

5.0 BIODIVERSITY IMPACT ASSESSMENT CALCULATIONS

Habitat Impacts and Removal of Existing Vegetation

- 5.1 Pre-development habitats within the Site include species-poor semi-improved grassland (31.22 ha), hedgerow (0.5 km), scattered trees (0.3 ha), built environment - buildings and hard-standing (0.3 ha) and flowing ditch (0.68 km).
- 5.2 The development will result in the loss of / disturbance to approximately 31.22 hectares of species-poor semi-improved grassland. This habitat type is not included as a category within the Environment Bank calculator; the most relevant category was 'Grassland – Other Neutral Grassland' in 'Poor' condition.
- 5.3 The development will retain approximately 0.24 km of hedgerow on the edge of the Site. The trees within the boundary hedgerows are proposed for retention where possible.

Development Proposal

- 5.4 As shown on the proposed layout plan⁶, the scheme will include the following habitats: hard standing / built environment⁷, mixed tree plantation, native hedgerows (retained 240 m + new hedgerow 600 m = total 840 m), wetland: standing water and retained/new scattered trees.
- 5.5 The new native hedgerows would be total 600 m in length. These hedges should be planted with native species such as hawthorn, elder, holly, hazel and guelder rose and managed for wildlife benefit.
- 5.6 The 2.8 ha of amenity grassland would include areas of mown amenity grassland and areas of long meadow grass. Native species of local provenance should be included within the planting schedule for the Site.
- 5.7 Refer to Table 2 for the outcome of the Biodiversity Impact Assessment Summary. A copy of the Biodiversity Impact Assessment Calculator is available on request.

⁶ Burnaston Cross, Willington – Green Infrastructure Areas – FPCR – 11.07.2018.

Calculation Results

5.8 Table 2 presents the Biodiversity Impact Assessment Summary.

5.9 Table 2. Biodiversity Impact Assessment Summary

Pre-development			
Habitat	Area (ha)	Condition	Score
Grassland – other neutral grassland	31	Moderate	186
Other features – bare ground	1	Moderate	4
Woodland – native broadleaf woodland	1	Moderate	12
Woodland – scrub	1	Moderate	8
Total			210
Linear Habitat	Area (m or ha)	Condition	Score
Hedgerows	500 m	Moderate	1000
Freshwater – natural rivers and streams	1 ha	Good	18
Total			1018

Development proposal			
Habitat	Area (ha)	Condition	Score
Woodland – native broadleaf woodland (Tree planting – specimen trees)	1 ha	Good	18
Woodland – native broadleaf woodland (Bund woodland planting)	4 ha	Good	72
Other features - Semi-ornamental shrub planting	1 ha	Good	6
Grassland lowland meadow - (long meadow grass)	5 ha	Good	90
Grassland – amenity (mown)	1 ha	Good	6
Wetland planting mix	2 ha	Moderate	24
Grassland lowland meadow (Wildflower meadow)	1 ha	Good	18
Freshwater - Ponds	1 ha	Moderate	12
Total			246
Linear Habitat	Area (m or ha)	Condition	Score
Formal hedge	663	Low	663
Native hedge	523 (new) + retained (240 m)	Moderate	1526
Freshwater – natural rivers and streams	1 ha	Good	18
Total			1,444

Post development vs pre-development for habitats = $246 - 210 = + 36$

Post development vs pre-development for linear features = $1444 - 1018 = + 426$

In conclusion, the habitat creation measures proposed as part of the development will result in a net gain in the Biodiversity Metrics Score indicating net-gain to the biodiversity value of the Site.