expertrees

Bolton-Upon-Dearne Station.

Arboricultural Tree Survey and Report

Date : 4th October 2008

Prepared for Shield Support Services and Network Rail

1.0 Introduction

1.1 expertrees have been instructed to complete an arboricultural tree survey and report on trees at Bolton-Upon-Dearne Station. The report was requested on behalf of Network Rail by Mark Rowlands of Shield Support Services.

1.2 Network Rail intend to undertake extensive construction work to the station and as proposed this work will directly influence the trees growing on the site.

The survey and report comprises;

i **Site survey and assessment of the trees.**

ii **Appraisal of the influence of the proposed construction work.**

iii **Recommendations for tree works.**

1.3 The contents of the report are an appraisal of the current condition of the trees on the site. Trees and shrubs are dynamic organisms and their health and condition can change rapidly. It is recommended that trees should be inspected regularly, at least once a year so that changes can be monitored and any management plan and survey data updated.

1.4 The data and recommendations contained within this report are valid for a period of **1 year** and may be subject to change within this period due to alterations in the trees environment or after inclement weather.

1.5 We have no information as to the current structural integrity of any adjacent building structures or drainage systems. Drainage/water supply systems, if damaged, can allow roots to penetrate. If the system is sound or after repair, roots have little capacity to access and damage underground services. A drainage expert can give more advice.

1.6 The appearance of any building defect should always be investigated promptly. If vegetation is implicated then effective early removal or pruning of trees will stabilise the situation at relatively little cost.

2.0 Status of the Trees

2.1 A Tree Preservation Order has been made on the trees on site by the Local Authority under The Town and Country Planning Act !990 (as amended). This should not normally be a block to the effective use of a site but serves to deter damage to or clearance of trees prior to planning permission being granted. It also enables the local authority to enforce the protection of any retained trees and to require tree planting to be undertaken as part of the project.

2.2 Before authorising any tree works an application for any such works should be made to the Local Planning Authority. Statutory permission is required before any works can take place.

3.1 Method of Inspection

3.2 The trees were inspected from ground level using a visual tree assessment method in accordance with British Standards and current best arboricultural practice.

3.3 Trees suitable for retention were tagged and numbered 0947 - 0967 on the West face of the trunk at approx 1.50m from ground level.

3.4 The survey was conducted on Friday October 3rd 2008. The weather at the time was overcast, blustery with showers. Temperature - 9 degrees celsius.

4.0 The Site

4.1 The site is located adjacent to the railway station at Bolton-Upon-Dearne. It comprises a small triangular group of trees enclosed by the road bridge of Lowfield Road, the existing station platform and the station car park.

4.2 Within the area of trees there is evidence of recent and regular Anti Social Behaviour; fly tipping, vandalism, fires, drug misuse and dog fouling.

4.3 The immediate surrounding area is essentially residential with agricultural land to the East. The station is only visible from a Western aspect as the height of the Lowfield Road bridge obscures the platform from views by residents of Lowfield Road. To the North and East there is little residential development that is visually influenced by the station.

4.4 Other tree cover in the area includes tree belts to the South and farmland hedgerow trees to the East of the station as well as small groups of garden trees and boundary planting around local housing.

4.5 The group of trees does provide a visual screen of the road bridge and will contribute to some noise attenuation but only for the properties on the edge of the station car park.

5.0 The Trees

The trees comprise a single group and contain ten recorded species. (See attached sketch plan)

These include;

Common Ash - *Fraxinus excelsior*
Field Maple - *Acer campestre*
Silver Birch - *Betula pendula*
Hawtorn - *Crataegus monogyna*
Hazel - *Corylus avellana*
Wild Cherry -*Prunus avium*
Aspen - *Populus tremula*
Sycamore -*Acer pseudoplatanus*
Elder - *Sambucus nigra*
Damson - *Prunus sp.*

5.1 They vary in age from young to mature with the majority of specimens being less than 20yrs.

5.2 The average height of the group is approximately 18.0 metres.

5.3 The majority of species comprise the Cherry, Aspen and Sycamore - approximately 80%.

5.4 There is patchy under storey within the group, a little natural regeneration of Sycamore and Elder and in parts dense suckering of the Cherry and Aspen species.

5.5 According to the current British Standard cascade chart for tree quality assessment, their condition would include some trees rated as C and the majority as C2.

5.6 Many trees have been damaged mechanically at or just above ground level resulting in the removal and die-back of bark and cambial zone. These areas of injury are likely to develop into decay cavities and could result in the failure of the stem around this area in the future. Many of the trees so damaged have a low Safe Useful Life Expectancy.

5.7 It appears that this site may have been originally planted with Cherry and Aspen, the remaining species are likely to be self-sown. There is no evidence of any recent management of the tree group.

6.0 Influence of Proposed Construction

6.1 The proposed construction work involves extensive alteration to the existing layout of pedestrian access over the railway. The proposals provide for a footbridge and associated ramps, stairs and footways to provide suitable access to and from both platforms of the station.

6.2 The proposals include for a raised footway which surrounds the tree group on all sides. Its position is located on the internal boundary of the tree group. The footway is to be constructed of reinforced earth with kerbing and associated fencing.

6.3 Due to the nature of the existing site levels the reinforcement of these footways will require a substantial area of land on the interior boundary of the site to provide for the retaining walls and new soil levels of the reinforced earthworks.

6.4 Site plans also show two proposed soakaways at each end of the site with associated inlets draining from the new footways.

6.5 It is clear that the construction of these works will involve the use of heavy plant and machinery. This will require sufficient space to operate and to allow reasonable access and egress.

7.0 Considerations and Recommendations

7.1 The trees on site have an amenity value but only relatively low. Their position in relation to the proposed construction work cannot be accommodated into the existing framework for the works.

7.2 Attempts to retain unsuitable trees close to the new footways could result in significant damage to root systems and create instability and adventitious conditions for pathogenic attack.

7.3 Due to the nature of both Cherry and Aspen species having suckering root systems, it is inadvisable to retain these species close to footways and particularly drainage systems.

7.4 Work which significantly changes soil levels within tree root zones affects the oxygen levels available to the roots. The new levels require the grading and reinforcing of the embankment on Lowfield Road to support the proposed footway. This work cannot be undertaken with the trees in situ.

7.5 In order for the intended work to be undertaken successfully the trees growing around the boundary of the site will require removal. This will allow for the proposals as presented and facilitate the necessary access needed for their construction.

7.6 Trees identified as suitable for retention will remain in the centre of the site to provide for continuation of amenity, visual screening and a degree of noise attenuation. These trees are relatively young and are in an adequate condition to provide a significant contribution for a minimum of 10 years.

7.7 The Root Protection Areas identified for the retained species should have a barrier erected around them prior to commencement of site work. (See accompanying sketch plan). The distance of the barrier from each stem is calculated by dividing the RDA by 3.142.

7.7 Once all site works are completed the area should be replanted with suitable tree species e.g. Alder, Birch, Holly, Hawthorn, Hazel sp. and either sub planted at low density to retain strong sight lines or alternatively high density to prevent access and continued anti social behaviour.

Survey Data (Trees Suitable For Retention)

Tree No	Species	A/ R	Diameter (mm)	Cat	RPA (m^2)
0967	Fm	Y	100	C	3.77
0966	Syc	Y	100 (t)	C	3.14
0965	Asp	Y	100	R	
0964	Asp	Y	150	C2	5.65
0963	Asp	Y	200	R	
0962	Asp	Ma	300	C2	11.31
0961	Syc	Ma	250	C	9.42
0960	Wch	Y	80	C	3.01
0959	Asp	Ma	150	C2	5.65
0958	Asp	Ma	250	C2	9.42
0957	Ash	Y	80	C	3.01
0956	Syc	Ma	480	C2	18.10
0955	Asp	Ma	300	C2	11.31
0954	Syc	Ma	300 (t)	C2	9.42
0953	Wch	Ma	100	C	3.77
0951	Wch	Ma	100	C	3.77
0950	Wch	Ma	100	C	3.77
0952	Asp	Ma	200	C2	7.54
0949	Asp	Ma	200	C2	7.54
0948	Asp	Ma	200	C2	7.54
0947	Asp	Ma	200	C2	7.54

Key

Fm = Field Maple -*Acer campestre* Syc = Sycamore -*Acer pseudoplatanus*

Asp = Aspen- *Populus tremula* Wch = Wild Cherry - *Prunus avium*

Ash = Ash- *Fraxinus excelsior*

Y = Young Ma = Middle age

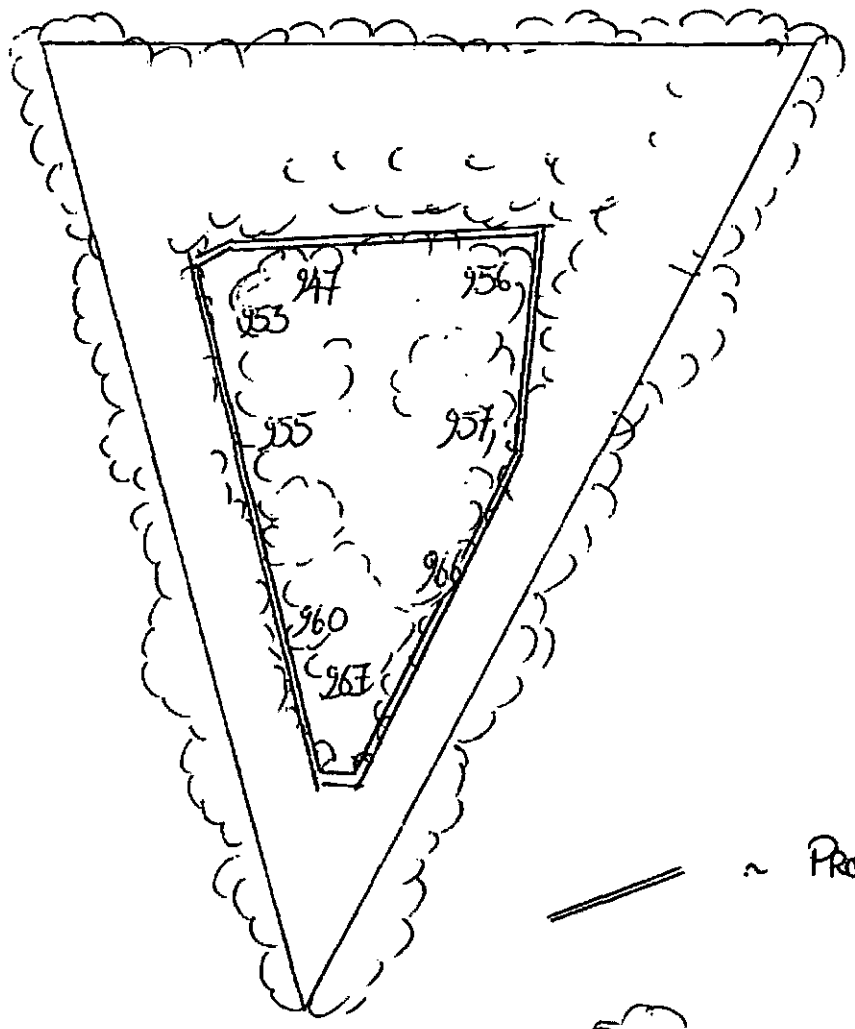
Diameter = Stem diameter @ 1.50m; (t) indicates a twin stemmed specimen.

Cat = Category of tree quality in accordance with BS 5837:2005

RPA = Root Protection Area in accordance with BS 5837:2005

Sketch Plan of Trees at Bolton-Upon-Dearne Station.

Retained Trees



~ PROTECTIVE BARRIER

~ TREES REMOVED

~ TREES RETAINED

N.B. Not to Scale