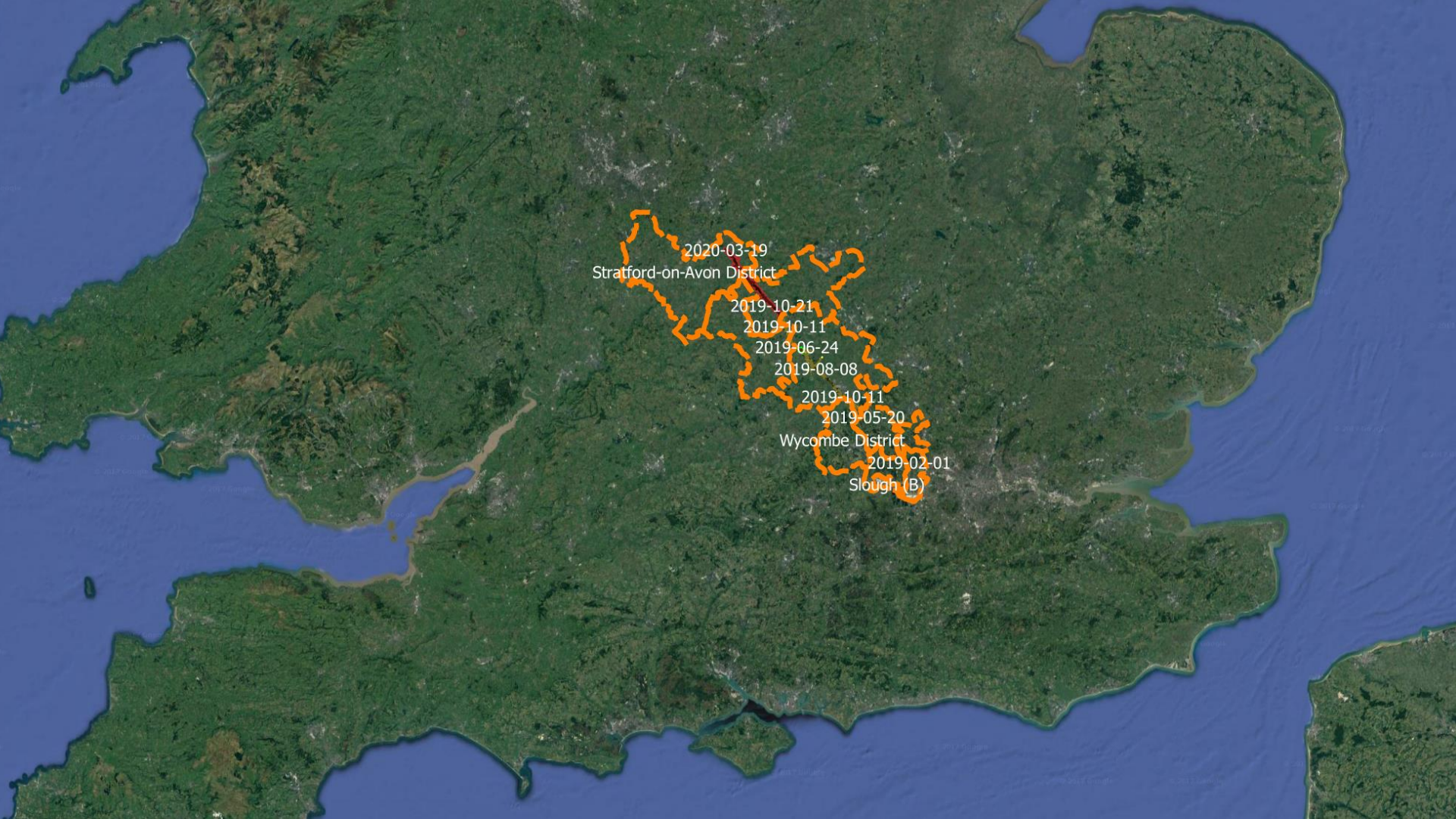
JV Morgan Sindall Infrastructure BAM Nuttall Ltd and Ferrovial Agroman.

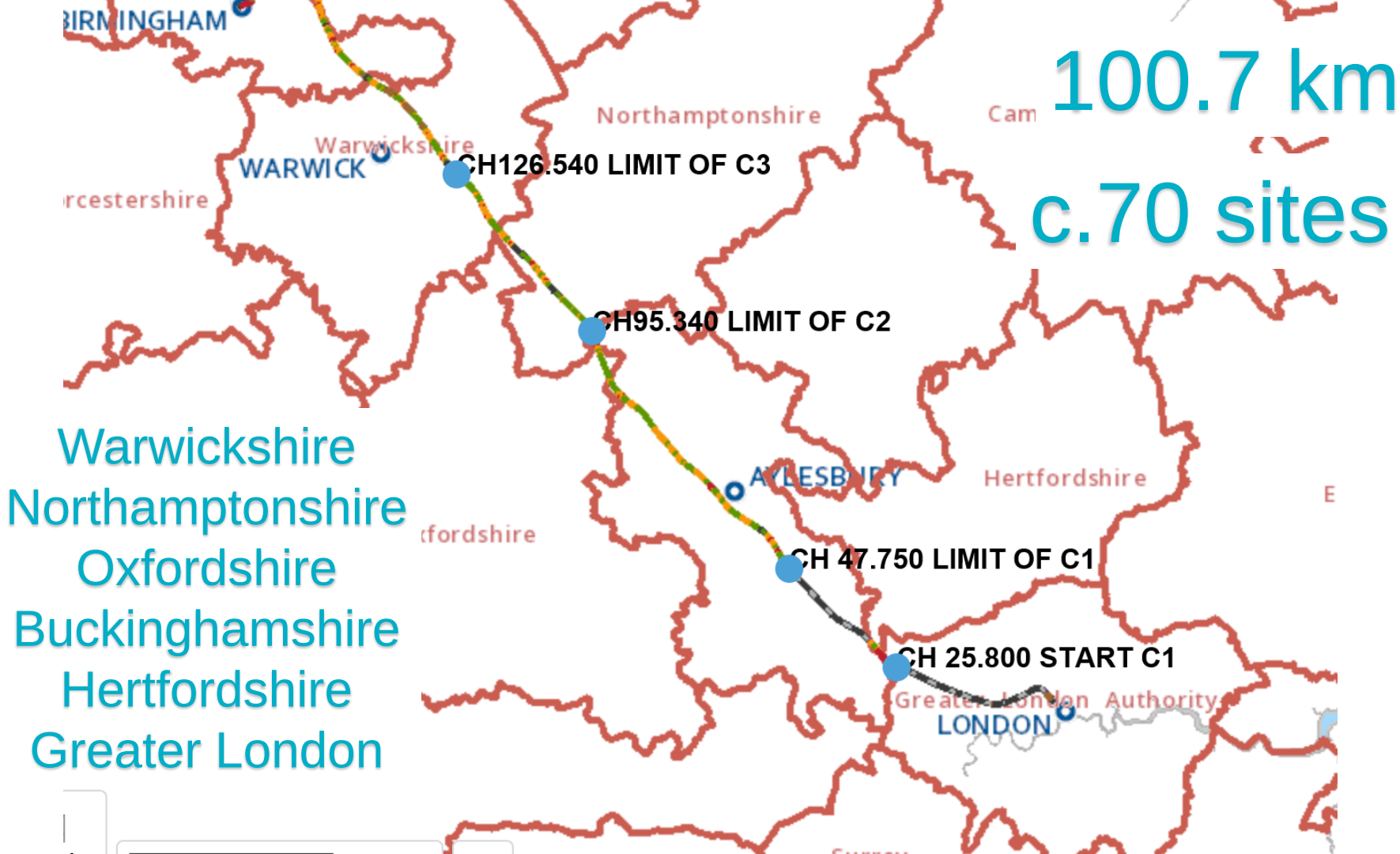
fusion
Connecting people

HS2 Phase 1 Central Section: Area wide Historic Environment

The work package delivery plan – overview to Heritage Sub group

Fusion Historic Environment Team 26 Sep 2017


2020-03-19
Stratford-on-Avon District
2019-10-21
2019-10-11
2019-06-24
2019-08-08
2019-10-11
2019-05-20
Wycombe District
2019-02-01
Slough (B)


100.7 km
c.70 sites
Warwickshire
Northamptonshire
Oxfordshire
Buckinghamshire
Hertfordshire
Greater London
CH126.540 LIMIT OF C3
CH95.340 LIMIT OF C2
CH 47.750 LIMIT OF C1
CH 25.800 START C1
WARWICK
Northamptonshire
Hertfordshire
LONDON

CENTRAL AREA: Major sites - KNOWN

1. Colne Valley
2. Grim's Ditch- prehistoric Scheduled Monument
3. Stoke Mandeville-St Mary's Church, burial ground and settlement
4. Fleet Marston Roman settlement, Akeman Street and Thame valley
5. Doddershall Deserted Medieval Settlement
6. Chetwode medieval settlement
7. Edgcote battlefield
8. Blackgrounds Roman Villa and Cherwell valley
9. Illets Farm- Roman Temple and settlement and Great Ouse valley
10. Radstone Deserted Medieval Settlement
11. Lower Radbourne Deserted Medieval Settlement
12. Heritage asset setting surveys
13. Built heritage recording – listed and non listed local importance
14. Historic landscape recording and research

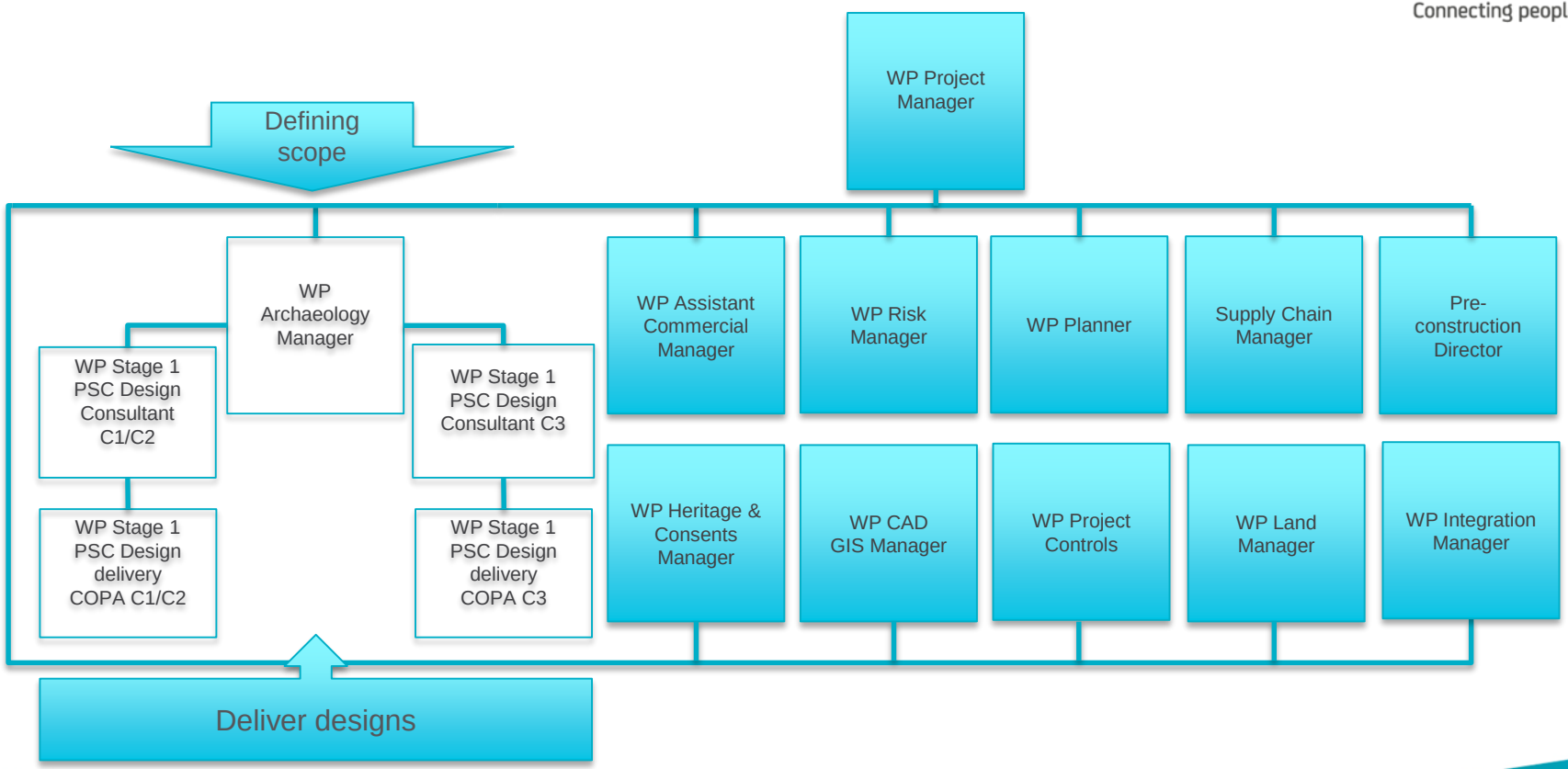
Up to 50 further locations may be investigated….

Community Forum Areas

- Colne Valley: CFA07
- The Chalfonts and Amersham: CFA08
- Central Chilterns: CFA09
- Dunsmore, Wendover and Halton: CFA10
- Stoke Mandeville and Aylesbury: CFA11
- Waddesdon and Quainton: CFA12
- Calvert, Steeple Claydon, Twyford and Chetwode: CFA13
- Newton Purcell to Brackley: CFA14
- Greatworth to Lower Boddington: CFA15
- Ladbroke and Southam: CFA16

Fusion Organisation

fusion
Connecting people



Fusion Archaeology framework - packages

Area	Contract Package	Package Name	Start Element	Finish Element	Start CH	End CH	Length
C1	AC100	Chilterns	Colne Valley	Wendover Dean South Embankment	25800	50525	24.7 km
C2	AC210	Aylesbury Vale South	Wendover Dean Viaduct	Wendover North Cutting	50525	56550	6.02 km
C2	AC220	Stoke Mandeville	Stoke Mandeville South Embankment	Stoke Mandeville South Embankment	56550	58400	1.85 km
C2	AC230	Aylesbury Vale	Aylesbury South Cutting	Whaddon Hill Cutting	58400	64300	5.9 km
C2	AC240	Bicester Road (Fleet Marston)	Thame Valley Viaduct	Waddesdon North Cutting	64300	70650	6.35km
C2	AC250	Aylesbury Vale North	Quainton South Embankment	Turweston Embankment	70650	95570	24.9 km
C3	AC300	Northampton South	Turweston Viaduct	Greatworth Green Tunnel	95570	104050	8.4 km
C3	AC310	Northampton North	Thorpe Mandeville Cutting	Edgcote Cutting	104050	109830	5.8 km
C3	AC320	Stratford-on-Avon	Chipping Warden Green Tunnel	Leamington Road Embankment	109830	126540	16.7 km

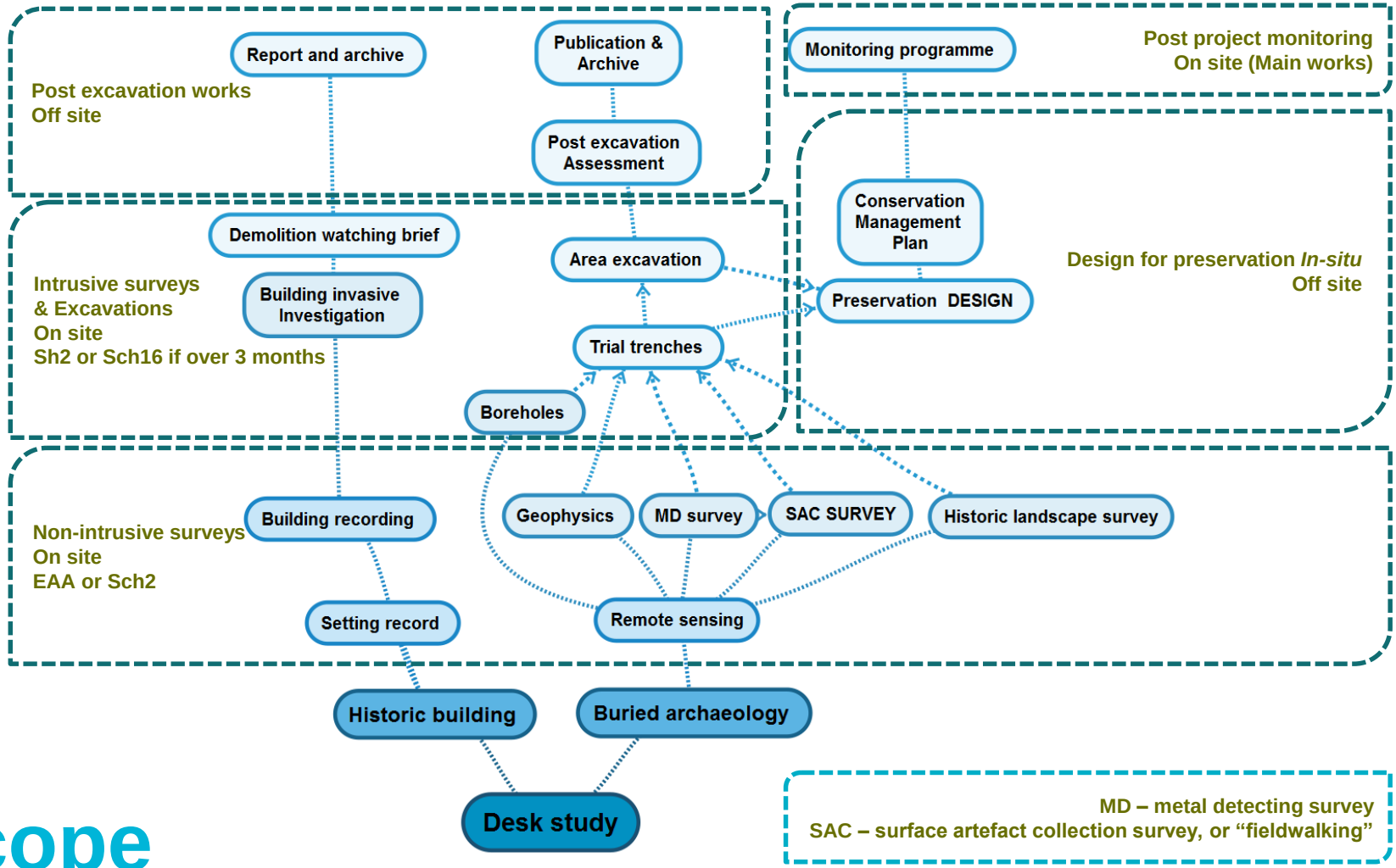
Fusion Archaeology framework - packages

C3			C2						C1
Stratford-on-Avon	Northampton North	Northampton South	Aylesbury Vale North	Bicester Road (Fleet Marston)	Aylesbury Vale	Stoke Mandeville	Aylesbury Vale South	Chilterns
• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3	• Lot1 • Lot 2 • Lot 3

Highway Design and build

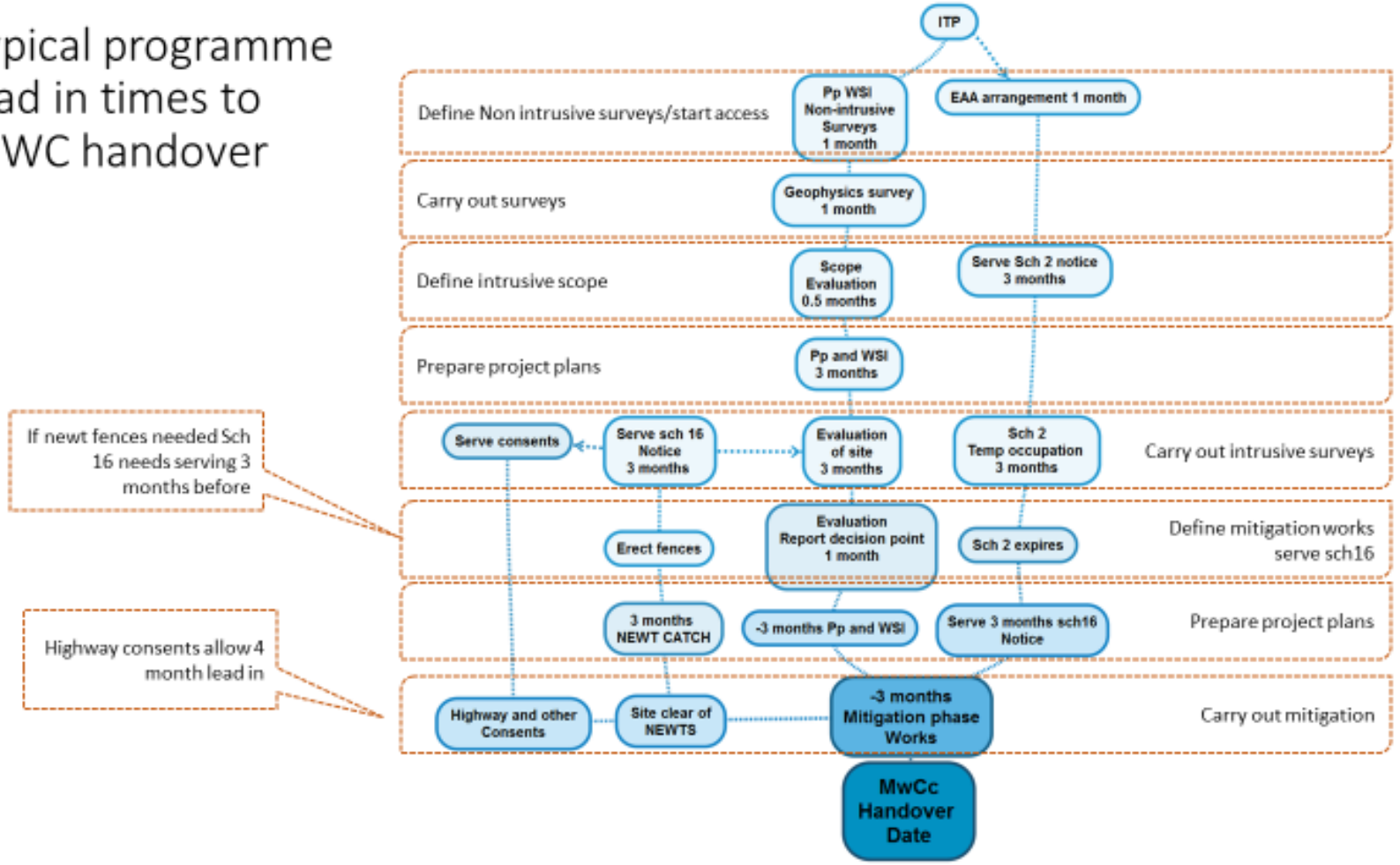
Chipping Warden bypass DC3a/b/c Northants

Lot 1 Design
Lot 2 Non intrusive surveys
Lot 3 Intrusive works
Lot 4 Site services


Post excavation works
Off site
Report and archive
Publication & Archive
Post excavation Assessment
Post project monitoring
On site (Main works)
Monitoring programme
Intrusive surveys
& Excavations
On site
Sh2 or Sch16 if over 3 months
Demolition watching brief
Building invasive Investigation
Area excavation
Trial trenches
Boreholes
Conservation Management Plan
Preservation DESIGN
Design for preservation *In-situ*
Off site
Non-intrusive surveys
On site
EAA or Sch2
Building recording
Setting record
Geophysics
MD survey
SAC SURVEY
Historic landscape survey
Remote sensing
Historic building
Buried archaeology
Desk study
MD – metal detecting survey
SAC – surface artefact collection survey, or "fieldwalking"

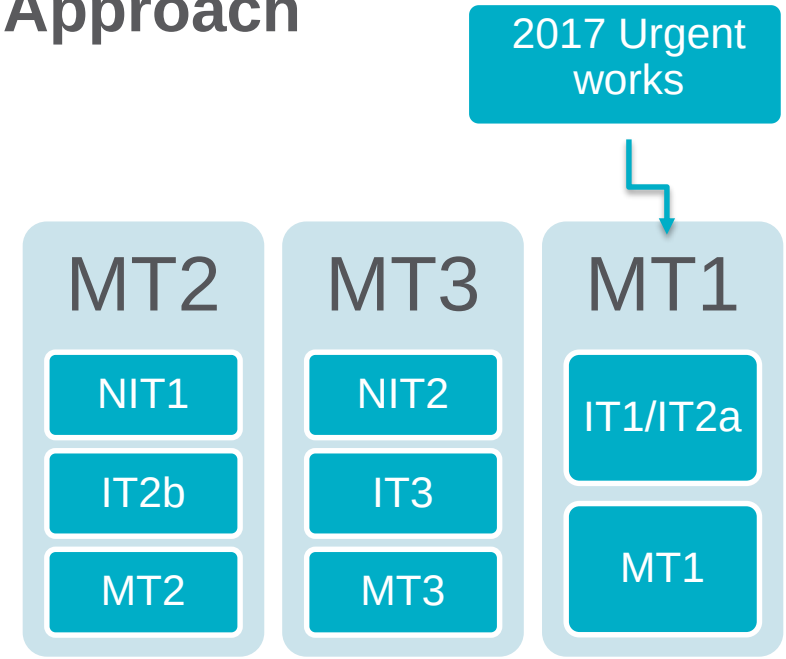
Scope

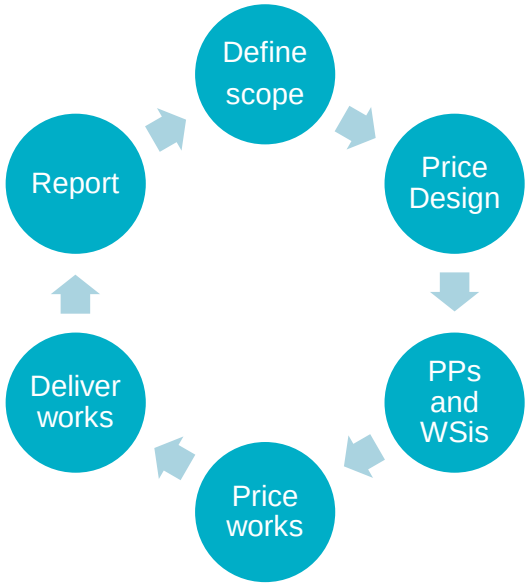
Typical programme lead in times to MWC handover



Programme

Approach





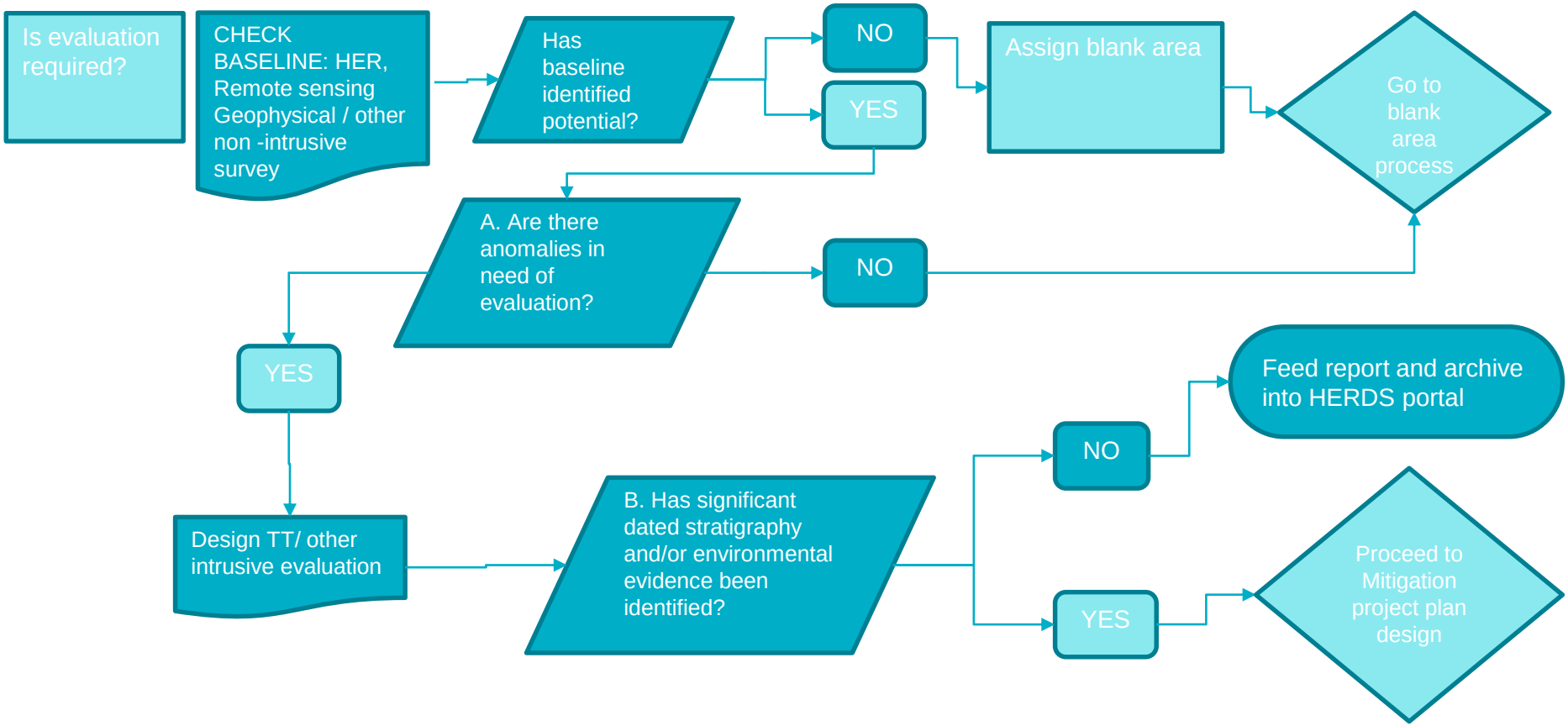
HERDS response – new scheme elements

Design Element	*Describe*	*Response*
Permanent earthworks		
Structural earthworks and utilities	Full impact	HERDS
Sustainable placement	Topsoil strip and excavate - or topsoil strip only	**Review**
Temporary material stockpile		
Topsoil on topsoil	No topsoil strip, use backtipping	Preserve in situ
Subsoil	If feasible preserve in situ – careful topsoil strip, no plant tracking, place fill by back tipping	**Review**
New landscaping features		
Hedgerows	Non significant impact	None
Woodland habitat	Depends of status of area	**Review**
Ecology pond	Partial impact	**Review**
Wetland habitat	Probable full impact	HERDS
Grassland habitat	Partial impact (subsoil ripping maybe required)	**Review**
Woodland planting	Depends of status of area	**Review**

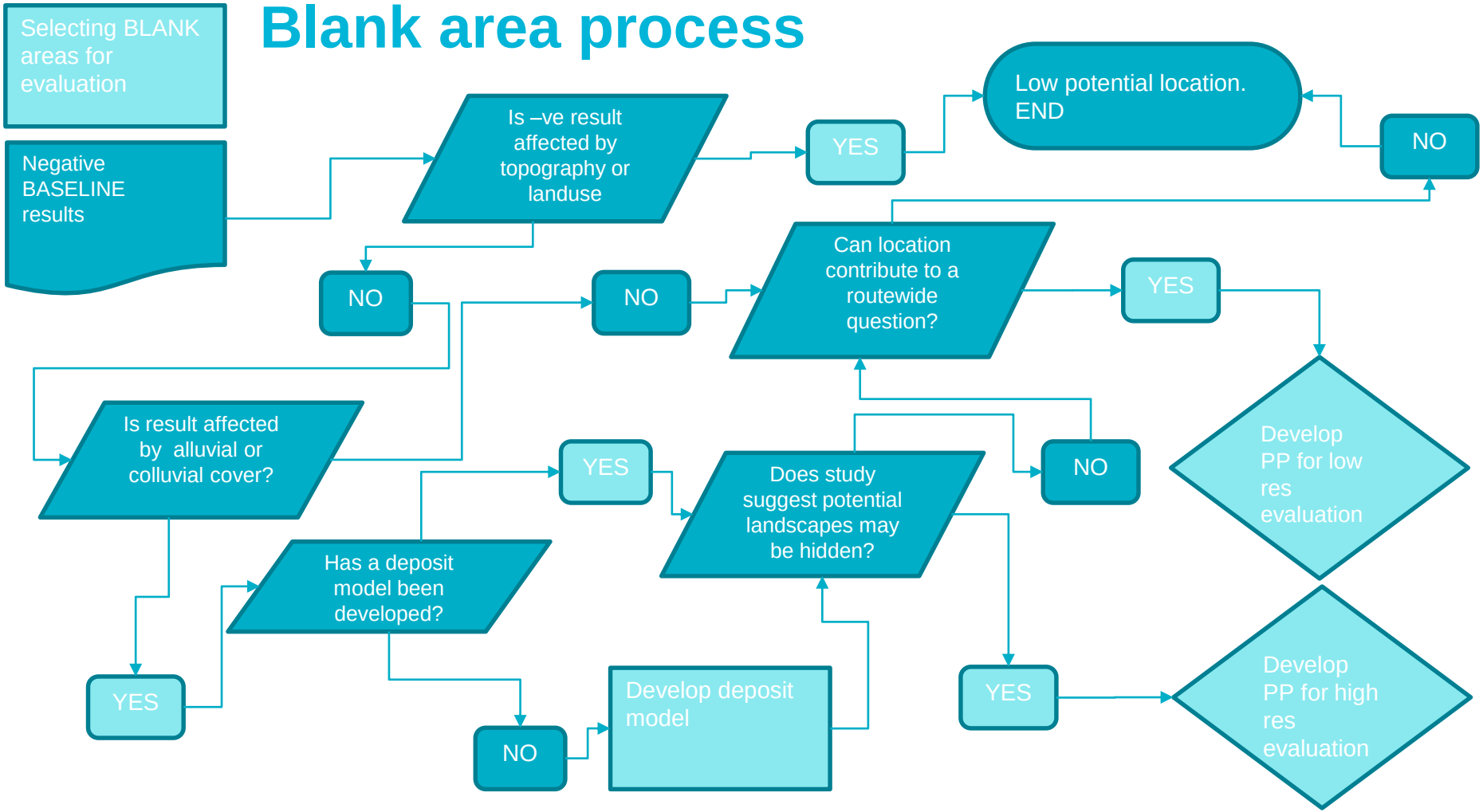
Options Preservation in situ (PIS) – where significant finds made – reduce impact to conserve assets

Construction activity	PIS options
Sustainable placement/Temporary material stockpile	Leave Topsoil in situ and back-tip materials
	Provide geotextile membrane and back-tip material
Grassland habitat	Avoid subsoil ripping if feasible and adopt alternative methods for lowering fertility
Woodland planting/habitat	On highly sensitive locations - provide additional soil layer to protect remains from future root disturbance
	Choose low impact species

- **Robust baseline**
- **Target maximum magnetometry coverage**
- **Select sites for intrusive evaluation – various resolution/sample size depending on targets**
- **Select sites for investigation**
- **Develop decision making model**
- **Develop process for “blank area” testing**


Is evaluation required?
CHECK BASELINE: HER, Remote sensing Geophysical / other non -intrusive survey
Has baseline identified potential?
NO
YES
Assign blank area
Go to blank area process
A. Are there anomalies in need of evaluation?
NO
YES
Design TT/ other intrusive evaluation
B. Has significant dated stratigraphy and/or environmental evidence been identified?
NO
Feed report and archive into HERDS portal
YES
Proceed to Mitigation project plan design

Blank area process




Mill Pond Embankment
Ladbroke Grove Embankment
Oxford Canal South Embankment
Lower Boddington Embankment
Edgcote Cutting
Thorpe Mandeville Cutting
Turweston Embankment
Mixbury Cutting
Barton Hartshorn Embankment
Twyford Embankment
Woodlands Cutting
Doddershall Embankment
Bicester Road Embankment
Aylesbury Embankment
Wendover North Cutting
Rocky Lane Cutting
South Heath Cutting
Amersham Vent Shaft
West Hyde Embankment
Colne Valley South Embankment
Google
Imagery ©2017 TerraMetrics
Terms of Use