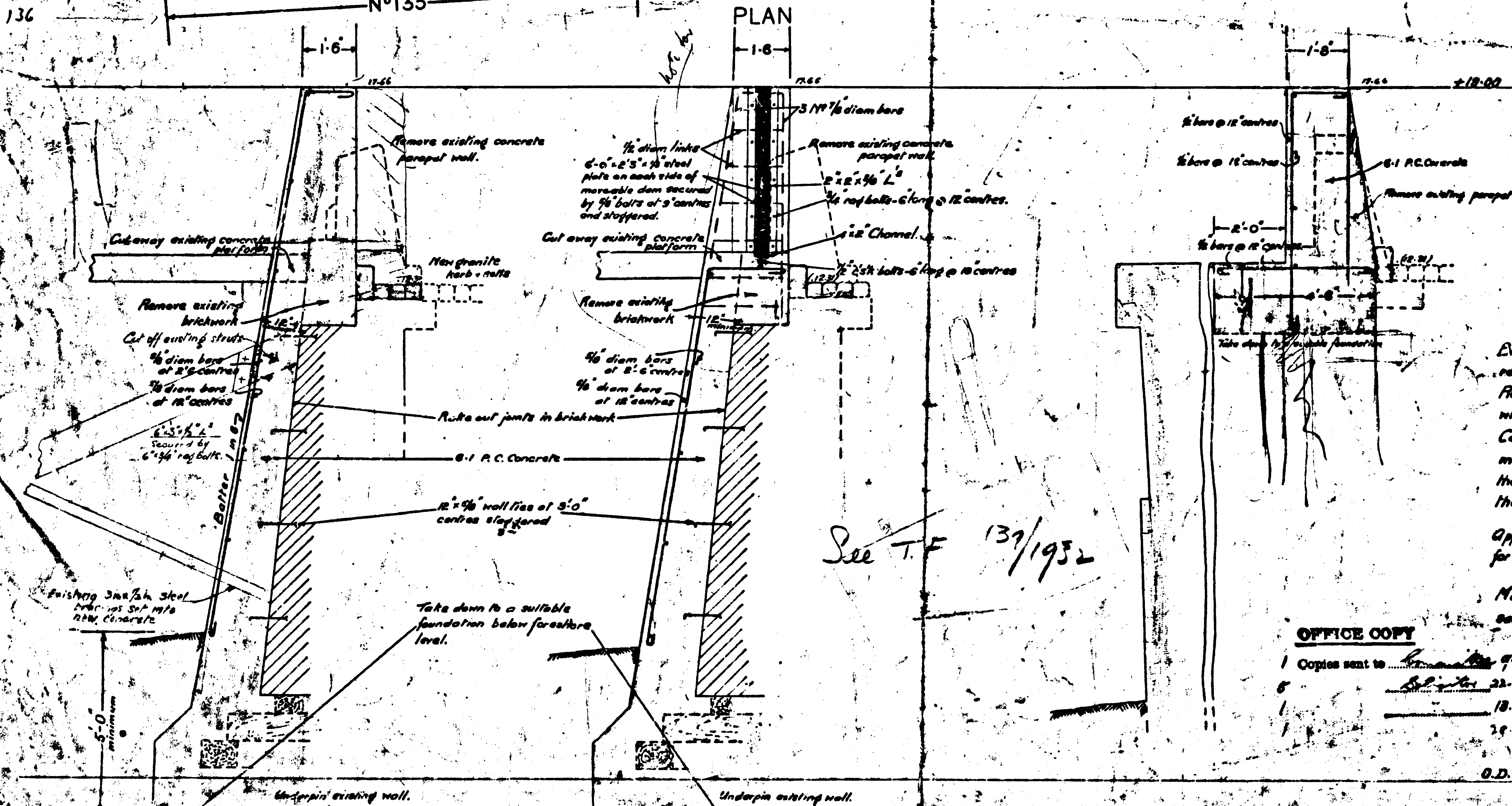
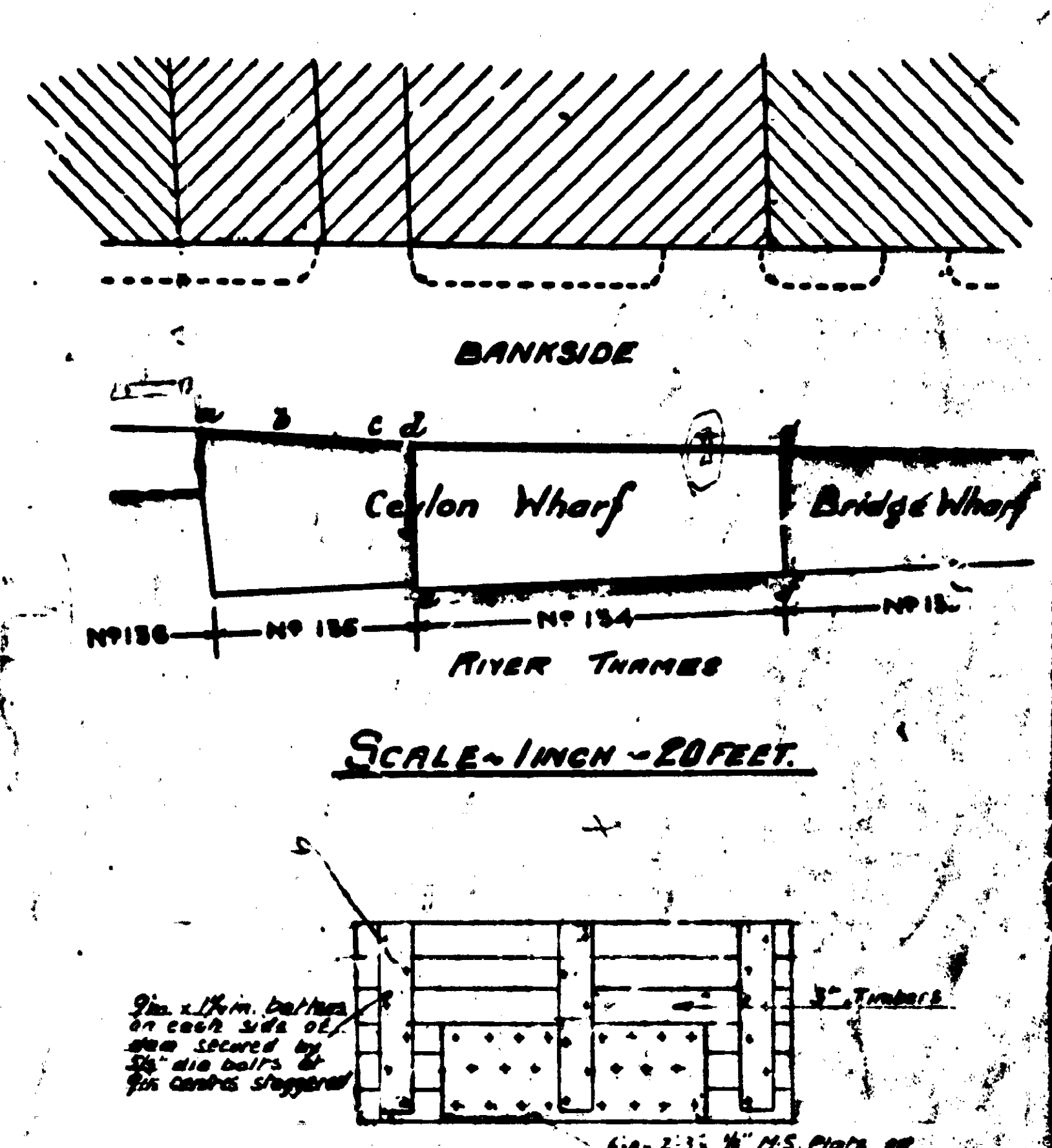
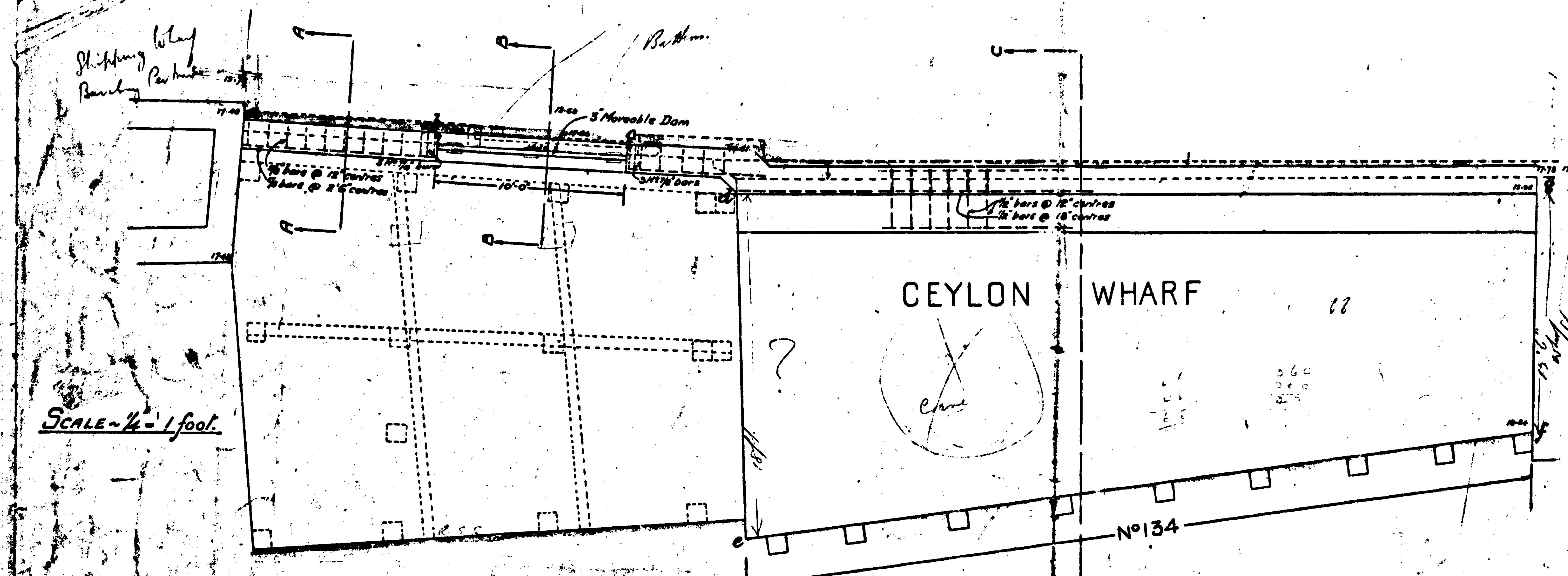


L.C.C.
THAMES FLOODS PREVENTION.

St Saviour's District No 134, 135.

27/12/32

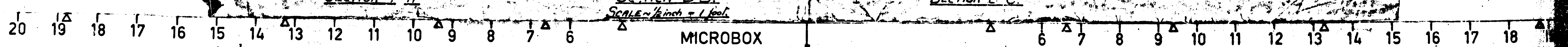


Block up or provide tidal stops to suitate if required.
 Repair and repaint river wall from A to B if required.
 Construct works from A to C including the movable dam from B to C in accordance with the details shown hereon to the satisfaction of the London County Council.
 Approximate estimate of cost (including provision for a temporary dam) £650.
 Maintain the movable dam from B to C to the satisfaction of the London County Council.

See T.F. 137/1932

OFFICE COPY
 Copies sent to: 9.6.31
 22.6.31
 13.8.31
 28.8.31

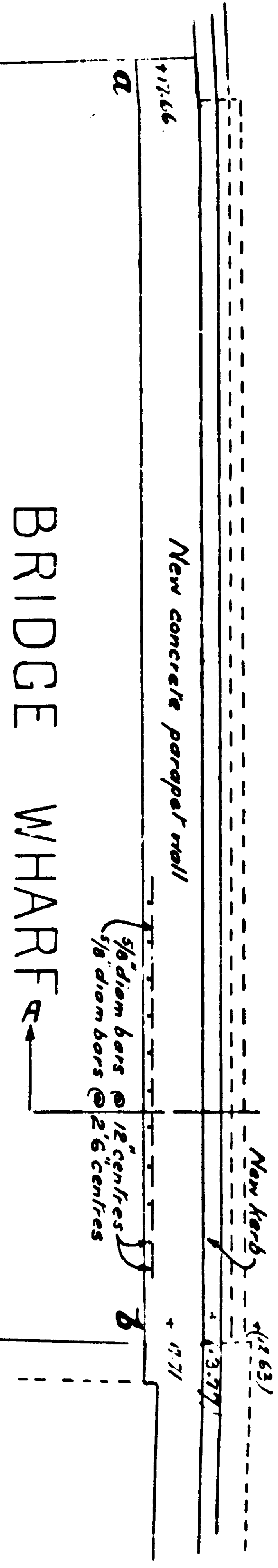
T.F. 1079
 1931
 May 1932



22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67

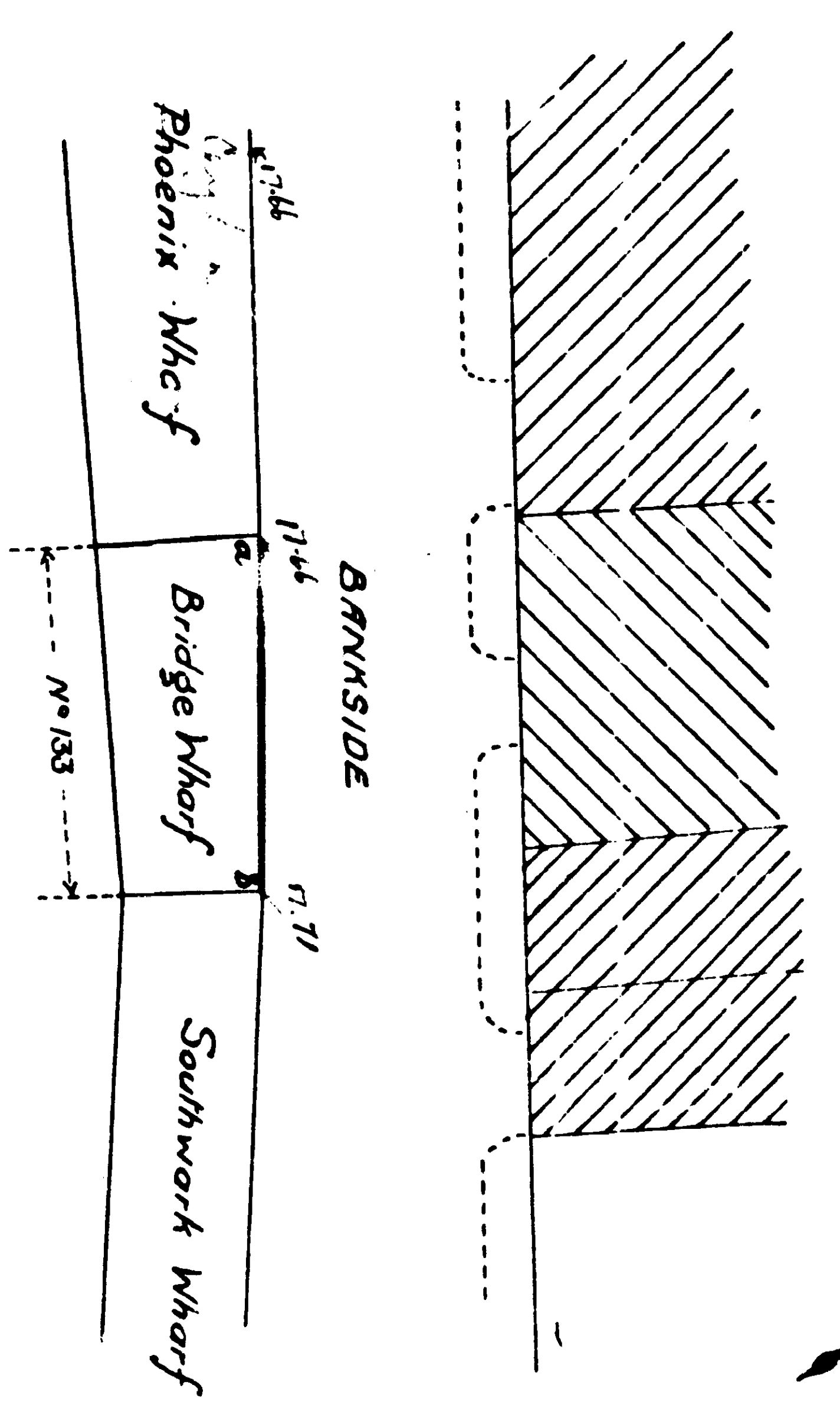
L.C.C.
THAMES FLOODS PREVENTION.
S^r Savours District No 133
 Construct the works from a to b in accordance with the details shown hereon to the satisfaction of the London County Council
 Before commencing the works erect a temporary Dam from a to b to be approved by the Council and maintain such Dam until the completion of the works to the satisfaction of the London County Council.

2594/72

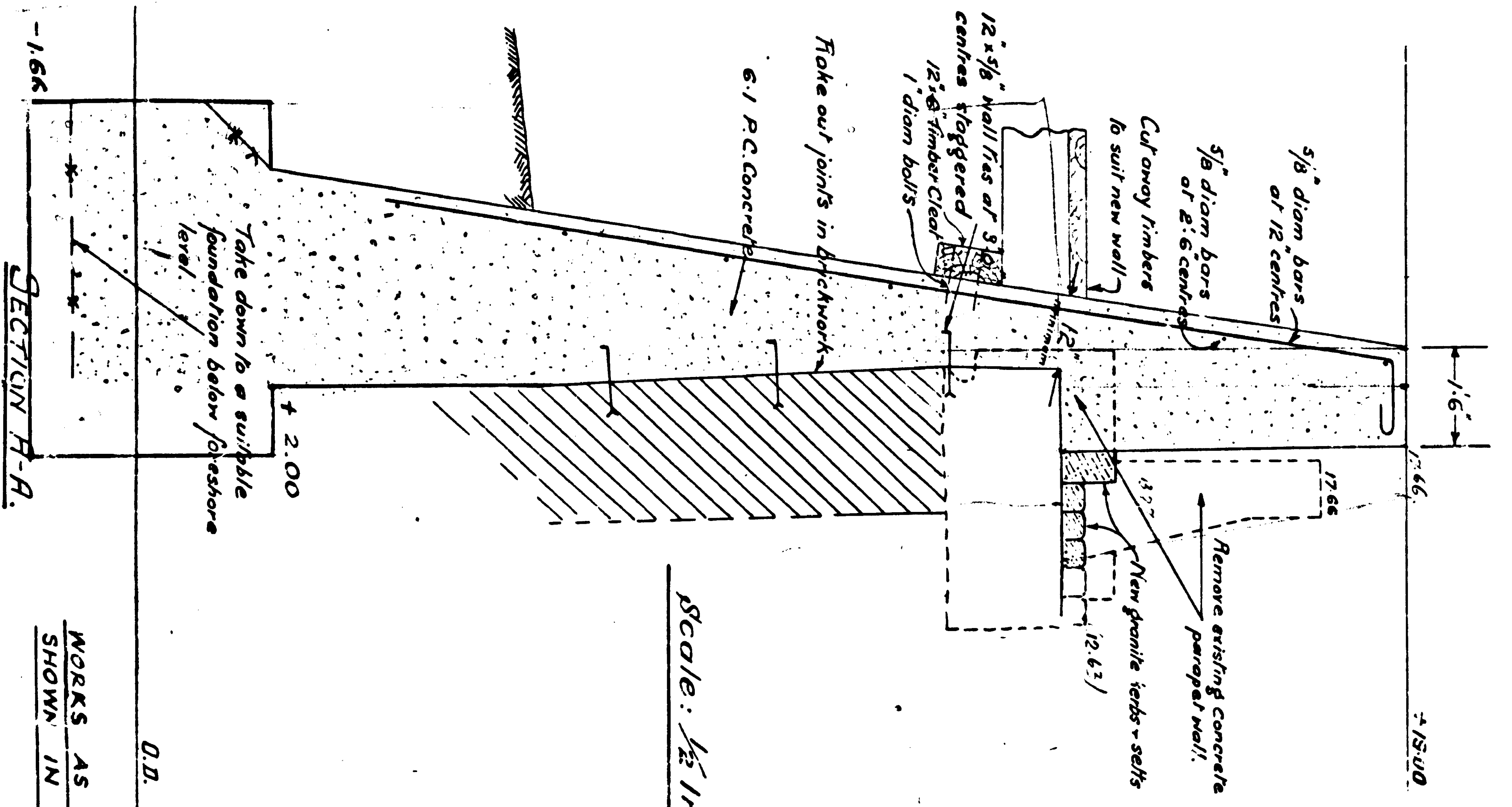


SCALE = 1/4" = 1 foot.

No 133
 PLAN



SCALE = 1 INCH = 20 FEET.



Scale: 1/2 Inch to 1 Foot.

WORKS AS EXECUTED
 SHOWN IN GREEN.

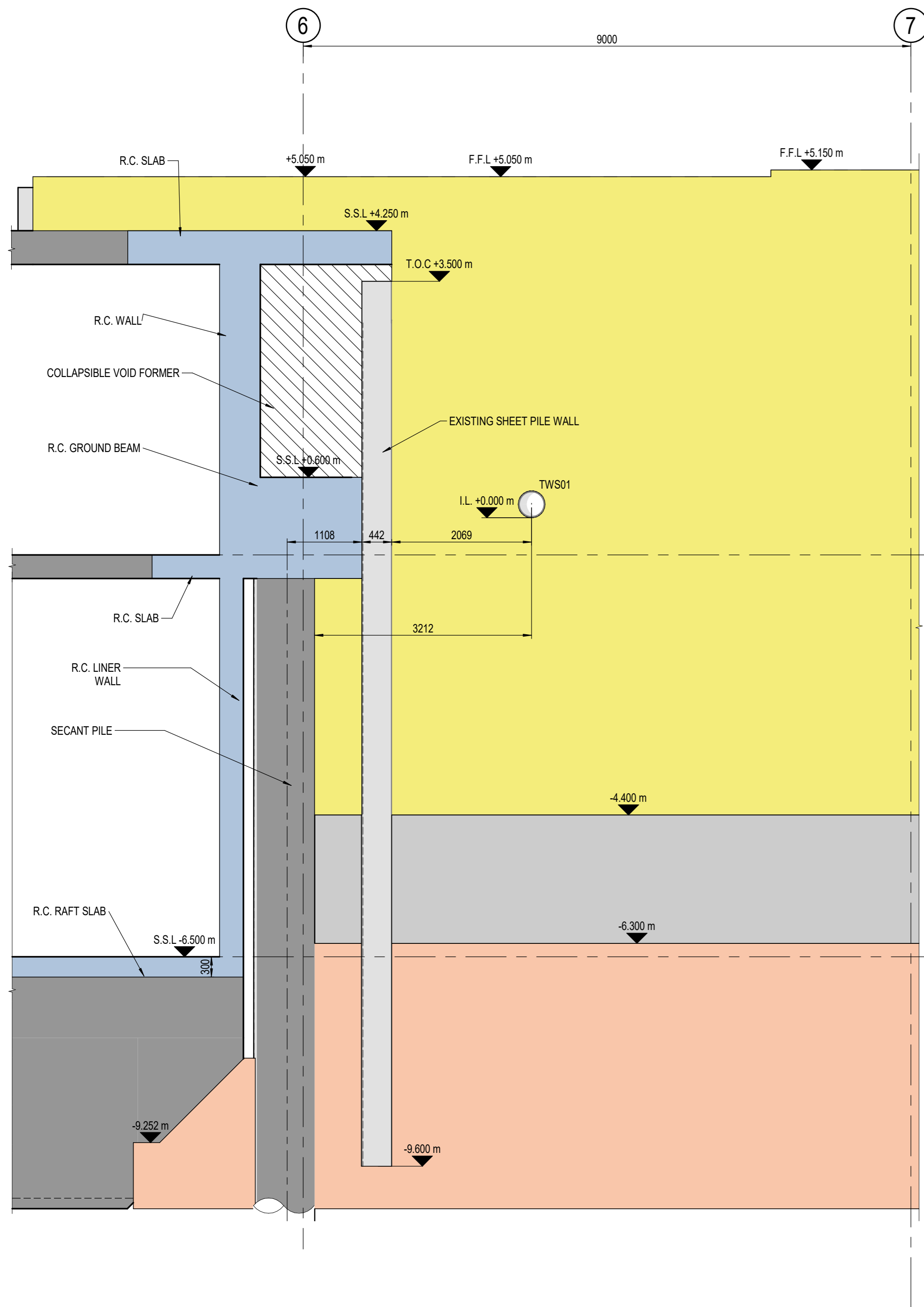
Leads in green taken 21.5.10.

T.F.
 2058
 1931
 April 1931.

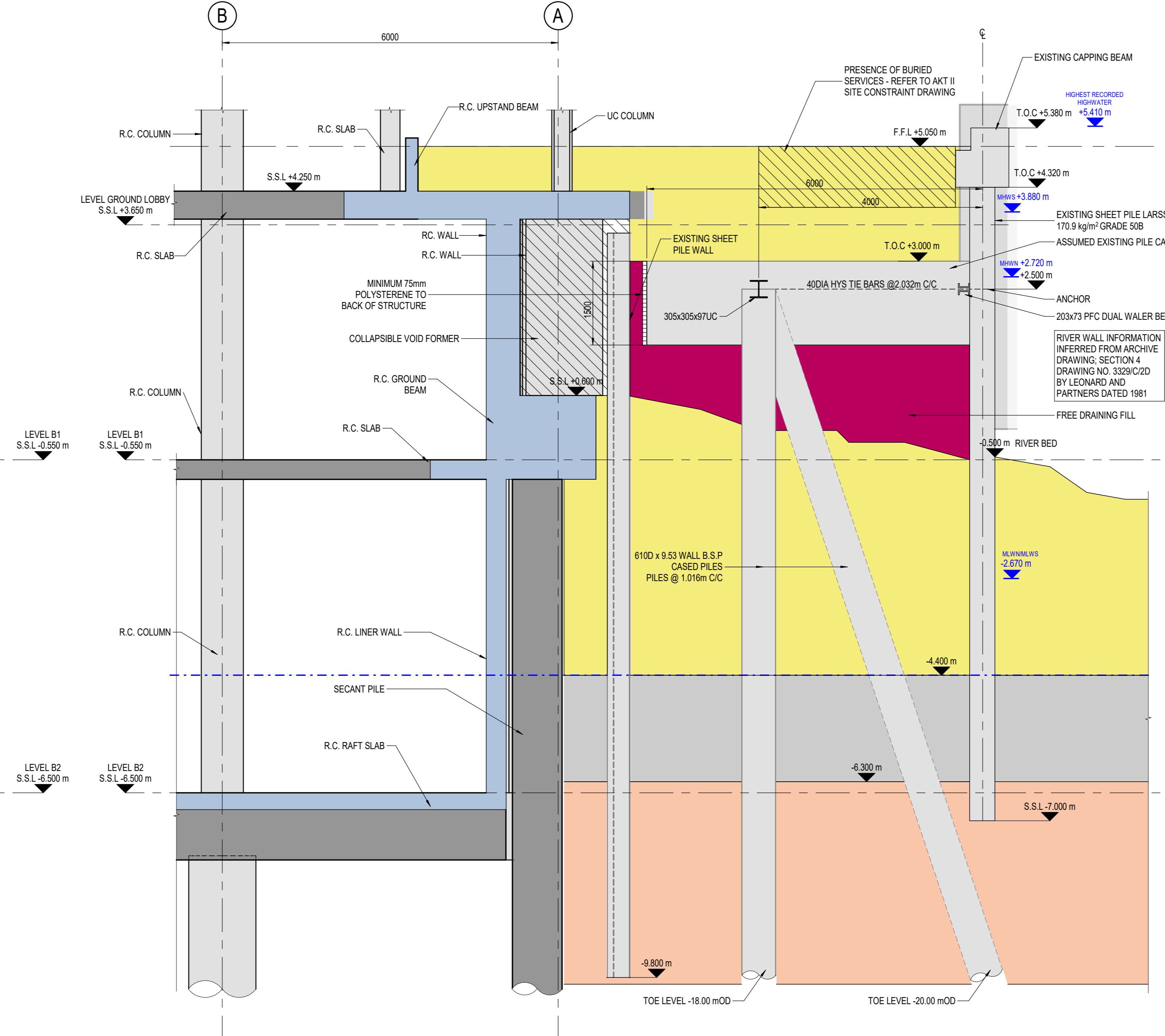
MICROBOX

14 13 12 11 10 9 8 7 6 5 4 3 2 1

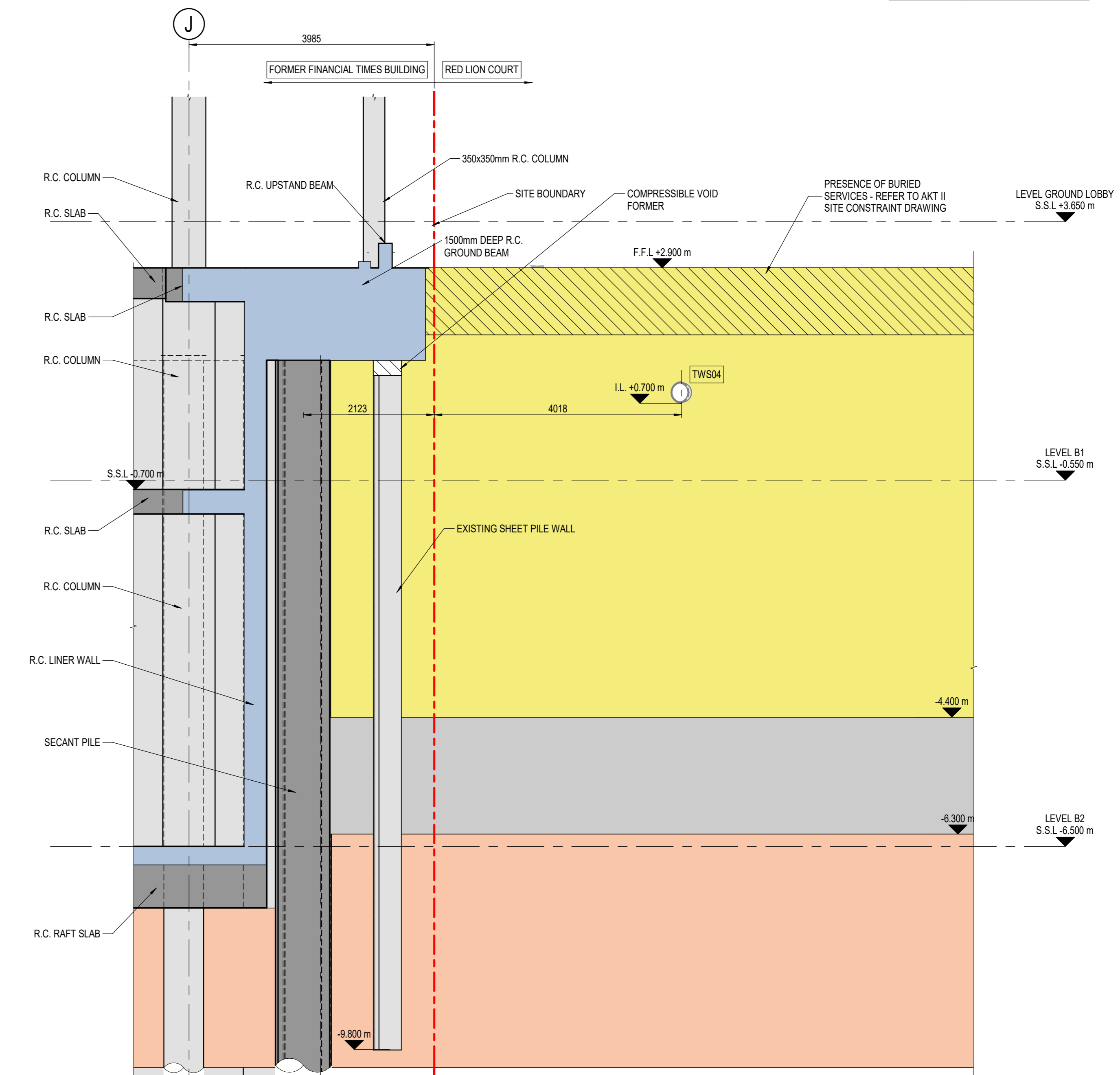
| GROUND PROPERTIES | |
|-------------------|-------------|
| | MADE GROUND |
| | GRAVEL |
| | LONDON CLAY |



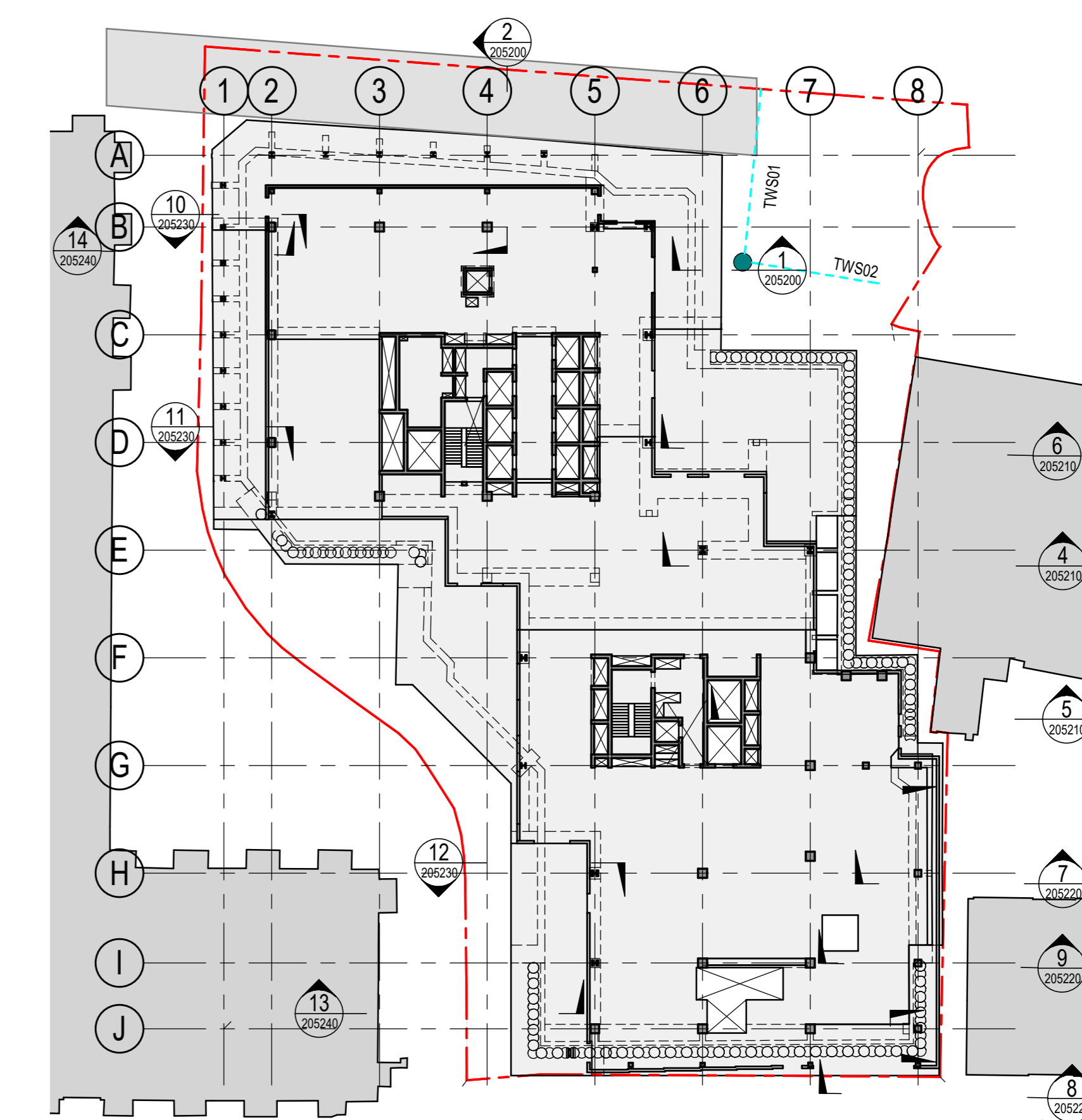
SECTION 1
1:50



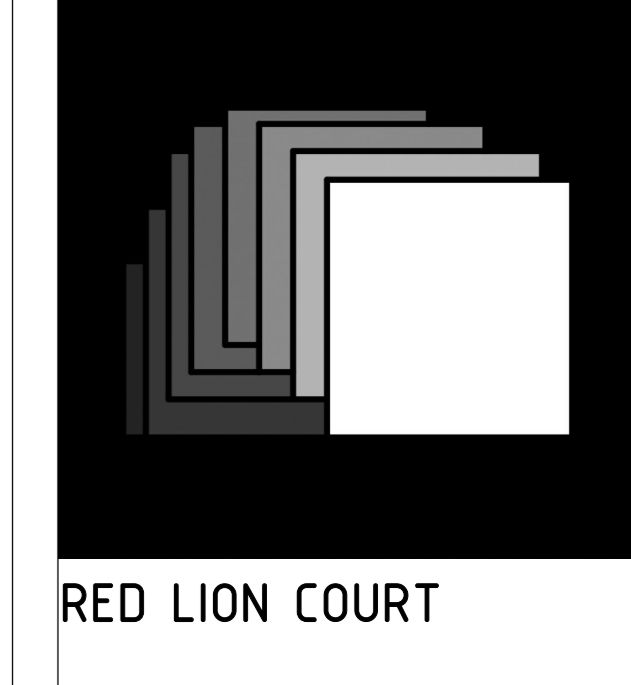
SECTION 2
1:50



SECTION 3
1:50



KEY PLAN
1:400



Landsec
akt II
H M
GT GARDNER & THEOBALD

KEY

NOTES:

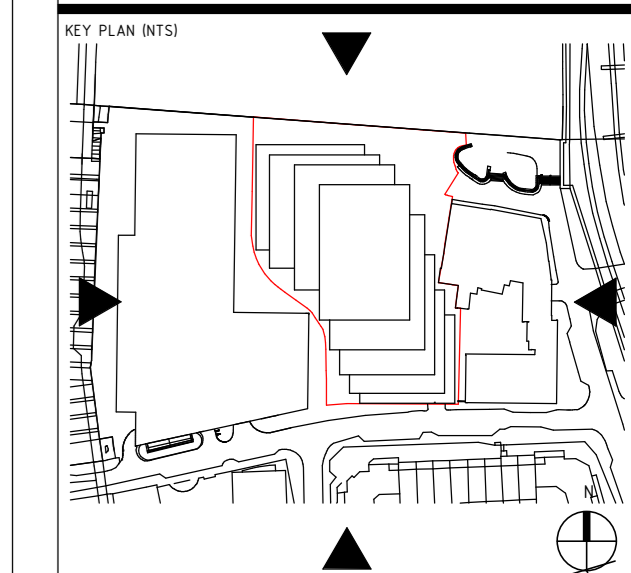
- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.

| REV | DATE | ISSUE |
|-----|-------|---------------------------|
| 01 | 06/23 | DRAFT STAGE 3 |
| 02 | 06/23 | STAGE 3 |
| 03 | 06/23 | EXISTING UTILITIES UPDATE |
| 04 | 07/23 | ISSUE FOR COMMENTS |
| 05 | 07/23 | STAGE 3 APPROVAL |

DRAWING PURPOSE
STAGE 3

DRAWN BY **CHECKED BY** **APPROVED BY**
 Author Checker Approver

NOTE:



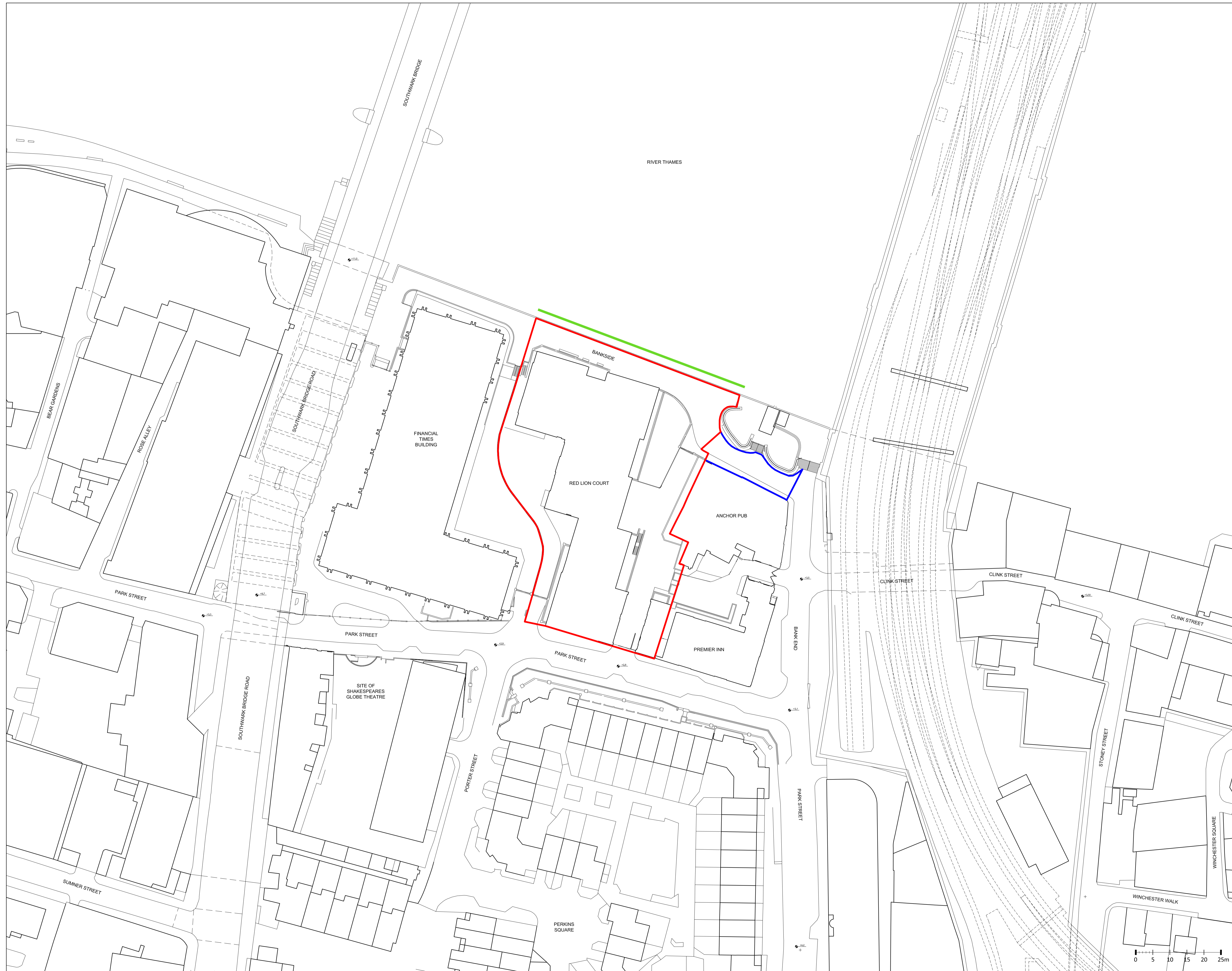
SHEET NUMBER
 8816_001-AKT-XXX-ZZZZ-DR-S-205200

PROJECT NO. **FORMAT** **REV**
 4378 A0 P05

DATE **SCALE**
 JUNE 22 50

SHEET TITLE
PROP. STR. PERIMETER SECTIONS SHEET 1

APPENDIX 02



RED LION COURT

46-48 PARK STREET
LONDON
SE1 9EQ, UK

CLIENT
LAND SECURITIES GROUP PLC
200 VICTORIA STREET
LONDON, EC1A 3BE, UK
T +44 (0) 20 7413 8000

AGENT
Landsec

ARCHITECT
BIG
1 FINCHBURY AVENUE
LONDON, EC2M 2PL, UK
T +44 (0) 20 3735 8000

LEGEND

- Planning Boundary
- Additional area outside the Planning Boundary which the applicant owns

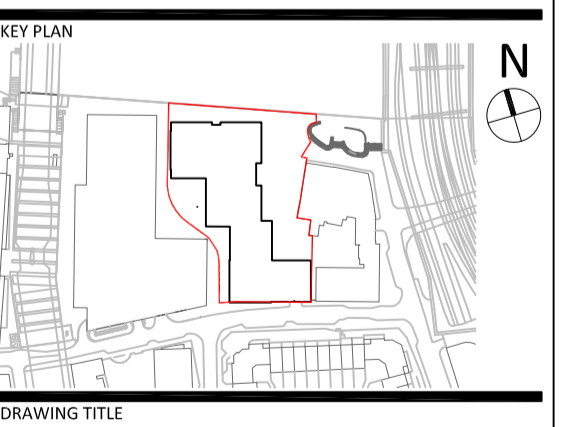
DRAFT

| REV. | DATE | ISSUE |
|------|------------|----------------------|
| - | 29/04/2022 | PLANNING APPLICATION |

NOTES

- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE BEFORE PROCEEDING WITH THE WORKS.
- THIS DRAWING IS TO BE USED IN CONSTRUCTION WITH RELEVANT CONSULTANTS AND SPECIALIST DRAWINGS.
- ANY DISCREPANCIES BETWEEN THE DRAWING AND ANY WRITTEN SPECIFICATION TO BE NOTICED IMMEDIATELY BY THE USER AND REPORTED TO THE ARCHITECT.
- THIS DRAWING IS THE PROPERTY OF BIG AND IS NOT TO BE REPRODUCED IN ANY FORM WITHOUT PRIOR WRITTEN CONSENT.
- IF IN DOUBT ABOUT ANY OF THE INFORMATION SHOWN ON THE DRAWING, PLEASE ASK.

PLANNING APPLICATION



EXISTING SITE BLOCK PLAN

PROJECT NO. 181000 SHEET NO. PA-10-SP

SCALE 1:500

FORMAT A1

DATE XX/04/2022

APPENDIX 03

soiltechnics

environmental • geotechnical • building fabric

Red Lion Court
46-48 Park Street
London

River Wall Survey

Cedar Barn, White Lodge, Walgrave, Northamptonshire NN6 9PY

t: 01604 781877

e: mail@soiltechnics.net

f: 01604 781007

w: www.soiltechnics.net

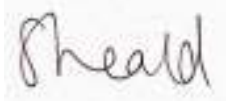
**Red Lion Court
46-48 Park Street
London
SE1 9EQ**

River Wall Survey

Soiltechnics Ltd. Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY.
Tel: (01604) 781877 Fax: (01604) 781007 E-mail: mail@soiltechnics.net

Report originators

Prepared
by

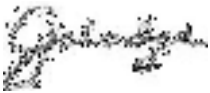


Sophie Heald B.Sc. (Hons), M.Sc., FGS

Sophie.heald@soiltechnics.net

Graduate Geo-environmental Engineer

Prepared
by

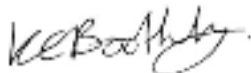


Georgina Lodge B.Sc. (Hons), FGS., AMIEnvSc

georgina.lodge@soiltechnics.net

Senior geo-environmental Engineer

Supervised
by



Karen Boothby B.Sc. (Hons) (Open), M.Sc.
Earth Sci. (Open), MIEnvSc

karen.boothby@soiltechnics.net

Associate director

Reviewed
by



Dr Matthew Hooper B.Sc. (Hons), M.Sc., Ph.D.,
MIEnvSc., FGS

matt.hooper@soiltechnics.net

Director



Aerial photograph of site



The approximate site boundary is highlighted in magenta.

Report status and format

| Report section | Principal coverage | Report status | |
|----------------|---------------------|---------------|----------|
| | | Revision | Comments |
| 1 | Introduction | | |
| 2 | Fieldwork | | |
| 3 | Summary of findings | | |

List of drawings

| Drawing | Principal coverage | Status | |
|---------|--|----------|----------|
| | | Revision | Comments |
| 01 | Plan showing river wall LIDAR scan and ultrasound thickness measurements | | |

1 Introduction

| | |
|-----|---|
| 1.1 | Objectives |
| 1.2 | Status of this report |
| 1.3 | Client instructions and confidentiality |
| 1.4 | Site location |
| 1.5 | Soiltechnics liability |

1.1 Objectives

1.1.1 This report describes a river wall survey carried out as part of investigations for a proposed development at Red Lion Court, Park Street, London.

1.1.2 The objectives of the investigations were as follows

- a) Determine the thickness of the existing sheet piled river wall using ultrasonic measurements.
- b) Undertake a visual inspection of the sheet pile condition
- c) Produce a scan of the wall using LIDAR and obtain appropriate measurements from the data.

1.2 Status of this report

1.2.1 This report is final based on current instructions.

1.3 Client instructions and confidentiality

1.3.1 The investigation was carried out in December 2021 and reported in May 2022 acting on instructions received through CPC Project Services LLP on behalf of our mutual client LS Red Lion Court Developer Limited.

1.3.2 This report has been prepared for the sole benefit of our above-named instructing client, but this report, and its contents, remains the property of Soiltechnics Limited until payment in full of our invoices in connection with production of this report.

1.4 Site location

- 1.4.1 The National Grid reference for the site is 532410,180440. The surveyed section is shown below which extends between Southwark Road Bridge and Cannon Street Railway Bridge.



1.5 Soiltechnics liability

- 1.5.1 Soiltechnics disclaims any responsibility to our Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence in accordance with the terms of our contract, taking account of the manpower, resources, investigations and testing devoted to it by agreement with our Client. This report is confidential to our Client and Soiltechnics accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

2 Fieldwork

| | |
|-----|--|
| 2.1 | General |
| 2.2 | Ultrasonic measurements |
| 2.3 | Visual inspection and photographic records |
| 2.4 | Measurement of anchor brackets |

2.1 General

2.1.1 Fieldwork was undertaken on 8th December 2021 and comprised an inspection of the river wall using various methods.

2.2 Ultrasonic measurements

2.2.1 An ultrasonic thickness meter model PCE-TG 50, manufactured by PCE Instruments was used to measure the thickness of steel in the sheet piles. The equipment includes an integrated calibration block. With calibration carried out prior to measurements of the set of three readings.

2.2.2 A coupling gel was applied to the pile. The probe directs ultrasonic waves through the coupling gel into the material to be tested to determine the thickness. Local corrosion can impact measurements.

2.2.3 The instrument displays measured thickness to an accuracy of 0.1mm.

2.3 Visual inspection

2.3.1 A visual inspection was undertaken along the length of the river wall from the foreshore of the River Thames at low tide. The objective of the inspection was to identify damage and areas of significant corrosion. Areas of noted corrosion are indicated on Drawing 01.

2.4 LIDAR scan

2.4.1 LIDAR scanning was undertaken to produce a 3D scan of the wall.

3 Summary of findings

| | |
|-----|---------------------------|
| 3.1 | General Wall Construction |
| 3.2 | Pile Condition |
| 3.3 | Concrete Capping Beam |
| 3.4 | Tie rods |

3.1 General wall construction

3.1.1 The river wall is formed of steel sheet piles. Anchor tie rod ends are present in all recessed piles from the west (Southwark Bridge) for approximately two thirds of the wall length. No tie rods were visible in the eastern section approximately as below.



3.1.2 A general view along the wall looking west is shown below.



Photograph 3.1 – General view along the sheet piled wall

3.2 Pile condition

3.2.1 The sheet piles appeared in generally good condition but some areas of expected decay were observed. These are recorded on Drawing 01 and detailed below. No significant faults, defects, buckling or failure of the sheet piles was observed during our survey.

3.2.2 General corrosion

3.2.2.1 Piles were generally slightly corroded with algae as expected. To the east, piles were slightly more visibly corroded, particularly at the base as pictured below.



3.2.3 Delamination

3.2.3.1 Small areas of delamination (loss of outer layer of steel) as pictured below:



3.2.4 Bubbling of surface

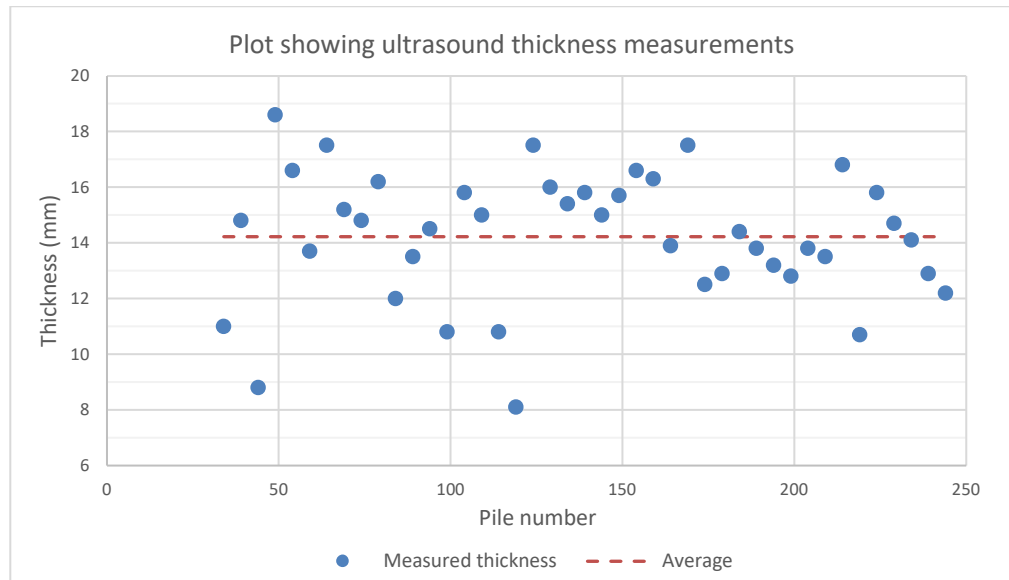
- 3.2.4.1 Bubbling at the surface, suggestive of possible sub surface corrosion/expansion, was observed within lower sections of piles particularly to the east of the site as pictured below.



3.3 Sheet Pile Thickness

3.3.1 A total of 43no' ultrasonic measurements were taken along the wall profile. The measurements are tabulated on Drawing 01.

3.3.2 The average measured steel thickness onsite was 14.2mm, with a range of 8.1mm – 18.6mm. Test results are represented graphically below.



3.4 Capping beam

3.4.1 The concrete capping beam was observed in generally good condition, with no obvious signs of cracking or damage.