

South Yorkshire Local Nature Partnership

# Overview of HS2 impacts and opportunities in South Yorkshire

Co-ordinated by Sheffield and Rotherham Wildlife Trust

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This report provides an initial overview of the impacts and opportunities for biodiversity along the length of the proposed HS2 route in South Yorkshire. Please note that the route information was based on published maps available prior to May 2018.

The majority of sites were identified through a joint workshop between stakeholders to draw together potential opportunities along the route.

This is intended to aid dialogue and discussion between HS2 Ltd and interested local stakeholders. It is submitted to HS2 Ltd now on that basis and does not prejudice any future proposals, decisions etc made by those involved.

The LNP has also produced natural capital maps for South Yorkshire, which are not included here but can be made available.

# **Proposed HS2 Alignments Nov 2016 For South Yorkshire And the Potential Impacts for Wildlife**

**Impacted Local Wildlife Sites:**

- First, Second and Third Plantations
- The Wilderness
- Bilham Park and Summer House
- Hickleton Golf Course
- Hickleton Park
- Barnburgh Cliff
- Thundahole
- Old Denaby Area
- Denaby Wood
- Hooton Cliff
- Conisbrough Parks Hedgerows

**Impacted Local Nature Reserve Site:**

- Old Denaby Wetland

**Potentially Impacted Local Wildlife Sites:**

- Howell Wood
- Frickley Park (including Whin Covert)
- Challenger Wood (with Spring Wood)
- Bilham Park Fish Pond Plantation
- Hickleton Spring
- Shrogs Plantation
- Castle Hill, Hickleton
- Barnburgh Park Quarry Wood
- Ravenfield Park & Firsby Reservoirs

**Potentially Impacted Local Nature Reserve Sites:**

- Firsby Reservoir

**Potentially Impacted Ancient Woodland Sites:**

- Howell Wood
- Challenger Wood/Spring Wood
- Hickleton Spring
- Barnburgh Cliff
- Hooton Cliff

Impacted Sites are within the 120m buffer (labels are all upper case)  
Potentially Impacted Sites are NOT within the 120m buffer, but within the 1km buffer (labels are upper and lower case)

## **Key**

- HS2 Proposed Main Route Nov 2016
- 120m Buffer (60m either side)
- 1km Buffer (500m either side)
- HS2 Sheffield Spur on existing track
- Impacted Local Wildlife Site
- Impacted Local Nature Reserve
- Potentially Impacted Local Wildlife Site
- Potentially Impacted Local Nature Reserve
- Potentially Impacted Ancient Woodland
- Sheffield & Rotherham Wildlife Trust Day

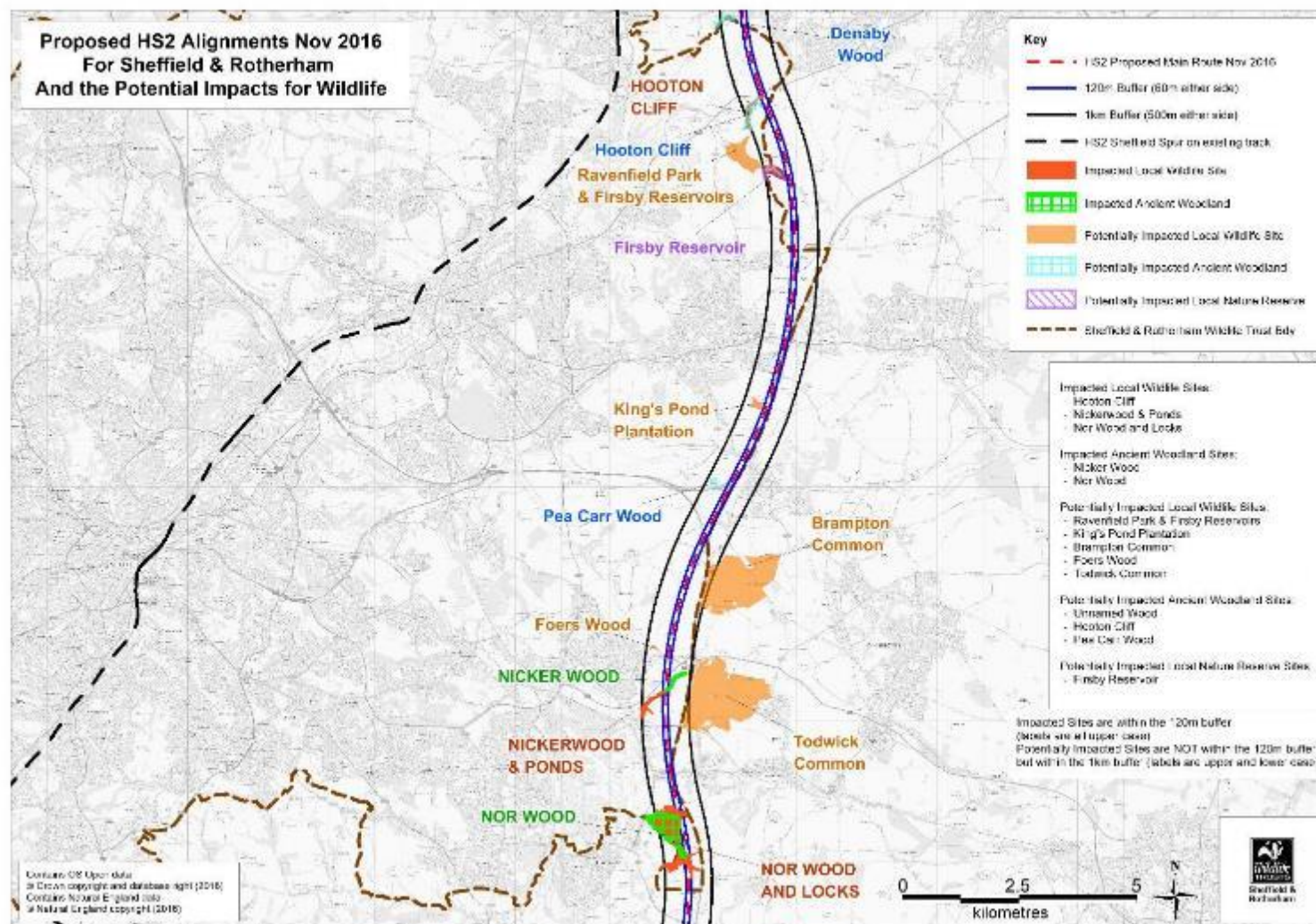
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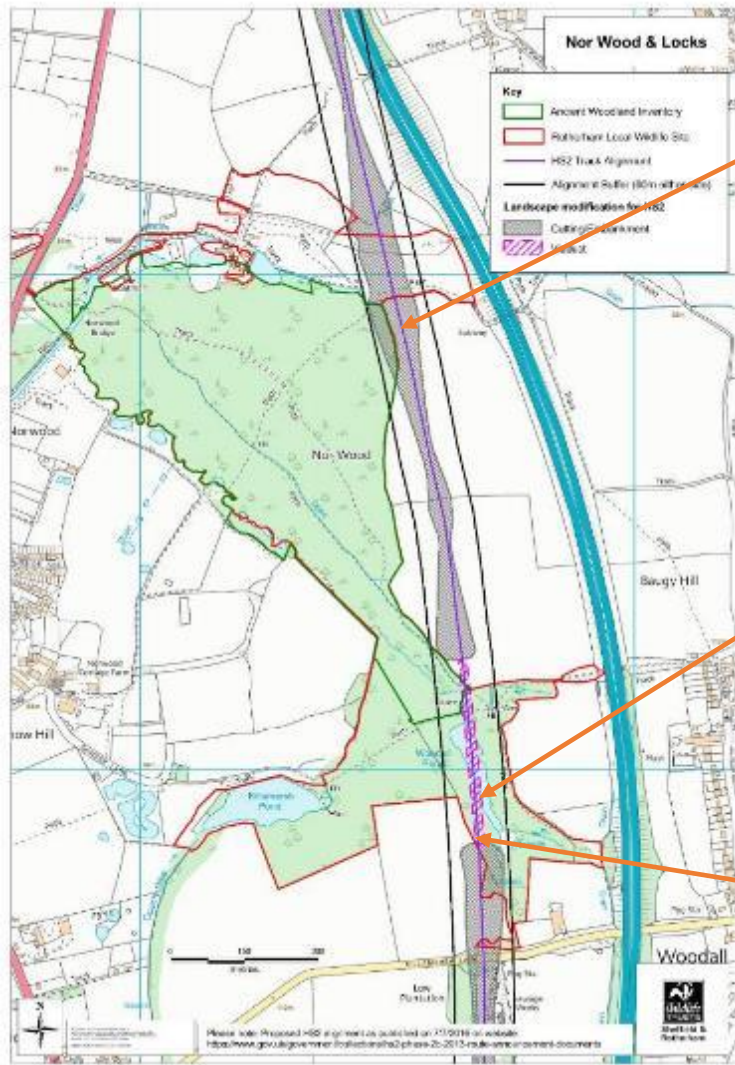


**Proposed HS2 Alignments Nov 2016  
For Sheffield & Rotherham  
And the Potential Impacts for Wildlife**





## Norwood and Locks



### **Norwood and Locks**

- Partially Ancient Woodland
- Contains populations of the nationally scarce Large-leaved lime, True Fox-sedge
- Privately owned (M.W. Hewitt) with maintained PROW – would be impacted
- Management in some areas e.g. new planting, game birds?
- Could the route be moved east to avoid the site? Difficult
- Viaduct piers – every 20m standard – clear span? Detailed design





## Nickerwood and Ponds



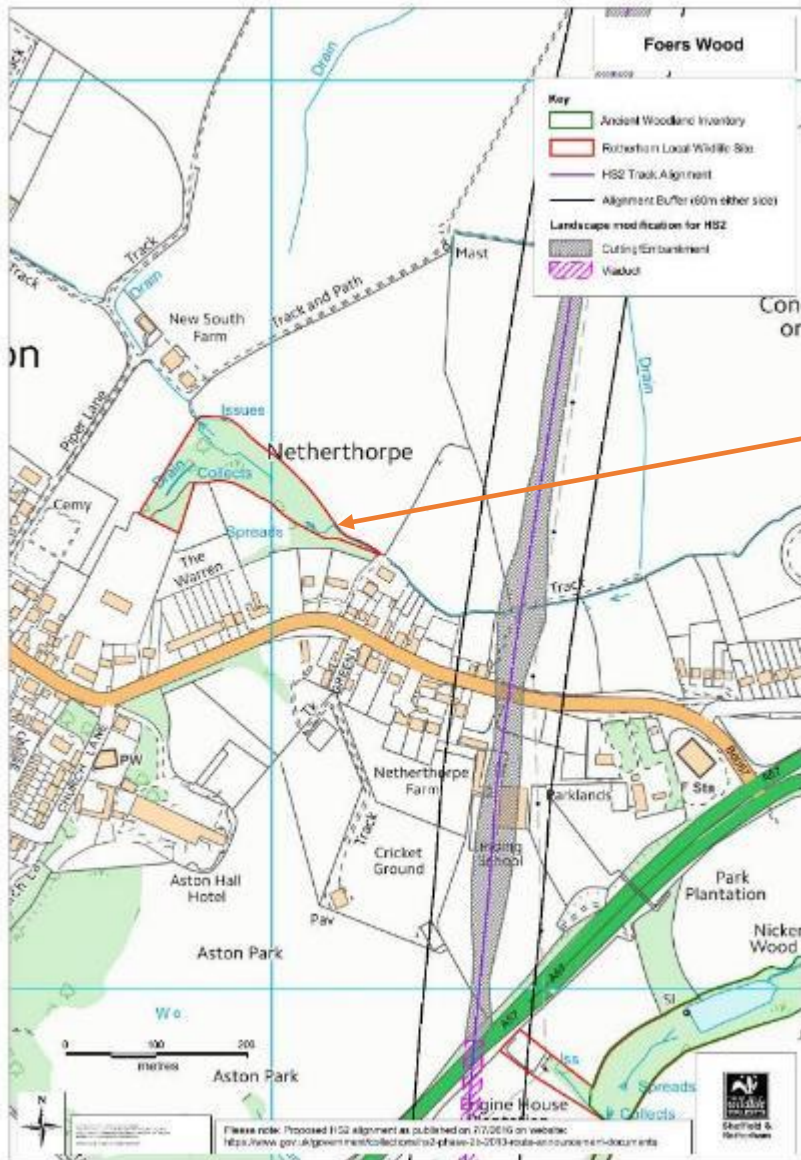


### **Nickerwood and Ponds**

- Privately owned by Aston Park Fisheries and managed as commercial fisheries
- Partially Ancient Woodland
- Unmanaged crack willows with recent work in the route area
- Old boundary oaks and acid grassland slopes, possible water vole presence
- Contains populations of the nationally scarce Large-leaved lime, True Fox-sedge
- Viaduct to consider again



## Foers Wood

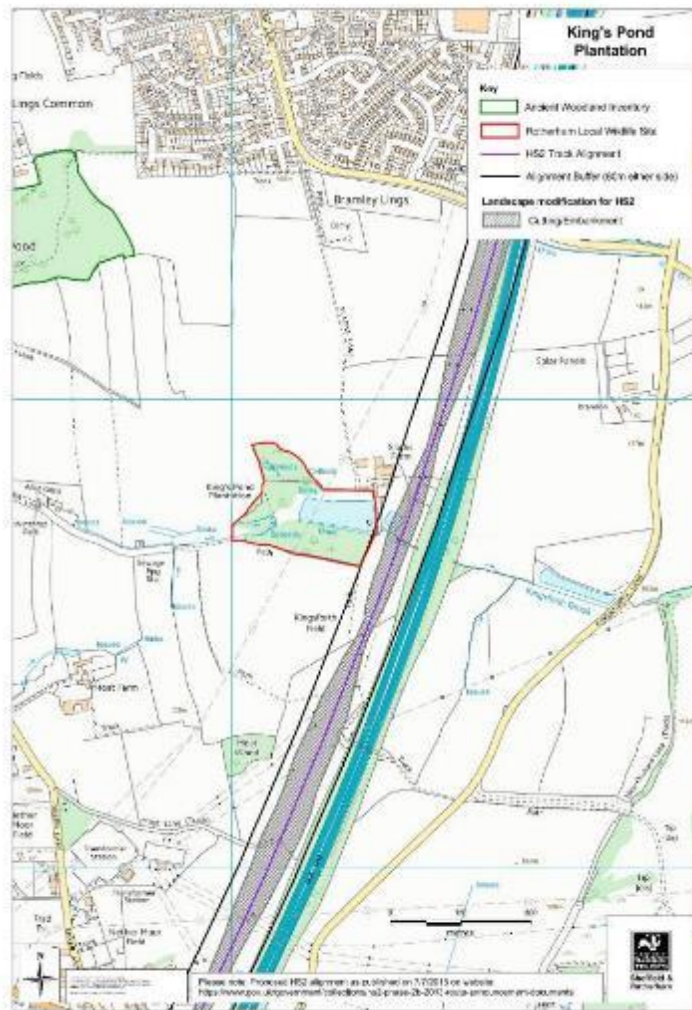


- Well managed LWS and stream
- Bat populations
- Owners against HS2,
- Nearby orchard





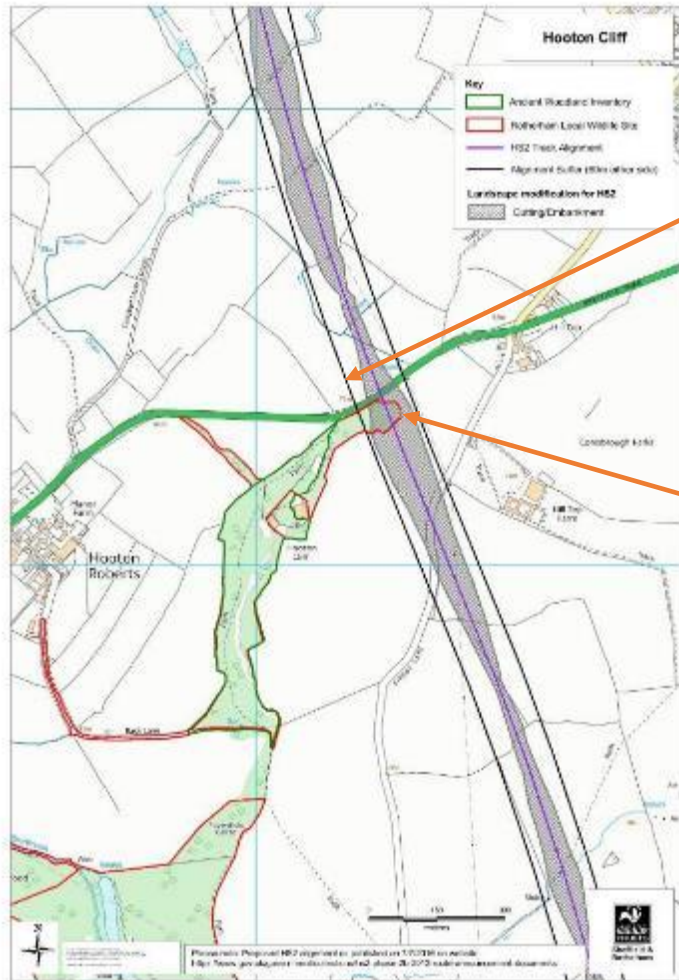
## Kings Pond Plantation



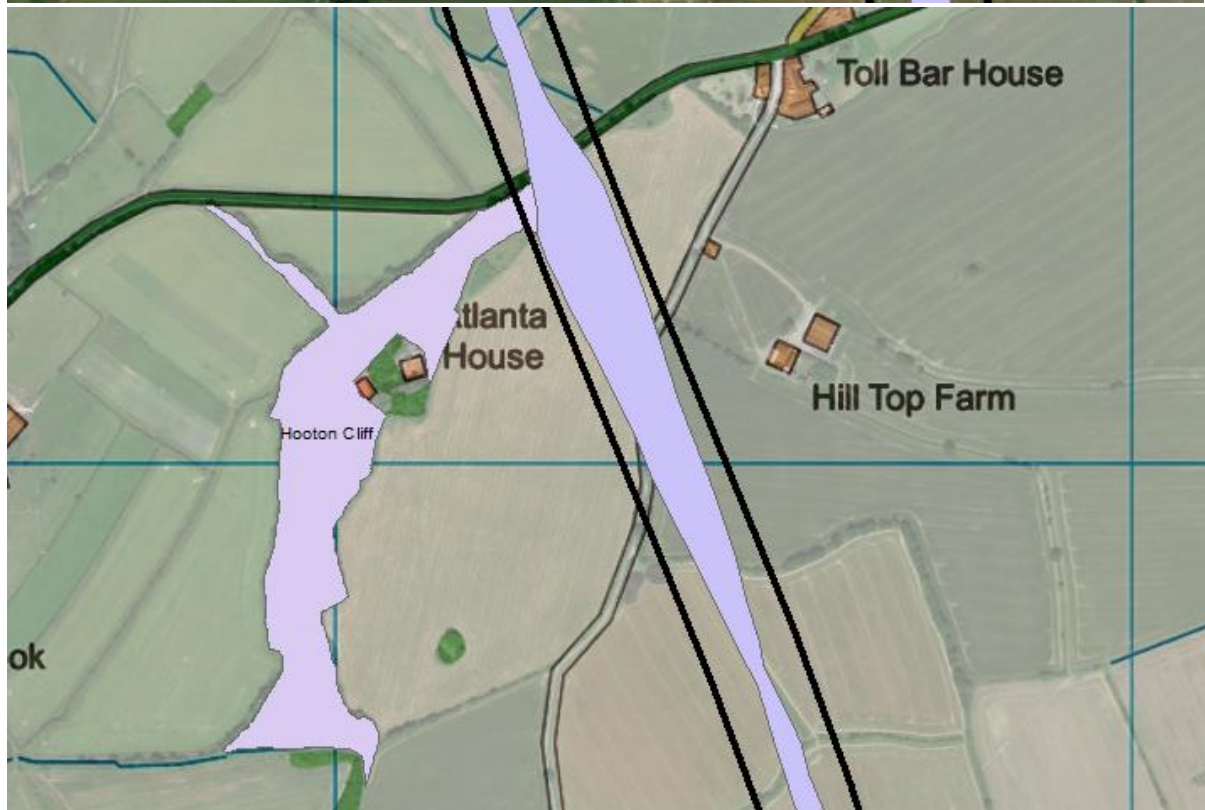




## Hooton Cliff

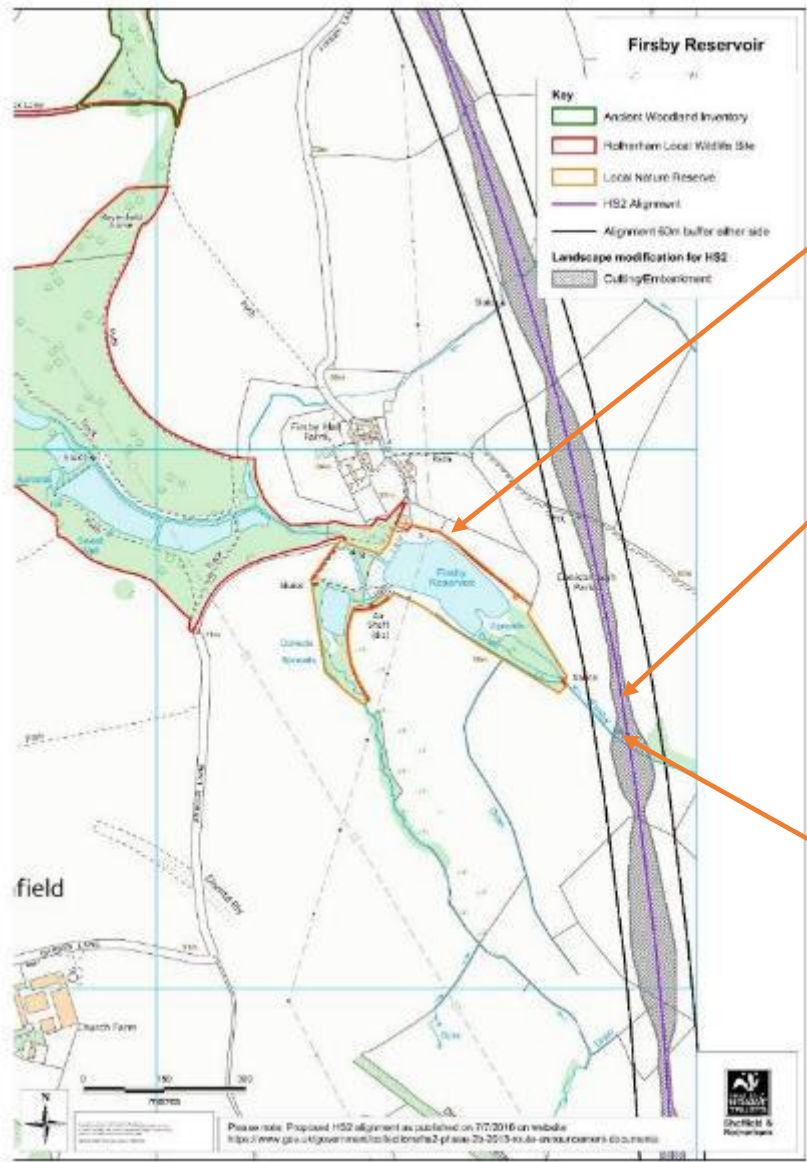


- Private land
- Ash and Large-leaved lime and Ancient Woodland, bats?
- Difficult to move route





Firsby Reservoir



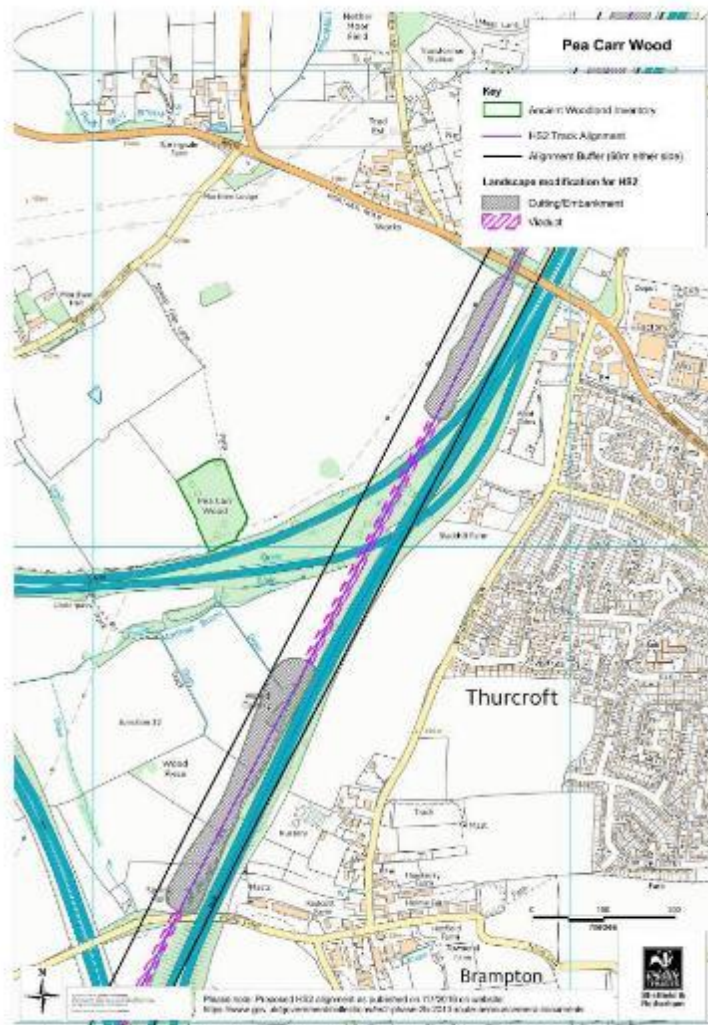


### **Firsby Reservoir**

- A series of water bodies
- Woodlands and grasslands
- Good bird life including gadwall and willow tit. Sheffield Bird Study Group records – possible disturbance?
- Two nationally scarce invertebrates
- Well used by walkers
- Drain in route – risk to water bodies?
- Water bodies suffered – opportunity?



## Bramley and other non-designated sites?

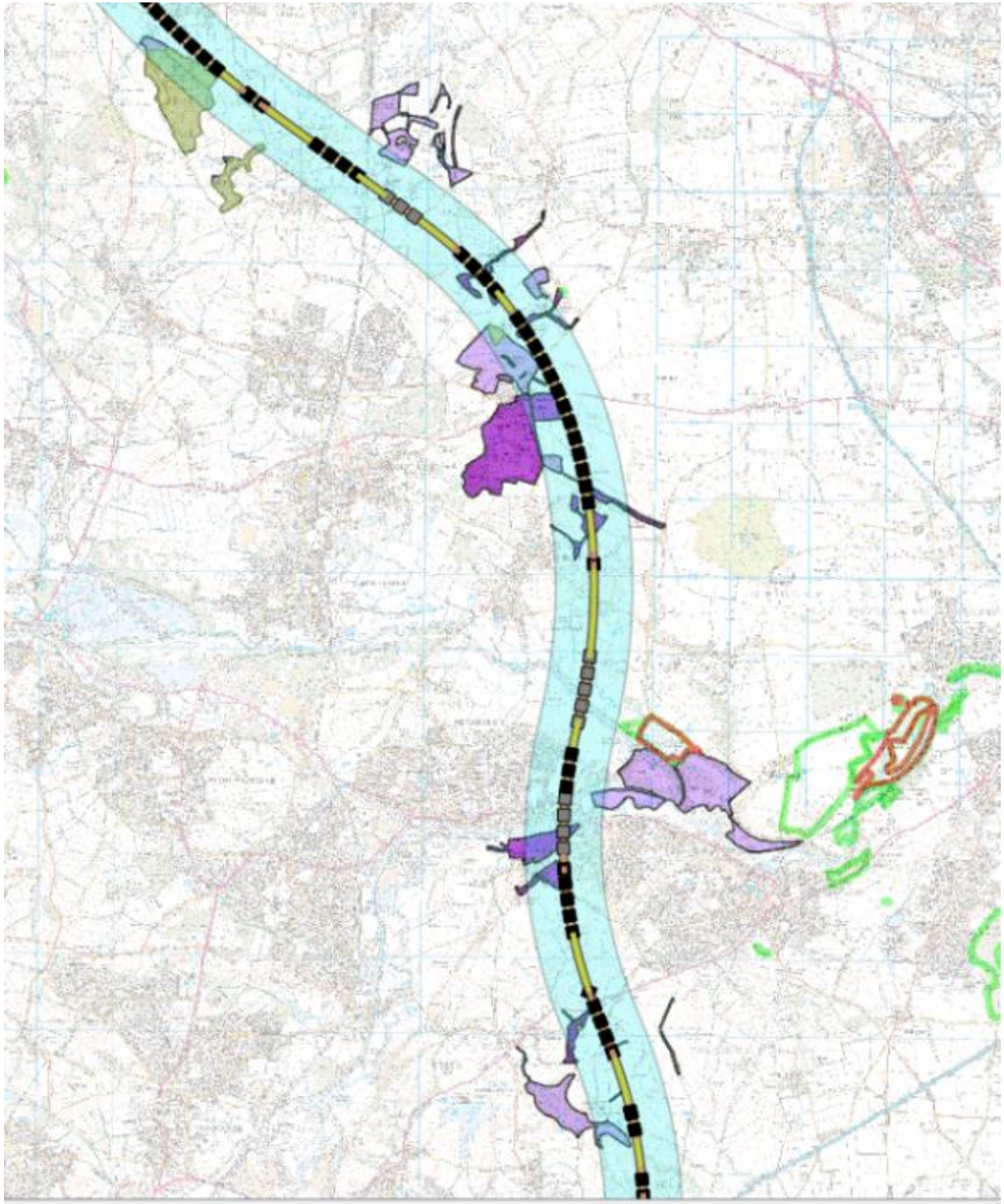


- Slacks pond
- Bird life
- Great-crested newts





## Doncaster and Barnsley Impacts



## South Yorkshire Local Nature Partnership HS2 Workshop Feedback

(Jack Lewis, SHU professional placement student May 2018)

0: Northeast Thurnscoe.

*“Opportunity in this area to have new woodland planting linking up existing small pockets of woodland”*

Difficult to Street View. Bilham Hall will most likely be affected. Mix of farmland and woodland.









1. River Dearne, near Melton Mill Lane.

*“Good area of opportunity to create new wetland habitat. First choice located near the route with goal being to link habitats along the river better, between Dearne Valley and Denaby Ings”*

Largely affected by River Dearne. Area just northwest of Denaby Ings.







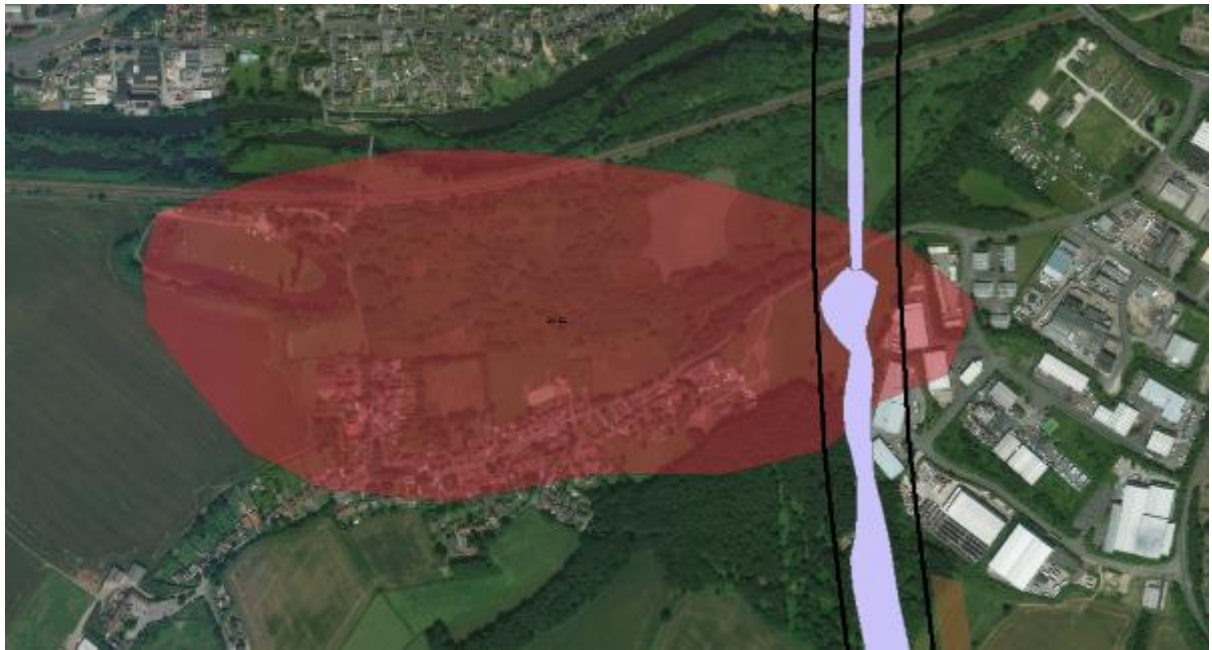
2. Area focused around Old Denaby.

*"Council owned (in part at least). Wetland habitats so opportunities potentially here"*

Area heavily affected by houses to the South, however plenty of wetland to the north close to the River Don, area runs close to existing train line. Street View only offers information the area is overgrown, however can see telephone line running over Ferry Boat Lane.





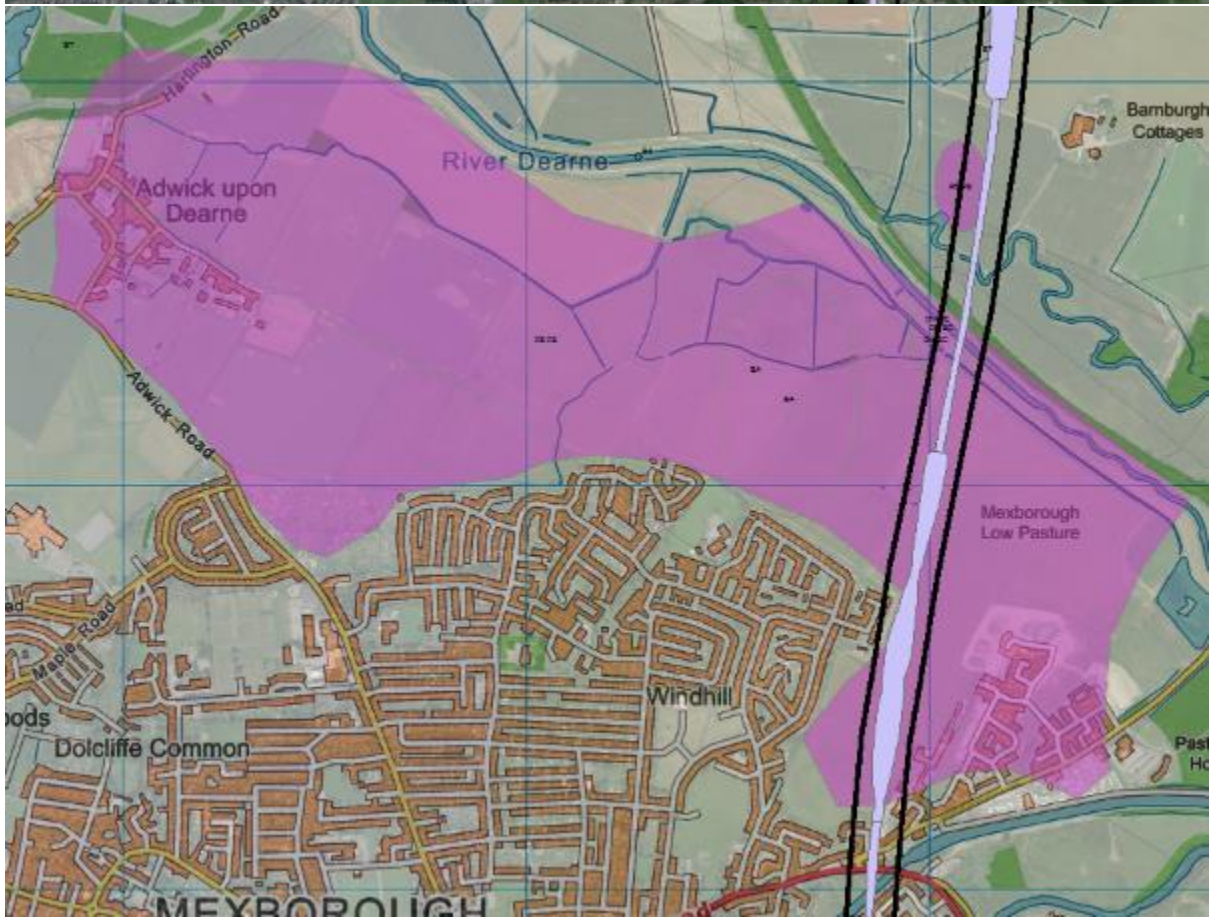


3. Area extends from Adwick upon Dearne to Mexborough Low Pasture.  
*“North Ings Habitat / Floor Alleviation Scheme (?) Lines cuts through North Ings which destroys good habitat including Heronry with Little Egret. Will need compensation. Also part of the potential network”*

Area primarily farmland northwest side, however area stretches into Denaby Ings. Route runs closer to eastern side.









4. Area within Howell Wood. Area also extends to outside SY boundary.  
*"Opportunity here for new scrub habitats for willow tit, adjacent to northeast side of Howell Wood".*

Obvious woodland area, public area. For a small daily fee the woodland pond provides a social spot for budding anglers, while other activities centred around the woodland include DMBC Ranger led activities and an organised archery club.



5. Area just East of Hickleton Road.  
*“YWT Projects – Mag lime grass creation. Opportunity to create grassland network north/south.”*

General farmland area. Cut bank significantly large in this area (see GIS file).







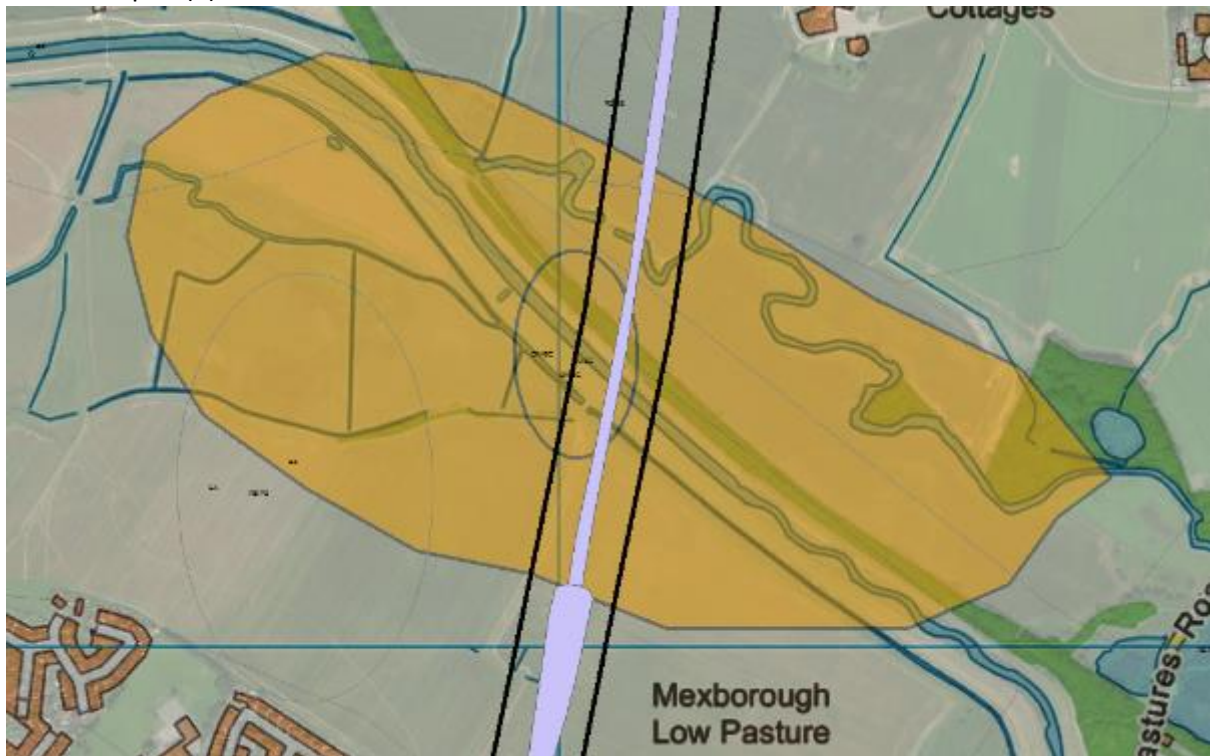
6. West Haigh Wood.
7. *"West Haigh Wood BMBC LNR/LWS Enhance/Compensation"*.

The site has features of archaeological significance, namely various abandoned Victorian ponds. The woodland is mainly comprised of oak with a mixture of other deciduous trees.



8. River Dearne.  
*"River Dearne biodiversity opportunity area"*

Area on top of (1). Small circle in middle of brown area



9. *"\*BMBC Priority\* TPT Mitigation Enhance/Compensation".*

Area on top of (1).

10. Lowfield Road.  
*"Lowfield Road  
(Track = Bridleway)  
Enhance/Compensation".*

Area looks suburban, possibly more opportunity on Lowfield Lane. Lowfield Road very close to existing Sheffield Spur. West Moor runs very close to Lowfield Lane.





11. Pheonix Park.

*"Pheonix Park Land Trust/TCV Enhance/Compensation".*

The site is located in the Thurnscoe area of South Yorkshire. The site was once a slagheap which was used by the Hickleton Main Colliery and is now home to diverse wildlife. There is a climbing wall, carved farmyard animals, a maze and an art gallery designed by a local youth group. It is also popular with walkers, cyclists and horse riders. Phoenix Park is owned by The Land Trust and managed by the Forestry Commission.



12. Park Springs.

*"Park Springs (Land Trust – TCV) Cudworth Common Enhance/Compensation"*

Difficult to gauge defined area, possibly area may refer to New Park Springs... aka Grimethorpe Nature Reserve or RSPB's Edderthorpe Ings reserve?



13. RSPB Edderthorpe.

*"RSPB Edderthorpe Houghton Washlands Enhance/Compensation".*

Part of the Dearne Valley complex. Privately owned marshland (local farmer and RJB Mining), a legacy of the coal industry. Two unregulated shallow ponds providing reed beds, mudflats and boggy pasture. There are several copses providing shrub and tree habitat. The site has the River Dearne on its southwest perimeter.





14. Rabbit Ings LWS.

*"Rabbit Ings LWS (?) Carlton Marsh LWS + LNR Enhance/Compensation".*

The park provides soaring footpaths and cycle tracks that offer stunning views, as well as sports pitches for use by the community. Rabbit Ings was officially opened in 2011 under the ownership of Wakefield Council. In 2012 the Council transferred the land into the ownership of the Land Trust.



15. Adwick Nature Reserve.  
*"RSPB Adwick Nature Reserve \*BMBC Priority\* Potential alongside YWT Dearne Ings and (??) SSSI. Line will sever functional wildlife corridor therefore key issue for compensation"*

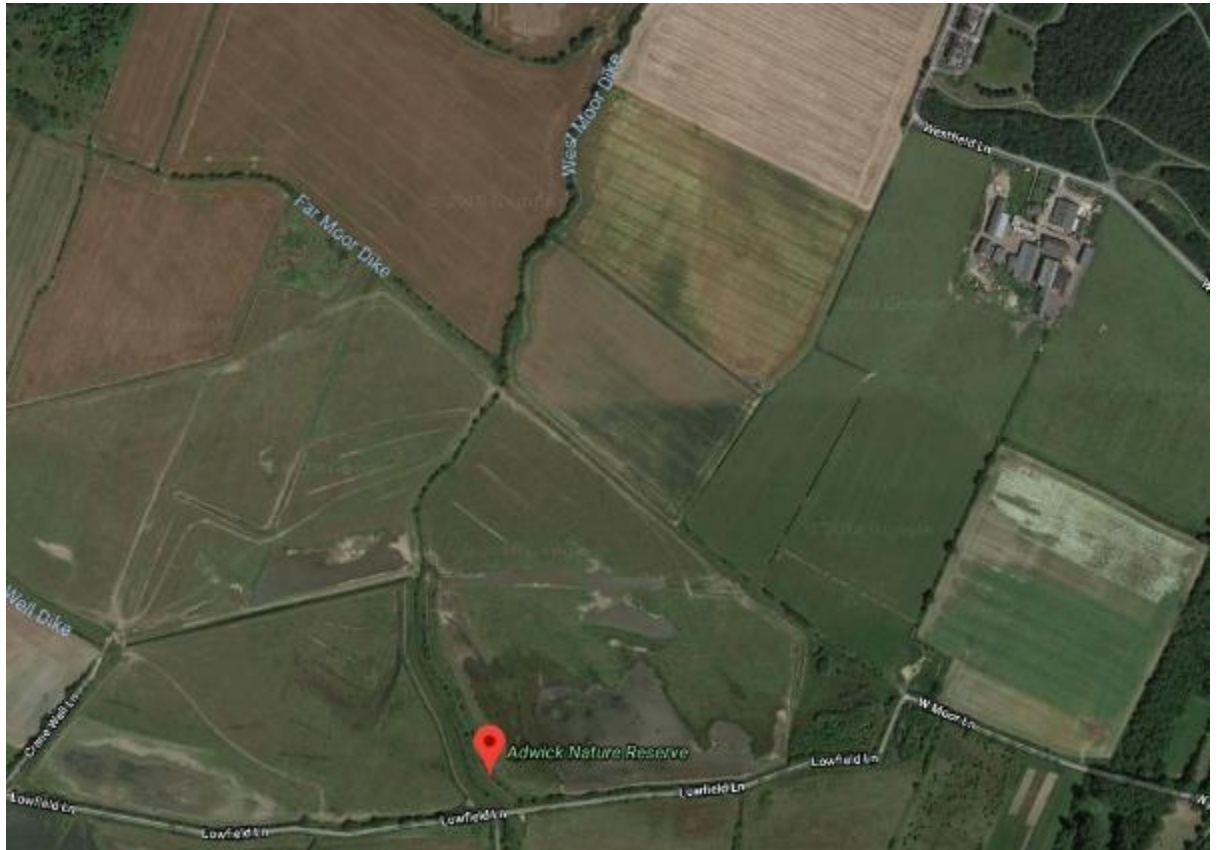
*"RSPB Adwick Nature Reserve \*BMBC Priority\* Potential alongside YWT Dearne Ings and (??) SSSI. Line will sever functional wildlife corridor therefore key issue for compensation"*

Was once an area of farmed fields has since been transformed into water meadows and marshes, home to lots of fascinating wildlife such as wigeon, redshank and kestrel. A bridleway runs through the site and a short path takes you to a central viewing point with panoramic views across the washland.



16. Possible compensation site – extend RSPB Adwick Reserve.

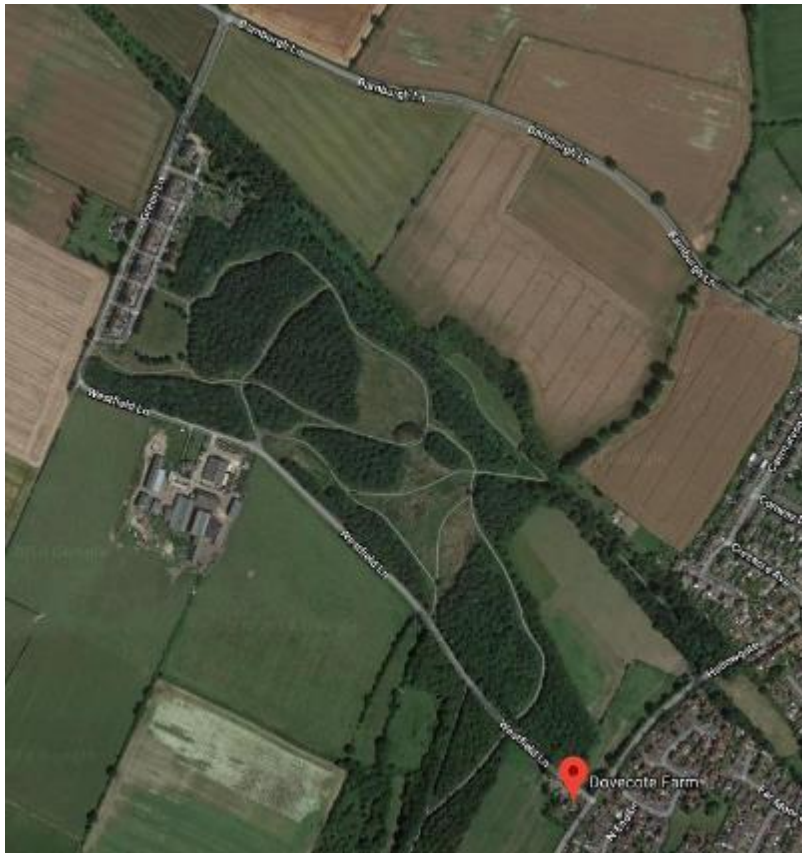
Area consists of a few Dikes running through, a lot of room for expansion.





17. *"Possible compensation site".*

Dovecote Farm. Wooded area with a few tracks running through.



18. Denaby Ings.

*“Denaby Ings. Key site and SSSI. Either enhance and compensation or extend as buffer.”*

Close to the River Dearne, the site plays an important role in flood relief - the iron gates of the sluice allow water to escape into the water meadows on the nature reserve when there is severe flooding. Local volunteers and the Trust work to maintain the path and to keep open areas free from scrub.



19. Potential easier funding.

RSPB Old Moor and RSPB Bolton Ings. Two reserves that are part of the functional network of Dearne wetlands. Possible compensation but ensure the network stays functional. Potential SSSI area being considered at the moment (increased compensation), three sites plus a few others. *"Blessed with a wide range of facilities, it's teeming with wildlife. Breeding bitterns and bearded tits have colonised the reedbeds."*





20. RSPB Old Moor and RSPB Bolton Ings. 2 Reserves that are part of the functional network of Dearne wetlands. Possible compensation but ensure the network stays functional. Potential SSSI area being considered at the moment (increased compensation), three sites plus a few others.

*"Bolton Ings sits just across the river from Old Moor. While you can't access the reserve, you can enjoy beautiful views of the main pool and reed beds that are home to lapwings and redshanks from the nearby paths and trails."*



21. "Other reserves along the river corridor – Broomhill Flash, Wombwell Ings, Gypsy Marsh, Edderthorpe, Houghton Washland, Doverside and land trust sites at New Park Springs and Cudworth. Enhancement / Compensation". "Wombwell Ings is an open site with views to the village of Darfield. Horses graze the grassland here, whilst the main pool is usually full of wildfowl and wading birds. With a footpath circling the reserve..."



22. *“Dearne river corridor is key. Trans Pennine Trail. Need to ensure access, connectivity and opportunity for enhancement or compensation.”*

Area runs near Bolton Common, runs along River Dearne. Area is run through the Sheffield Spur railway line.

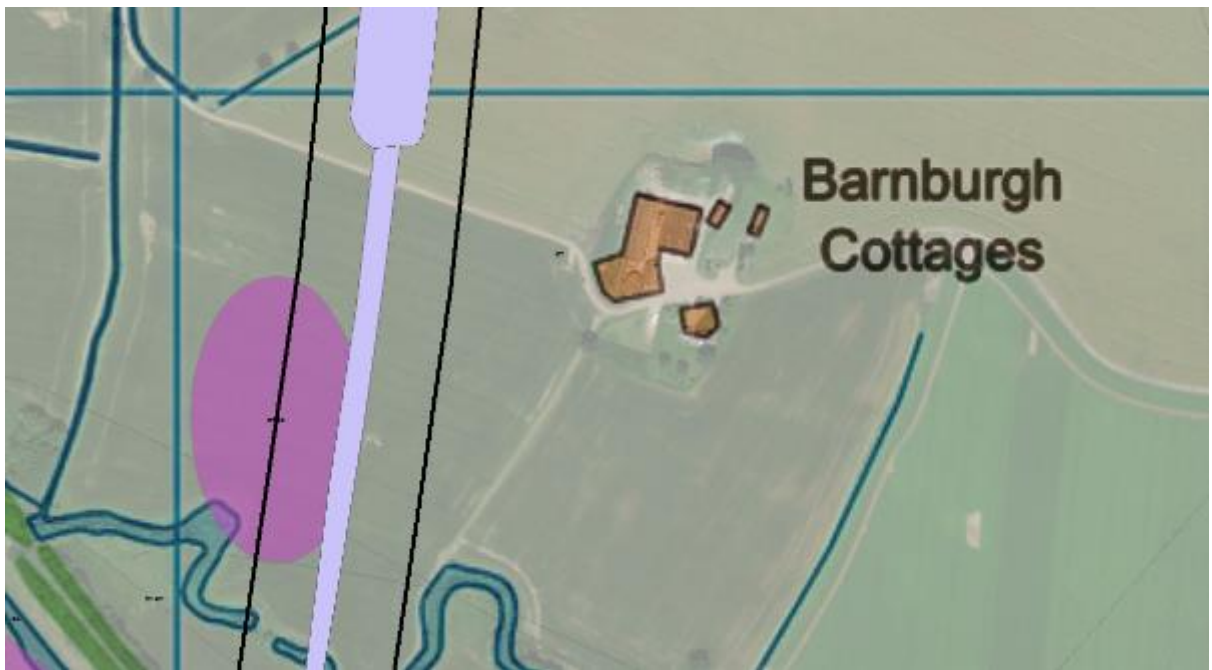
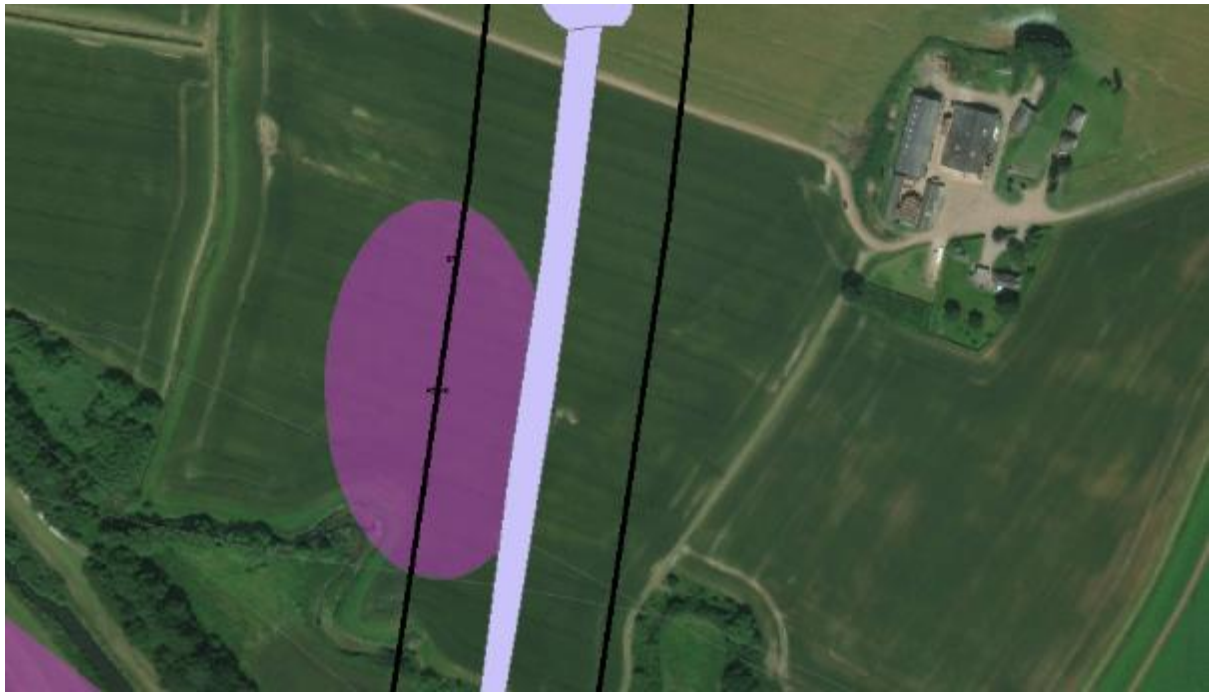




23. "Site identified next to RSPB Old Moor for potential new wetland and wasteland. Large reedbed to extend existing Old Moor Bittern population. Ideal but expensive compensation site".

Area on GIS file is on HS2 line however note above is located on Old Moor?





24. Thrybergh Tip. Yorkshire Water site. Potential improvement or compensation site.  
Area surrounding River Don, Moorland area?





25. *“Dearne RSPB reserves and EA washlands could be potential sites of soil for construction. But more importantly we could use spoil / soil generated to create habitat. E.g. We have a reservoir at Old Moor we want to fill and create a new reed bed.”*

26. *“Lundwood STW – habitat work ongoing here – combine in too large scale landscape mitigation”*

*“Over the next two years, the site will receive a major overhaul involving the construction of a new activated sludge treatment process and the removal and reinstatement of the existing filter beds. In addition, a new inlet will be built, fitted with a new, state-of-the-art odour control unit.”*

*“Once complete, not only will the site be able to operate more efficiently, water being released back into the River Dearne will be greatly improved bringing environmental benefits to the river and local environment.”*



27. *“Thrybergh Country Park. RMBC owned. Beneficiary site?”*

*“Thrybergh Country Park campsite is located in beautiful countryside on the edge of Rotherham. The 60-acre site has a 35-acre reservoir with woodlands, picnic and barbecue areas, trout fishery (fly fishing only), and much more.”*



28. *“North Ings strategic mitigation compulsory purchase? Strategic habitat enhancement”.*

Taken from a blog post on Mexborough North Ings:

*“After all the rain we've had this year, the fields have reverted to their original wetland state, and a lot of birds have taken up residency. Before the river Dearne was diverted to its present route in 1960-ish (to the south of the old railway embankment), the whole area was a large flood meadow, full of bullrushes (...and stuff ; so my dad says), and was known locally as 'Swallows Bottoms'. So it's good to see it getting recolonised!”*





29. *“The park has 170 species of wildflower and plants, 200 species of birds and 20 species of mammals. It is surrounded by some truly lovely Yorkshire countryside making for a splendid short stroll. The park has good facilities with two bird hides, a play area and a lakeside cafe.”*



30. *“Aldwarke STW Potential for landscape management across area between Thrybergh and Aldwarke up to Mexborough”*

YWT- *“We’ve invested £7.7 million at our Aldwarke site, a significant proportion of which has gone towards reducing the level of ammonia discharged from the site from 10 milligrams per litre to 3 milligrams per litre. By doing this we’ll ensure a much higher quality of water is put back into the Don, which will create a healthier river environment for people, fish and wildlife. This work will ensure compliance with the Water Framework Directive and move our rivers one step closer to having “good ecological status”.”*



31. *"Improve woodland, expand wood along route in accordance with UKF"*

Difficult to understand what wood needs expanding due to lack of detail?





Brampton Common: LW Ownership unclear.

*“This large area of mixed arable and pastoral farmland. As well as the fishing ponds of the Straight mile fisheries there is also a small woodland, Brampton Common Plantation (SK495868). The main focus of ornithological interest is the wet field between the Plantation and Hardwick village. It is possible to park in the gateway here opposite the public footpath. Over 100 bird species have been recorded since 1974 in this area and the area is particularly important for its breeding waders.”*



32. Ulley Country Park: RMBC owned. Beneficiary sites?

*"The Park is situated at the confluence of Morthen and Ulley Brooks, where the construction of the reservoir was completed in 1874. This created an area containing a broad diversity of habitats, ranging from the reservoir itself with its aquatic margins to grasslands below the dam and steep wooded hillsides bordering the streams. A pond, created in 2009 to replace the old filter-beds, augments these habitats and provides a useful facility for school pond-dipping groups."*





33. "Mitigation fish pass opportunities Star Mill Weir Barnsley River Dearne"

*"The river below Clayton West ceases to be a shallow, fast-flowing watercourse, and consists of deeper pools with a slower flow, which is suitable for various coarse fish as well as trout. By 1974, a modest improvement in water quality had been achieved by treatment of industrial effluent, and some fish managed to exist below the weir at the Star Paper Mill in Barnsley. The weir helped to oxygenate the water, and most of the fish had been washed downstream from Cannon Hall and Bretton Lakes."*





34. "Key blue green corridor. To protect and enhance Flood risk Space for water Wildlife corridor"

Large area but majority is covered by other stakeholders.





35. *"Disused rail line Barnburgh (Barsley + Doncaster) Enhance / Compensation"*

Difficult to find any information





36. "Disused railway (BMBC) Enhance / Compensation"



37. Barnburgh Lakes – (??) Anderson. This is an opportunity for relocation of the lakes

Barnburgh Lakes offers the sportsman a number of well stocked fisheries accommodating both Match and Pleasure Anglers from the surrounding Dearne Valley region.



38. "Land Ownerships Farmers: Richard Durdy, Peter Smith, Peter Atkinson"







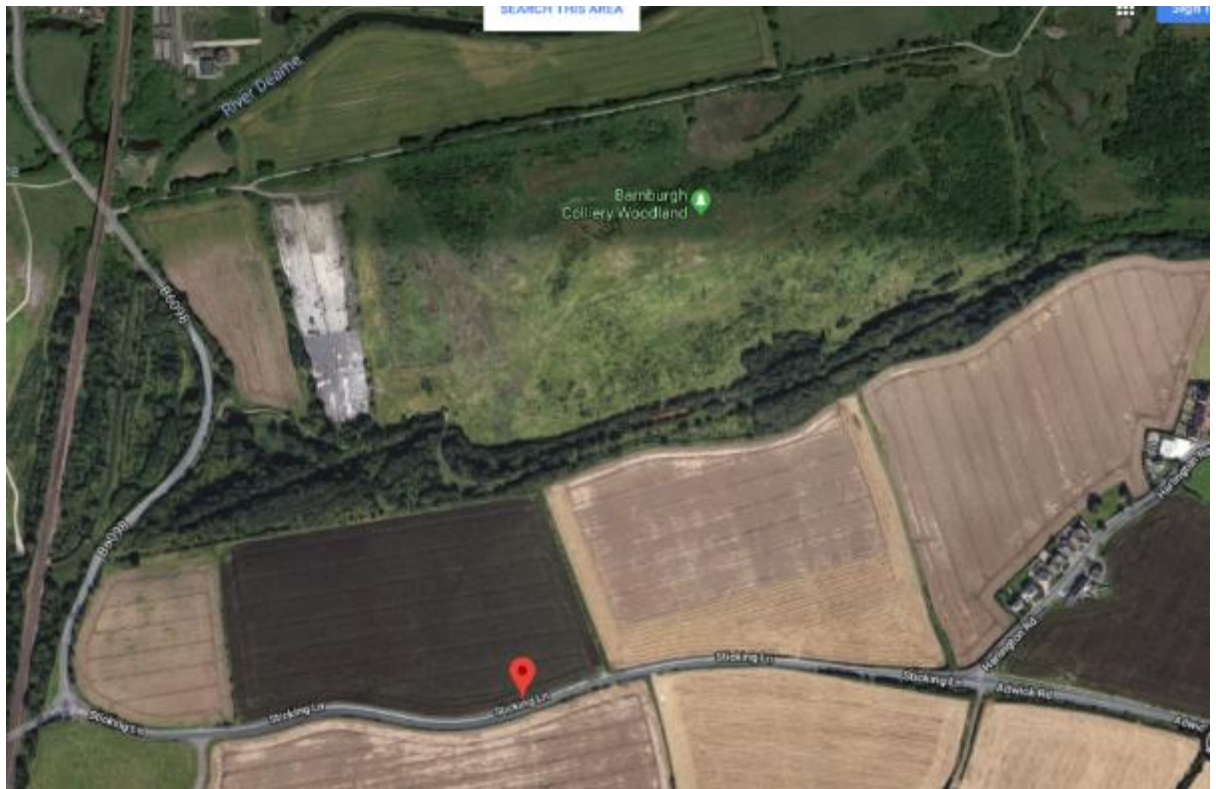
39. Bolton Common.

*"Land Ownership*

*Thomas Black Ltd (Formerly Aogden and Sons)*

*Potential for biodiversity opportunity"*

*"This woodland sits on the site of a redundant brown field colliery. This restored site has been planted with grass and trees and a network of footpaths were constructed with provision made for the Trans Pennine way, the longest footpath in the UK, to run through the site."*





40. *"Former Silverwood Colliery Tip Ownership Thomas Black LTD Potential (??) biodiversity offsetting"*

The colliery closed in 1994, Reclamation work finished in 2006, with the Forestry Commission planting tree saplings in 2007. The coal tip has been grassed completely and the once dangerous slurry lake turned into a freshwater nature reserve.





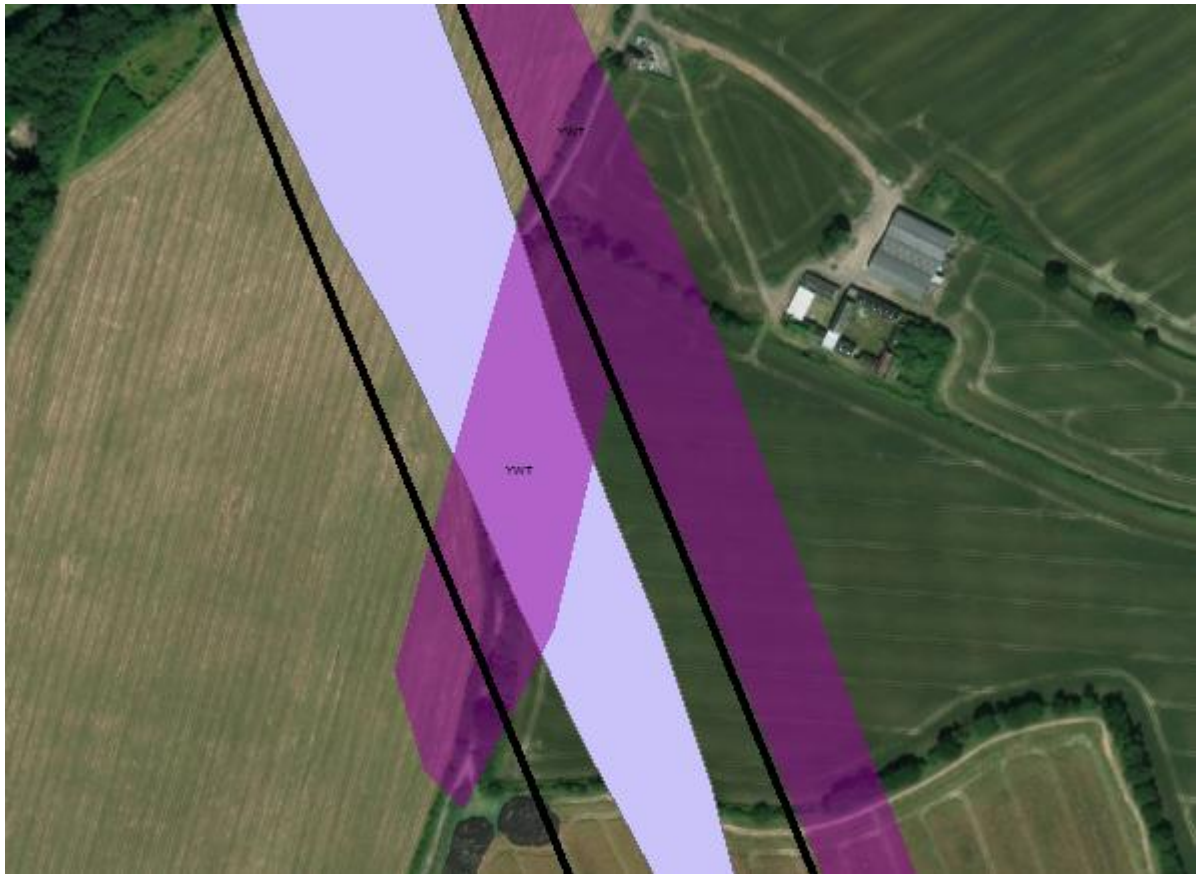
41. "Former Thurcroft Colliery Site and Tip Owner FCC Environmental Potential Biodiversity Opportunity".

"The September 2007 pictures show a much improved environment. Most of shale had acquired some topsoil and was covered in thick scrubby grass and rows of newly planted saplings. It seemed home to ground nesting birds like skylarks, and kestrels hovered hunting for the mice and voles that the grass provided food and cover for."



42. "ROW Cut off Strava labs data to look at level of ROW UK."

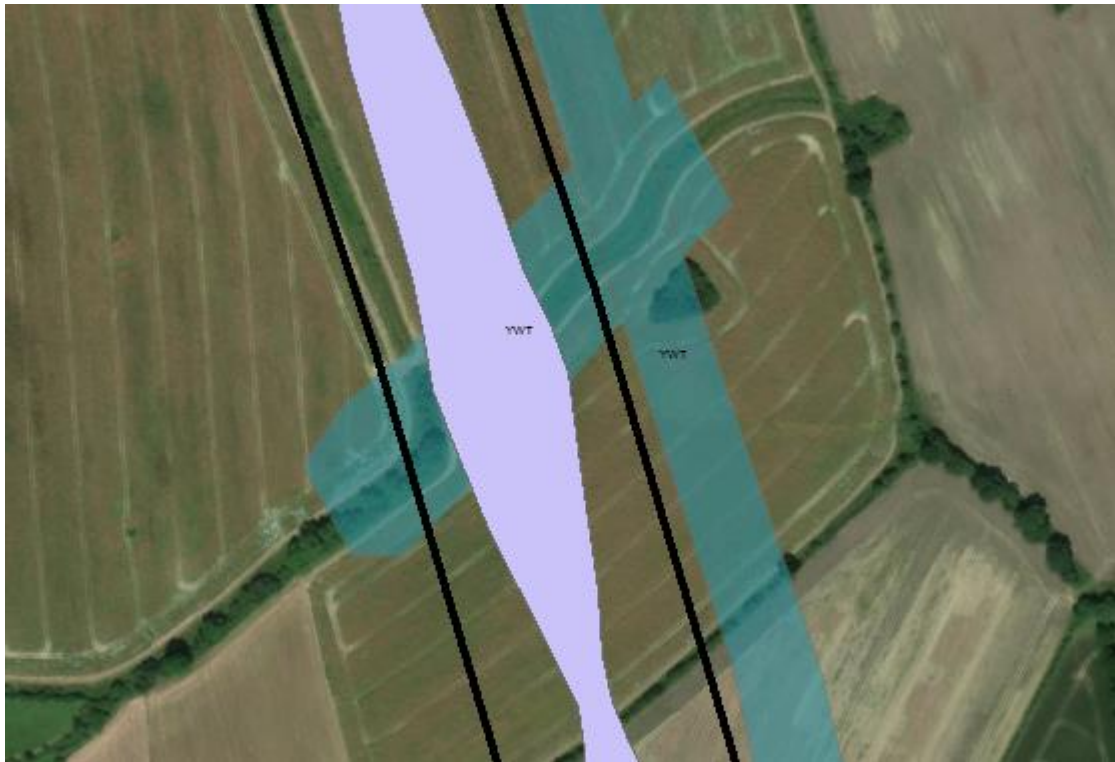




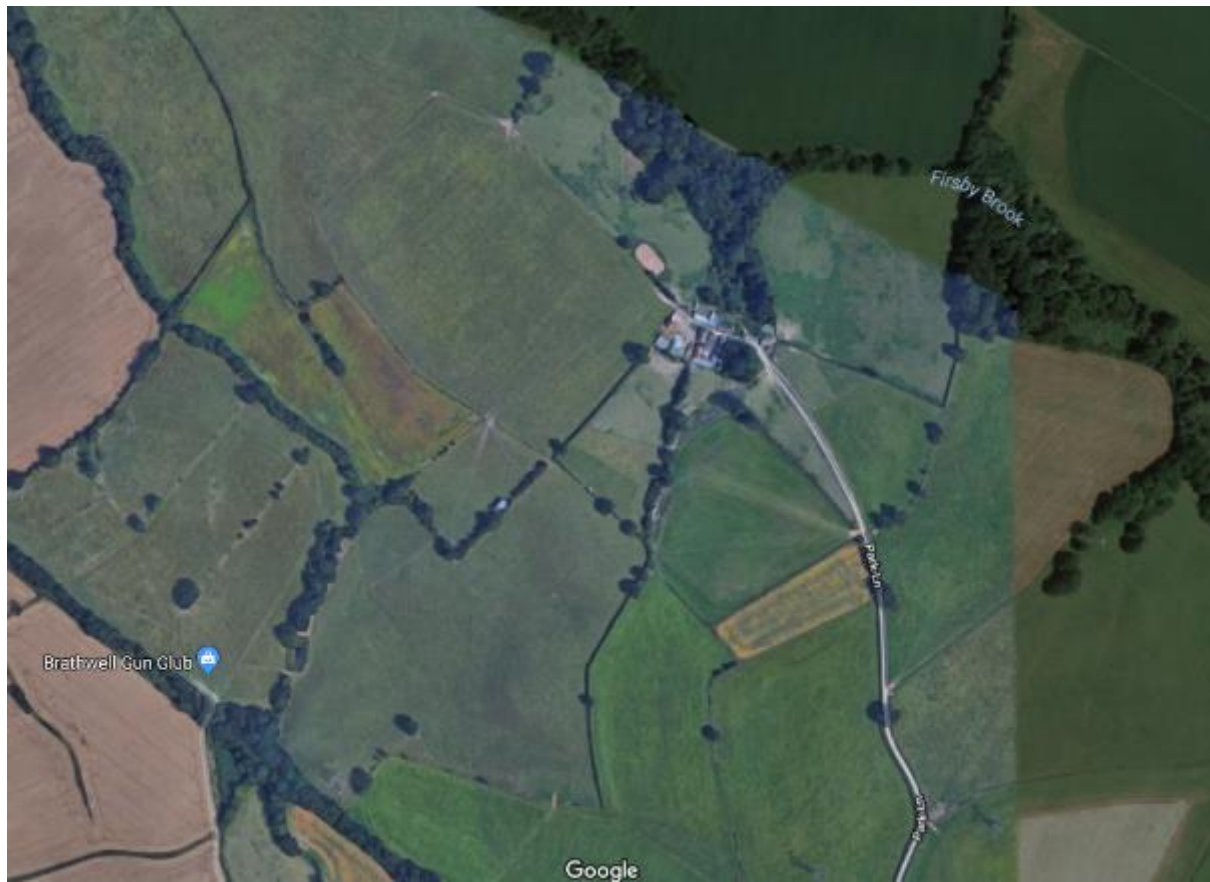


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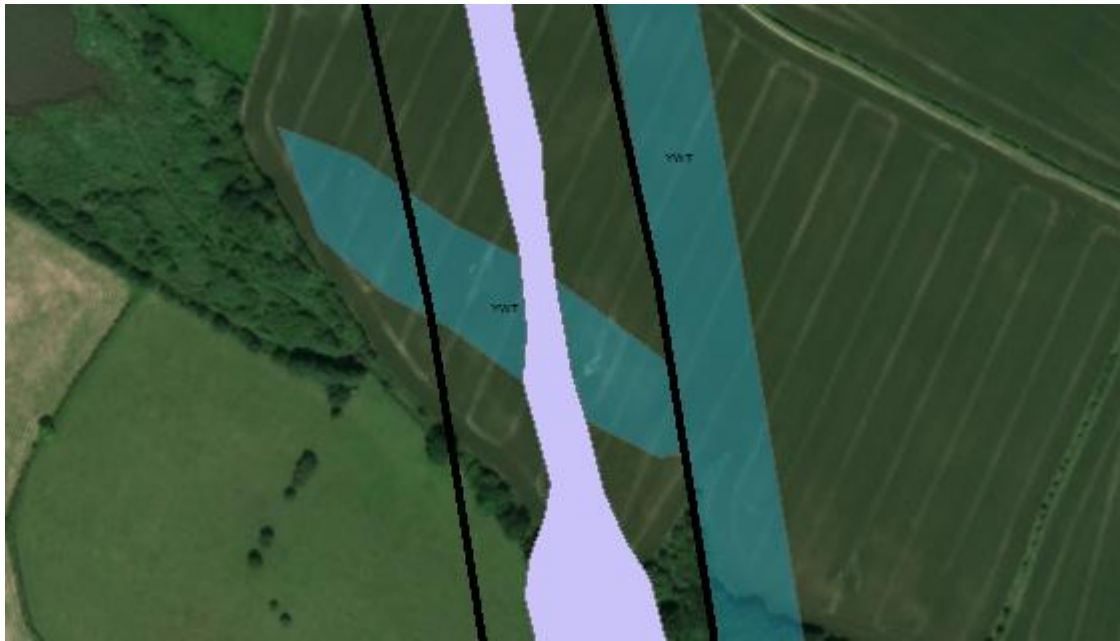




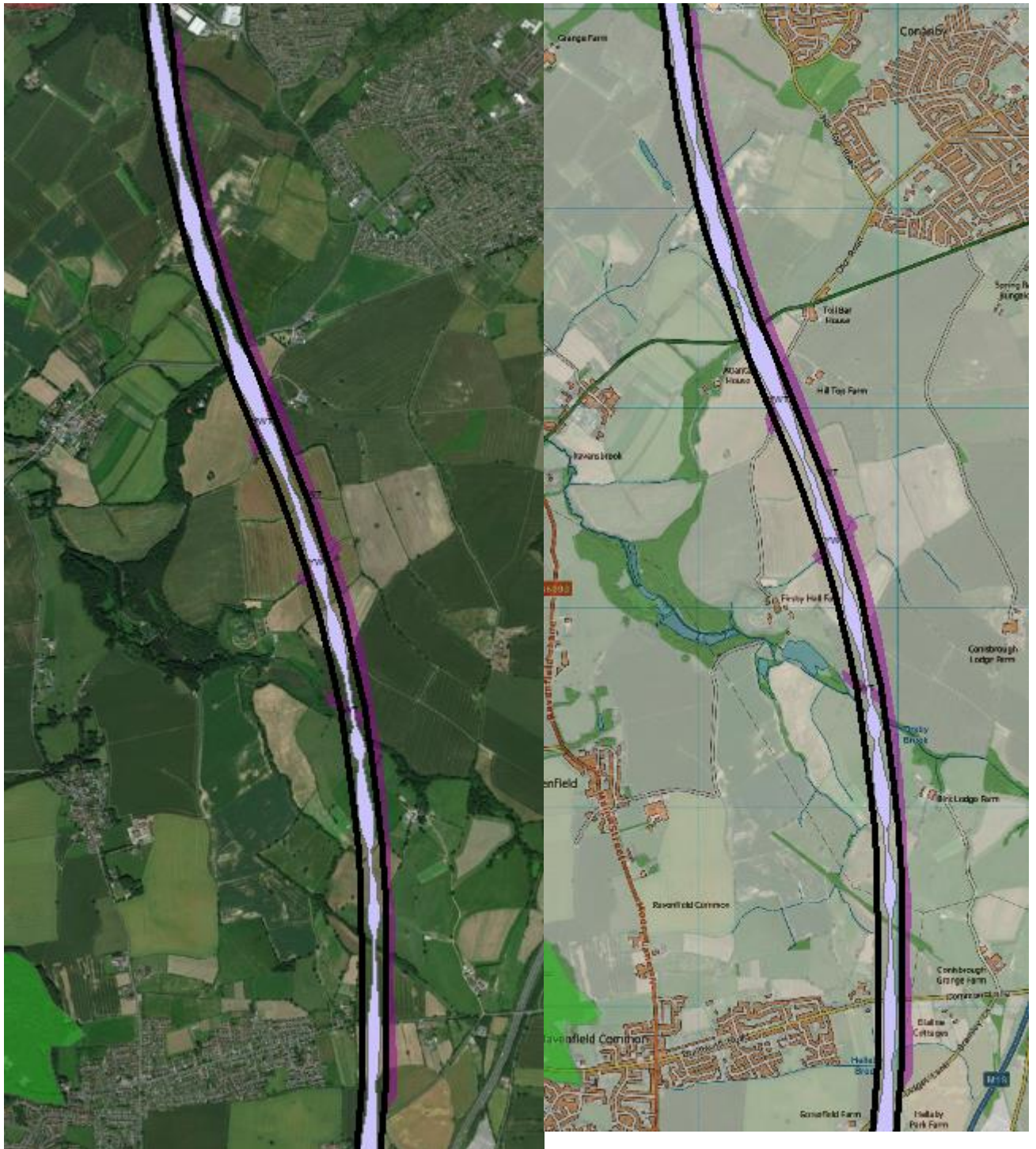
44. "ROW Cut off Strava labs data to look at level of ROW UK."







45. "Grassland better linking (??) North/South".

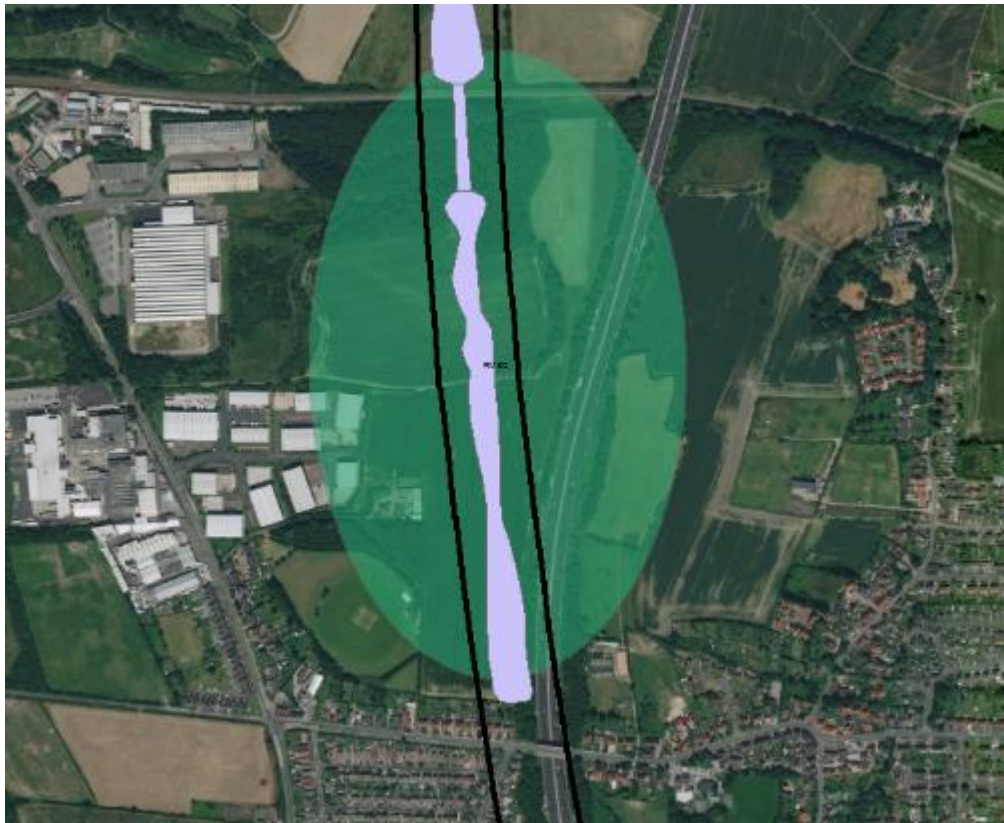




46. RMBC Manage.







47. R.O.W: Cuckoo Way. Chesterfield Canal. Like of Norwood Tunnel.







<b>YWT Region</b> <i>e.g. South, West etc</i>	<b>Opportunity Ref</b> <i>e.g. SY1, WY1</i>	<b>Opportunity Name</b>	<b>Habitats on site currently</b>	<b>Habitats potentially restored/enhanced/created</b>	<b>Key Opportunities</b> <i>e.g. connectivity, NFM, people engagement</i>	<b>Approx. Cost</b> <i>i.e. purchase and capital</i>	<b>RAG Status</b> <i>i.e. how feasible?</i> <i>Red = high risk, Amber = medium risk, Green = low risk</i>	<b>Additional Info</b>
South	SY1	Old Denaby wetlands	LWS Wetlands but scrub encroachment	Wetland restoration potential Enhance and upgrade current habitat	Habitat creation and improvement Know landowner - DMBC People engagement Connectivity with Denaby Ings	Compulsory purchase from DMBC and capital works - £300K		
South	SY2	Denaby Wood (adjacent to ancient woodland)	Arable	Woodland	Habitat creation Potential sympathetic landowner (Grange Farm) People engagement - improve	Land purchase plus capital - £200K		To buffer ancient woodland and extend woodland habitat

					amenity value of woodlands and surrounding area			
South	SY3	Don River Corridor	Areas of wet woodland	Restore flood plain Low wet grasslands and fen	NFM Improve water quality (WFD objectives) People engagement and public amenity	Land purchase and capital works - £400K		Restore flood plain for biodiversity, water quality and natural flood management
South	SY4	Conibrough North Cliff/Denaby Craggs	Mag Lime quarry Scrub Allotments Arable land	Mag Lime woodland Mag Lime grassland	Restore mag lime habitat (key character area) People engagement and public amenity Landowner known - DMBC	Land purchase and capital works - £500K		Social problems - could help improve these Linking Local Limestone School close by for engagement

South	SY5	North Ings and Mexbrough Low Pastures	Arable Wetland	Remeandering project for Dearne Washland restoration/natural river floodplain Reinstate limestone springs	NFM Improve water quality (WFD objectives) People engagement and public amenity Landowner known	Land purchase and capital works - £600K		Braithwaite owns most EA river course Natural spring there Recompense for Thunderhole
South	SY6	Denaby Springs	Arable	Limestone fen Limestone grassland Denaby Ings extension and Melton Craggs extension	Restore mag lime habitat Extension of wetland habitat People engagement and public amenity	Land purchase and capital works - £300K		Natural spring there Translocation of mag lime grassland Recompense for Thunderhole
South	SY8	Stables Wood/Barnburgh Cliff	Arable Mag Lime grassland/Mag Lime woodland	Habitat improvement for mag lime grassland Arable reversion for extension of grassland	Restore mag lime habitat Extension of grassland habitat People engagement and public amenity	Land purchase and capital works - £300K		



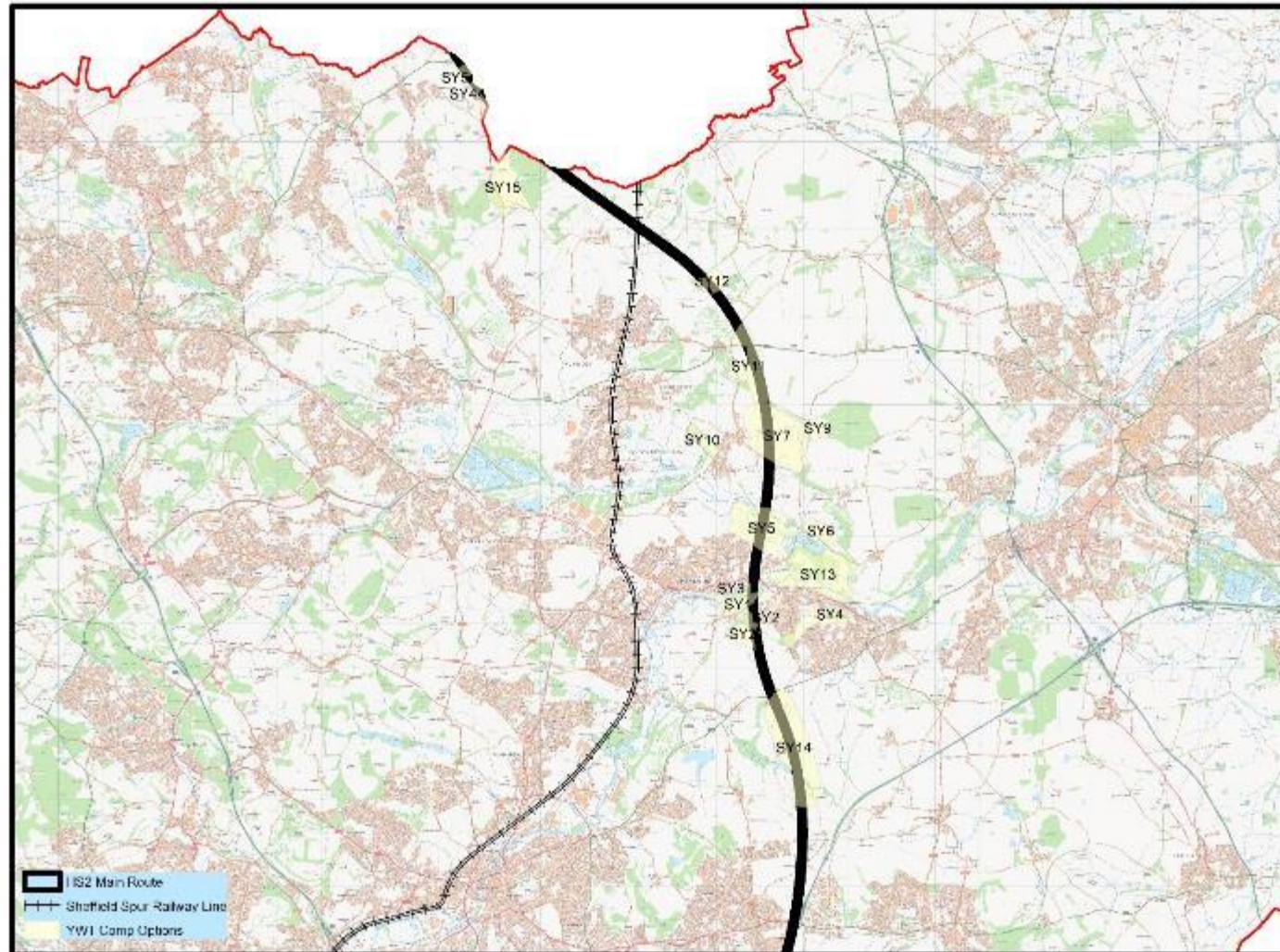
South	SY7	Thunderhole Extension	Arable Mag Lime grassland/Mag Lime woodland	Habitat improvement for mag lime grassland Arable reversion for extension of grassland	Restore mag lime habitat Extension of grassland habitat People engagement and public amenity	Land purchase and capital works - £800K		Other arable fields near there to make it a big enough grassland bit to manage Arable fields near Thunderhole Ideally should be tunnelled under mag lime bit full stop due to springs and habitat - so if not tunnelling then need to do all of this Hydrology big risk if cutting through - will need to manage this
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South	SY9	Melton Wood extension	Arable	Woodland corridor extension - between Melton Wood and Bamburgh Cliff woodland rides and grassland too	Woodland habitat creation People engagement and amenity	Land purchase and capital works - £350K		Marbled White butterflies!
South	SY10	Barmburgh Tip	Plantation woodland and amenity grassland	Species rich grassland Woodland management	Grassland habitat restoration People engagement and public amenity Known landowner - BMBC	Land purchase and capital works - £400K		Owned by BMBC
South	SY11	Hickleton Plateau	Arable	Mag Lime woodland Mag Lime grassland	Restore mag lime habitat (key character area) People engagement and public amenity	Land purchase and capital works - £700K		Private landowner Listed building nearby Hydrology an issue due to natural springs so could flood cut through
South	SY12	Wilderness Wood extension	Arable	Extension of woodland	Woodland habitat creation People engagement and amenity	Land purchase and capital works - £350K		

South	SY13	Kingsland Earth Centre	Areas of unmanaged grassland Young plantation Areas of bare ground from colliery spoil tipping	Grassland improvement Woodland improvement Wetland/ponds	Restore grassland and woodland habitat Extension of wetland habitat People engagement and public amenity	Land purchase and capital works - £800K		DMBC may own it/lease it
South	SY14	Conisbrough Parks	Arable	Hedgerow planting for connectivity Mag lime woodland Mag lime grassland	Restore mag lime habitat (key character area) and restore hedgerow connectivity People engagement and public amenity	Land purchase and capital works - £500K		
South	SY15	Howell Wood and Houghton Common	Arable	Woodland Lowland heath in areas	Woodland habitat creation People engagement and amenity	Land purchase and capital works - £500K		Add to West region patch (West 1)



# HS2 Workshop, YWT.



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