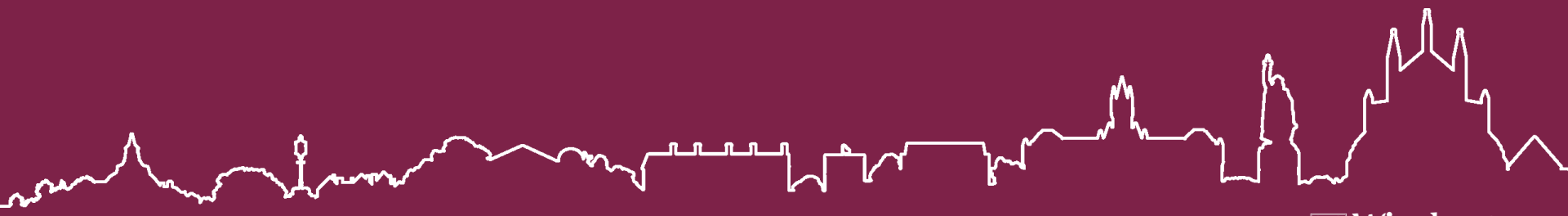
# CENTRAL WINCHESTER REGENERATION

## Archaeology Day

## 6th October 2021



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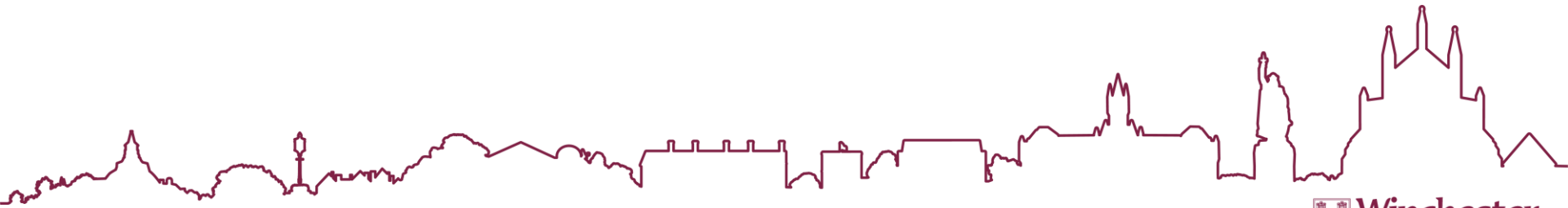
# AGENDA

- Introduction
- Update on findings
- Q&A
- Close



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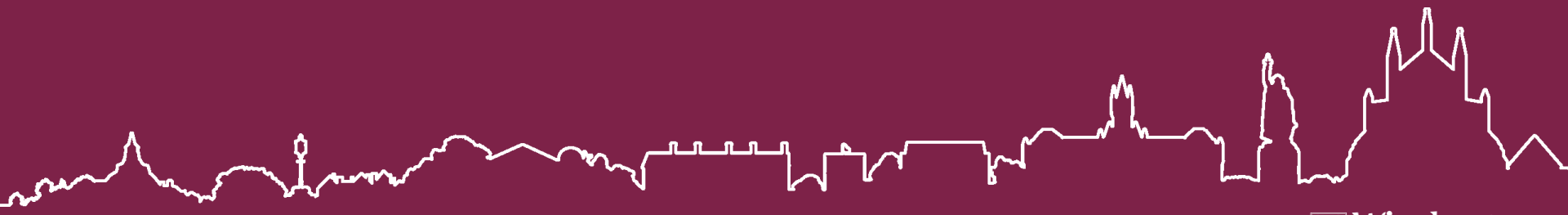
# Introduction



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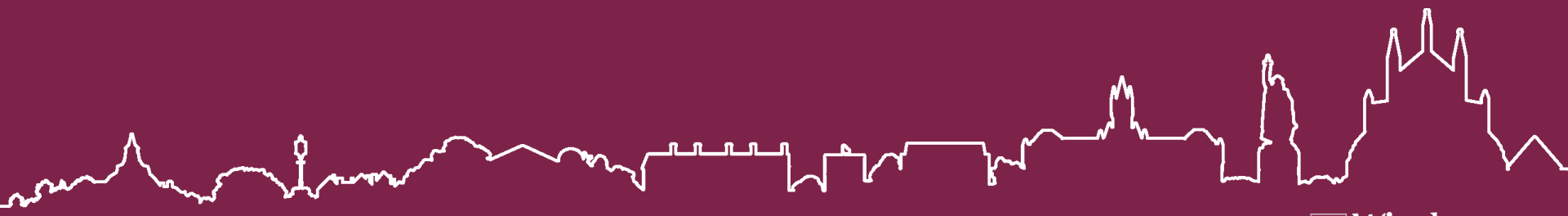
# UPDATE



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# The geoarchaeology of the Central Winchester Redevelopment site: September 2020–September 2021

Prof Keith Wilkinson
ARCA geoarchaeology
University of Winchester

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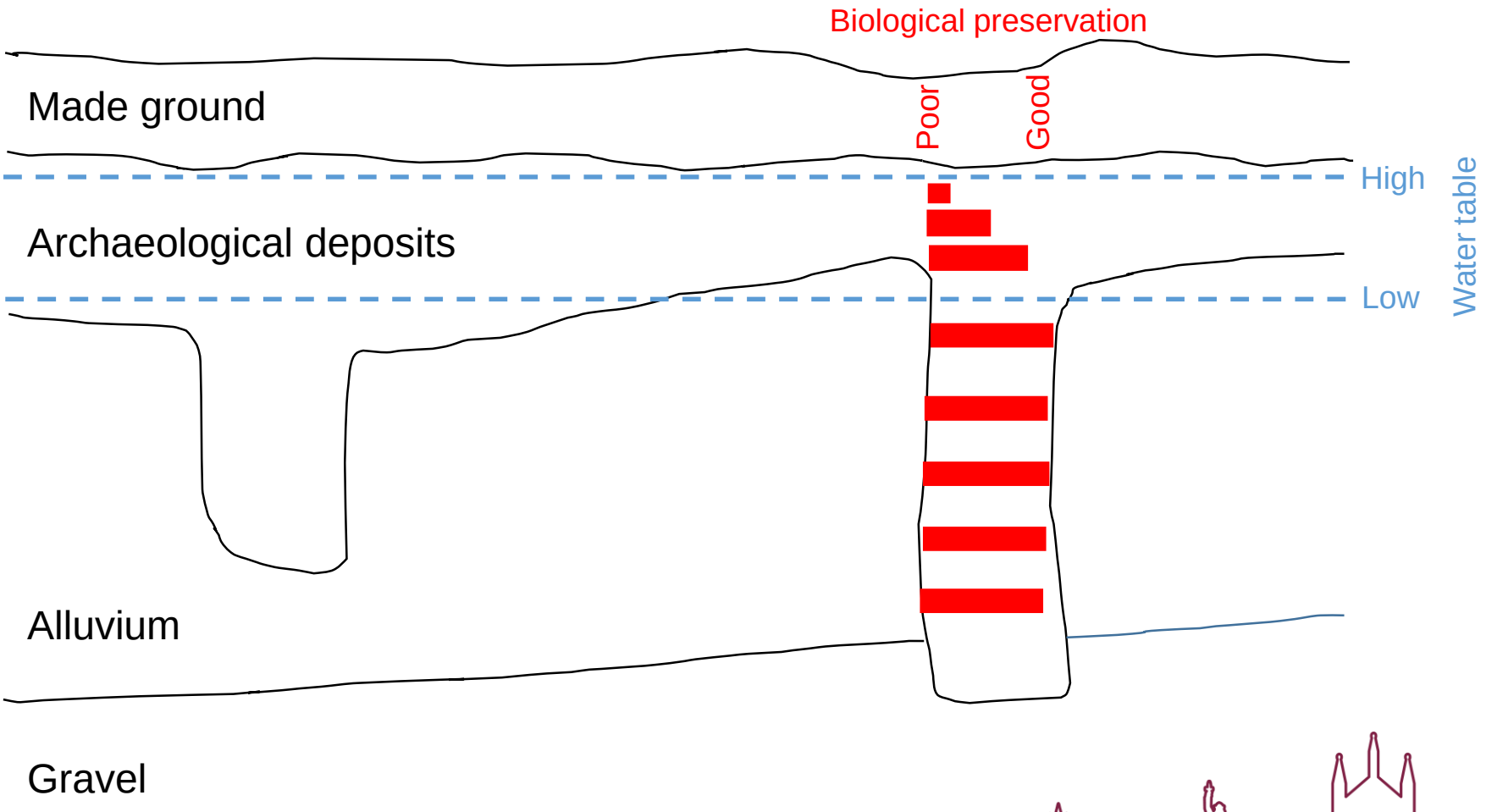
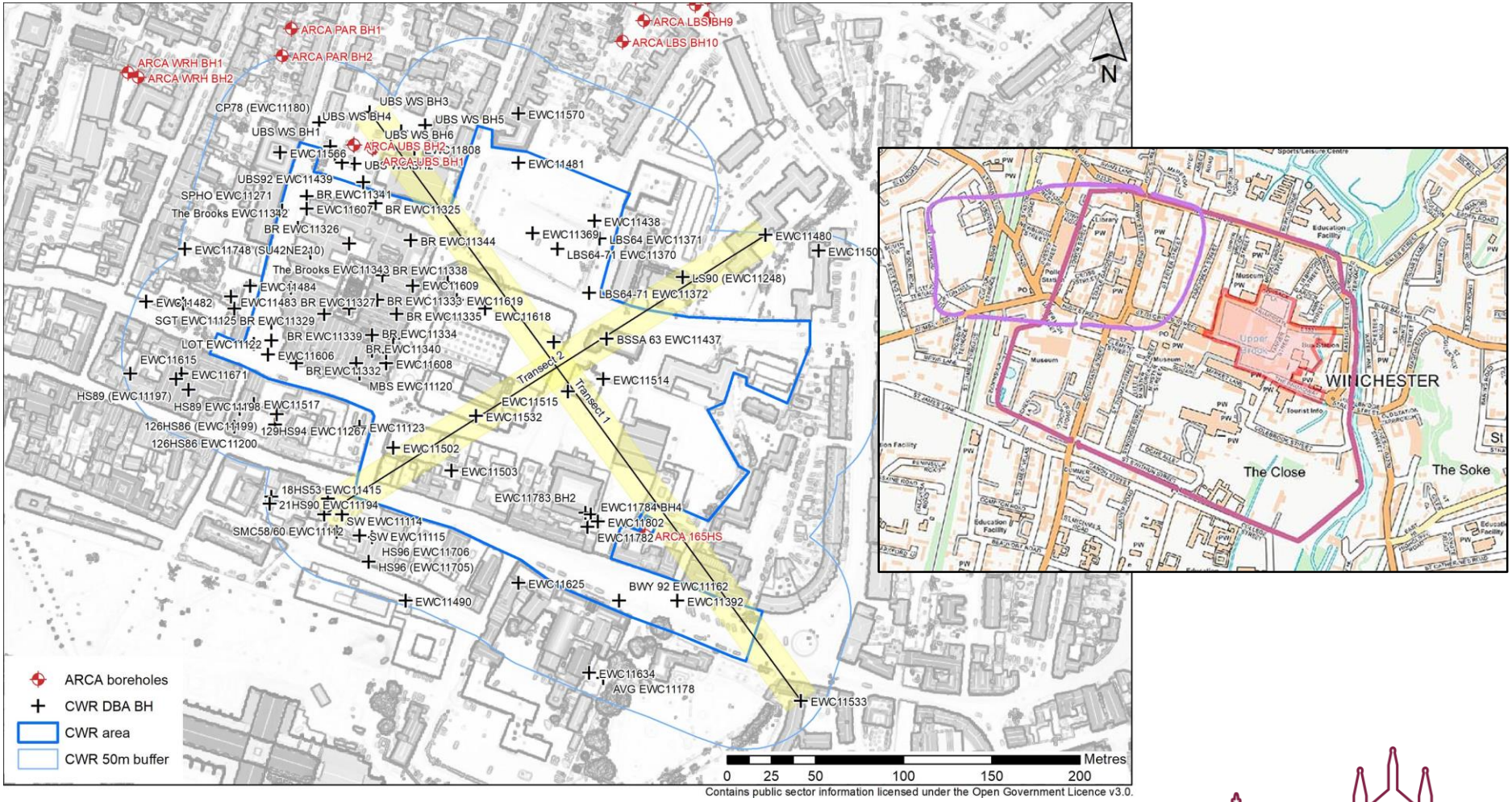
# AIMS OF THE GEOARCHAEOLOGICAL STUDY

- Reconstruct the stratigraphic sequence underlying the CWR site;
- Determine the hydrological context of the site;
- Assess biological preservation in the deposits;
- Provide baseline information on the nature of biological preservation and the hydological environment of the site.

# HYDROLOGY AND PRESERVATION



# DESK-BASED RESEARCH: SUMMER 2020



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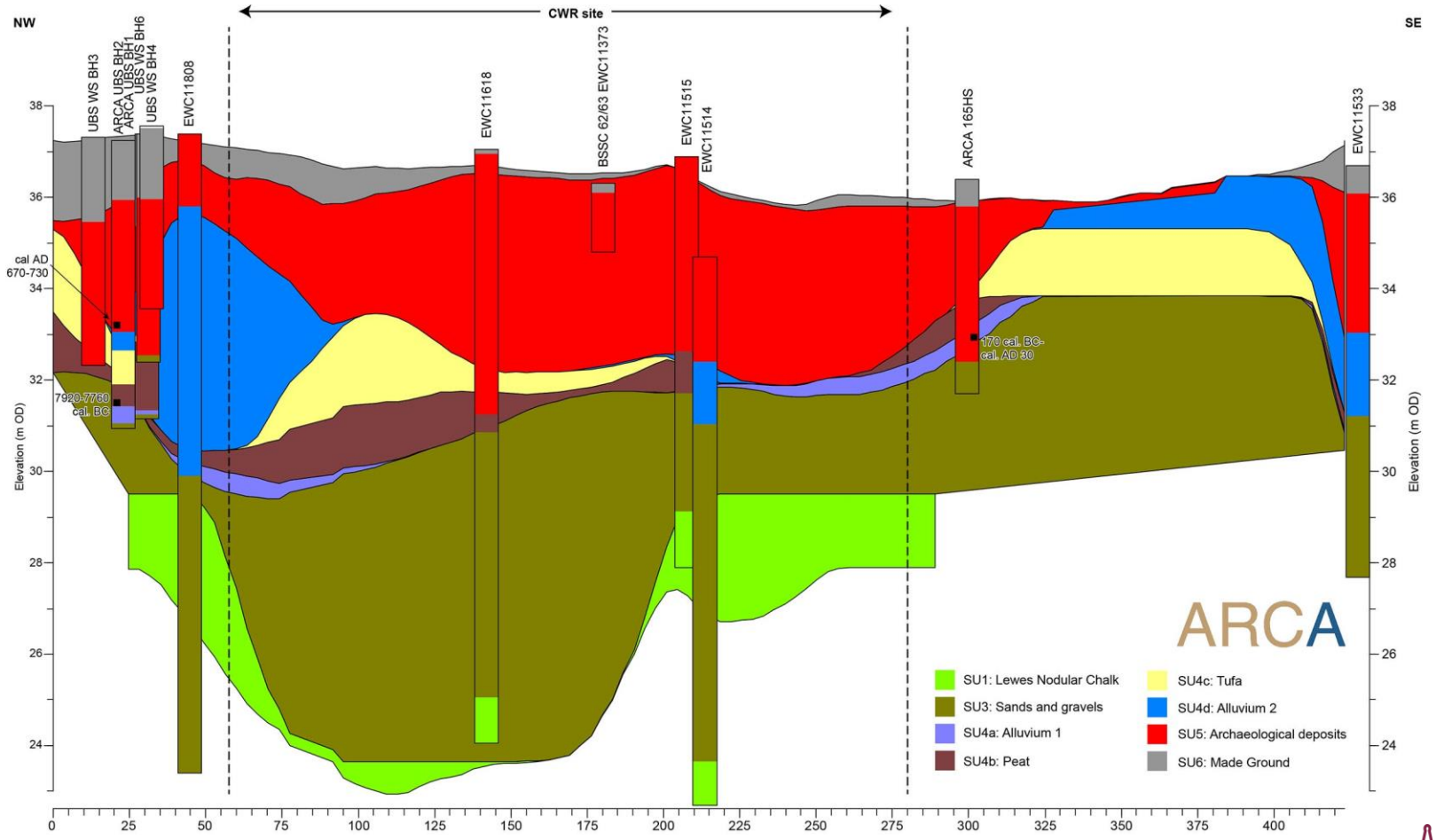
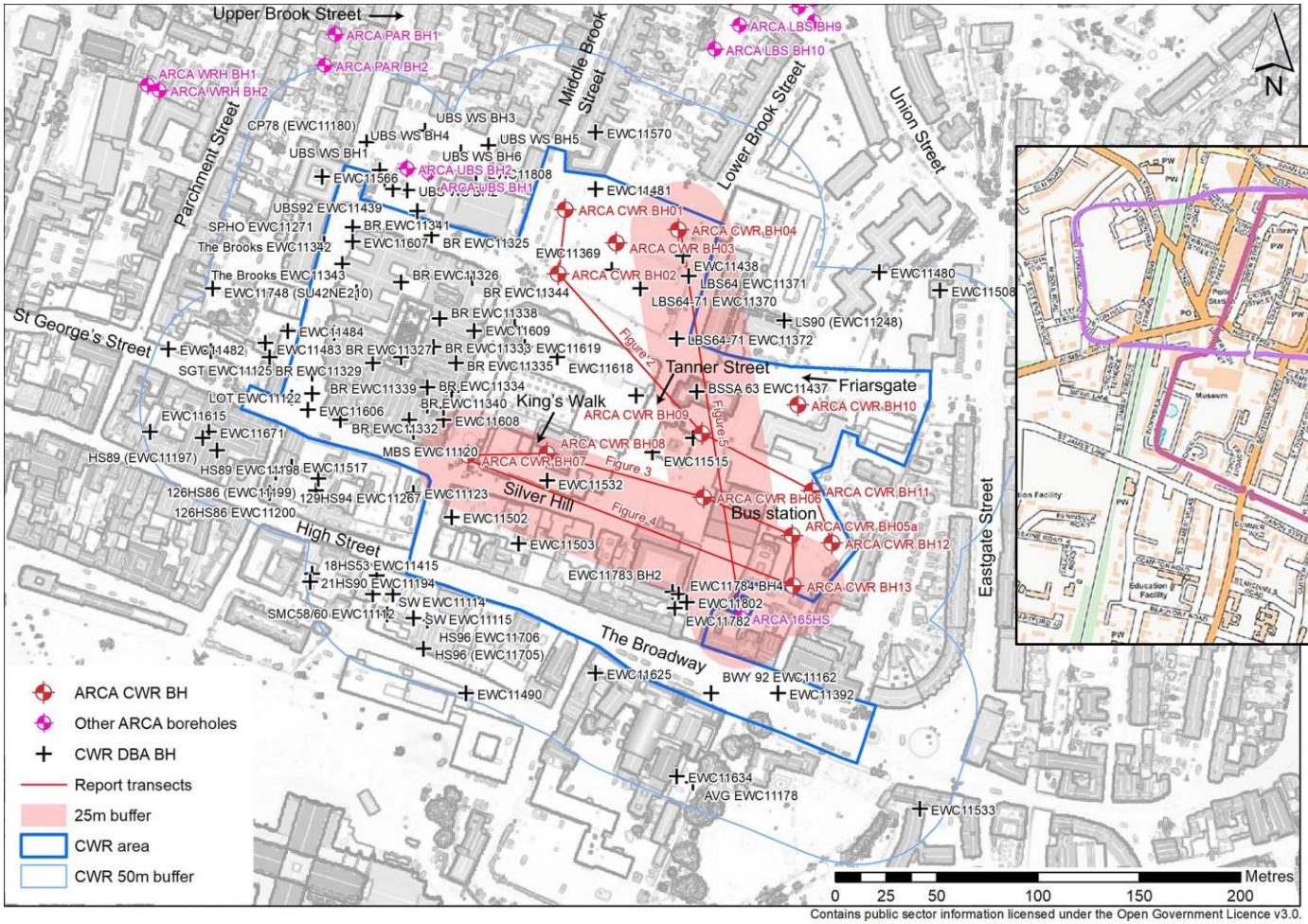
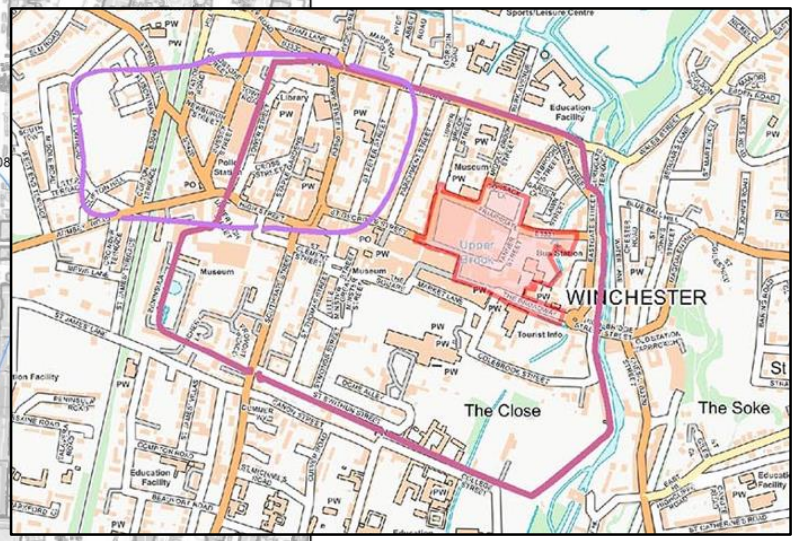


# FIELDWORK: AUGUST–SEPTEMBER 2020

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# FIELDWORK: AUGUST–SEPTEMBER 2020

# LABORATORY EXAMINATION: SEPTEMBER 2020–MARCH 2021


BH08


BH02

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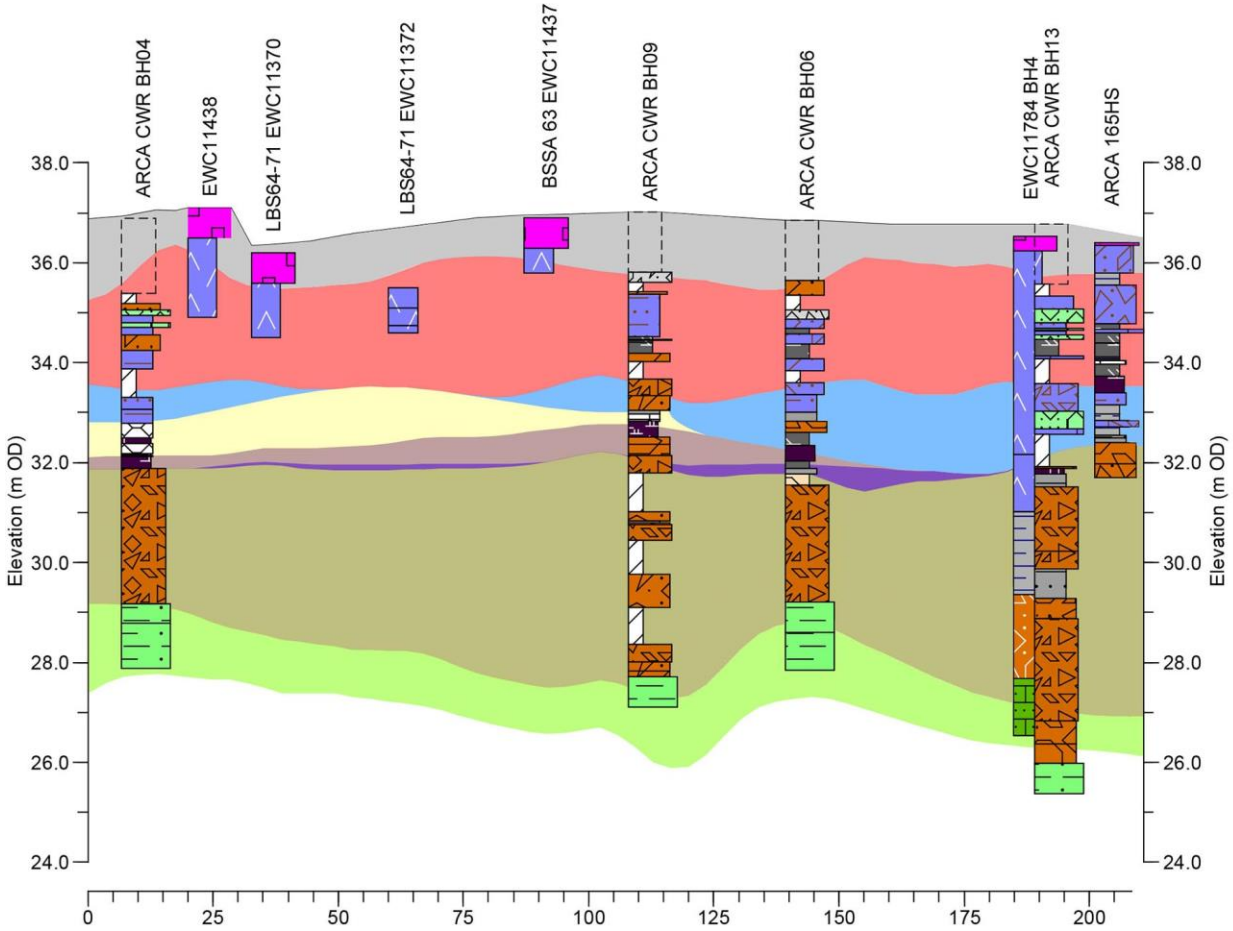
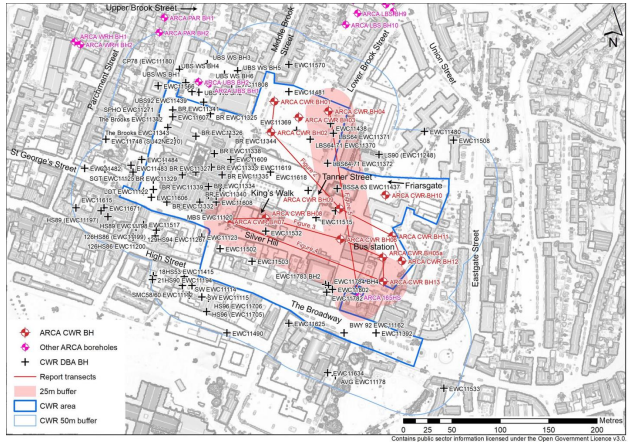
# RESULTS: STRATIGRAPHY




Archaeological test pit

SU-6: Overburden

SU-5: Archaeological deposits

SU-4d: Alluvium 2

SU-4c: Tufa

SU-4b: Peat

SU-4a: Alluvium 1

SU-3: Sands and gravels

SU-1: Chalk

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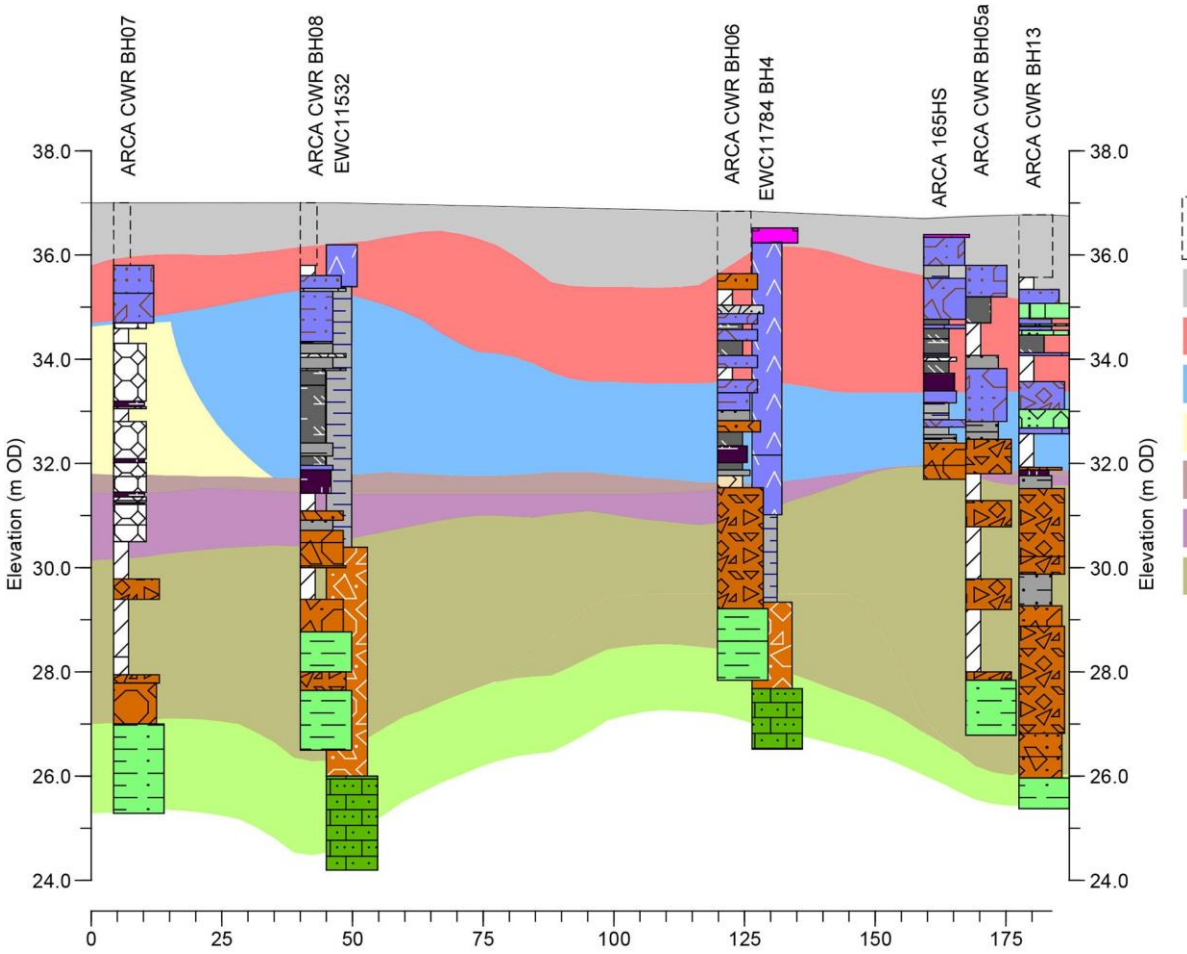


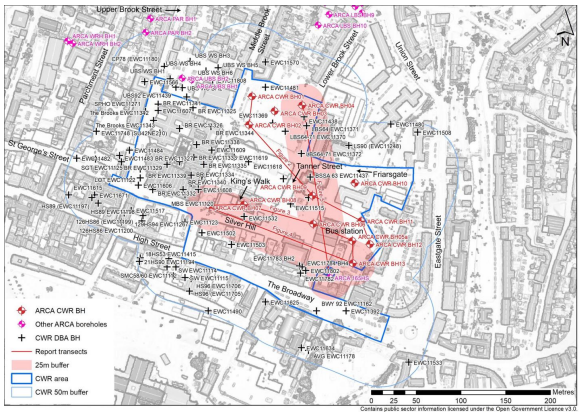


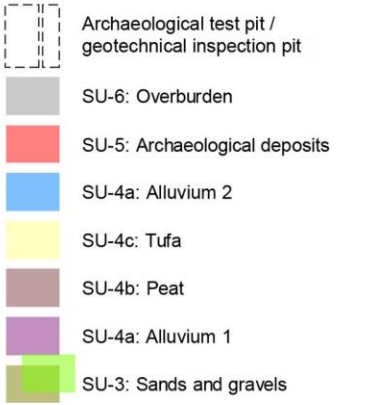

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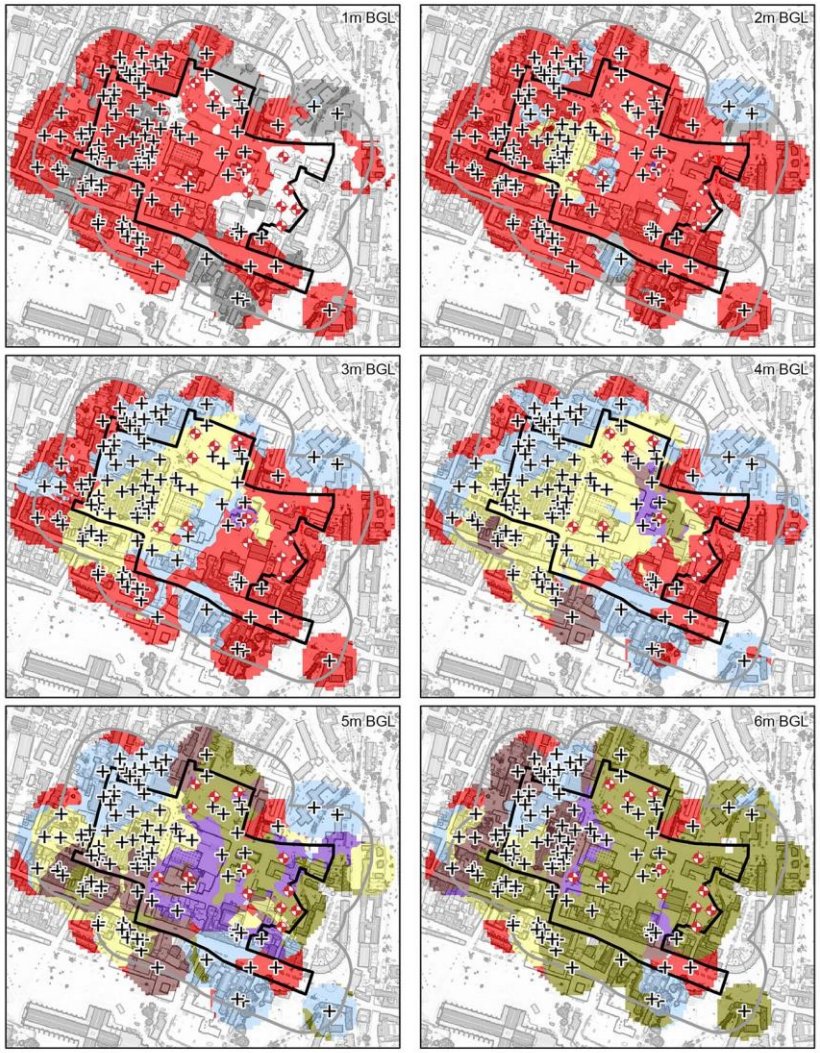


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# RESULTS: SEDIMENTOLOGY AND GEOCHEMISTRY

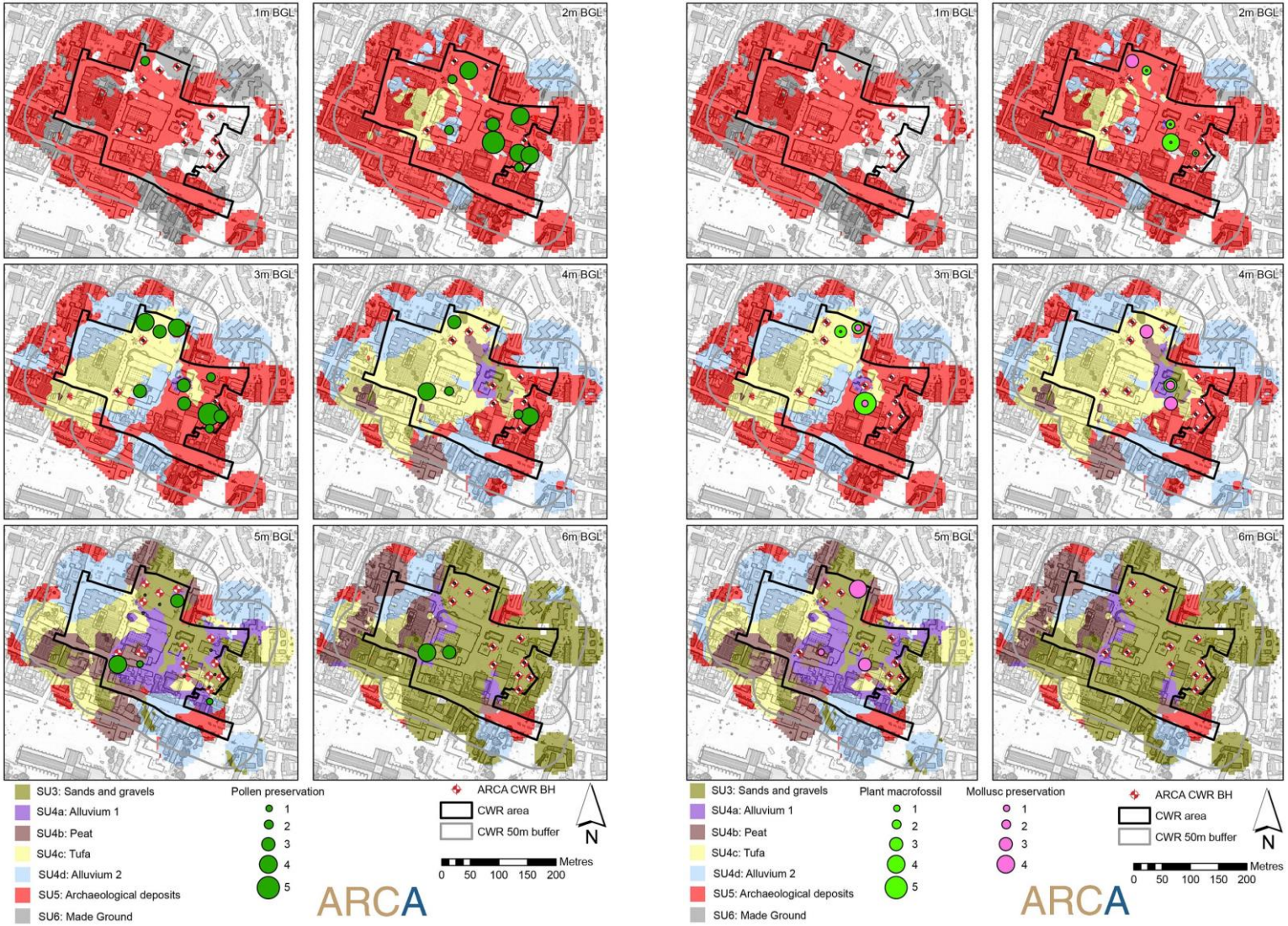
| SU | Samples | Moisture (%) | $\chi^{lf}$ SI units x$10^{-8}$ $m^3$ $kg^{-1}$ | LOI 550 (%) | pH |
|---|---|---|---|---|---|
| 1 | 12 | 16.46±2.04 | 0.91±0.74 | 1.62±0.69 | 9.36±0.13 |
| 3 | 7 | 17.05±8.52 | 32.51±56.40 | 4.76±5.93 | 8.70±0.72 |
| 4a | 8 | 26.64±6.42 | 26.36±32.67 | 6.84±3.73 | 8.90±0.18 |
| 4b | 24 | 60.83±14.82 | 3.01±6.81 | 48.17±30.45 | 8.54±0.37 |
| 4c | 25 | 49.571±1.54 | 0.90±1.51 | 11.79±10.68 | 8.77±0.31 |
| 4d | 47 | 37.89±11.44 | 35.56±80.98 | 13.38±17.33 | 8.82±0.27 |
| 5 | 67 | 41.45±12.13 | 73.48±134.81 | 14.53±9.73 | 8.64±0.23 |

NB: SU1 = Lewes Nodule Chalk Formation, SU3 = River Terrace Deposits 1, SU4a = Alluvium 1, SU4b = Peat, SU4c Tufa, SU4d = Alluvium 2, SU5 = Archaeological strata

| SU | Bal. (%) | Ca (%) | Si (%) | Fe (%) | K (%) | P (%) |
|---|---|---|---|---|---|---|
| 1 | 59.76±1.61 | 36.70±1.91 | 2.02±0.64 | 0.40±0.17 | 0.27±0.07 | 0.14±0.06 |
| 3 | 68.90±4.29 | 21.27±9.39 | 7.26±5.21 | 1.09±0.55 | 0.41±0.28 | 0.18±0.06 |
| 4a | 68.08±4.03 | 21.51±8.14 | 6.89±3.34 | 1.19±0.60 | 0.75±0.40 | 0.31±0.21 |
| 4b | 80.04±11.55 | 14.02±13.77 | 3.19±4.84 | 1.09±0.77 | 0.29±0.36 | 0.16±0.04 |
| 4c | 61.65 4.75 | 36.71 4.91 | 0.55±0.77 | 0.47±0.87 | 0.08±0.07 | 0.20±0.16 |
| 4d | 65.74 6.07 | 27.54 7.83 | 4.06±2.65 | 0.93±0.51 | 0.39±0.23 | 0.36±0.36 |
| 5 | 67.06 4.85 | 23.94 4.65 | 4.67±1.41 | 1.24±0.55 | 0.20±0.13 | 0.57±0.46 |

NB: SU1 = Lewes Nodule Chalk Formation, SU3 = River Terrace Deposits 1, SU4a = Alluvium 1, SU4b = Peat, SU4c Tufa, SU4d = Alluvium 2, SU5 = Archaeological strata

# BIOLOGICAL PRESERVATION



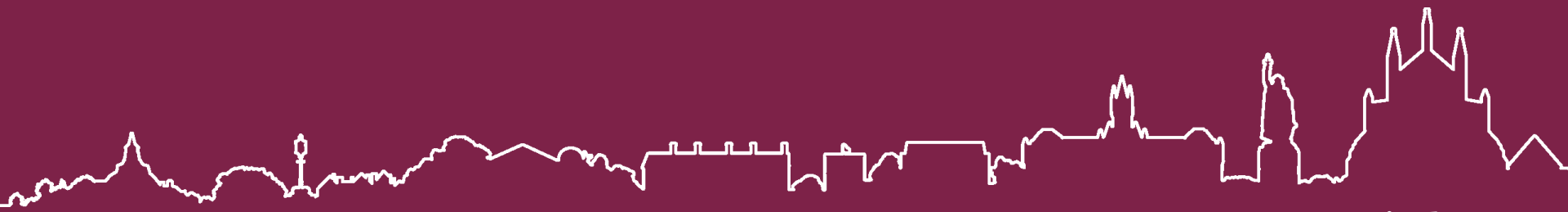
# CONCLUSIONS

- Western part of the site contained the Itchen channel in the Early and/or Middle Holocene;
- The site coincided with the channel and floodplain of the Itchen in the Late Holocene;
- Flooding of the CWR continued to occur after the foundation of Venta Belgarum;
- Archaeological deposits formed from the Roman period onwards. They are thickest on the east of the site;
- Biological preservation is good throughout the archaeological deposits.

# NEXT STEPS

- Final Stage 1 hydrological measurements collected on 29 September;
- Final Stage 1 geoarchaeology report due later in the autumn (integrating hydrology, stratigraphy, biology and archaeology as evidenced in the boreholes);
- Possibility of Stage 2 hydrological and geoarchaeological study.

# Q&A



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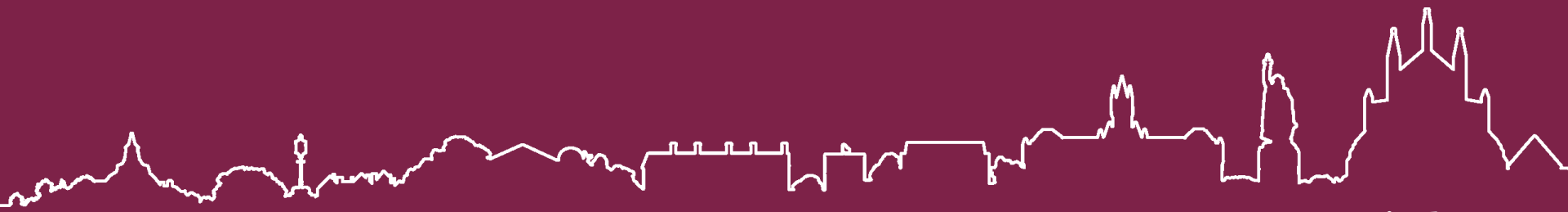
# Close



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