



# Envirocheck<sup>®</sup>

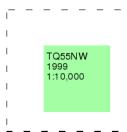
# 10k Raster Mapping

## **Published 1999**

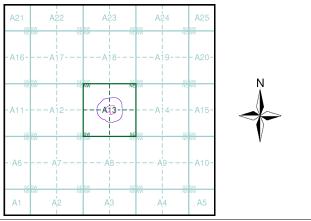
## Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

## Map Name(s) and Date(s)



## Historical Map - Slice A



### **Order Details**

 Order Number:
 246950229\_1\_1

 Customer Ref:
 1378

 National Grid Reference:
 552880, 157170

 Slice:
 A

 Site Area (Ha):
 0.98

 Search Buffer (m):
 1000

### Site Details

Sevenoaks Gasholder Site, Cramptons Road, Sevenoaks, Kent, TN14 5DY



Tel: Fax: Web:

0844 844 9952 0844 844 9951 www.envirocheck.co.uk



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# 10k Raster Mapping

## Published 2006

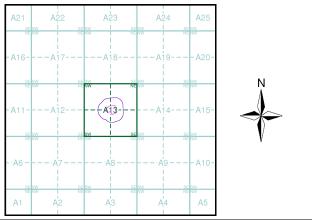
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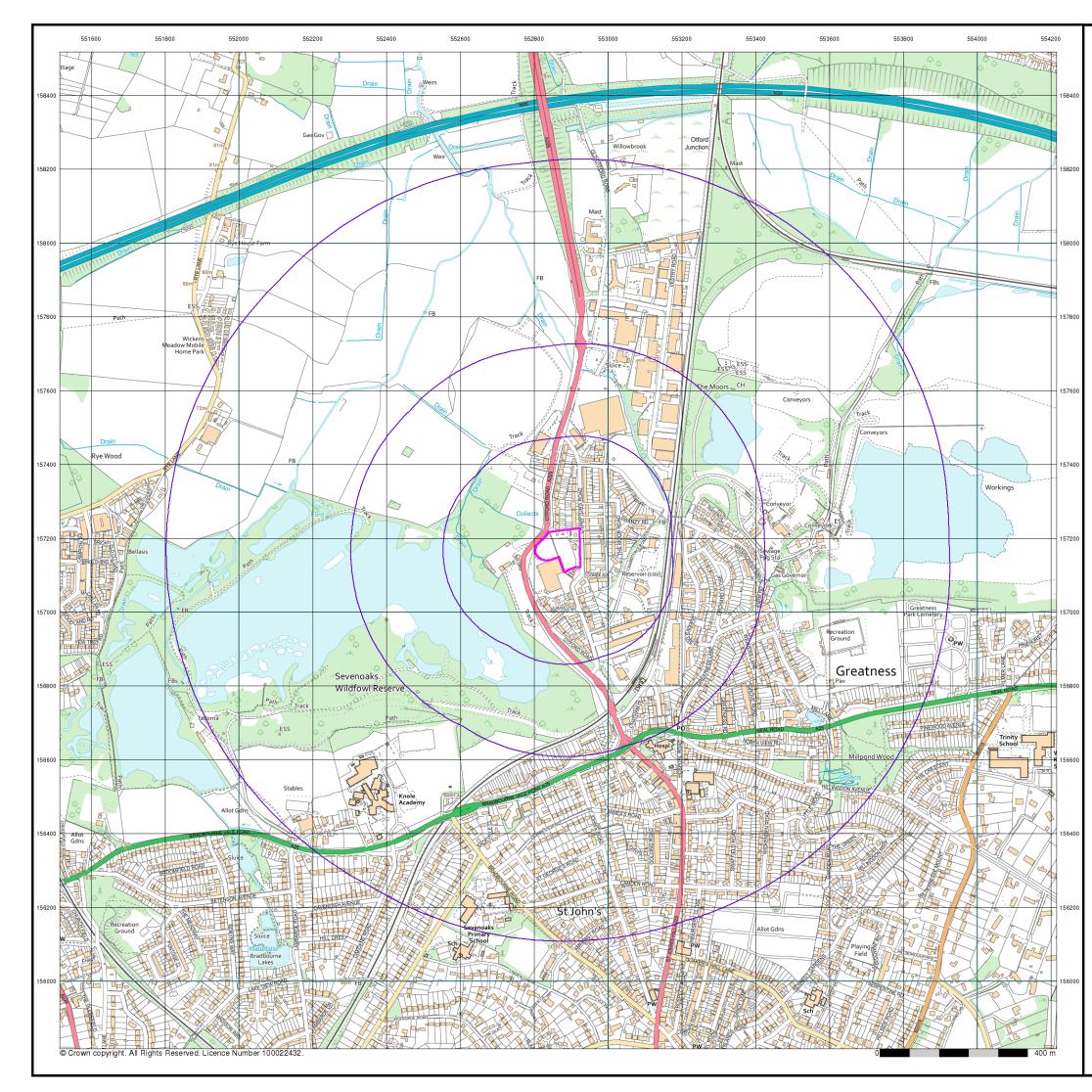
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# VectorMap Local

## Published 2020

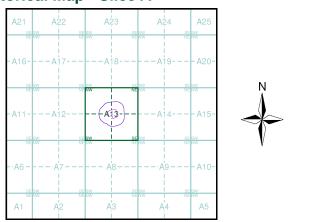
## Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

## Map Name(s) and Date(s)



## Historical Map - Slice A



### **Order Details**

Order Number:	246950229_1_1
Customer Ref:	1378
National Grid Reference:	552880, 157170
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Site Area (Ha):	0.98
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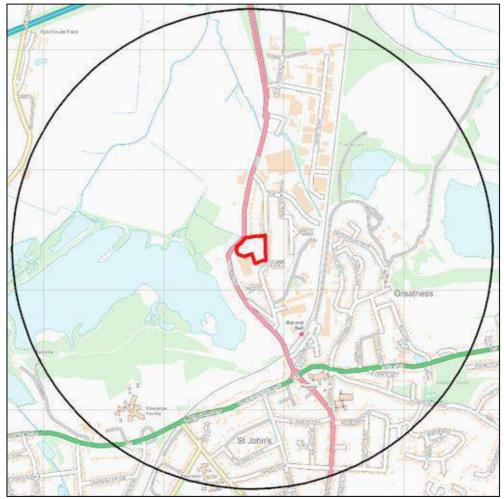
T: +44 (0) 844 844 9952 W: www.envirocheck.co.uk





# PRELIMINARY UNEXPLODED ORDNANCE (UXO) THREAT ASSESSMENT

Meeting the requirements of *CIRIA* C681 'Unexploded Ordnance (UXO) – A guide for the Construction Industry' Risk Management Framework



6 ALPHA PROJECT NUMBER	8300	ORIGINATOR	D. Barrett
LANDMARK ORDER NUMBER	246950229_2	REVIEWED BY	L. Gregory (7 <sup>th</sup> July 2020)
CLIENT REFERENCE	1378	RELEASED BY	R. Griffiths (8 <sup>th</sup> July 2020)
STUDY SITE	Sevenoaks Gasholder Site, Cramptons Road, Sevenoaks, Kent, TN14 5DY		
RECOMMENDATION	This Study Site requires a Detailed UXO Threat and Risk Assessment		



## STUDY SITE

The Study Site is described as "Sevenoaks Gasholder Site, Cramptons Road, Sevenoaks, Kent, TN14 5DY", and it is centred on National Grid Reference 552870, 157170.

### **THREAT POTENTIAL AND RECOMMENDATIONS**

The potential for a UXO hazard to occur, and more specifically, the potential for unexploded WWI and WWII ordnance to exist at this site is assessed as being LIKELY (*Figure 2*).

In accordance with *CIRIA* C681 Chapter 5 on managing UXO risks, *6 Alpha* recommends that the next stage in the risk management framework is:

## **DETAILED UXO THREAT & RISK ASSESSMENT**

We would be pleased to provide this service, please contact *Envirocheck* for further details:



LANDMARK INFORMATION GROUP

### **REPORT SUMMARY**

During WWII, the Study Site was situated within *Sevenoaks Urban District & Sevenoaks Rural District*, which recorded six and 12 High Explosive (HE) bomb strikes per 100 hectares respectively; both very low levels of bombing.

*Luftwaffe* aerial reconnaissance photography associated with the Study Site did not identify any primary bombing targets either on-site or within 1,000m of the Study Site boundary.

Air Raid Precaution (ARP) records were not available. However, further research identified that the gas works off *Cramptons Road* (located on-site) were subject to bombing in WWII. In addition, civil bomb strike records identified three unexploded AA shells within 730m, the closest being 235m south-east. V1 and V2 rocket strikes were also identified at *Otford Road* 310m north and at *Wickenden Road* 775m south-east.

Official bomb damage mapping was not available. Nonetheless, further research has identified evidence that the on-site gasworks were damaged by bombing during WWII. In addition, an analysis of post-war mapping identified a "*ruin*" 40m south-west that could also have been caused by the WWII bomb strikes in the immediate vicinity. Photographic evidence also suggests that *Wickenden Road* (775m south-east) was significantly damaged by WWII bombing.

Given that both bombing and bomb damage were likely recorded on-site; it would suggest that further action is warranted to address the potential for UXO encounter.

### **USING THIS REPORT**

This Preliminary Assessment is designed to inform environmental and construction professionals of the potential threat of military related explosives and/or ordnance on, or in, the vicinity of the Study Site.

This assessment is designed to be employed as a site-screening tool to meet with the requirement of Phase One of the *CIRIA UXO Risk Management Framework*; there are two broad prospective outcomes; either the threat level requires a detailed threat & risk assessment; or no further action is required. In the former instance we can provide a report within 10 working days (or more quickly upon application).

Two figures accompany the report, the *Second World War* (WWII) High Explosive (HE) Bomb Density and the final Probability of UXO Encounter. The purpose of this approach is to demonstrate that whilst bomb density statistics give an indication for WWII bombing, they should not be relied upon exclusively to generate a holistic assessment.

For further information, please contact *Envirocheck*: Website: <u>http://www.envirocheck.co.uk</u> Telephone: +44 (0)844 844 9952 Email: customerservice@envirocheck.co.uk

# Envirocheck UNEXPLODED ORDNANCE THREAT ASSESSMENT



DATA FINDINGS			
Threat Source	Detail		
(within 1,000m)	Identified	Comments	
Airfields/Military Facilities	×	None recorded within 1,000m.	
Ordnance Manufacture/Storage	×	None recorded within 1,000m.	
WWII Decoy Bombing Sites	×	None recorded within 1,000m.	
WWII Defensive Features	×	None recorded within 1,000m.	
WWII <i>Luftwaffe</i> Designated Bombing Targets	×	<i>Luftwaffe</i> aerial photography did not identify any primary bombing targets on-site or within 1,000m of the Study Site boundary.	
WWII Bomb Strikes Within Study Site Boundary	¥	There is evidence that the gas works formerly located on-site were subjected to WWII bomb strikes.	
WWII Bomb Strikes Near Study Site Boundary	<b>~</b>	Unexploded AA shells identified 235m south-east, 525m north-east and 730m south-east.	
WWII Bomb Damage	¥	The on-site Gas Works were reportedly damaged by WWII bombing.	
Abandoned Bomb Register	×	The official abandoned bomb list did not identify any abandoned bombs on-site or within 1,000m of the Study Site boundary.	
Potential Threat Sources	<b>v</b>	The most probable UXO threat is posed by WWII <i>German</i> HE bombs, whilst IBs and <i>British</i> AAA projectiles pose a residual threat.	
WWII Bombing Density Per 100 Hectares	<b>v</b>	Sevenoaks Urban District & Sevenoaks Rural District, which recorded six and 12 HE bomb strikes per 100 hectares respectively.	
Important Notes			

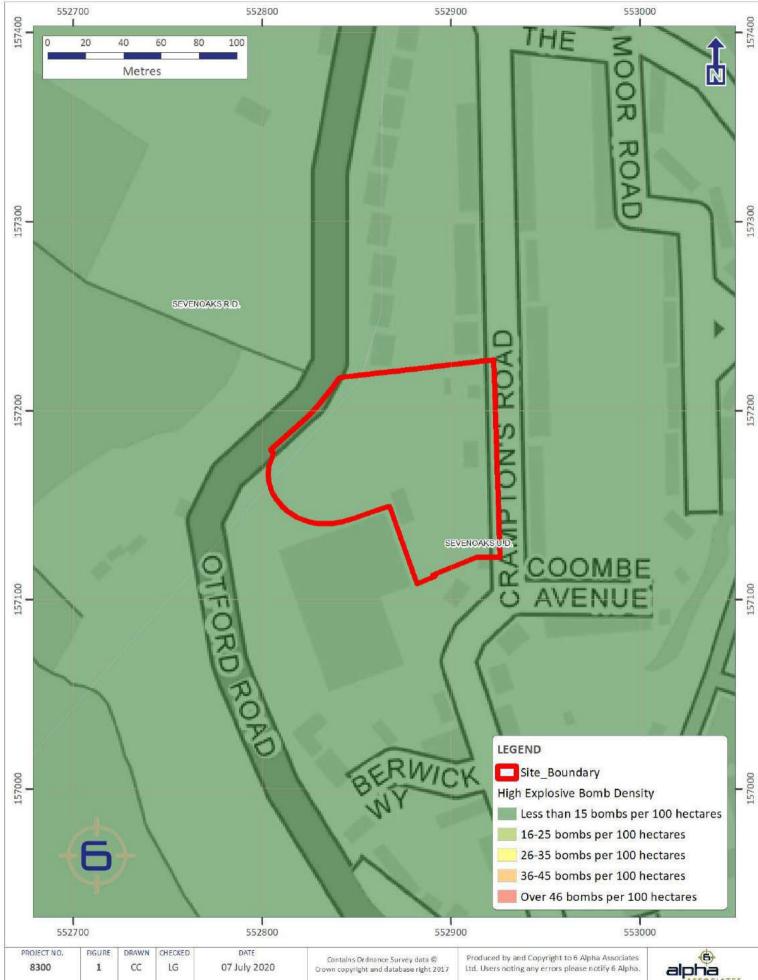
- 1. The term 'Preliminary UXO Threat Assessment' has been used to describe this report, to fall in line with the *CIRIA* C681 guidelines. Whilst the term 'Risk' can be justifiably used at this stage, the reader should note that the 'Consequence' function of 'Risk' is not considered. Should it be required, this would be addressed in the 'Detailed UXO Threat & Risk Assessment' (Stages 2 and 3).
- 2. This report is accurate and up to date at the time of writing.
- 3. The assessment levels have been generated from historical data and third party sources. Where possible *6 Alpha* have sought to verify the accuracy of such data, but cannot be held accountable for inherent errors that may be in third party data sets (e.g. *National Archives* or library sources).
- 4. 6 Alpha have exercised all reasonable care, skill and due diligence in producing this service.
- 5. Whilst every effort has been used to identify all potential UXO/explosive threats, there were a number of private facilities, which may not have released privately recorded information concerning UXO/explosive threats into the public domain. It is therefore possible that some of the aforementioned sites may not be included within the database.



## SEVENOAKS GASHOLDER SITE, CRAMPTONS ROAD, SEVENOAKS, KENT, TN14 5DY



# WWII High Explosive Bomb Density

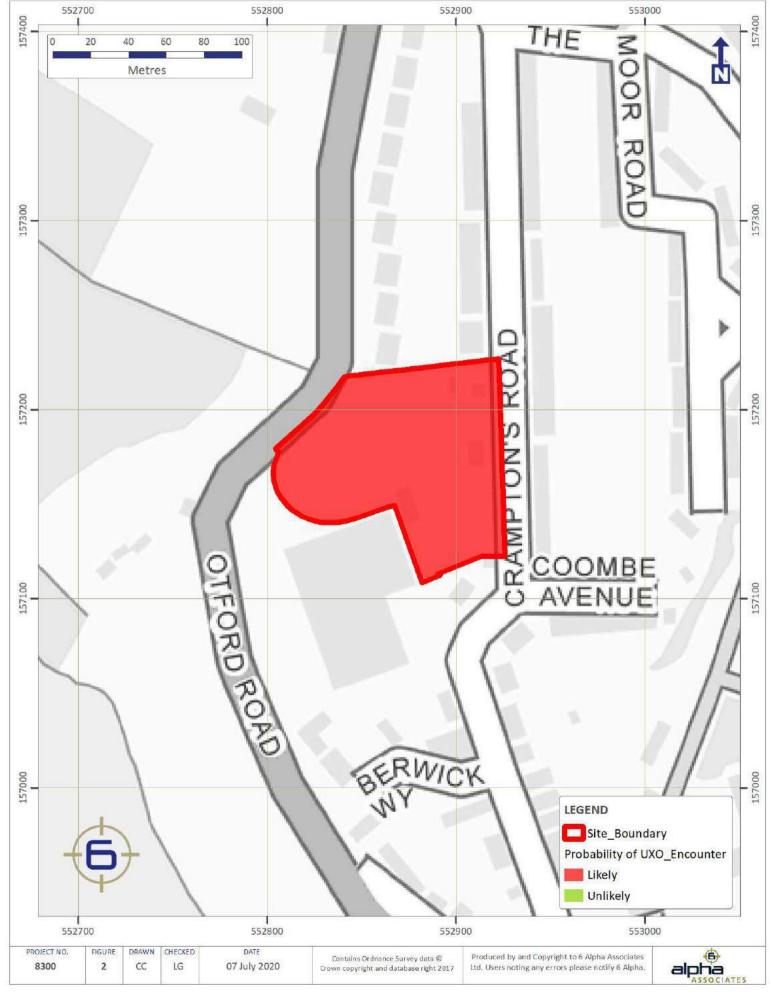




## SEVENOAKS GASHOLDER SITE, CRAMPTONS ROAD, SEVENOAKS, KENT, TN14 5DY

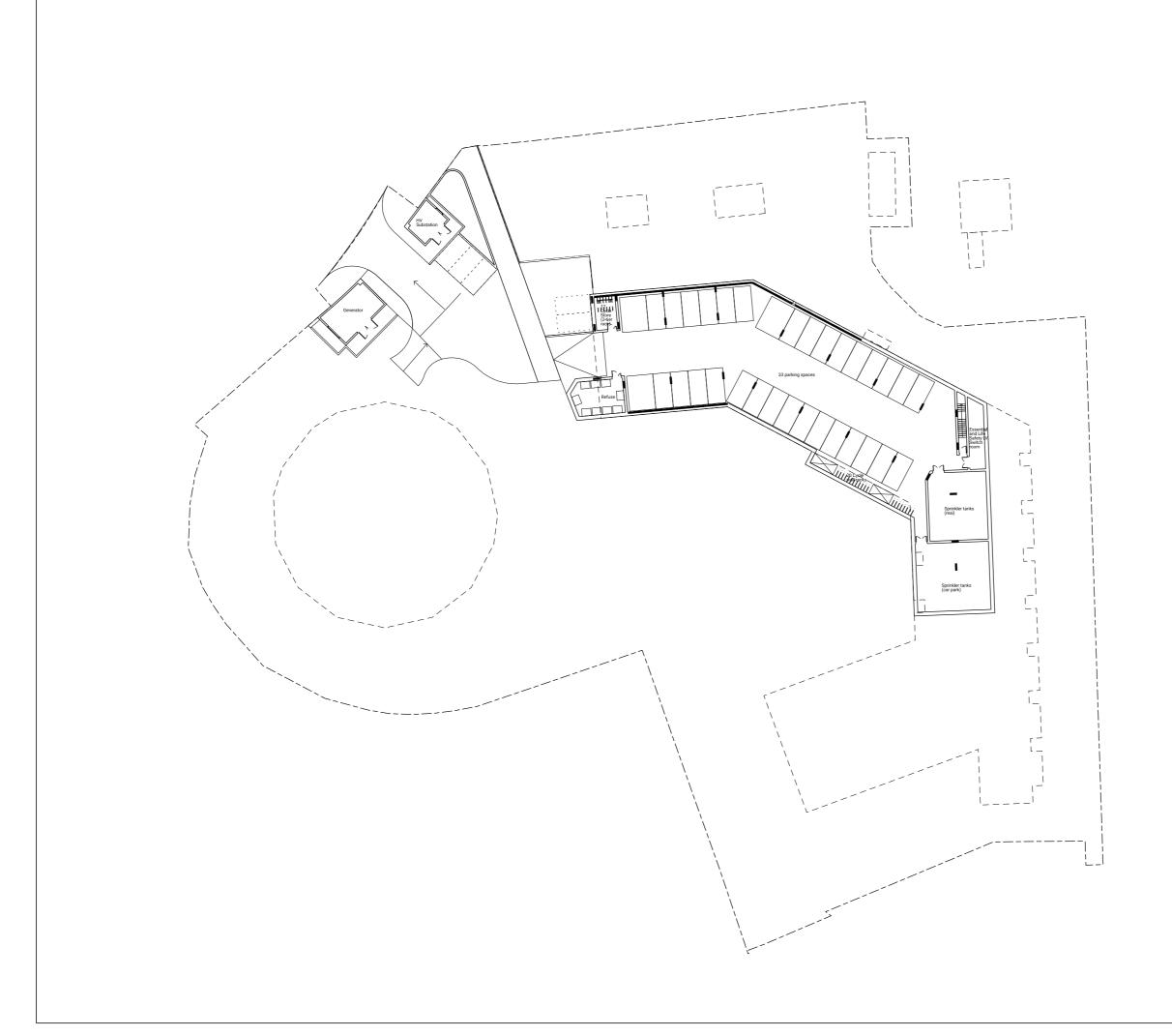


# **Probability of UXO Encounter**



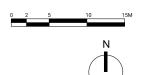
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Appendix C: Selected Proposed Development Information



ISSUE	REVISION NOTE	DATE
Α	Issued for Information	06.08.2020
В	Revised based on structural sketch	07.08.2020
С	Revised based on MEP sketch	11.08.2020
D	Revised plant areas	13.08.2020
Е	Stage 2 Report	02.09.2020
F	Revised venting	30.09.2020
G	Revised rotunda, structure, grid	02.10.2020
н	Revised podium wall	05.10.2020
1	Issued for Information	25.11.2020
J	Issued for Information	15.02.2021
P01	Planning Submission	19.03.2021

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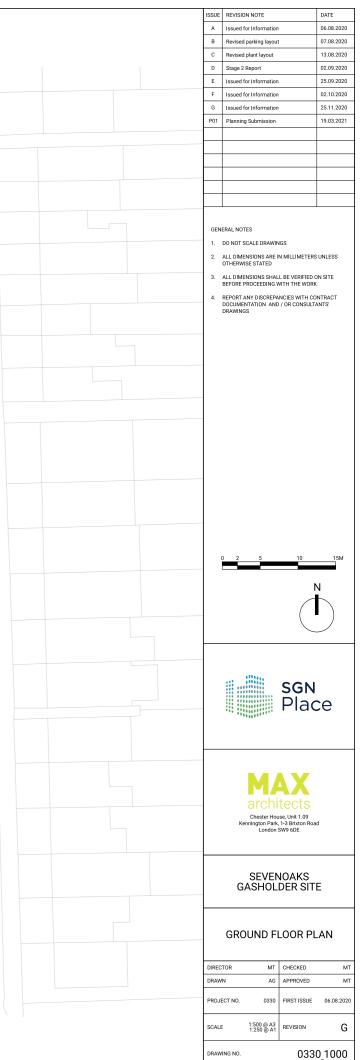


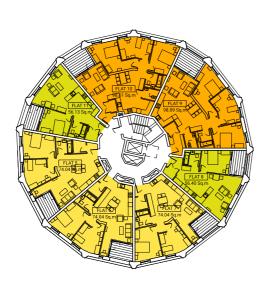
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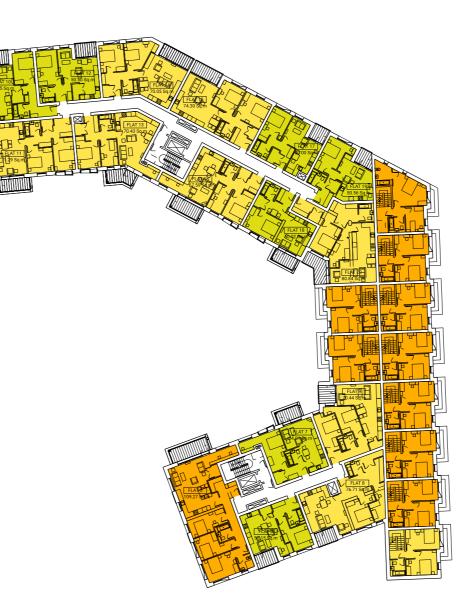
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SCALE	1:500 @ A3 1:250 @ A1	REVISION	J
DRAWING NO. 0330_0900			



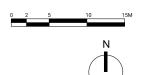






ISSUE	REVISION NOTE	DATE
A	Issued for Information	06.08.2020
В	Stage 2 Report	02.09.2020
D	Issued for Information	25.09.2020
E	Issued for Information	25.11.2020
P01	Planning Submission	19.03.2021

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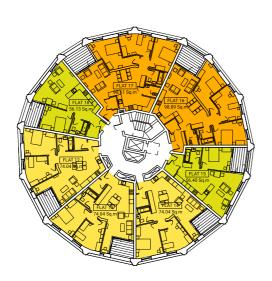


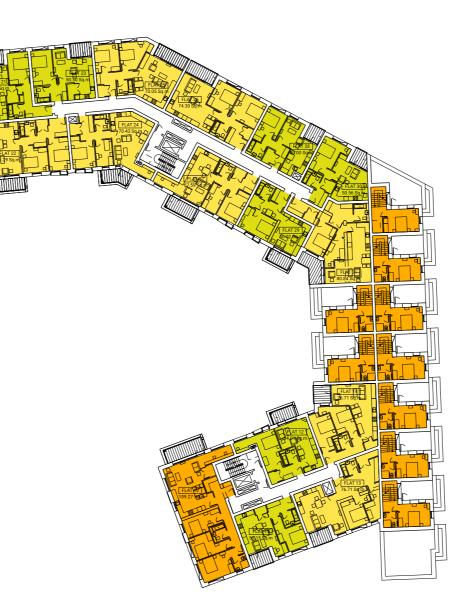


### SEVENOAKS GASHOLDER SITE

### LEVEL 1 PLAN

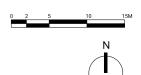
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DRAWING NO. 0330_1010			





ISSUE	REVISION NOTE	DATE
A	Issued for Information	06.08.2020
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С	Issued for Information	25.11.2020
P01	Planning Submission	19.03.2021

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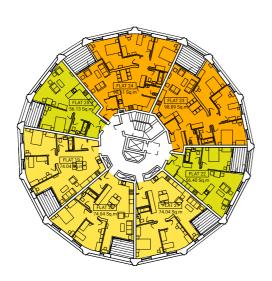




# SEVENOAKS GASHOLDER SITE

### LEVEL 2 PLAN

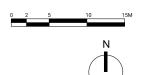
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ISSUE	REVISION NOTE	DATE
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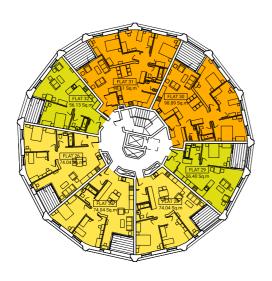


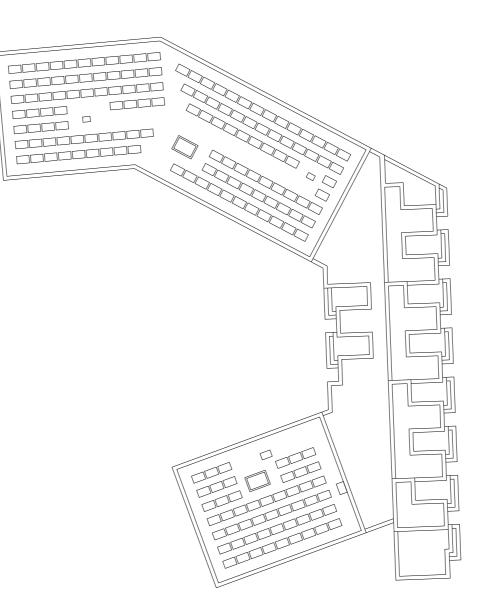


### SEVENOAKS GASHOLDER SITE

### LEVEL 3 PLAN

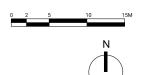
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SCALE	1:500 @ A3 1:250 @ A1	REVISION	D
DRAWING NO. 0330_1030			





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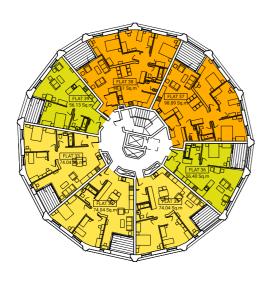


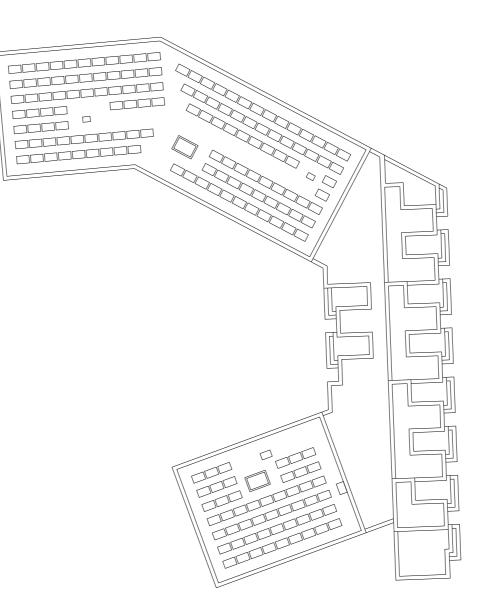


### SEVENOAKS GASHOLDER SITE

### LEVEL 4 PLAN

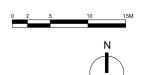
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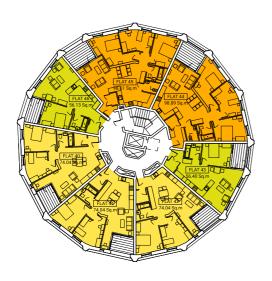


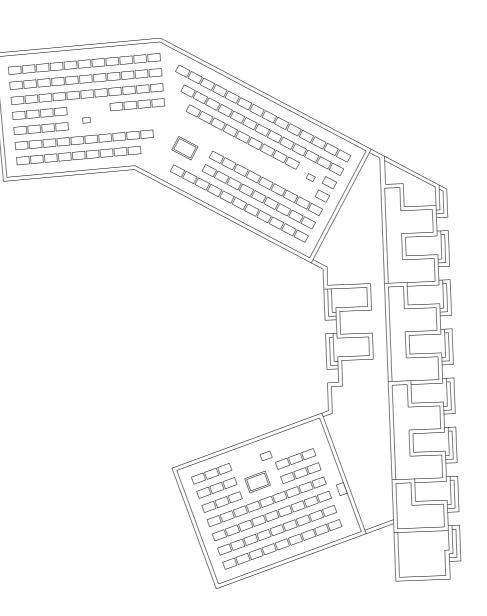


# SEVENOAKS GASHOLDER SITE

### LEVEL 5 PLAN

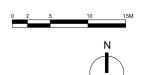
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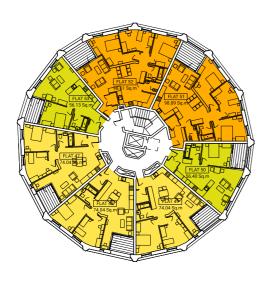


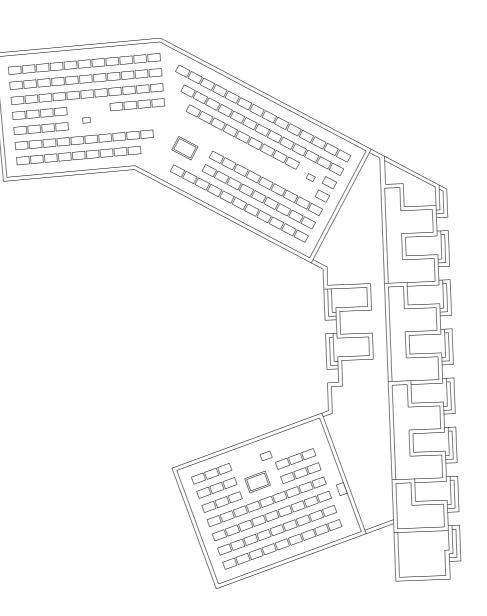


# SEVENOAKS GASHOLDER SITE

### LEVEL 6 PLAN

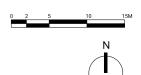
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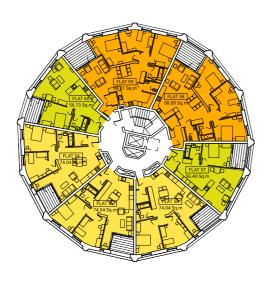


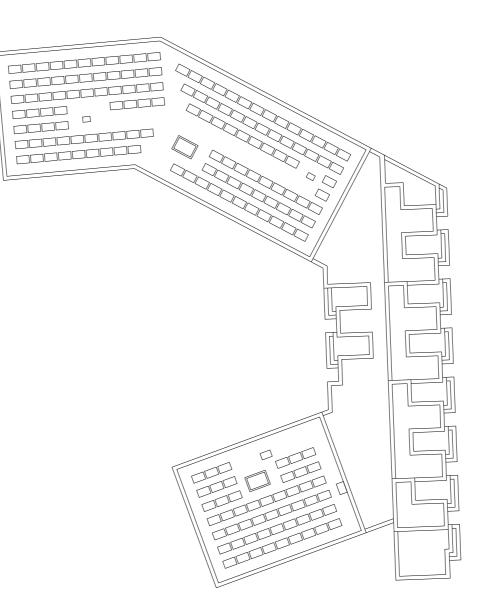


# SEVENOAKS GASHOLDER SITE

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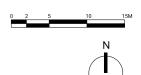
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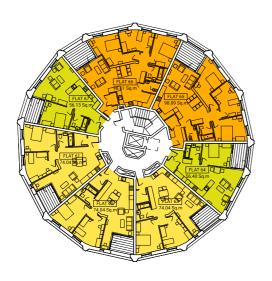


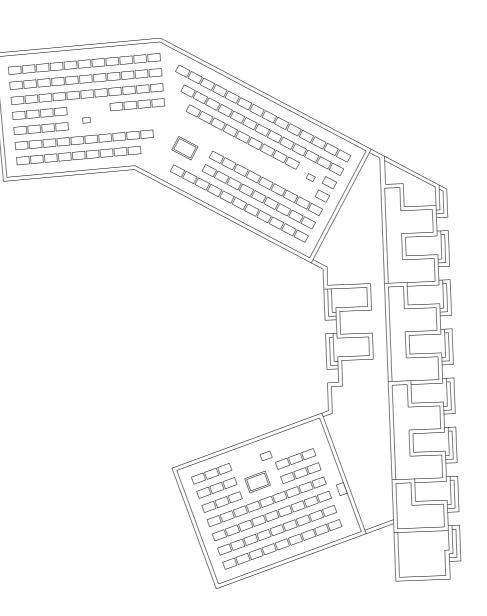


# SEVENOAKS GASHOLDER SITE

### LEVEL 8 PLAN

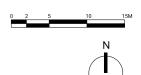
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В	Issued for information	25.11.2020
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- 1. DO NOT SCALE DRAWINGS
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- 3. ALL DIMENSIONS SHALL BE VERIFIED ON SITE BEFORE PROCEEDING WITH THE WORK
- 4. REPORT ANY DISCREPANCIES WITH CONTRACT DOCUMENTATION AND / OR CONSULTANTS' DRAWINGS



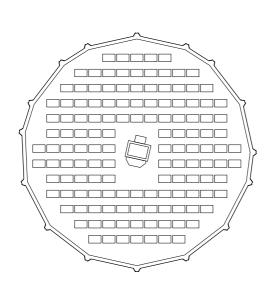


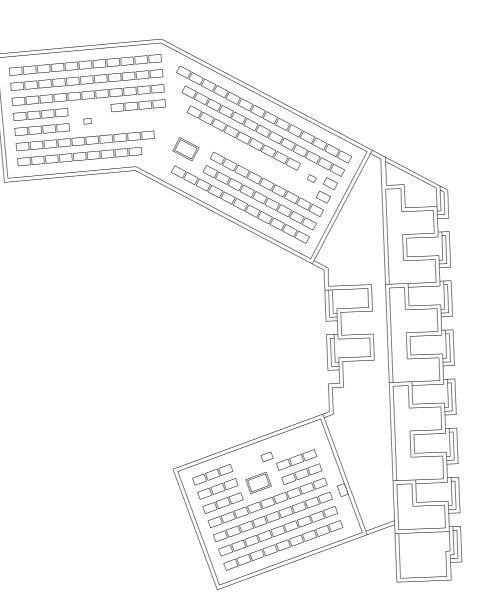


# SEVENOAKS GASHOLDER SITE

### LEVEL 9 PLAN

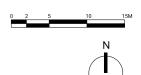
DIRECTOR	MT	CHECKED	MT
DRAWN	AG	APPROVED	мт
PROJECT NO.	0330	FIRST ISSUE	28.08.2020
SCALE	1:500 @ A3 1:250 @ A1	REVISION	В
DRAWING NO.		0330	0 <u>1090</u>





ISSUE	REVISION NOTE	DATE
A	Issued for Information	06.08.2020
В	Stage 2 Report	02.09.2020
С	Issued for Information	25.11.2020
P01	Planning Submission	19.03.2021

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# SEVENOAKS GASHOLDER SITE

### ROOF PLAN

DIRECTOR	MT	CHECKED	MT
DRAWN	AG	APPROVED	MT
PROJECT NO.	0330	FIRST ISSUE	06.08.2020
SCALE	1:500 @ A3 1:250 @ A1	REVISION	С
DRAWING NO.	DRAWING NO. 0330_1099		