

Arboricultural Impact Assessment



Redevelopment of Deacon Business Park

17th July 2023



**Tyler
Grange**

TG Report No. 15353_R01a_BV_CW

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15353_R01b	17th July 2023	B	Ben Vause BSc (Hons)	Jamie Pratt BSc (Hons) MArborA

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Section 1: Introduction

Table 1: Overview and Summary

Purpose of report:	Following the recommendations of the British Standard ¹ , this report includes the necessary arboricultural information to support the planning application. It demonstrates that the impact, both direct and indirect, of the proposal, has been assessed and where appropriate, mitigation and tree protection may be required.
Site description:	The site contains an existing warehouse/ depot building with adjacent car parking areas to the west and south. Within the grounds are boundary grassed slopes and soft landscaping containing trees and other vegetation. Scattered trees typically in small clusters, dense boundary groups, with a few sporadically distributed across the site. Site entrance/exit barriers and a reception building are positioned away from the main warehouse, which have trees in close proximity. The site is parallel to the A5207 (Moorgate Rd N) which stretches down along the western site boundary. The northern, eastern, and southern boundaries are lined with fencing as a separation from other warehouse and industrial buildings around the site. (See Figure 1 overleaf).
Application type and description:	Full planning application for the demolition of existing industrial accommodation and erection of warehouse (Use Class B8) with ancillary offices (Use Class E(g)), reconfigured points of access, new security gatehouses and associated works. The application site area is 21.89 acres / 8.86 ha.
Report prepared on behalf of:	EEIP II Arundel Propco 2 Holdings Limited
Local Planning Authority (LPA):	Knowsley Metropolitan Borough Council
Planning policies relating to arboricultural features:	Policy CS21- Greenspaces and Trees within Knowsley Metropolitan Borough Council's Local Plan Core strategy 2016. CS21 policy is further detailed at Appendix 1, which entails a 2:1 replacement tree requirement.
Report Summary:	A total of four no. trees are proposed for removal including two Category B Silver Birch, a Category B Goat Willow, and a Category C tree. These are considered unavoidable and compensatory tree planting is provided on the site to satisfy the losses and relevant policy. The removal will result in a negligible reduction in canopy cover, yet any loss will be re-established and improved as the replacement planting matures to increase the site's green infrastructure coverage. This report details where tree pruning works are required along with mitigative measures for working with the rooting areas of trees where necessary. The collective visual amenity values the trees provide to the area will be preserved and therefore the proposal is not considered harmful to the character of the site. The proposal is consistent with local planning policy CS21. The protection of the retained trees during the construction stage will require a detailed Arboricultural Method Statement (AMS). This report provides recommendations for protection to demonstrate how this can be achieved. Therefore, an AMS is recommended to be secured by planning condition should consent be granted.

¹ BS5837:2012 Trees in relation to design, demolition and construction- Recommendations, London: British Standards Institute



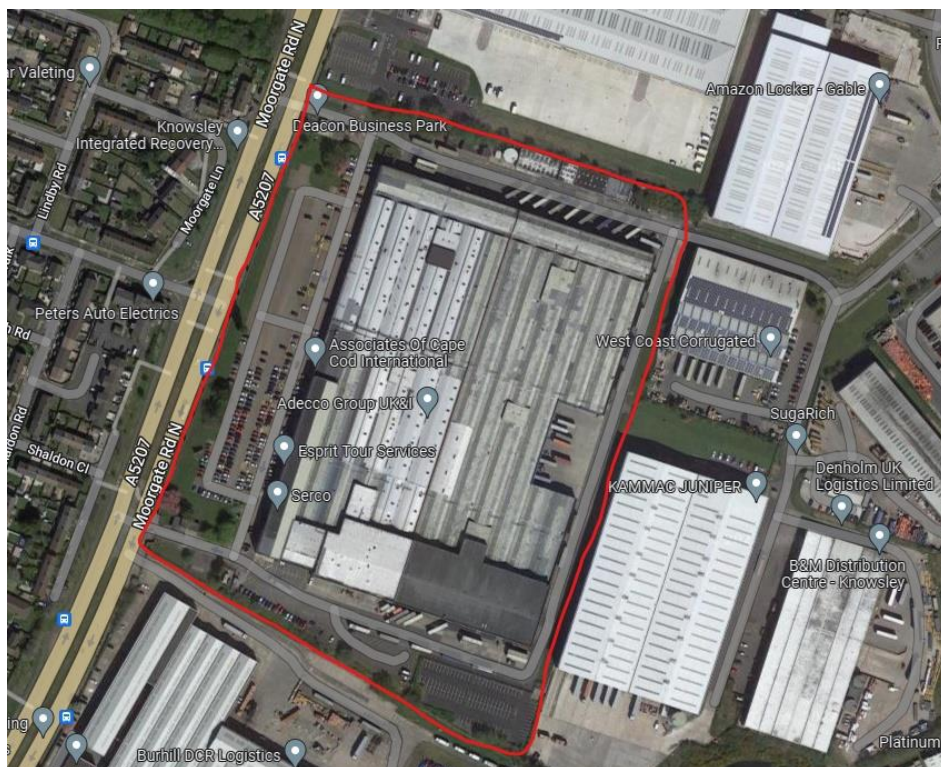


Figure 1: Site Location (E: 342544 N: 397584) with Indicative Application Boundary (Google Earth ©).

Section 2: Arboricultural Baseline

Table 2: Survey Summary

Survey approach:	The tree survey was completed by a suitably qualified Arboricultural Surveyor of Tyler Grange on the 26 th October 2022. The survey was completed in accordance with BS5837. A measured topographical survey was used to identify the location of trees and their surrounding context.
Survey findings:	Findings for each of the trees surveyed are detailed in the Tree Survey Schedule (See Appendix 3). This provides a tabulated record of the trees surveyed, including reference numbers, species composition, tree dimensions, life stage, physiological and structural condition, and the arboricultural value of each survey entry.
Survey mapping:	The distribution of the trees surveyed is illustrated on the Tree Constraints Plan (TCP) together details of their constraints to new development in accordance with BS5837, including, tree quality gradings ² , Root Protection Areas (RPAs) ³ , tree canopy spreads ⁴ and tree shading ⁵ .

Table 3: Tree related Designations

Designation Type	TG Tree Reference Number(s)
Tree Preservation Order ⁶	None
Conservation Area ⁷	None
Ancient Woodland ⁸	None
Other Woodland Habitat ⁹	None

² The arboricultural value of surveyed features under the criteria shown at Appendix 1. Allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring.

³ a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

⁴ Dimensions of the trees crown spread and clearance from ground level.

⁵ Shade cast by existing trees which may affect the availability of sunlight and daylight within a new development.

⁶ A Tree Preservation Order is an order made by a local planning authority in England to protect specific trees, groups of trees or woodlands in the interests of amenity. An Order prohibits the any works and damage to trees (with some exceptions) without the local planning authority's written consent. More information can be found online <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#tree-preservation-orders--general>.

⁷ Trees in a conservation area that are not protected by an Order are protected by the provisions in section 211 of the Town and Country Planning Act 1990. These provisions require people to notify the local planning authority, using a 'section 211 notice', 6 weeks before carrying out certain work on such trees, unless an exception applies. More information can be found online <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#tree-preservation-orders--general>.

⁸ Ancient woods are areas of woodland that have persisted since 1600 in England and Wales, and 1750 in Scotland. The Magic Maps website <https://magic.defra.gov.uk/MagicMap.aspx> has been used to search for ancient woodland on or adjacent to a site.

⁹ Spatial data of woodlands identified under the Priority Habitat Inventory (England) Published by Natural England. The Magic Maps website <https://magic.defra.gov.uk/MagicMap.aspx> has been used to search for woodland on or adjacent to a site.



Section 3: Arboricultural Impact Assessment

Tree Retention and Removal

- 3.1. Trees to be retained and removed are shown on the TRRP. Table 4 below describes the tree losses required to facilitate the development and provides recommendations for compensation.

Table 4: Trees to be Removed to Facilitate Development

Reference Number	Category Grading	Description of Loss
T3	Cat B	Removal of an early mature Silver Birch growing on the edge of a small cluster of trees situated on the grassed garden embankment, to facilitate the extension of the car park hard surfacing.
T23	Cat B	Removal of a mature Silver Birch growing on the edge of a dense tree group, to facilitate the resurfacing of the existing car parking area.
T42	Cat B	Removal of a mature Goat Willow growing along the southern site boundary, to facilitate the construction of the attenuation pond and landscaping around this feature.
T5	Cat C	Removal of a semi-mature tree growing near the edge of a cluster of trees situated on the grassed garden embankment, to facilitate the extension of the car park hard surfacing.

Tree Pruning Works

- 3.2. Table 5 below details possible pruning works to retained trees to facilitate the development.

Table 5: Tree Pruning Works

Reference Number	Category Grading	Description of Works
T30	Cat B	Crown reduction pruning by approximately 20% of the total canopy area to facilitate access for the construction of the proposed car parking extension.
G46	Cat B	Potential requirement for crown lifting and/ or crown reducing works on trees located along the eastern periphery of G46 following the required tree removals (partial group removal) to facilitate the sub-station construction. Works to ensure sufficient ground clearance and access to the substation to prevent incurring damages during and after construction.
G31	Cat C	Crown reduction pruning by approximately 15% of the total canopy area to facilitate access for the construction of the proposed car parking extension.

New Tree Planting

- 3.3. A Landscape Strategy Plan (Ref 15353_P09) and a Detailed Soft Landscape Proposal (Ref: 15353_P10) has been prepared separately to this report as part of the application, which specify the incorporation of 39n.o new trees of extra heavy standard, and 99n.o shrubs planted at a 3 per m² density. These proposed trees and shrubs are proposed along the western and southern site boundaries; within planting pits amongst the car park, alongside the western perimeter fence, and around the attenuation basin feature to the south.
- 3.4. This planting schedule ensures sufficient compensation to adhere the tree replacement policy of 2:1 (see Appendix 1 for details), ensuring the tree population at the site is maintained and can be improved long-term. It is anticipated this will have a notable positive impact on the amenity values, including a net-gain in tree canopy and green infrastructure coverage at the site.

Works within Root Protection Areas

- 3.5. Works required within the RPAs of trees to facilitate the demolition and construction stages of the development are detailed in the table below. Recommendations to mitigate the working activities with respect to minimising impacts to roots and their environment is provided.
- 3.6. Adoption of the recommended protective measures is subject to the approval of a detailed Arboricultural Method Statement (AMS) which will be provided by condition should consent be granted.

Table 6: Works within RPAs

Tree Number	Description of works	Protective measures
Proposed Surfacing		
T4	Resurfacing works of existing car park are proposed within approximately 8% of the RPA of T4.	Sensitive excavation of only the surface layer (currently comprising tarmac), leaving the sub-base as a barrier against rooting damages. Ensure limited disturbance to surrounding root-able soil. Retain sub-bases where possible beneath new development or landscaping. Hand-held tools or appropriate machinery should be used to remove the existing surface.
T30, T22	Extension of hard surfacing works into untouched soil, forming the proposed car parking extension within approximately 6% and 1.5% of the RPAs, respectively.	Sensitive manual excavation using hand held tools only to prevent incurring root damages. Surface to not exceed an area greater than 20% of the existing unsurfaced ground within the RPA. Permeable specification of hard surfacing installed where feasible. Non-invasive edge/ curbing supports. Surfaces requiring de-icing - impermeable barrier should be incorporated to prevent contamination of the rooting area. Run-off should be directed away from the RPA.

- 3.7. It is proposed that only the surface layer of the existing car park is to be scraped away within the RPA of T19, leaving the existing sub-base in-tact which will act as sufficient ground protection for the RPA. Manual equipment and pouring techniques should still be used where feasible, along with the prohibited use of heavy machinery on the exposed retained sub-base within the RPA of T19, is strongly advised.
- 3.8. If the sub-base is damaged or requires replacing before the new top surface layer, then appropriate construction and excavation methods will need to be adopted in order to prevent RPA damages.
- 3.9. Upon recognising the need for sub-base works, an arboricultural specialist will be sought to advise on suitable procedures for the removal and application of all new surfaces within relevant RPA's.

Long-term Tree Management and Social Proximity

- 3.10. The proximity associated with retained trees has been recognised in relation to the potential impacts of tree shading and future canopy growth towards new structures.
- 3.11. The TRRP illustrates where shade cast by retained trees will be located for the main part of the day across the development and the distance between new built structures and the canopies of retained trees.
- 3.12. There are no undue tree shading or canopy encroachment issues anticipated from retained trees towards the proposed warehouse construction and active use areas (car parking spaces for example). This has been achieved by suitable development buffers from retained trees which also allows for future canopy expansion.

Construction Mitigation

- 3.13. Trees to be retained will remain unaffected by the proposed development subject to the adoption of tree protection measures during the demolition and construction phase.
- 3.14. It is recommended that a full Arboricultural Method Statement (AMS) is prepared as part of the Technical design stage as recommended by BS5837. Should consent be granted, this can be secured by way of a reserved matters application or to discharge suitably worded planning Conditions.
- 3.15. An AMS will set out a practical methodology to the protection of retained trees based on detailed construction plans and will typically include the following key items:
- A schedule and specification of tree removal and pruning works;
 - Specifications for tree protection barriers and ground protection;
 - Procedures for any specialist construction techniques / any supervised excavations within RPAs;
 - Phasing of work;
 - Site monitoring (where required); and
 - A Tree Protection Plan.

Conclusion

- 3.16. The proposed development requires the removal of few trees which are unremarkable and do not provide a substantial contribution to the collective arboricultural and visual amenity values on site. The majority of trees, including the principal tree cover along the western site regions, will be retained, and the overall arboricultural resource will remain unaffected given the localised nature of the tree removals.
- 3.17. The impacts of the proposal are therefore considered negligible from an arboricultural perspective, subject to the adoption of appropriate tree protection measures during construction stage, and the incorporation of new trees as specified. The proposed development is therefore considered consistent with local planning policies CS21, given the replacement tree ratio 2:1 being attained.
- 3.18. Further work is recommended to include an AMS to accompany a subsequent reserved matters application and / or discharge of suitably worded planning conditions.

Appendix 1: Planning Policy Relating to Trees

Table 7: National and Local Planning Policy Relating to Trees

Policy Document	Policy References	Policy Wording / Description
National Planning Policy Framework (NPPF)	Section 12, paragraph 131	"Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users."
	Section 15, paragraph 174	"Planning policies and decisions should contribute to and enhance the natural and local environment by:" Subsection B; "recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland."
	Section 15, paragraph 180	"When determining planning applications, local planning authorities should apply the following principles:" Subsection C; "that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists."
Knowsley Local Plan Core Strategy Jan 2016	Policy CS21- Greenspaces and Trees, section 10)	Enhancement of Natural and Semi-Natural Greenspace and Tree Protection The Council will encourage proposals for new development to incorporate: a) Retention of existing trees, woodland, vegetation and other habitat features which offer a positive contribution to the local environment in terms of visual amenity, recreation value or biodiversity/wildlife interest; b) Appropriate planting of trees, other soft landscaping and installation of habitat features for the benefit of biodiversity; and c) Adequate replacement provision where tree loss is unavoidable, comprising two additional trees for every tree lost and taking account of species and size



Appendix 2: BS 5837:2012 Cascade Chart for Tree Quality Assessment

TREES FOR REMOVAL				
Category and Definition	Criteria			Identification on Plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of			DARK RED
	Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.			
	Trees infected with pathogens of significance to the health and/or safety of other trees nearby or very low-quality trees suppressing adjacent trees of better quality. (NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve)			
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	Criteria - Subcategories			Identification on Plan
	1. Mainly Arboricultural Values	2. Mainly Landscape Values	3. Mainly Cultural Values, including Conservation	
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	LIGHT GREEN
Category B <i>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</i>	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural benefits.	MID BLUE
Category C <i>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm</i>	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or temporary/transient landscape benefit.	Trees with no material conservation or other cultural value.	GREY



Appendix 3: Tree Survey Schedule (15353/TSS01)



Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Stem Count	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	Comments/Preliminary Management Recommendations	RPA Radius (m)	Root Protection Area (m2)
					N	E	S	W								
G1	Prunus avium (Wild Cherry)	9m	290, 300, 320, 190, 280	5	3.50	5.00	5.50	4.50	2.00	Mature	Fair	Fair	C2	Low quality and value. Multiple stems below 1.5m. Crown distorted due to group pressure. Branches encroaching upon building. Two trees close together. One with four stems, other single. Crowns interfering with sign. Overhanging path and road. Minor decline. Grass and garden waste stored at base	7.5	176.7
T2	Betula pendula (Silver Birch)	9m	280.00	1	4.00	4.00	4.00	4.00	2.00	Early Mature	Good	Good	B12	Good quality, but of moderate value due to small size. Multiple stems above 1.5m.	3.4	35.5
T3	Betula pendula (Silver Birch)	9m	230.00	1	3.50	3.50	4.00	3.50	2.00	Early Mature	Good	Good	B12	Good quality, but of moderate value due to small size. Plotted by eye on plan. Suckers around stem base.	2.8	23.9
T4	Betula pendula (Silver Birch)	11m	220340.00	2	3.20	4.00	4.50	4.50	2.00	Mature	Good	Good	B12	Plotted by eye on plan. Multiple stems below 1.5m. Epicormics on stem. Scattered deadwood.	4.9	74.2
T5	Unknown (Unknown)	5m	60, 60, 70, 80, 80, 75	6	1.50	2.50	3.50	3.00	2.20	Semi Mature	Fair	Fair	C2	Low quality and value. Cavity on stem. Major bark wounding on stem. Scattered deadwood.	2.1	13.9
T6	Prunus avium (Wild Cherry)	8m	220, 230, 280, 270, 50, 150, 130, 300	8	4.00	7.50	6.00	6.50	2.00	Mature	Fair	Fair	B12	Moderate quality and value. Suckers around stem base. Surface roots sustained bark damage. Multiple stems below 1.5m. Major root exposure above grass. Included bark unions at base. Upper and Apex Crown decline.	7.4	173.9
T7	Betula pendula (Silver Birch)	12m	370.00	1	6.50	4.50	4.00	5.50	2.00	Mature	Good	Good	B12	Good quality with high landscape value. Crown distorted due to group pressure.	4.4	61.9
T8	Betula pendula (Silver Birch)	10m	160.00	1	4.50	6.50	2.00	0.10	2.50	Mature	Good	Fair	C2	Low quality and value. Poor shape and form. Unbalanced crown shape. Crown distorted due to group pressure.	1.9	11.6
T9	Betula sp.	10m	320.00	1	5.00	6.50	4.50	4.50	2.00	Mature	Fair	Fair	C12	Moderate quality and value. Decay present on stem. Cavity on stem. Major bark wounding on stem. Scattered deadwood. Lean towards road downhill.	3.8	46.3
T10	Prunus sp.	4m	150.00	1	3.00	3.50	2.50	2.50	2.00	Semi Mature	Fair	Fair	C2	Low quality and value. Kerb close to stem base. Roots restricted by hard surface. Tree located within hard surface area. Downgraded due to constrained rooting environment. Pruning wounds on stems. Dieback in crown.	1.8	10.2

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Stem Count	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	Comments/Preliminary Management Recommendations	RPA Radius (m)	Root Protection Area (m ²)
					N	E	S	W								
T11	Prunus sp.	5m	200.00	1	2.50	2.50	2.50	2.50	2.50	Early Mature	Fair	Fair	C2	Low quality and value. Kerb close to stem base. Roots restricted by hard surface. Tree located within hard surface area. Downgraded due to constrained rooting environment. Pruning wounds on stems. Dieback in crown.	2.4	18.1
T12	Betula sp.	12m	420 430	2	4.50	5.50	7.00	5.50	0.00	Mature	Good	Good	B12	Moderate quality and value. Located on bank. Multiple stems below 1.5m. Epicormics on stem.	7.2	163.3
T13	Quercus robur (Common Oak)	9m	280.00	1	3.50	2.00	4.00	5.50	1.00	Semi Mature	Good	Good	B2	Moderate quality and value. Plotted by eye on plan. Scattered deadwood. Dieback in crown. Crown distorted due to group pressure. One sided crown: suppressed by adjacent specimen.	3.4	35.5
T14	Betula sp.	13m	300 370	2	6.50	5.50	5.50	4.50	1.50	Mature	Good	Good	B12	Good quality with high landscape value. Located on bank. Cavity at base. Multiple stems below 1.5m. Scattered deadwood. Basal stem cavity	5.7	102.4
T15	Quercus robur (Common Oak)	10m	170.00	1	2.50	3.00	4.50	4.00	1.50	Semi Mature	Good	Good	B12	Moderate quality, but of reduced value due to small size. Located on bank. Scattered deadwood. Crown distorted due to group pressure.	2.0	13.1
T16	Quercus robur (Common Oak)	11m	320.00	1	4.50	3.50	5.50	4.50	1.00	Mature	Good	Good	B12	Moderate quality and value. Located on bank. Scattered deadwood. Crown distorted due to group pressure.	3.8	46.3
T17	Quercus robur (Common Oak)	11m	260.00	1	3.50	5.50	5.50	2.50	2.00	Early Mature	Good	Good	B12	Moderate quality and value. Located on bank. Scattered deadwood. Dieback in crown. Crown distorted due to group pressure.	3.1	30.6
H18	Crataegus monogyna (Hawthorn)	1m	50.00	1	0.25	0.25	0.25	0.25	0.00	Young	Good	Good	C12	Low quality and value. Provides some screen. Recently planted for long term screening value	0.6	1.1
T19	Populus nigra 'Italica' (Lombardy Poplar)	23m	1100.00	1	4.00	4.50	3.20	3.30	1.00	Mature	Good	Good	B12	Good quality with high landscape value. Roadside tree: of value in the streetscene. Dominant specimen, readily visible on property frontage. Suckers around stem base. Epicormics on stem. Scattered deadwood. Located on grass mound on car park edge. Some induced damages to car park from roots. Justified as Cat B due to species susceptibility to splitting and stem failures when maturity is reached. Exposed tree in the landscape with arguably high wind exposure.	13.2	547.5

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Stem Count	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	Comments/Preliminary Management Recommendations	RPA Radius (m)	Root Protection Area (m ²)
					N	E	S	W								
T20	Quercus robur (Common Oak)	9m	610.00	1	7.50	3.50	6.00	6.00	1.00	Mature	Poor	Fair	B2	Dead. Major deadwood in crown. Crown distorted due to group pressure. Dead tree with little to no live growth remaining. High ecological value	7.3	168.4
T21	Betula pendula (Silver Birch)	13m	350.00	1	3.00	3.50	5.00	3.00	2.50	Mature	Fair	Good	B2	Moderate quality and value. Plotted by eye on plan. Ivy on stem. Unbalanced crown shape. Crown distorted due to group pressure.	4.2	55.4
T22	Salix caprea (Goat Willow)	5m	160.00	4	3.00	2.50	3.00	4.50	0.00	Semi Mature	Fair	Good	C2	Low quality and value. Plotted by eye on plan. Multiple stems below 1.5m. Crown distorted due to group pressure.	3.8	46.3
T23	Betula pendula (Silver Birch)	11m	370.00	1	3.50	3.50	4.50	3.50	1.00	Mature	Good	Fair	B2	Moderate quality and value. Plotted by eye on plan. Ivy on stem. Unbalanced crown shape. Crown distorted due to group pressure.	4.4	61.9
T24	Betula pendula (Silver Birch)	11m	180.00	1	2.00	2.00	2.00	2.00	4.00	Early Mature	Good	Good	C2	Moderate quality and value. Plotted by eye on plan.	2.2	14.7
T25	Betula pendula (Silver Birch)	8m	170.00	1	0.50	0.50	0.50	0.50	0.00	Semi Mature	Dead	Dead	U	Dead.	2.0	13.1
T26	Betula pendula (Silver Birch)	10m	80, 90, 220, 280	4	2.50	5.00	3.00	3.00	2.50	Mature	Fair	Fair	B2	Moderate quality and value. Plotted by eye on plan. Ivy on stem. Ivy in crown. Scattered deadwood. Dieback in crown. Crown distorted due to group pressure.	4.5	63.9
T27	Betula pendula (Silver Birch)	7m	190.00	1	2.00	2.50	2.00	3.00	1.00	Semi Mature	Fair	Fair	C2	Low quality and value. Plotted by eye on plan. Ivy on stem. Ivy in crown. Crown distorted due to group pressure.	2.3	16.3
T28	Betula pendula (Silver Birch)	11m	260, 270	2	3.50	5.50	4.00	4.00	1.50	Mature	Good	Fair	B2	Moderate quality and value. Plotted by eye on plan. Ivy on stem. Ivy in crown. Scattered deadwood. Crown distorted due to group pressure.	4.5	63.6
T29	Betula pendula (Silver Birch)	7m	180, 200	2	4.00	3.50	3.50	5.00	1.00	Semi Mature	Good	Fair	C2	Moderate quality and value. Plotted by eye on plan. Unable to inspect stem due to undergrowth. Crown distorted due to group pressure.	3.2	32.8
T30	Betula pendula (Silver Birch)	10m	180, 200, 220	3	4.00	4.70	3.00	4.00	0.00	Mature	Good	Good	B2	Moderate quality and value. Plotted by eye on plan. Unable to inspect stem due to undergrowth. Crown distorted due to group pressure.	4.2	54.9
G31	Sambucus nigra (Elder)	5m	50.00	1	2.70	2.00	1.50	2.50	0.00	Semi Mature	Fair	Fair	C2	Ivy on stems, multi stemmed shrubs amongst mature tree group collated canopy.	0.6	1.1
T32	Betula pendula (Silver Birch)	11m	320.00	1	5.00	5.00	4.00	5.00	1.00	Mature	Good	Good	B2	Moderate quality and value. Scattered deadwood. Branches encroaching upon building.	3.8	46.3

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Stem Count	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	Comments/Preliminary Management Recommendations	RPA Radius (m)	Root Protection Area (m2)
					N	E	S	W								
T33	Prunus sp.	5m	290.00	1	4.00	3.50	3.50	4.00	1.50	Mature	Good	Good	C1	Moderate quality, but of reduced value due to small size. Plotted by eye on plan. Pruning wounds on stems.	3.5	38.1
T34	Prunus sp.	7m	480.00	1	4.00	4.50	4.50	4.00	1.00	Mature	Good	Good	B2	Moderate quality, but of reduced value due to small size. Plotted by eye on plan. Pruning wounds on stems.	5.8	104.2
T35	Prunus sp.	5m	420.00	1	6.00	6.00	4.00	4.50	1.00	Mature	Good	Good	B2	Moderate quality, but of reduced value due to small size. Plotted by eye on plan. Pruning wounds on stems.	5.0	79.8
T36	Sorbus aucuparia (Rowan)	7m	50, 70, 70, 100, 150, 160, 170	7	3.70	3.80	3.50	3.00	1.50	Mature	Fair	Fair	C12	Low quality and value. Decay present on stem. Dieback in crown. Tree blocking camera security visuals. Included bark unions	3.8	44.9
T37	Salix sp. (Willow)	8m	370.00	1	6.00	5.50	6.50	5.50	2.00	Mature	Good	Good	B12	Good quality with high landscape value. Roadside tree: of value in the streetscene. Dominant specimen, readily visible on property frontage. Scattered deadwood.	4.4	61.9
T38	Salix sp. (Willow)	8m	370.00	1	5.00	6.50	7.00	5.00	2.00	Mature	Good	Good	B12	Good quality with high landscape value. Roadside tree: of value in the streetscene. Dominant specimen, readily visible on property frontage. Scattered deadwood.	4.4	61.9
T39	Salix sp. (Willow)	10m	530.00	1	7.00	5.50	5.50	9.50	2.00	Mature	Good	Good	B12	Good quality with high landscape value. Roadside tree: of value in the streetscene. Dominant specimen, readily visible on property frontage. Scattered deadwood.	6.4	127.1
G40	Chamaecyparis pisifera, Salix caprea (Goat Willow), Sambucus nigra (Elder)	8m	350.00	1	2.50	3.00	2.50	2.00	0.00	Mature	Fair	Fair	C12	Low quality and value. Kerb close to stem base. Roots restricted by hard surface. Plotted by eye on plan. Scattered deadwood. Dieback in crown. Crown distorted due to group pressure. One sided crown: suppressed by adjacent specimen.	4.2	55.4
G41	Salix caprea (Goat Willow)	8m	450.00	4	4.00	4.00	3.00	3.50	1.00	Mature	Fair	Fair	C2	Low quality and value. Plotted by eye on plan. One sided crown: suppressed by adjacent specimen. Rooted down rough bank. Downhill ditch. Close proximity to fence. Low vigour and quality	10.8	366.5
T42	Salix caprea (Goat Willow)	9m	610.00	2	5.00	5.50	5.00	5.00	1.00	Mature	Good	Good	B2	Moderate quality and value. Located on bank. Scattered deadwood. Canker formations on stem. Basal epicormic. Root at top of steep embankment	10.4	337.2

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Stem Count	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	Comments/Preliminary Management Recommendations	RPA Radius (m)	Root Protection Area (m2)
					N	E	S	W								
T43	Quercus robur (Common Oak)	12m	450.00	1	7.50	7.00	7.00	7.00	1.50	Mature	Good	Good	B1	Good quality with high landscape value. Inaccessible. Off site. Located on bank. Scattered deadwood.	5.4	91.6
T44	Salix caprea (Goat Willow)	7m	180.00	1	3.50	3.00	3.50	3.50	0.00	Semi Mature	Fair	Good	C2	Low quality and value. Plotted by eye on plan. Growing through and up against metal boundary fence.	2.2	14.7
T45	Betula pendula (Silver Birch)	10m	290, 300	2	5.50	5.00	5.00	5.50	0.00	Mature	Good	Fair	B2	Moderate quality and value. Ownership is unclear. Tree located within raised bed. Located on bank. Multiple stems below 1.5m.	5.0	78.6
G46	Betula pendula (Silver Birch), Quercus robur (Common Oak), Acer pseudoplatanus (Sycamore), Salix caprea (Goat Willow)	10m	350.00	1	4.50	4.50	4.50	4.50	2.00	Mature	Good	Good	B2	Moderate quality and value. Provides some screen. Located on bank. Scattered deadwood. Dieback in crown. Crown distorted due to group pressure. Group an indication on remaining trees along boundary. Primarily sycamore East, Birch and oak West. Minor deadwood. Generic defects. Included bark unions. Canopies overhanging road.	4.2	55.4

Appendix 4: Report Limitations

Limitations

- A4.1. The comments made are based on observable factors present at the time of inspection. Although the health and stability of trees in their current context is an integral part of their suitability for retention, it must be understood that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.
- A4.2. No tree can be considered entirely safe, given the possibility that exceptionally strong winds could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or the site. An assessment of the potential influence of trees upon existing buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

Un-assessable Risks

- A4.3. Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.
- A4.4. The Wildlife and Countryside Act (WCA) 1981 (as amended) makes it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Bats are also a European protected species and are additionally protected under the Conservation (Habitats & c) Regulations 1994 and 2010 (as amended). The survey findings, constraints, opportunities and design or mitigation recommendations included within that report must be read alongside this document.

A lack of recommended work does not imply that a tree does not pose an unacceptable level of risk and likewise, it should not be implied that a tree will present an acceptable level of risk following the completion of any recommended work.

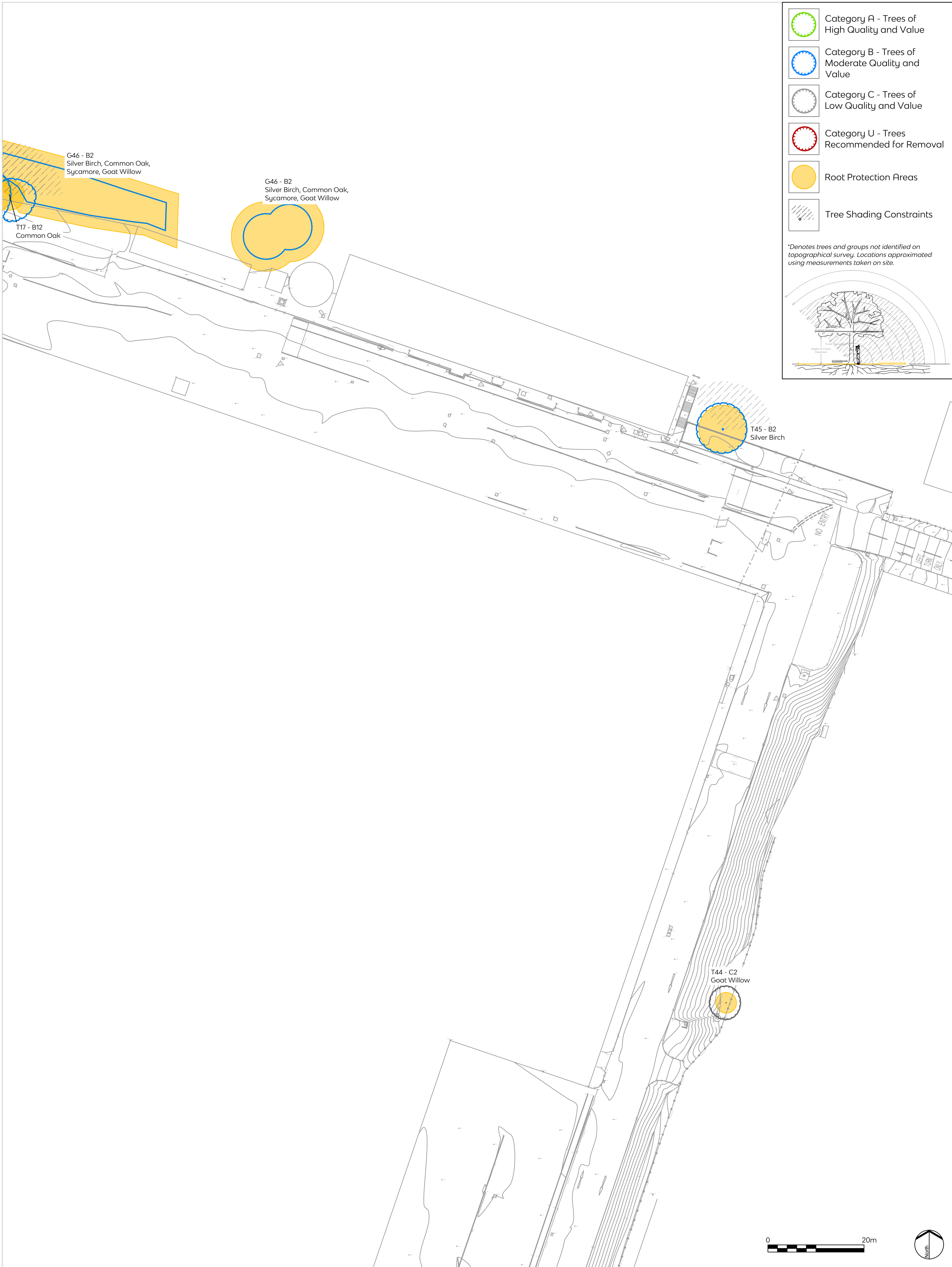


Plans:

Plan 1: Tree Constraints Plan (TCP), (15353/P01a)

Plan 2: Tree Retention and Removal Plan (TRRP), (15353/P02a)





Category A - Trees of High Quality and Value

Category B - Trees of Moderate Quality and Value

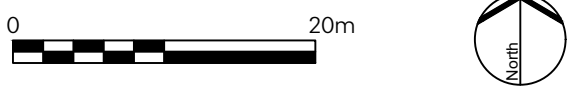
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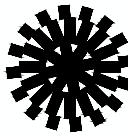
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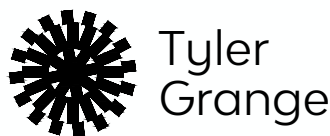
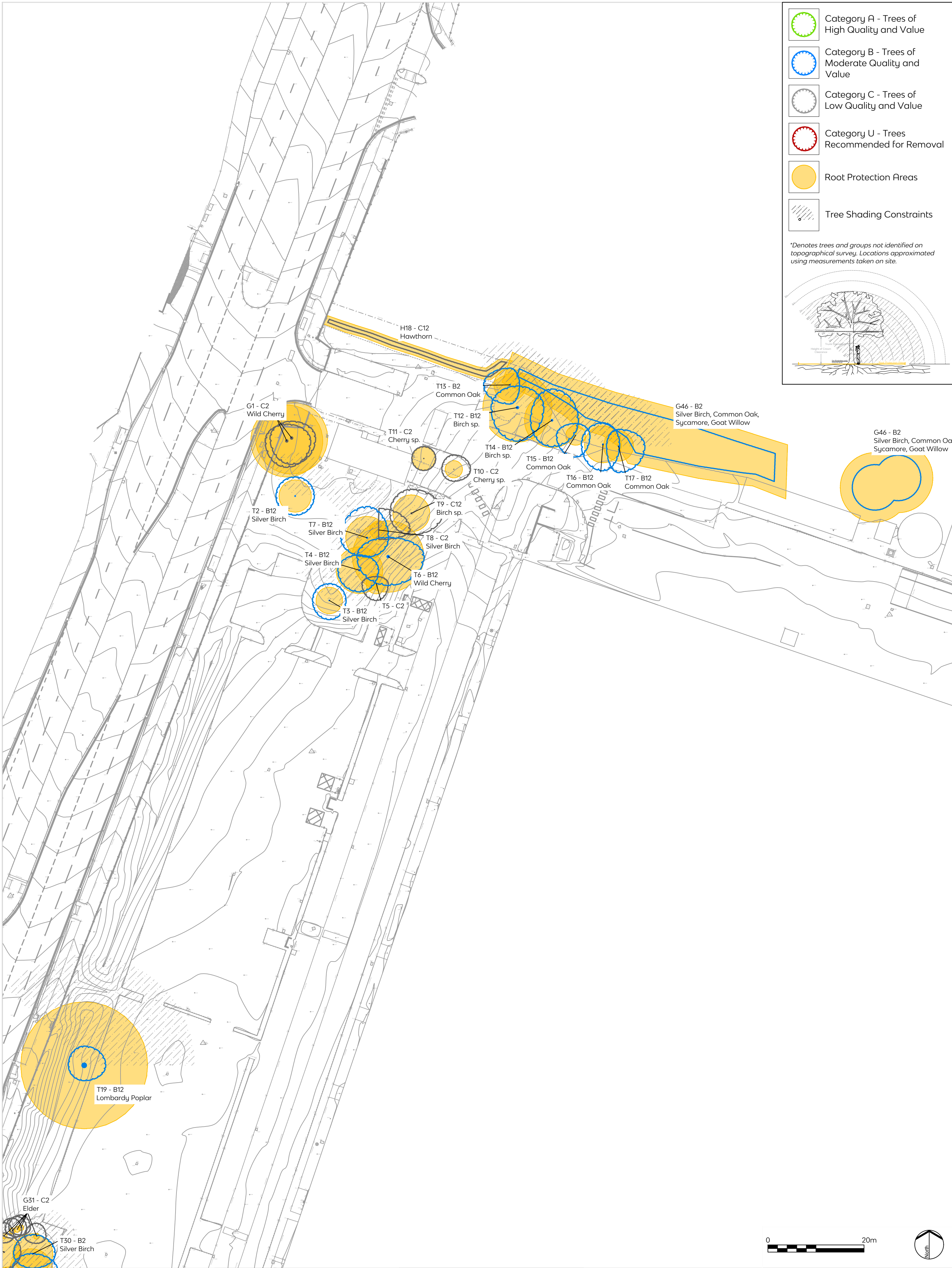
Root Protection Areas

Tree Shading Constraints

**Denotes trees and groups not identified on topographical survey. Locations approximated using measurements taken on site.*



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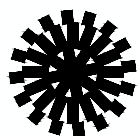
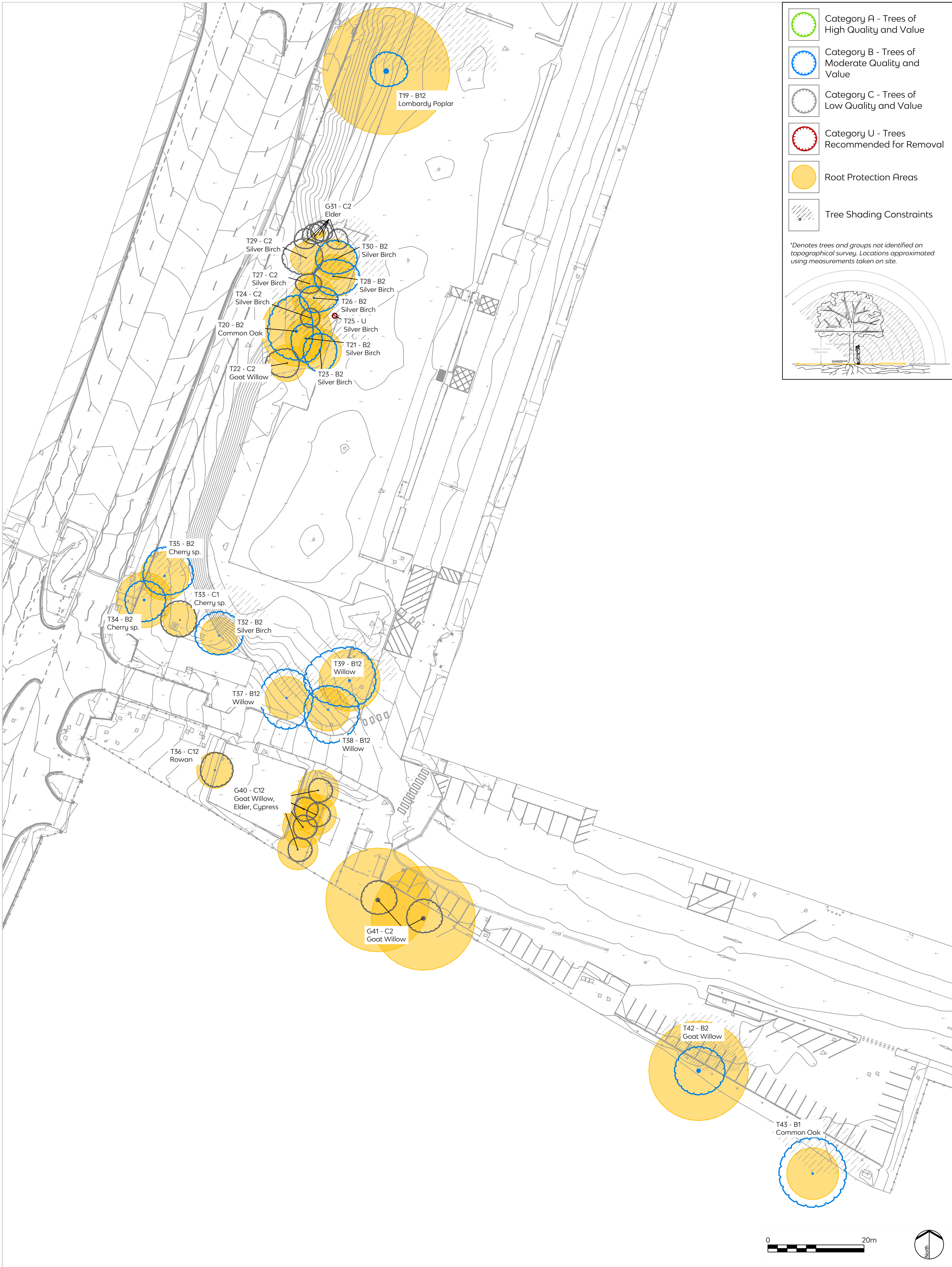
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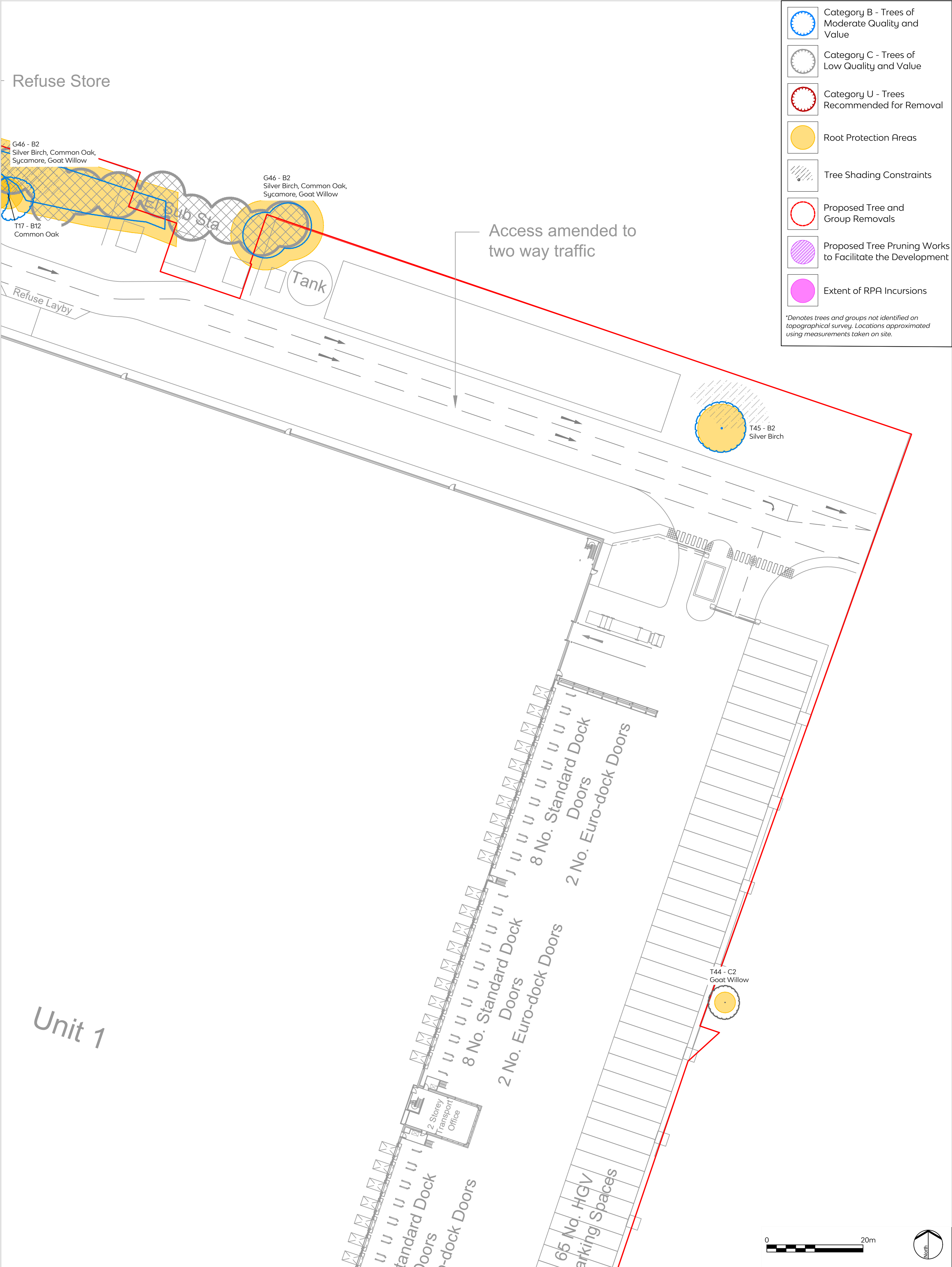
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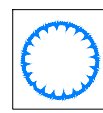
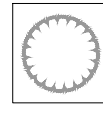
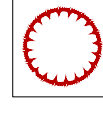
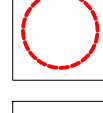
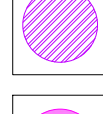
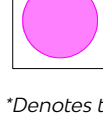
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-  Category B - Trees of Moderate Quality and Value
-  Category C - Trees of Low Quality and Value
-  Category U - Trees Recommended for Removal
-  Root Protection Areas
-  Tree Shading Constraints
-  Proposed Tree and Group Removals
-  Proposed Tree Pruning Works to Facilitate the Development
-  Extent of RPA Incursions

*Denotes trees and groups not identified on topographical survey. Locations approximated using measurements taken on site.

Category B - Trees of Moderate Quality and Value

Category C - Trees of Low Quality and Value

Category U - Trees Recommended for Removal

Root Protection Areas

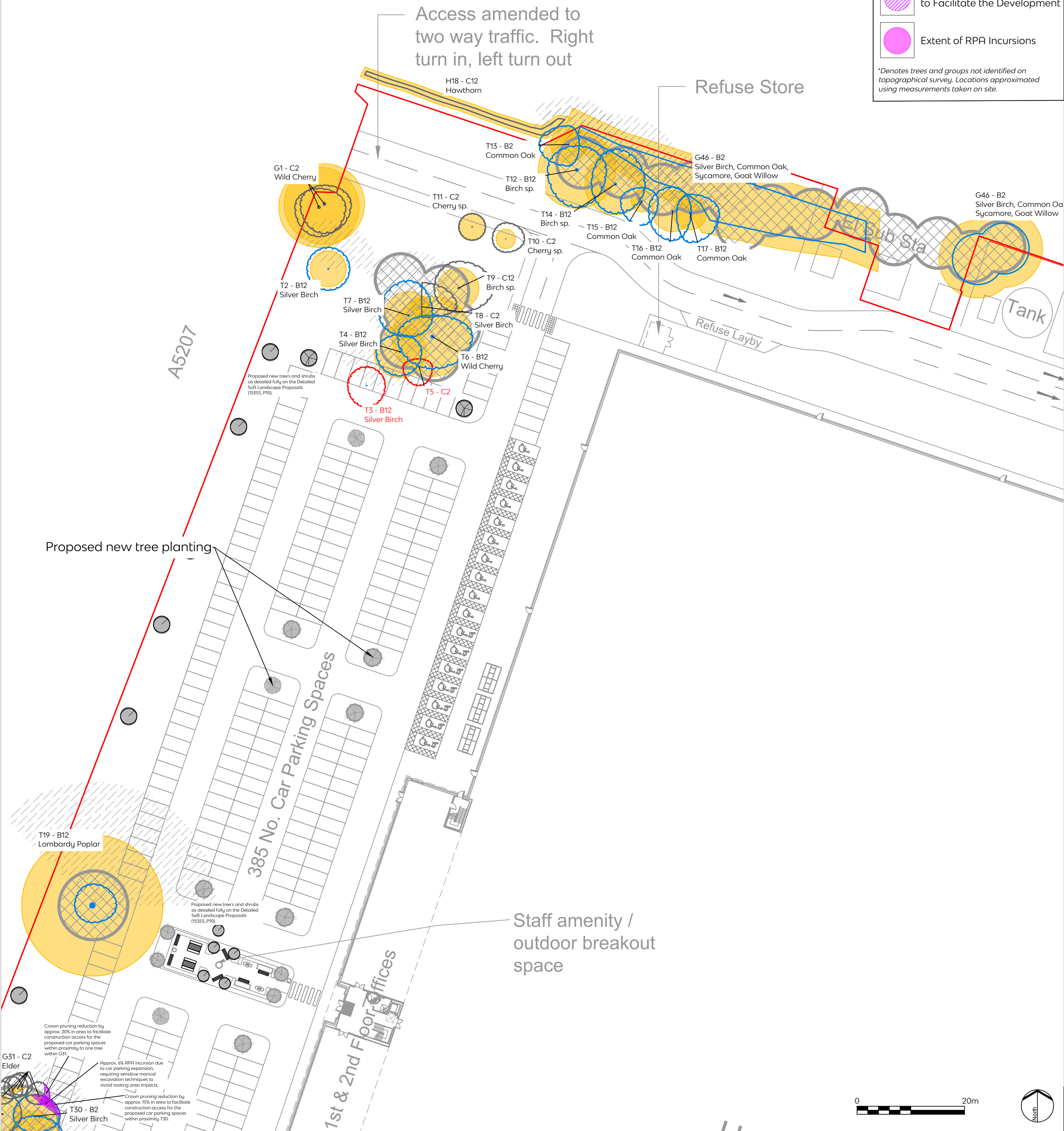
Tree Shading Constraints

Proposed Tree and Group Removals

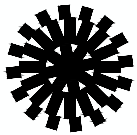
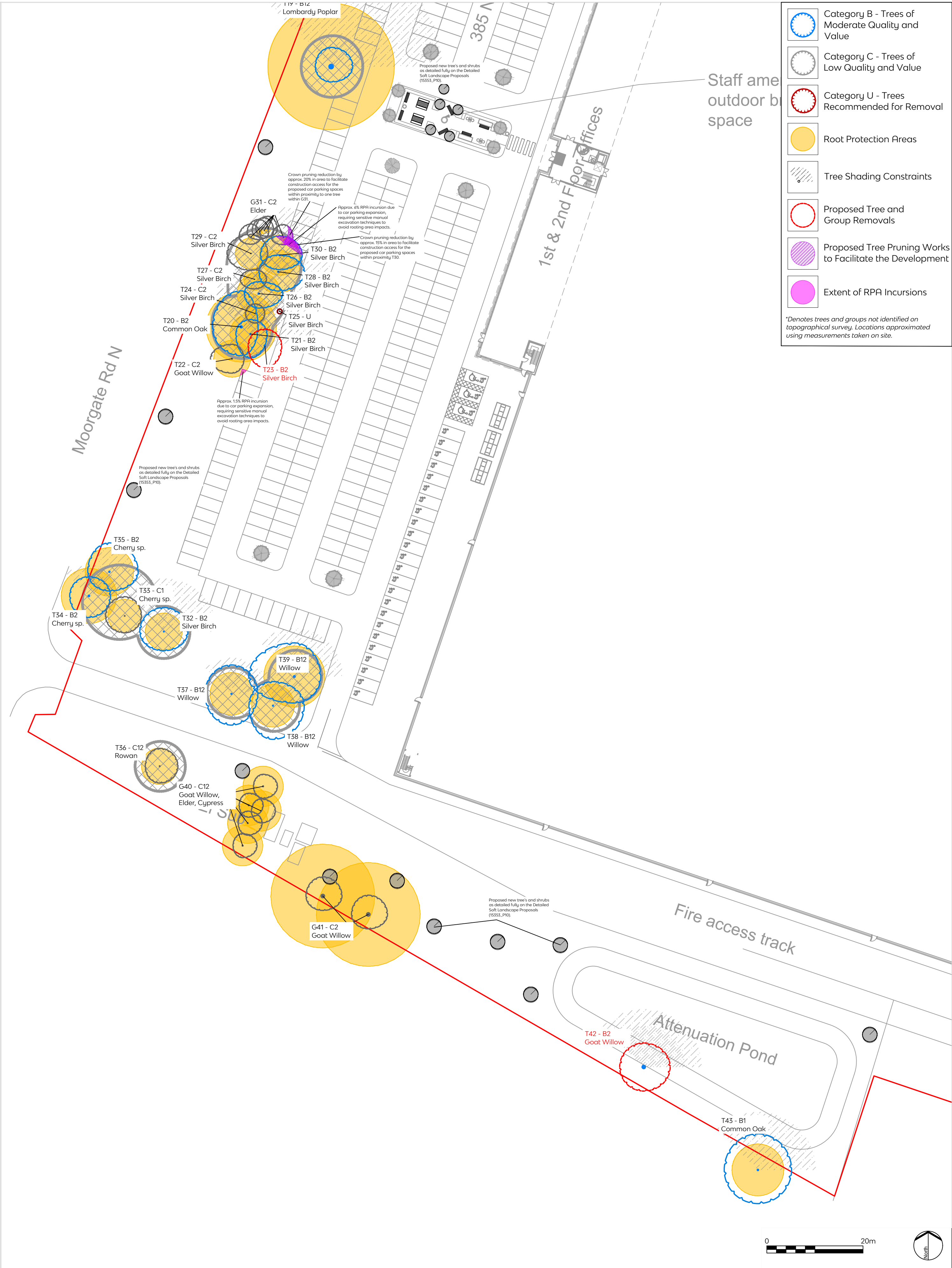
Proposed Tree Pruning Works to Facilitate the Development

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