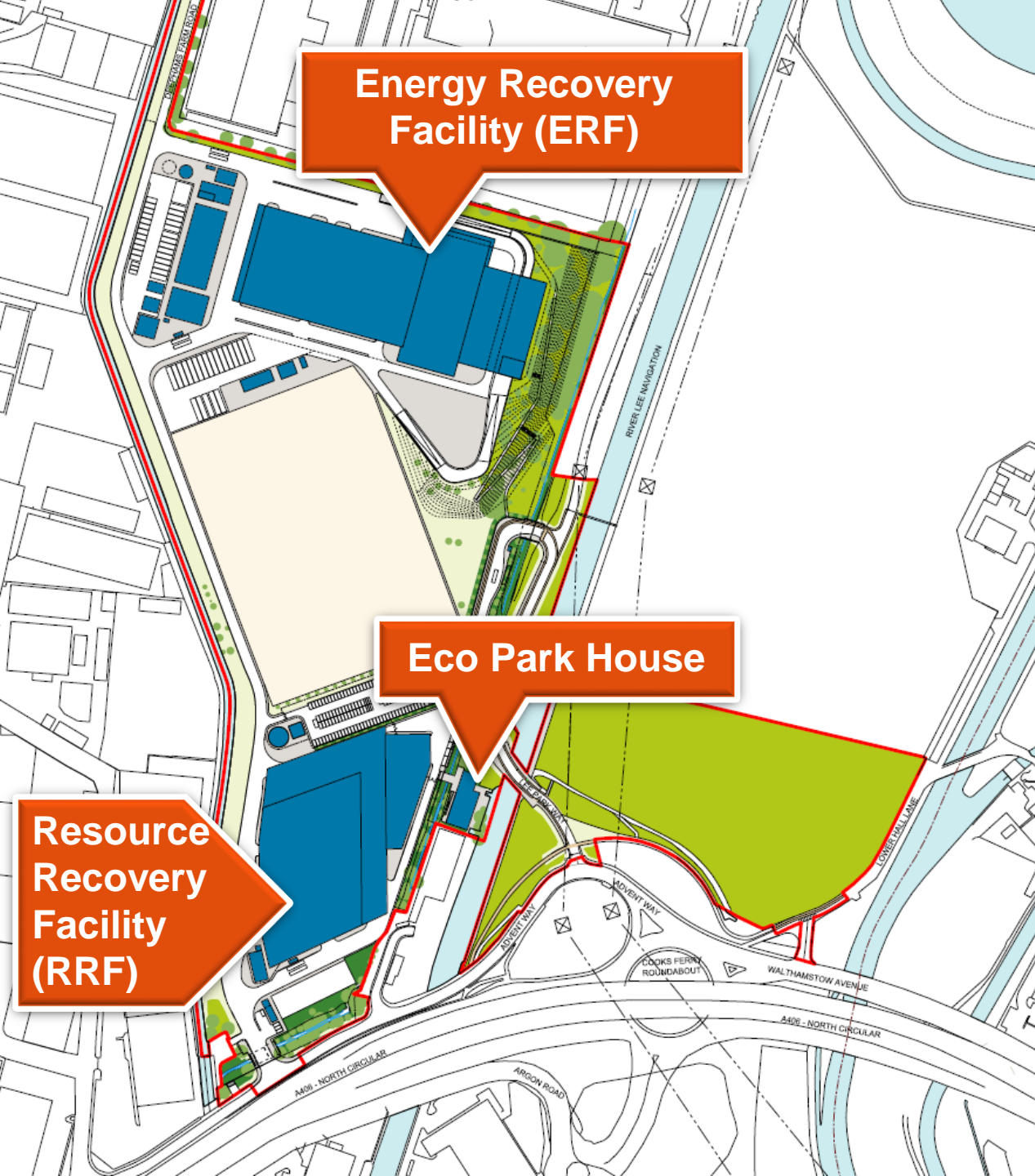
The Works

Presented by Wood, Waste and engineering TA

EcoPark, Advent Way – Existing Site Plan



North London Heat and Power Project – Key facilities



A
Deephams Farm Road

C
Eastern Access

B
Laydown Area

D
Utility Bridge and Corridor

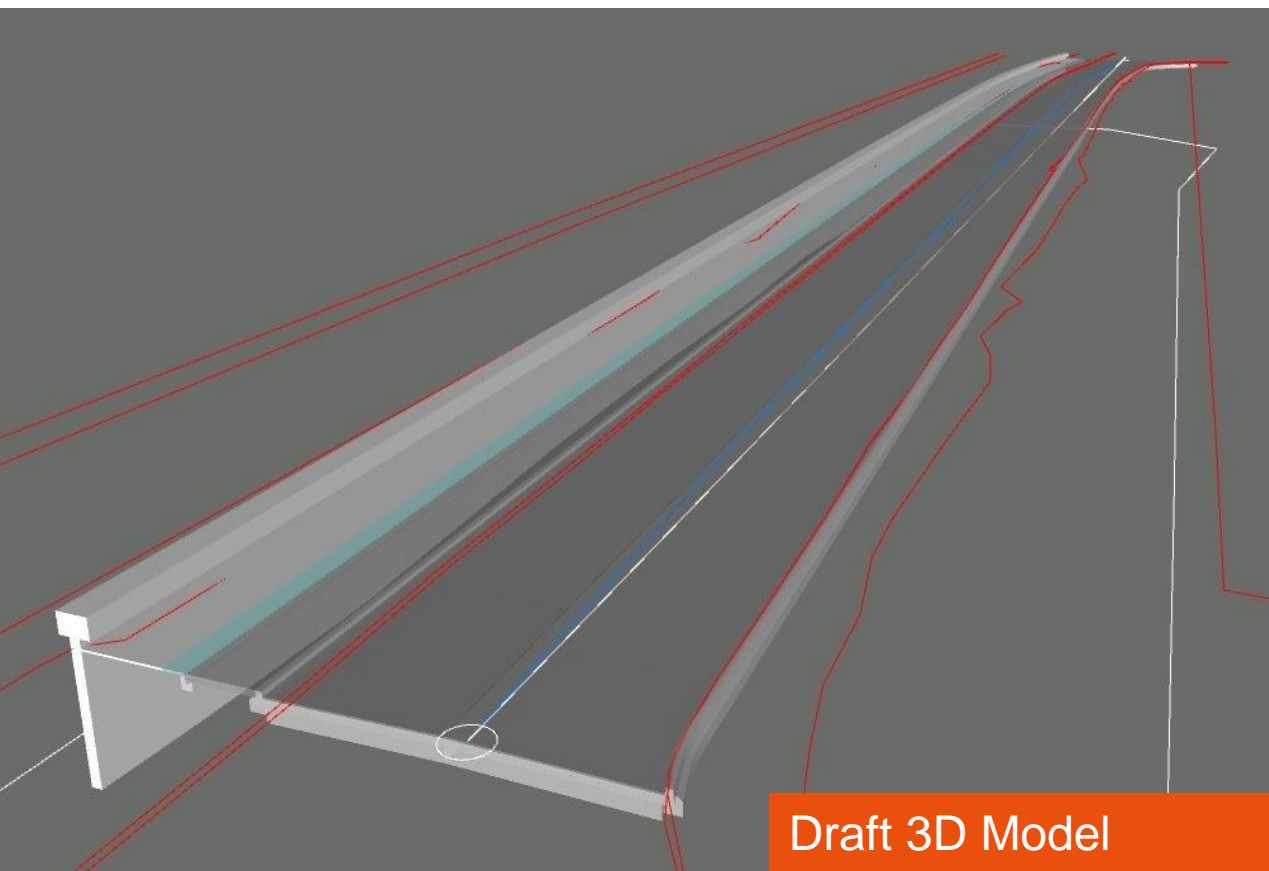
E
Sewer Diversion

EcoPark, Advent Way – Preparatory works



Existing

A. Deepphams Farm Road



Draft 3D Model

What is it?

- 160 metre long road in poor condition
- To be upgraded to take construction traffic, then operational traffic

Key facts:

- NEC 4 Contract
- Approx. Capex £1M
- Arrangements – traditional build (detailed design by Wood), CDM PD – Wood, PC – the contractor
- Anticipated Programme – 6 months
- Scope – tree clearance, river bank stabilisation, utilities, flexible pavement road



Existing

B. Laydown Area



Proposed

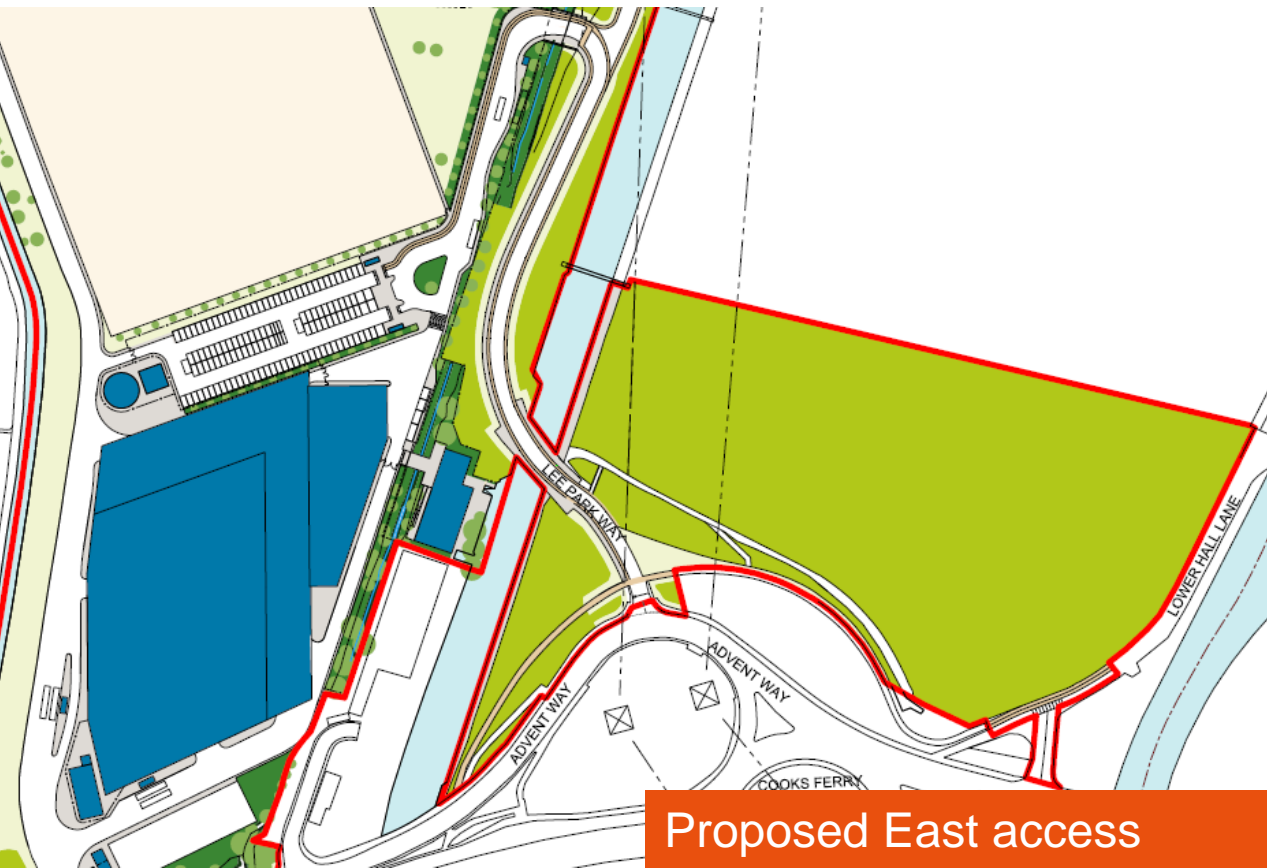
What is it?

- 3.28 ha area adjacent to North Circular – to provide office, welfare, parking and storage areas for contractors

Key facts:

- NEC 4 Contract
- Approx. Capex £4M
- Arrangements – traditional build only (detailed design by Wood), CDM PD – Wood, PC – the contractor
- Scope – Site clearance, utility, infrastructure, access ramp, formation of hardstanding and roads access
- Electricity pylons along western edge

C. Eastern Access



What is it?

- 190m of new road and crossing of Enfield Ditch to provide new eastern entrance to the site

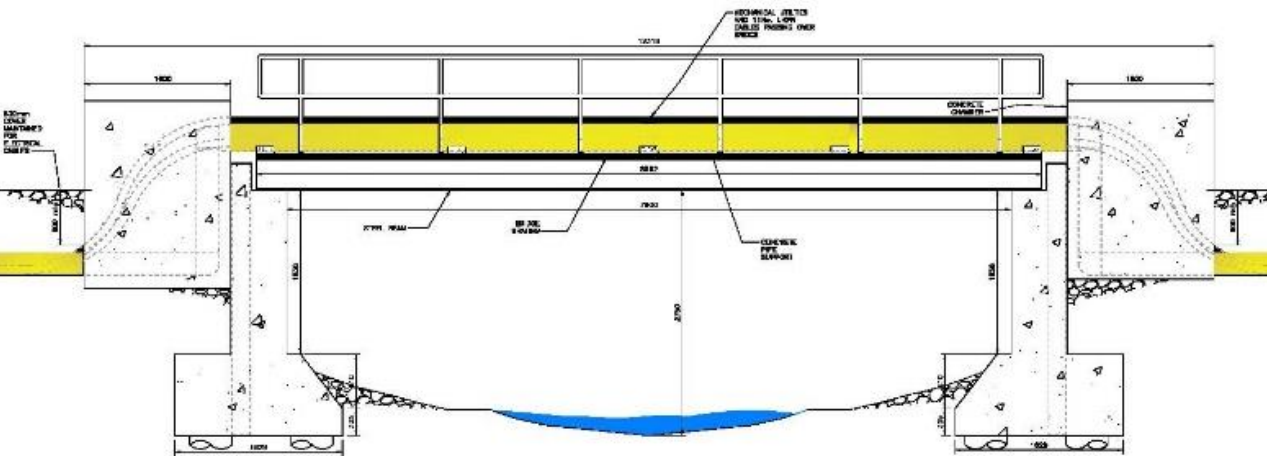
Key facts:

- NEC 4 Contract
- Approx. £13 M Capex
- Arrangements – traditional build only (detailed design by Wood), CDM PD – Wood, PC – the contractor
- Scope – Repairs to existing River Lee Navigation Bridge, new river crossing of Enfield ditch, new flexible pavement road with services, pedestrian/cycling provision



Existing

D. Utilities Bridge and Corridor



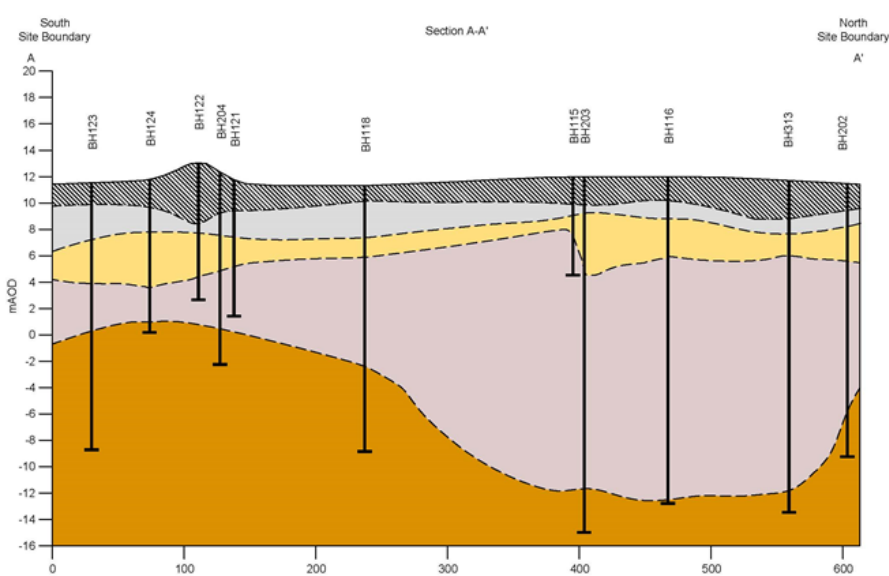
Proposed

What is it?

- The Utility Bridge and Corridor comprises a 730 metre strip of existing and proposed utilities to service the EcoPark NLHPP. It runs the length of the site north to south from Advent Way to Deephams Farm Road, alongside main site road

Key facts:

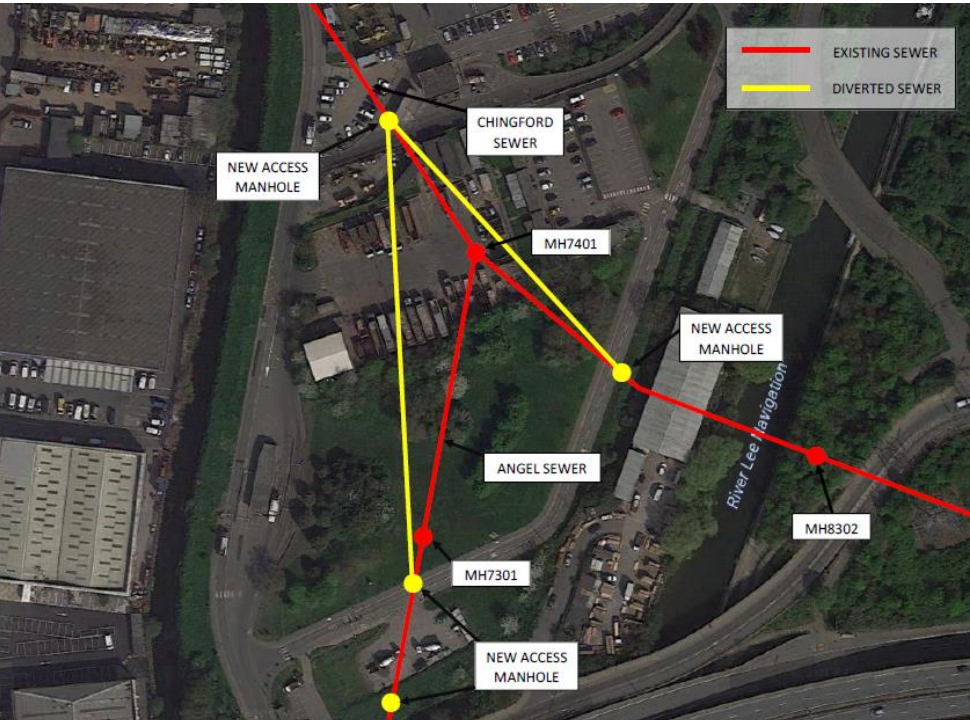
- NEC 4 or SU's standard form of Contract
- Approx. Capex: £5M
- Arrangements – Traditional or design and build, in compliance with Statutory Undertaker requirements for work on their assets
- Scope: Significant diversions and relocations to existing services (site & statutory undertaker), protection of critical services, new pipe bridge over Enfield Ditch, new service routes and road crossing



Geology



E. Sewer Diversion



Plan

What is it?

- Construction of approximately 300m of new 1200mm diameter Thames Water sewer

Key facts:

- Thames Water approved contractors
- Replaces existing live 450mm and 980 mm diameter sewers, the largest main conveying approximately 1m³/s
- Design and Build NEC 4 Contract
- Approximate capex £3.5M
- Scope – detailed design, temporary works (dewatering, drive shafts, etc.), permanent works to TWUL approval

Recap



- We have covered:
 - The project and the rationale for it
 - The site, and work areas
 - The works we are planning to procure this summer
- Any questions so far?



Contracts and Procurement

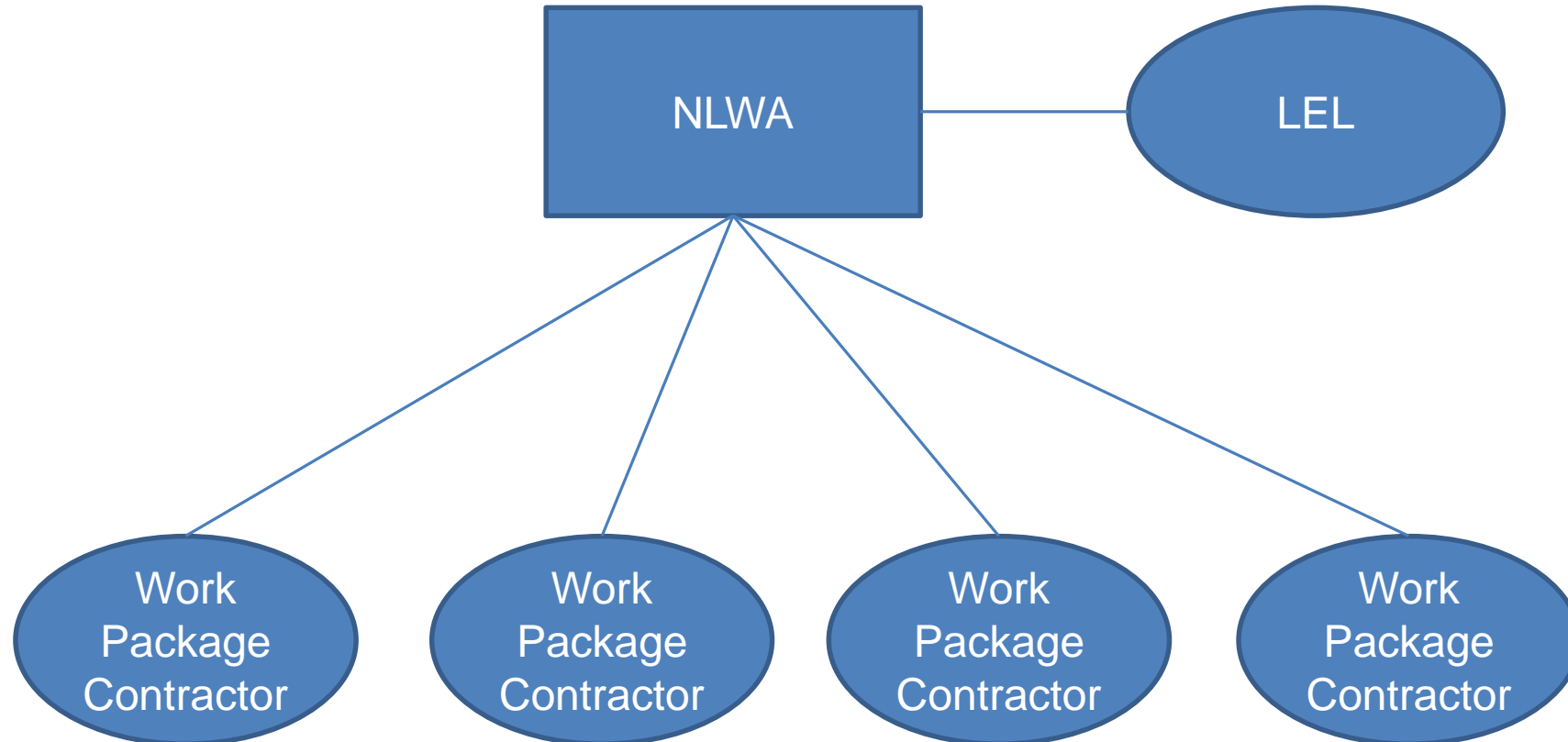
Presented by Ursula Taylor, Head of Legal and Governance

Choice of standard form contract



- Adopting a common form of contract across as many work packages as possible
- Chosen NEC4 because:
 - proactive risk management
 - collaborative working
 - a project management tool – not gathering dust in a drawer
 - Government endorsed for use by the public sector
- Option A (Priced contract with activity schedule)
- Note that negotiation of contract terms will not be permissible so NEC4 Z clauses will be commercially realistic

Contractual structure



Traditional or D&B?



- Considered on a package by package basis
 - NLWA designs with Wood and others, contractor carries out works on the basis of that design; or
 - contractor responsible for design and build although NLWA will specify initial design elements (e.g. site wide “look and feel”, management of interfaces between packages and DCO elements)
- Key factors in making the choice:
 - complexity of design/works package
 - to what extent does NLWA need to dictate the design?
 - will transfer of risk be value for money?

Public procurement route



- All preparatory works packages procured either by:
 - restricted procedure if above threshold; or
 - a below threshold procedure
- Separate procurement for each work package
 - lots considered (i.e. multiple work packages under a single procurement)
 - decided against (because packages are quite discrete and to keep it simple)

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)
- Anticipated procurement launch in June 2018, subject to approvals
- Programme will be updated on website as timings for works with third party involvement become clearer
- Processes will be run in line with minimum statutory timescales (e.g. 30 day tender period) and similar for below threshold, unless good reason to do otherwise
- The SQ period gives you time to get ready

Contract and procurement summary (1)

| Work package | Contract | Traditional or D&B | Process |
|-------------------------------|------------------|--|-----------------|
| Deepham's Farm Road | NEC4 | Traditional (detailed design by Wood) | Below threshold |
| Laydown Area | NEC4 | Traditional (detailed design by Wood) | Restricted |
| Eastern Access | NEC4 | Traditional (detailed design by Wood) | Restricted |
| Sewer diversion | NEC4 | D&B (TW approved outline design will form part of the Scope and contractors must be TW approved) | Below threshold |
| Utilities Bridge and Corridor | NEC4/SU standard | Traditional or D&B depending on Scope and in line with SU's requirements | Below threshold |

Contract and procurement summary (2)

| Work package | Notice | Timing |
|-------------------------------|---|---|
| Deephams Farm Road | Contracts Finder | June 2018, subject to EA approval |
| Laydown Area | Contracts Finder & OJEU | June 2018 |
| Eastern Access | Contracts finder & OJEU | June 2018 subject to EA approval |
| Sewer diversion | Shortlist invited from TW approved list | Q4 2018 |
| Utilities Bridge and Corridor | Contracts Finder or invited from SU approved list | June 2018 at the earliest, but subject to Statutory Undertaker requirements |

Future Procurements

| Work Element | Start of procurement (Indicative) |
|--|--------------------------------------|
| Building Works | |
| RRF construction and northern site clearance | Q2 2019 |
| Site-wide Works | Q2 2019 |
| EcoPark House | Q2 2019 |
| ERF Works | |
| ERF | Q2 2020 |
| Post-ERF Works | |
| Decommissioning and Demolition of EfW Facility | Q3 2025 |
| Southern Access Widening | Q4 2025 |



Questions?

Questions?



- Any questions?
- Any comments on proposals
 - Looking for any comments on contract packages, practicalities, scope