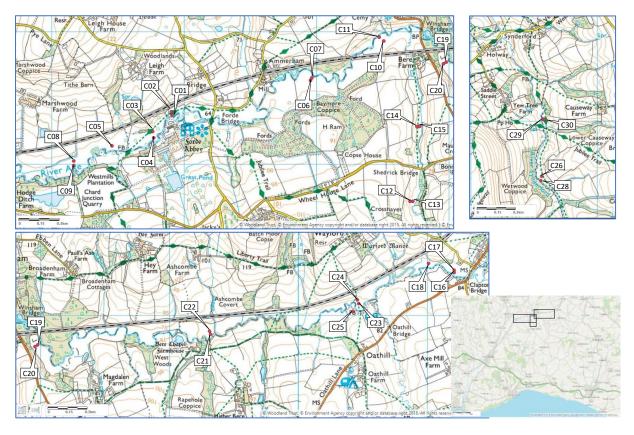
River Axe Soil Profile Cores



Figures: Soil core locations

Location Right floodplain in line with upstream of Forde Abbey

Core Type Floodplain

Date and Time 19 July 2023 11:15-13:42

Grid location ST 35906 05368 (acc 4m) ST 35908 05371 (acc 4m)

2m Terrain Elevation 63.17mAOD → Gravel elevation 60.08mAOD





252cm

262cm

275cm

290cm

310cm

325cm

(60.08mAOD)

280cm

Sandy silt (golden brown colour)

Sandy silt – with organic matter and Fe oxide brown stains

Sandy silt - clay increasing

Grey clay

grey clay – darker

grey clay – sandy organic matter dominating

Loam Hazel Nut

Loam with coarse sand

Loam with coarse sand and woody material Wet silty sand with woody material, above gravel.

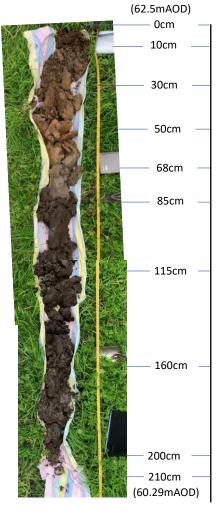
Location Far right floodplain, in line with u/s of Forde Abbey

Core Type Paleochannel (linear depression)

Date and Time 19 July 2023 14:55 – 16:20

Grid location ST 35900 05394 (acc 4m) ST 35894 05396 (acc 6m)

2m Terrain Elevation 62.5mAOD → Gravel elevation 60.29mAOD



Topsoil – clayey silt Clayey silt

Silty sand, with black organic material

Clay with brown (golden) Fe oxide streaks

Grey (slight grey brown) clay)

Loam

Loam with a few wood fragments, Increasingly wet

Wet loam, with increasing wood fragments (light brown)

Wood fragments (light brown) in silty clay Chert Layer

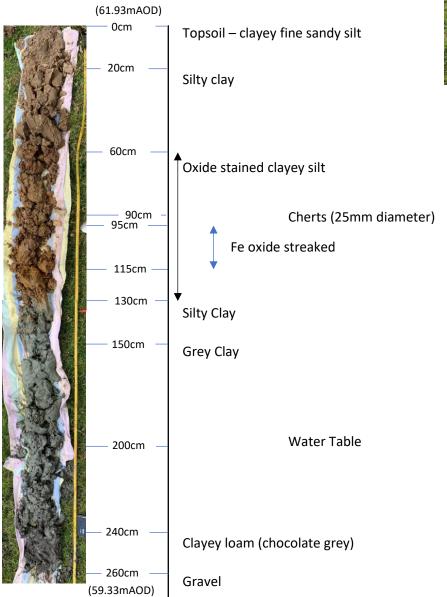
Location Mid-right floodplain, 10-20m u/s of Sawmill Cottage

Core Type Paleochannel

Date and Time 20 July 2023 10:04 – 11:59

Grid location ST 35760 05248 (acc 4m) ST 35761 053246 (acc 6m)

2m Terrain Elevation 61.93mAOD → Gravel elevation 59.33mAOD





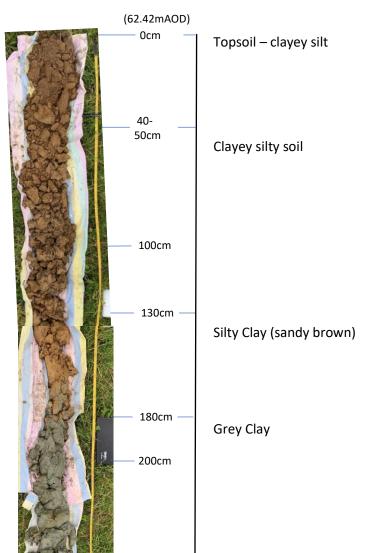
Location R floodplain, 8m into field, 10-20m u/s of Sawmill Cottage

Core Type Floodplain

Date and Time 20 July 2023 13:03 – 15:00

Grid location ST 35771 05200 (acc 5m) ST 35770 05202 (acc 6m)

2m Terrain Elevation 62.42mAOD → Gravel elevation 59.42mAOD



255cm

290cm

300cm

(59.42mAOD)

Loam

Wet loam (Brownish)

Cobble and gravel



Location R floodplain, depression in field d/s Forde Abbey

between the OxBow and tributary delta

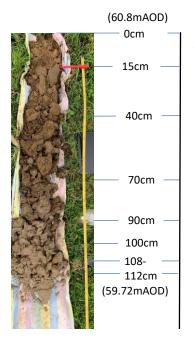
Core Type Floodplain/Tributary's paleochannel

Date and Time 20 July 2023 16:39 -

Grid location ST 35454 05140 (acc 5m) ST 35454 05140 (acc 6m)

2m Terrain Elevation 60.8mAOD → Gravel elevation 59.72mAOD





Topsoil – Loamy silt

Clayey silt

Silty Clay with Fe oxide streaks

Slightly silty (brown/grey) Clay

Greyish wet clay (very slightly silty)

Clayey gravels

Water table

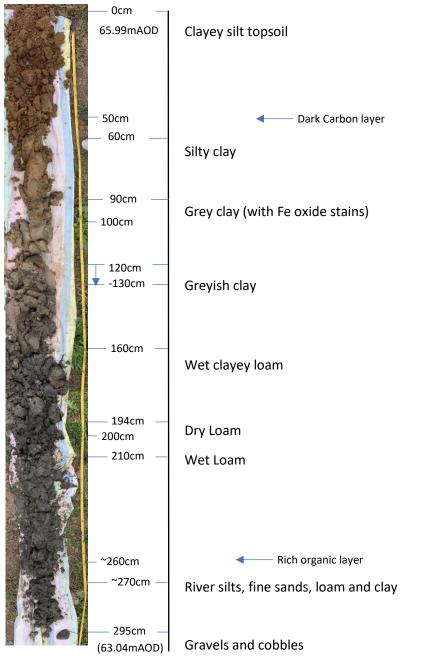
Location Left floodplain u/s and opposite Amerham Mill

Core Type Paleochannel

Date and Time 21 July 2023 10:11-11:45

Grid location ST 36952 05634 (acc 4m) ST 36951 05633 (acc 6m)

2m Terrain Elevation 65.99mAOD → Gravel elevation 63.04mAOD





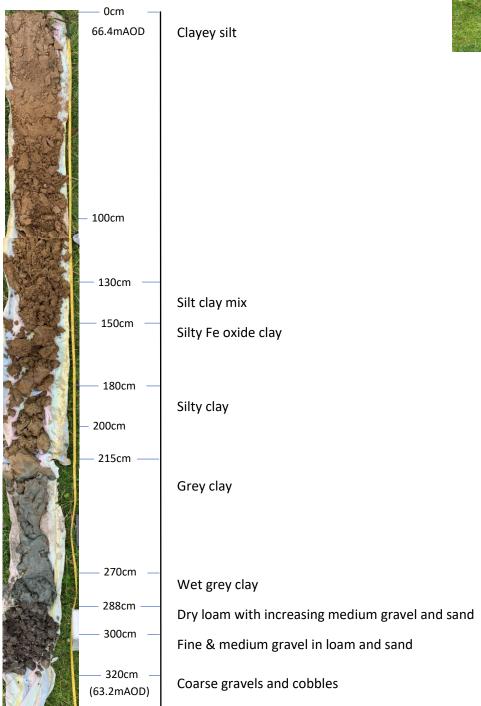
Location Left floodplain u/s and opposite Amerham Mill

Core Type Floodplain, between paleochannel and channel

Date and Time 21 July 2023 12:47-14:30

Grid location ST 36962 05652 (acc 4m) ST 36962 05652 (acc 6m)

2m Terrain Elevation 66.4mAOD → Gravel elevation 63.2mAOD





Location 42m west field and ditch line, Hodge Ditch to Forde Abbey

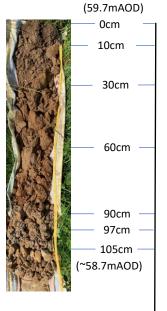
Core Type Paleochannel

Date and Time 1 August 2023 10:34 – 12:30

Grid location ST 35167 05026 (acc 4m) ST 35168 05024 (acc 6m)

2m Terrain Elevation 59.7mAOD → Gravel elevation 58.7mAOD





Topsoil

Clayey loamy silt

Silty loamy Clay

Rich brown Fe oxide streaked loamy silty clay (more clay than layer above)

Silty loamy grey clay Cobbles and gravels in clay (cherts to $50 \text{mm} \varnothing$, with large resistant to extraction)

Location 38m N small ox bow, Hodge Ditch to Forde Abbey

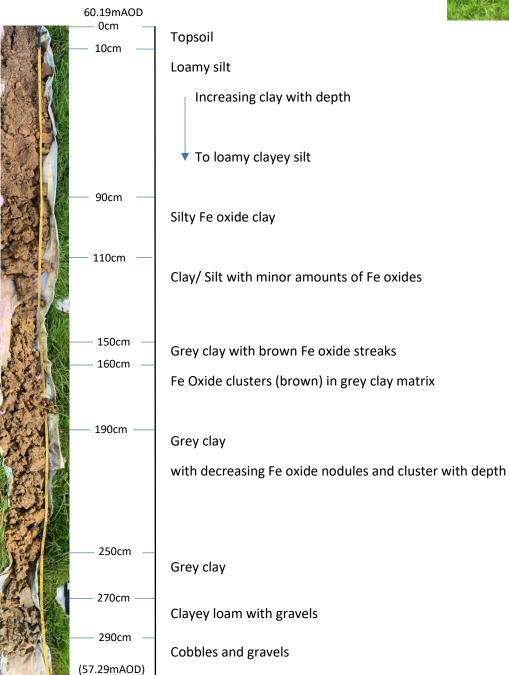
Core Type Floodplain, between paleochannel and channel

Date and Time 1 August 2023 13:08 – 15:10

Grid location ST 35168 04992 (acc 5m)

ST 35168 04992 (acc 6m)

2m Terrain Elevation 60.19mAOD → Gravel elevation 57.29mAOD





Location D/s Winsham outfall, midway LH valley slope to channel

Core Type Floodplain

Date and Time 2 August 2023 13:02 – 16:00

Grid location ST 37506 05931 (acc 5m) ST 37506 05930 (acc 7m)

2m Terrain Elevation 68.15mAOD → Gravel elevation 65.0mAOD





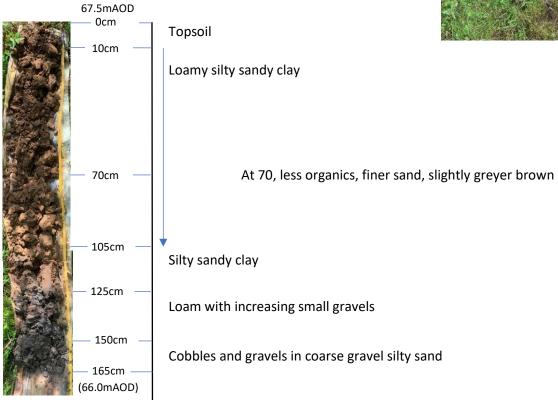
Location D/s Winsham outfall, Paleo-meander under willows

Core Type Paleochannel

Date and Time 2 August 2023 16:36 – 17:63

Grid location ST 37472 05957 (acc 6m) ST 37471 05959 (acc 7m)

2m Terrain Elevation 67.5mAOD → Gravel elevation 66.0mAOD





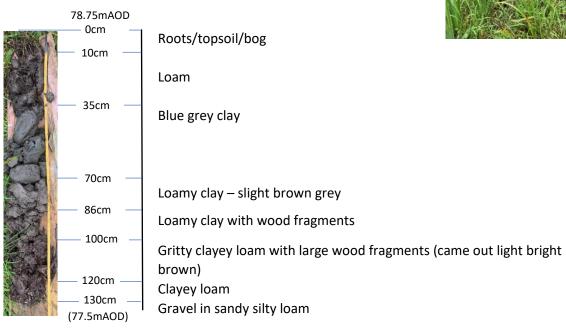
Location Synderford, Shedrick Mill wetland oxbow flush

Core Type Paleochannel

Date and Time 3 August 2023 10:18 – 11:06

Grid location ST 37705 04721 (acc 4m) ST 37702 04719 (acc 6m)

2m Terrain Elevation 78.75mAOD → Gravel elevation 77.5mAOD





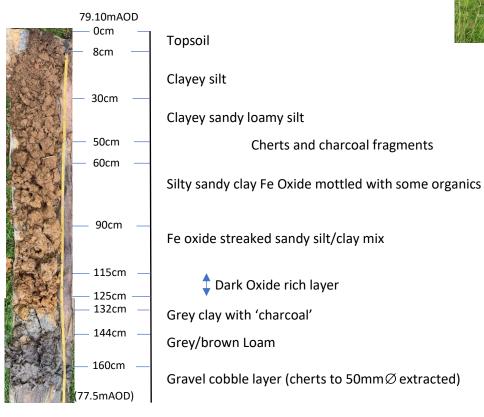
Location Synderford, Shedrick Mill btwn channel & wetland oxbow

Core Type Floodplain

Date and Time 3 August 2023 11:35 – 12:43

Grid location ST 37725 04721 (acc 5m) ST 37724 04723 (acc 7m)

2m Terrain Elevation 79.10mAOD → Gravel elevation 77.5mAOD



NB Gravel layer in riverbank 1.2m below floodplain.

Floodplain at channel 78.7mAOD, gravel cobble layer 77.5mAOD.

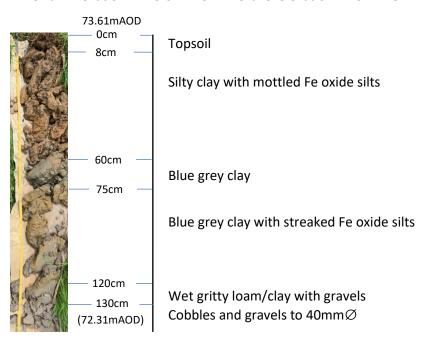
Location 2nd old meander LHS d/s Shedrick Bridge

Core Type Paleochannel

Date and Time 3 August 2023 14:09 – 14:53

Grid location ST 37757 05283 (acc 4m) ST 37757 05282 (acc 6m)

2m Terrain Elevation 73.61mAOD → Gravel elevation 72.31mAOD





Location 2nd old meander LHS d/s Shedrick Bridge, centre of valley

Core Type Floodplain

Date and Time 3 August 2023 15:20 – 16:42

Grid location ST 37777 05286 (acc 4m) ST 37773 05287 (acc 6m)

2m Terrain Elevation 73.75mAOD → Gravel elevation 72.35mAOD





Location Clapton, opposite Greenacres, Wayford Lane

Core Type Paleochannel

Date and Time 4 August 2023 10:00 – 11:05

Grid location ST 41206 06334 (acc 4m)

ST 41207 06335 (acc 6m)

2m Terrain Elevation 81.79mAOD → Gravel elevation 80.14mAOD (NB floodplain measured as 106cm above paleochannel bed, Terrain Elevation suggests this is 82.85m.)





Location Clapton, opposite Greenacres, Wayford Lane

80cm

100cm

133cm

175cm

205cm

248cm

(80.12mAOD)

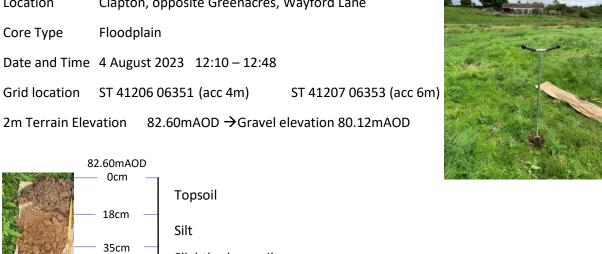
Slightly clayey silt

Clayey silt

Silt/clay mix

Grey clay (wet)

Dark loam



Light brown loam, with wood fragments (sparse), damp

Cobbles and gravels (to 50mm Ø extracted)

Location Land downstream of Clapton, in line with tight meander

Core Type Floodplain

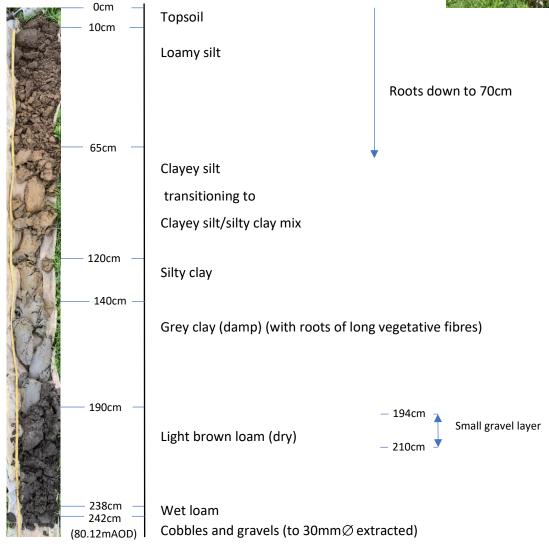
81.95mAOD

Date and Time 4 August 2023 14:22 – 16:08

Grid location ST 41007 06405 (acc 4m) ST 41010 06405 (acc 6m)

2m Terrain Elevation 81.95mAOD → Gravel elevation 79.53mAOD





Location Magdalen Farm, 80m upstream rail line, centre of valley

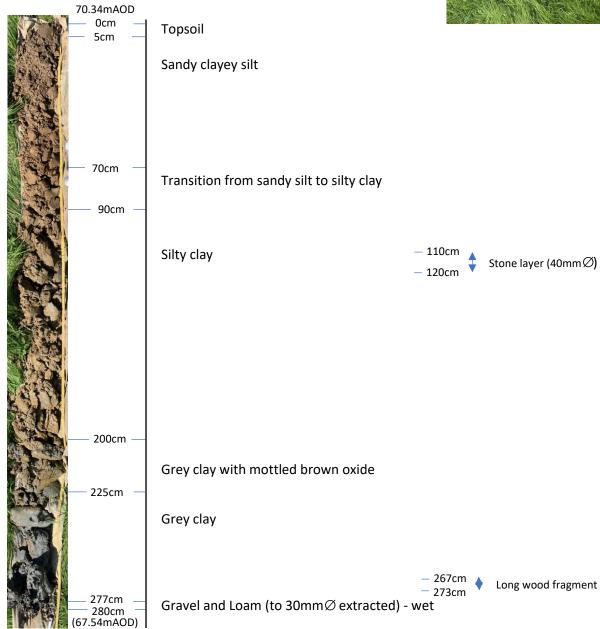
Core Type Floodplain

Date and Time 4 September 2023 12:04 – 14:04

Grid location ST 37976 05771 (acc 4m) ST 37976 05722 (acc 6m)

2m Terrain Elevation 70.34mAOD → Gravel elevation 67.54mAOD





Location Magdalen Farm, 80m upstream rail line, LHS of valley

Core Type Paleochannel

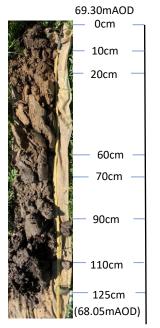
Date and Time 4 September 2023 14:04 – 15:30

Grid location ST 37955 05759 (acc 4m) ST 37955 05759(acc 6m)

2m Terrain Elevation Floodplain (@70.02) 0.72m above base wetland

69.30mAOD → Gravel elevation 68.05mAOD





Topsoil

Clayey silt

Silty clay with oxide stains

Grey clay, minor oxide stain

Grey loam (sandy wily loam, with low clay)

Wet loamy clay with large

wood fragments - 105cm Start of gravels (to 50mm \emptyset)

Clayey loam, mainly wood.

Cobble and gravels (to 40mm∅ extracted)

Location Across ford at Bere Chapel Farm, in line with bend apex

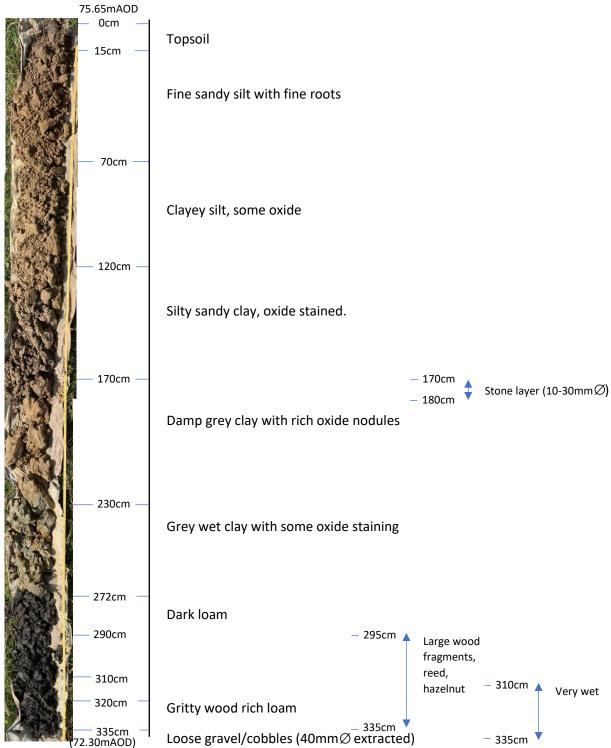
Core Type Floodplain

Date and Time 5 September 2023 09:36 – 11:41

Grid location ST 39316 05855 (acc 4m) ST 39316 05856 (acc 6m)

2m Terrain Elevation 75.65mAOD → Gravel elevation 72.30mAOD





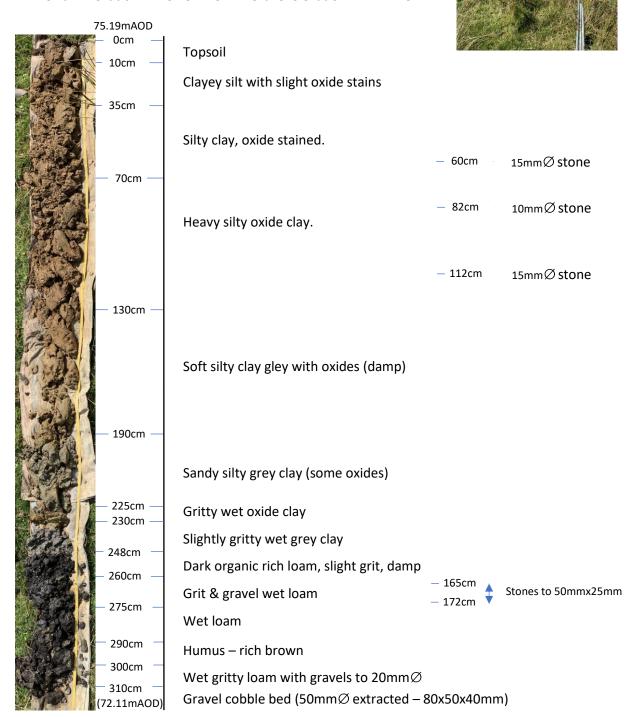
Location Across ford at Bere Chapel Farm, 3rd way to RHS valley toe

Core Type Paleochannel

Date and Time 5 September 2023 12:41 – 14:22

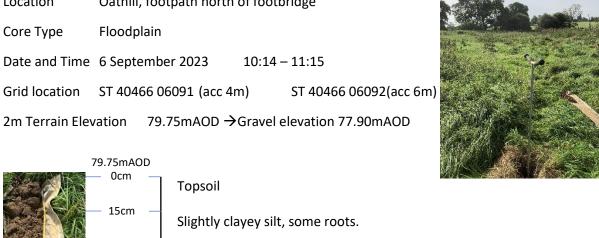
Grid location ST 39309 05878 (acc 4m) ST 39309 05875 (acc 6m)

2m Terrain Elevation 75.19mAOD → Gravel elevation 72.11mAOD



Location Oathill, footpath north of footbridge

Core Type



40cm Clayey silt 100cm Clayey fine silt (smooth) 150cm 180cm 185cm 7.90mAOD) 195cm

Sandy silt, minor clay Increasing sand and gravel

Wet, gravelly sandy silt. Cobble gravel layer (to 450mm∅ extracted) Very substantial layer below, can't break through.

Location Oathill, north of footbridge, wetland at valley slope toe

Core Type Paleochannel

25cm

75cm

145cm -

265cm -

280cm

305cm

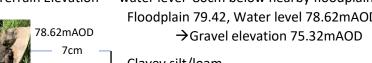
330cm

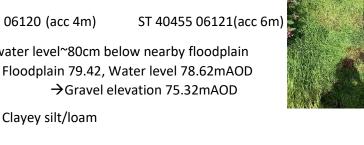
(75.32mAOD)

Date and Time 6 September 2023 11:27 - 12:20

Grid location ST 40455 06120 (acc 4m)

water level~80cm below nearby floodplain 2m Terrain Elevation Floodplain 79.42, Water level 78.62mAOD





Silty clay with oxide stain.

Grey clay

Grey brown loam

Wet gritty charcoal loam, reed fragments

'drier' clayey loam

Wet loam with wood fragments

Gravel cobble layer to 25mm \varnothing extracted.

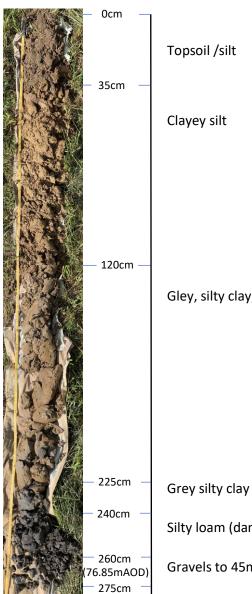
Location Oathill, LHS floodplain, in line with channel and oak

Core Type Floodplain

Date and Time 6 September 2023 13:44 - 14:50

Grid location ST 40422 06031 (acc 4m) ST 40419 06031(acc 6m)

79.45 → Gravel elevation 76.85mAOD 2m Terrain Elevation 79.45mAOD



Gley, silty clay, oxide stained and nodules.

Silty loam (damp, dark grey silty clay)

Gravels to 45mm \emptyset extracted (wet).



Location Synderford, opp Wetwood Cop, S.field, RHS 2nd old bend

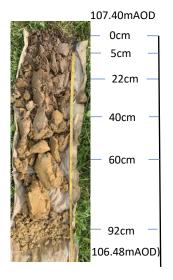
Core Type Paleochannel

Date and Time 7 September 2023 10:01 – 11:00

Grid location ST 38560 02562 (acc 4m) ST 38557 02565(acc 6m)

2m Terrain Elevation 107.40 → Gravel elevation 106.48mAOD





Topsoil /silt Clayey silt

Silty clay, gley oxide stains -30 cm 50mm \varnothing stone

Slightly silty clay, gley with oxide stains

Slightly damp, pliable clay gley with heavy oxide stains

Gravels in silty grey clay (wet) only to 15mm \varnothing extracted, but larger below.

Location Synderford, opp Wetwood Cop, S.field, u/s of 2nd old bend

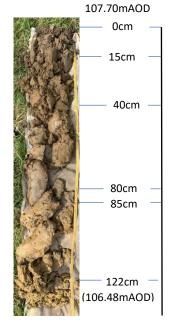
Core Type Floodplain

Date and Time 7 September 2023 11:25 – 12:30

Grid location ST 83554 02539 (acc 4m) ST 38553 02538(acc 6m)

2m Terrain Elevation 107.70 → Gravel elevation 106.48mAOD





Topsoil, silt and roots

Clayey silt, some oxide

Gley, stiff silty clay, black to orange oxide stains.

Grey clay, with next to no oxide

Damp silty clay, iron brown and odd black staining

Gravels in tan clay, to 30mm∅ extracted (wet).

NB Core 27 abandoned, as large cobbles 15-10mm below surface, that appear to be infill material.

Location Synderford, d/s Lower Causeway Cop, 5m right of river

Core Type Floodplain

Date and Time 7 September 2023 13:37 – 14:37

Grid location ST 38569 03017 (acc 4m) ST 38570 03018(acc 6m)

2m Terrain Elevation 100.70 → Gravel elevation 99.34mAOD



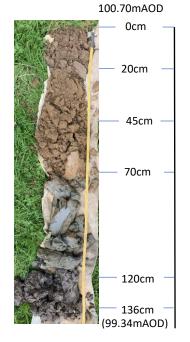
Occasional gravel and

cobbles

(10-40mm∅**)**

28cm

80cm



Silty topsoil

Silt to clayey silt

Gley, increasingly clayey silt and oxides

Grey clay

Humus (grey/brown, wood, reed and root fragments) with gravels Gravels and cobbles, extracted to $30\text{mm}\varnothing$

Location Synderford, d/s Lower Causeway Cop, 5m from hillslope

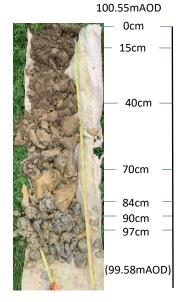
Core Type Floodplain

Date and Time 7 September 2023 14:51 – 15:40

Grid location ST 38583 03014 (acc 4m) ST 38581 03014(acc 6m)

2m Terrain Elevation 100.55 → Gravel elevation 99.58mAOD





Topsoil (with oxides)

Crumbly slightly silty gley

Crumbly gley, grey with brown oxide satins & nodules ${}^{-}$ 50cm ${}^{30\text{mm}\varnothing}$ stone

Gley, pliable grey clay with strong yellow tan oxide marbling

Grey clay (damp)

Gritty grey clay (wet)
Gravels and cobbles in clay, to 50mm∅

86cmSmall gravels