Thame Valley boreholes (HS2) MOLA

The boreholes all revealed relatively substantial alluvial deposits lying over terrace gravels. These Holocene alluvial deposits, mainly silty clays, hold the greatest potential for archaeological investigation in terms of ancient environmental reconstruction. By taking subsamples of the alluvium up through the cores for pollen and ostracod/diatom analysis, changes in vegetation, climate and indirect evidence of human activity can be recognised. Furthermore, although little in the way of peat was recovered, wood sampled at the base of BH9 has the potential for radiocarbon dating, providing a timeframe for the alluvial deposits as a whole.

BH01						
Surface OD height:	70.414	Easting	478288.7	Northing	214680.477	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.3	70.414	70.114	0.300	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.3	1.45	70.114	68.964	1.150	Soft 10YR 6/2 light brownish grey oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
1.45	2	68.964	68.414	0.550	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones. Becomes more sandy toward base.	River terrace gravels

BH02						
Surface OD height:	70.316	Easting	478296.837	Northing	214671.358	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.2	70.316	70.116	0.200	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.2	1	70.116	69.316	0.800	Soft 10YR 6/2 light brownish grey oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
1	1.58	69.316	68.736	0.580	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones. Becomes more sandy toward base.	River terrace gravels
1.58	2	68.736	68.316	0.420	Stiff 2.5YR 7/6 yellow becoming 2.5YR 7/3 pale yellow chalk rich clay grading into 2.5YR 4/2 dark greyish brown clay from 1.86m bgl	Kimmeridge Clay (basal geology)

BH03						
Surface OD height:	70.270	Easting	478310.248		Northing	214656.482
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.3	70.270	69.970	0.300	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.3	1.2	69.970	69.070	0.900	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
1.2	1.4	69.070	68.870	0.200	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones. Becomes more sandy toward base.	River terrace gravels
1.4	2	68.870	68.270	0.600	Stiff 2.5YR 4/2 dark greyish brown clay	Kimmeridge Clay (basal geology)

BH04						
Surface OD height:	70.203	Easting	478323.614	Northing	214641.587	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.3	70.203	69.903	0.300	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.3	1.45	69.903	68.753	1.150	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
1.45	2	68.753	68.203	0.550	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones.	River terrace gravels

BH05						
Surface OD height:	70.150	Easting	478336.978	Northing	214626.754	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.3	70.150	69.850	0.300	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.3	5.5	69.850	64.650	5.200	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
5.5	6	64.650	64.150	0.500	Stiff 2.5YR 4/2 dark greyish brown clay	Kimmeridge Clay (basal geology)

BH06						
Surface OD height:	70.126	Easting	478350.358	Northing	214611.889	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.3	70.126	69.826	0.300	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.3	2	69.826	68.126	1.700	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
2	4.54	68.126	65.586	2.540	Soft 10YR 4/2 dark greyish brown silty clay with occasional fine to medium gravel	
4.54	5	65.586	65.126	0.460	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones.	River terrace gravels

BH07						
Surface OD height:	70.167	Easting	478363.717	Northing	214597.02	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.3	70.167	69.867	0.300	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.3	2.45	69.867	67.717	2.150	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
2.45	4.54	67.717	65.627	2.090	Soft 10YR 4/2 dark greyish brown silty clay with occasional fine to medium gravel	
4.54	5	67.717	65.167	2.550	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones.	River terrace gravels

BH08						
Surface OD height:	70.146	Easting	478377.111	Northing	214582.135	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.2	70.146	69.946	0.200	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.2	3	69.946	67.146	2.800	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
3	4	67.146	66.146	1.000	no recovery	
4	5.8	67.146	64.346	2.800	Soft 10YR 4/2 dark greyish brown silty clay with some organic / peaty material and snails	
5.8	5.85	66.146	64.296	1.850	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones.	River terrace gravels
5.85	6	64.346	64.146	0.200	Stiff 2.5YR 4/2 dark greyish brown clay	Kimmeridge Clay (basal geology)

BH09						
Surface OD height:	70.145	Easting	478390.48	Northing	214567.275	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.4	70.145	69.745	0.400	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.4	2.5	69.745	67.645	2.100	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
2.5	3	67.645	67.145	0.500	Soft 10YR 4/2 dark greyish brown silty clay	
3	4.8	67.145	65.345	1.800	no recovery	
4.8	4.85	65.345	65.295	0.050	Soft 10YR 4/2 dark greyish brown silty clay with wood	
4.85	5	65.295	65.145	0.150	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones.	River terrace gravels

BH10						
Surface OD height:	70.138	Easting	478403.846	Northing	214552.385	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.3	70.138	69.838	0.300	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.3	1.85	69.838	68.288	1.550	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
1.85	3	68.288	67.138	1.150	Soft 10YR 3/2 very dark greyish brown organic silty clay	
3	4.65	67.138	65.238	1.900	Soft 10YR 4/2 dark greyish brown partly organic silty clay with Hydrogen sulphide odour	
4.65	4.9	65.238	65.188	0.050	Soft 5B5/1 blueish grey silty clay with occasional fine angular flint gravel	
4.9	4.95	65.188	65.138	0.050	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint and other stones.	River terrace gravels
4.95	5	65.138	65.138	0.000	Stiff 2.5YR 4/2 dark greyish brown clay	Kimmeridge Clay (basal geology)

BH11						
Surface OD height:	70.247	Easting	478417.234	Northing	214537.531	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.55	70.247	69.697	0.550	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.55	1.8	69.697	68.447	1.250	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
1.8	2.7	68.447	67.547	0.900	Soft 10YR 4/2 dark greyish brown silty clay with occasional fine to medium gravel	
2.7	2.75	67.547	67.497	0.050	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint.	River terrace gravels
2.75	3	67.497	67.247	0.250	Stiff 2.5YR 4/2 dark greyish brown clay	Kimmeridge Clay (basal geology)

BH12						
Surface OD height:	70.498	Easting	478427.902	Northing	214525.438	
from (m BGL)	**to (m BGL)**	**from (mOD)**	**to (mOD)**	**Thickness (m)**	**Deposit description**	**Interpretation**
0	0.6	70.498	69.898	0.600	Crumbly soft 10YR 5/2 greyish brown loam with fine roots and occasional gravel clast	Topsoil
0.6	1.7	69.898	68.798	1.100	Soft 10YR 6/2 light brownish grey blocky oxidised silty clay with occasional fine to medium gravel	Holocene alluvium
1.7	2.35	68.798	68.148	0.650	Soft 10YR 4/2 dark greyish brown silty clay with occasional fine to medium gravel	
2.35	3	68.148	67.498	0.650	Firm 10YR 6/8 brownish yellow slightly sandy clay with frequent angular granular to medium flint.	River terrace gravels