

# TWELVETREES PARK

LONDON E16

## REMEDIATION *Update*



**Berkeley**  
Designed for life

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# INTRODUCTION

*In this brochure we will update you on works at TwelveTrees Park, an exciting new development providing over 3,800 homes built around 12 acres of open green space in east London.*

We'll introduce you to the site and the team behind it at Berkeley Homes South East London Ltd. (BHSEL). We'll provide you with a simple potted history of TwelveTrees Park (TTP) before explaining what remediation means and why it's an essential part of the development process here.

We'll then outline the remediation process and timeline, before detailing just how these vital works will be monitored and communicated to you.



Photography of remediation works on site.



Photography of remediation works on site.

# KEY TERMS

## *Air Quality*

Air quality is the term we use to describe the level of pollution in the air that we breathe.

## *Brownfield Land*

Brownfield land is also known as ‘previously developed land’.

## *Contamination*

Land is classified as contaminated because of actual or likely presence of pollution that is likely to, or at least has the potential to, affect people or the immediate environment.

## *Hotspots*

Hotspots refer to pockets of contaminants found within the ground on a site undergoing development.

## *Mitigation*

Mitigation is the process of avoiding or reducing potential adverse effects of a site to a safe level. A range of mitigation measures are available depending on the scale of the impact.

## *Monitoring*

Monitoring is used to alert us to any changes and whether further mitigation is needed, especially when it comes to air quality and dust. There are different kinds of monitoring that take place on a site. Baseline monitoring establishes conditions before any works start, then we carry out active monitoring during works to gauge performance against agreed safety levels.

## *Odour*

Odour on a site can be characterised as pleasant, neutral or unpleasant. There are standard methods for assessing odour which define when odour is a nuisance. Odour nuisance alone does not necessarily cause harmful health effects, it’s just one environmental factor we evaluate.

## *Remediation*

The process we go through to clean up a proposed site to meet standards required by the Environment Agency and the Council for its new purpose. Remediation involves removing polluting substances from the soil, or limiting the effect that they have on the environment to a certain approved level. All of this is carefully monitored and regulated.



Computer Generated Image of TwelveTrees Park is indicative only.

# OUR SITE

## *the project*

*In August 2018, Berkeley Homes South East London was granted planning permission for the development of a major mixed-use site on Stephenson Street, E16.*

*The site was subsequently rebranded ‘TwelveTrees Park’.*

*TwelveTrees Park will deliver*

- **3,838 new homes** – 40% of which will be affordable housing for residents of Newham and surrounding areas.
- **New retail and commercial units** – enabling job creation and a diverse new townscape.
- A dedicated **community space** at the heart of the site.
- A **4.5-acre linear park** and over **12 acres** of landscaped gardens.
- Providing a new home for the **1,000 pupil** East London Science School

# RECENT HISTORY *of TwelveTrees Park*

*To fully understand what we need to do to safely develop any site, it's important that we review the site's history.*

The site at TwelveTrees Park has had a varied history of use over the past century or so. Historical mapping indicates that the site has been in railway use with associated coal storage since the early 1900s.

Also in the early part of the last century, the site was occupied by a builders' merchants and a portion of it for a wider glassworks.

By the late 1980s the site had been developed as a distribution depot for the Parcelforce company. This saw the installation of vehicle refuelling areas and associated underground storage tanks.

## *The Bigger Picture*

The immediate surrounding land also has a history of industrial use. A tidal works plant called 'The Three Mills' (north-west of the site) and Bromley-by-Bow Gas Works (west of the site) have been situated near the site since the late 1800s.

As you can see in the image to the right, the gas holder site is not part of the TwelveTrees Park development. The Gas Works is owned by St William and does not currently have planning permission.





Aerial photography of Stephenson Street, E15.

# WHAT IS REMEDIATION *and why is it necessary?*

*Remediation is simply the process of removing potential pollution or contaminants from soil, groundwater, sediment or surface water to protect people and the environment from any potential harmful effects.*

Remediation is not always needed for planning applications for redevelopment, but it's very common when redeveloping brownfield sites like TwelveTrees Park with an industrial heritage, such as disused factories, railway sidings and underground fuel tanks. This is because these industrial uses often involved materials and processes that have the potential to pollute the ground and the wider environment.

Remediation is necessary to safeguard the public, the environment, and for the protection of groundwater to the River Thames, due to the site's previous industrial uses.

## *Safeguards*

Remediation works are highly regulated through government legislation and best practice. Agencies involved with setting the requirements and approach for remediation and enforcing standards include local planning authorities (planning, environmental and building control), the Environment Agency, new homes warranty providers, and consultant engineers on behalf of the landowner or the developer.

The Environment Agency and the Council's Environmental Health Department act in the public interest and are heavily involved all the way through, from the planning process to carrying out and assessing any remediation works.



# THE REMEDICATION PROCESS

*The Government sets out a three stage process for the remediation of ‘contaminated land’ that must be followed in a certain order.*

*The key Government statutory guidance and legislation includes the Land Contamination Risk Management (LCRM) and Part 2A of the Environmental Protection Act 1990.*

*All three stages apply to remediation under our planning application (17/01847/OUT).*

## / STAGE 1 / Risk assessment

*Develop a detailed understanding of the site to characterise the environmental conditions and potential risks. This is split into three tiers;*

1. Desk-based research to understand the history of the site.
2. Initial risk assessment using desk-based research and other published sources.
3. Complete intrusive site investigation works to provide site-specific information for assessment.

## / STAGE 2 / Remediation options appraisal

*After Stage One is complete, a Stage Two assessment of suitable remediation options is performed, as follows;*

1. Identify potential remediation options.
2. Carry out detailed evaluation of the options to determine which is most suitable.
3. Select the most viable remediation option.

## / STAGE 3 / Remediation and verification

*Stage Three then sets out to develop the remediation strategy and carry out the remediation works.*

*At this stage we;*

1. Develop a detailed strategy using the risk assessment and options appraisal.
2. Gain regulatory approval for the detailed strategy from the Council and the Environment Agency.
3. Start environmental monitoring and maintain throughout and after the remediation works.
4. Specialist contractor carries out remediation works.
5. When the works are complete, a specialist consultant produces the verification report to confirm the works have been successful.
6. Long-term monitoring and maintenance.

# CHECKS & CONTROLS

## *So how do we know we're following the remediation process properly?*

The remediation process is highly regulated with numerous checks and controls established in guidance and legislation to ensure everything is carried out for maximum safety.

We will fully comply with all relevant Government guidance and regulations to ensure the health and safety of the public, the environment and our employees.

Our remediation strategy has been approved and will be monitored by the local Council and environmental body to ensure that all works are carried out properly.

The following documents were approved by Newham Council at the planning stage of development.

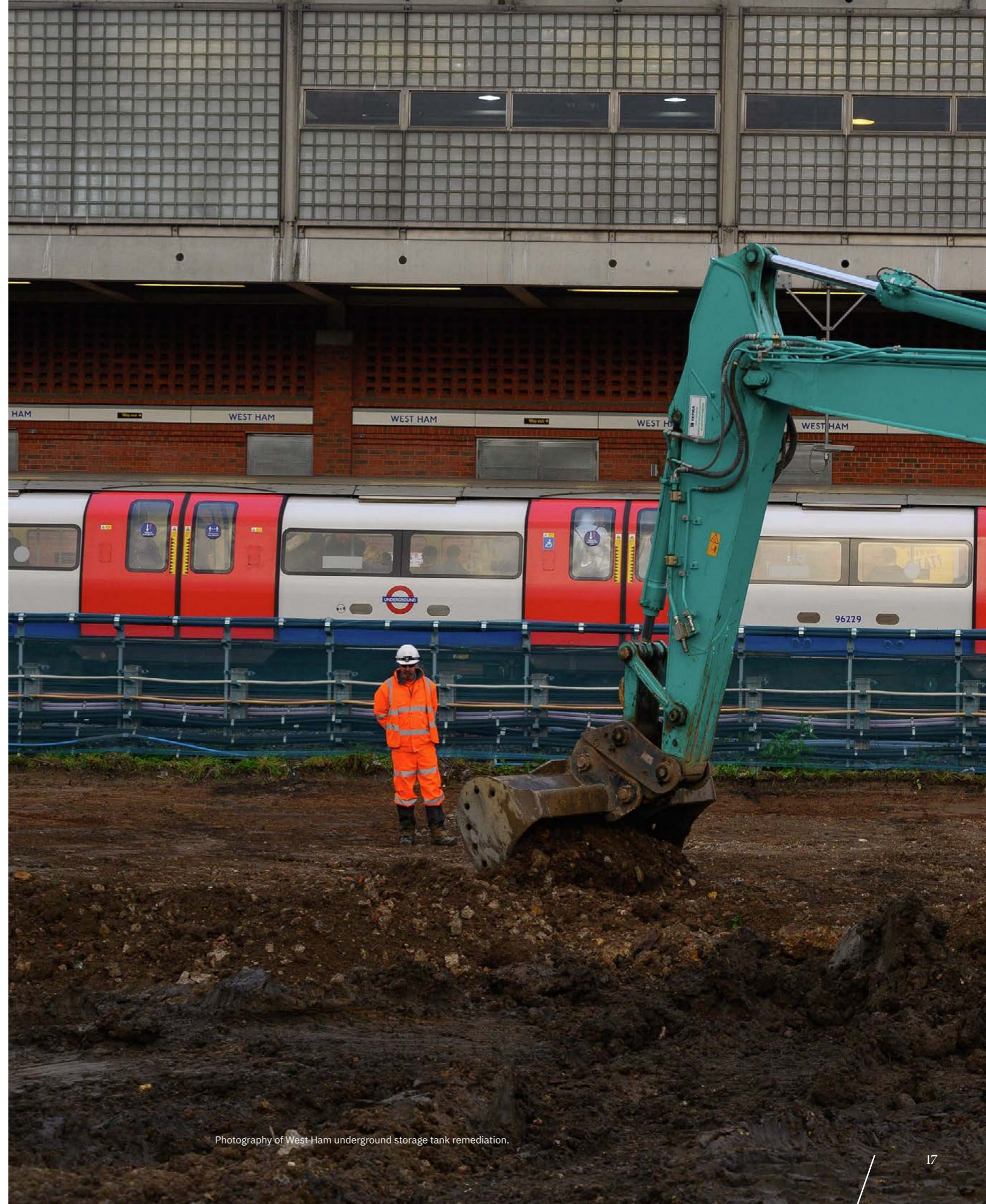
- Stephenson Street Phase I Environmental and Geotechnical Assessment dated March 2016
- Stephenson Street, West Ham Underground Storage Tank Remediation Strategy dated June 2016
- Stephenson Street Remediation Strategy, dated June 2017;
- Stephenson Street Phase II Environmental Site Investigation dated, July 2017; and
- C11: Remediation Statement Review for Phase 1 was approved by Newham Council, under the discharge of conditions in 2019.

## *Overseeing our Remediation*

We employ a specialist Remediation Contractor, (Provectus) who will be responsible for overseeing monitoring, mitigation methods and undertaking a series of specific checks and controls throughout the work. These will include:

- The standards the soil on site must meet, as set and agreed with the regulators to be safe for the site to be used by the residents and the public
- Permitted levels of noise, air quality, odour\* and vibration that must be maintained during works
- Completion of a series of documents that verify that remediation has been carried out successfully.

\*It's important to recognise that odour is different to air quality and its presence does not mean it is harmful to health, or that mitigation measures are not being effective. This is completely normal, and with proper mitigation measures and continuous monitoring a site can be remediated safely and effectively with no adverse effects posing any health risks.



Photography of West Ham underground storage tank remediation.



Photography of remediation works on site.

# REMEDIATION *to date*

*Remediation started on site in August 2020. We're carrying out remediation works in four phases throughout the project for maximum efficiency.*

## *So far in Phase 1*

- We have removed two sets of diesel tanks and related hotspots located underground.
- We have carried out the safe removal of pollutant hotspots due to existing railway sidings.

## *Monitoring in Phase 1*

There are eight environmental monitoring points located around the site.

Also there are boreholes located around the two existing diesel tanks. These help to monitor ground water quality and detect any contamination.

We conduct health and safety walks on site at least twice a week. So far during Phase 1 we have carried out over 100 safety walks.

A full report will be prepared to verify remediation has been completed safely when all works are completed.

## *Timescales for remediation works\**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Phase 1	August	May								
Phase 2				July	January					
Phase 3						February	August			
Phase 4								August	February	

\*Estimated dates based on the current programme and subject to change

# OUR COMMUNICATION *with you*

*It's important that we keep you in the picture. We aim to provide an ongoing process of communication with the community from now until all construction works are complete.*

We will keep you updated on our progress primarily via the Stephenson Street Community Website;  
[www.berkeley-stephensonstreet.co.uk](http://www.berkeley-stephensonstreet.co.uk)

Our community engagement doesn't stop there of course.

We have a dedicated member of the construction team to liaise with the local community via a wide range of events, such as site visits, school visits and attending community meetings (Covid-19 restrictions permitting).

There will also be regular communications made via newsletters, a site noticeboard and website updates.

## *Contact Us:*

Of course you can also contact us at any time by using the following details:

Email:  
[StephensonStreet@berkeleygroup.co.uk](mailto:StephensonStreet@berkeleygroup.co.uk)

Phone:  
Sam Yell: 0207 601 7300



Photography of TwelveTrees Park Breaking Ground Event with the Mayor of Newham



# ABOUT BERKELEY SOUTH EAST LONDON *who we are*

*The Berkeley Group specialises in the regeneration of brownfield land. We have remediated sites and established new communities on formerly underused sites across London and the South East. Many of these were located in urban areas surrounded by existing communities.*

Berkeley Group is made up of six companies: Berkeley, St Edward, St George, St James, St Joseph and St William. Each is autonomous with its own operational management that has specialist knowledge, local understanding and expertise. All are devoted to the same ideals; creating new homes, mixed-use and commercial developments of unrivalled quality, in the country’s most desirable locations, always underpinned by concepts of sustainability, community and regeneration.

We’re highly skilled in managing the challenges these sites can present and the many benefits they unlock. We only employ highly competent expert consultants and contractors to advise on and carry out these vital works.

<p><b>40+</b> years of experience and relentless passion for quality</p>	<p><b>19,600</b> more than 19,600 homes have been built in the last 5 years</p>	<p><b>Highest</b> We have the highest customer satisfaction score in our sector*</p>
<p><b>60+</b> live developments across the UK</p>	<p><b>£2.1bn</b> Contribution to community facilities over the last five years</p>	<p><b>1st</b> We became the UK’s first carbon positive homebuilder in 2018</p>

Working in partnership with Aecom, environmental consultants and Provectus, Berkeley’s remediation contractor.



TWELVETREES  
PARK  
LONDON E16