2.4 Landscape Design

2.4.1 The landscape design philosophy is based on the objectives of encouraging biodiversity and mitigating ecological, landscape and visual impacts in accordance with the design requirements.

2.4.2 Planting has been proposed within the car park to break up large areas of hard-standing and help integrate the new facility into the adjacent existing woodland areas. The planting layout and location of CCTV camera points will be coordinated during the detailed design stage, to enable scanning down the lines of cars. Shrub planting in these areas will be generally beech hedges and massed single groundcover species. Groundcover species will be primarily evergreen, robust, able to withstand semi-arid ground conditions, and constrained in growth to promote inter-visibility and reduce maintenance. The plants will be planted into 450mm depth of approved topsoil at a minimum density of 4 plants per square metre, finished with a 75mm depth layer of mulch to reduce maintenance and assist establishment.

2.4.3 Shrub planting shall be supplemented by specimen trees that shall be selected from narrow upright varieties. All trees shall be short-double staked or underground-guyed (in pedestrian areas) as appropriate.

2.4.4 Within the public court area, a more complex soft landscape palette will be employed to the edges of this mainly paved space, fusing amenity and herbaceous planting with native species to reflect the pioneer vegetation common of railway sidings. This approach has been co-ordinated with the station building and interchange layout to enhance wayfinding and provide a variety of areas for passengers to take enjoy between stages of their journey.

2.4.5 For areas adjacent the rail corridor, the solution both mitigates environmental impacts and satisfies the requirement to run the railway and associated infrastructure efficiently and safely. Whilst a proportion of the existing tree and scrub vegetation will be lost in the construction process, healthy and suitable woody and other valuable vegetation will be retained. This will be supplemented by new native screen planting to reduce visual impacts on the adjacent public court and pedestrian routes and contribute to the creation of a green corridor.

2.4.6 In areas that are unsuitable for tree or scrub planting, such as the 5m cess/cess strip, a grassland habitat has been proposed via seeding. The type of seeding will be appropriate to the soil types and adjacent vegetation.

2.4.7 When fully grown, for each particular location, the trees and shrubs shall not infringe the Standard clearances as defined in Railway Group Standard GC/RT5204.

Fig 18. Landscape design concept studies and precedents (existing landscape forms and complementary influence – public square early ideas)
Material Specifications

2.4.8 The public realm design has been founded on a common language of materials, fit for purpose, whilst meeting specific requirements such as environmental and engineering criteria.

2.4.9 The design language has been applied taking specific cognisance of the hierarchy of spaces around the building and the links between each to ensure that applied surfaces, finishes and edge details are appropriate to their surroundings, including both the natural and built fabric of the site. This approach has been inspired by the high quality landscaping found in the college courts in the historic centre of Cambridge.

2.4.10 The order of spaces and routes is expressed in the surface material palette which is deliberately restricted to maintain a simple, uncluttered arrangement of connected movement routes and spaces. The material specifications specifically address the intended use such as servicing and building uses to reduce any long-term maintenance requirements.

2.4.11 The public plaza space to the front of the building will be paved with natural stone surfacing which will provide a neutral colour palette that will compliment the new station building. This high quality material will also provide a robust surface that can accommodate a range of activities and uses.

2.4.12 Within the car park area, the hard landscape elements will be more utilitarian, with standard PCC Kerbs being used in conjunction with aisles surfaced with asphalt and bays with permeable block paving (SUDS element).

2.4.13 Associated design elements such as street furniture will follow the same approach, recognising that furniture is an appropriate vehicle by which identity and character can be reinforced to deliver distinction.

2.4.14 Surface detailing, such as trims, kerbs and channels will be selectively applied to express interfaces and level changes only.

2.4.15 The approach to planting adopts the same philosophy as the specification of hard landscape materials. Simple, bold and sustainability characteristics are key drivers in the selection and application of soft landscape materials.

Fig 19. Landscape Material palette - Simplicity, boldness, sustainability and fitness for purpose are the key drivers in the selection of hard and soft materials.
3.0 ACCESS

Fig 20. visualization of the station building from the new public square
3.1 Policy Approach and Access Issues

3.1.1 NR are committed to a policy of diversity, inclusion and inclusive design in the delivery of its services and to meeting its public sector equality duties.

3.1.2 NR fully recognises the diversity of its customers and employees and is active in ensuring that any potential sources of discrimination are addressed in both the physical attributes of the buildings, its uses and in the management practices and procedures that it adopts.

3.1.3 The project team have clear objectives and are aspiring to achieve compliance with the following documents:
- BS 8300:2009 Design of Buildings and their approaches to meet the needs of disabled people – Code of Practice, British Standards Institution, 2009,

3.1.4 In addition to considering these standards the design team are also intending to apply other guidance documents and accepted best practice inclusive design principles.

3.1.5 During an extensive period of consultation in 2012 (as discussed in 1.2.9) the general public raised the following key issues:
- Bramblefields LNR. The proposed pedestrian and cycle access through Bramblefields LNR is predominantly aimed at connecting local residents to the new station interchange and routes beyond. Unlike the other main pedestrian and cycle routes for the project (Cowley Road and Moss Bank) the extension of the present pathways in Bramblefields will remain until. The pathway will conform to the City Council existing construction standard for paths shared by cyclists and pedestrians at the location and the proposed new surfaces will not exceed a maximum width of 2 metres.
- Parking and traffic. The project will have its own 450 space car park, which will be owned by NR and operated by the incumbent train company. This will be accessed from Cowley Road, which will be the only signed motor vehicle route to the station. Should additional car park provision be required then the available land at the site of the station interchange readily lends itself for the rail industry to increase the number of spaces available to meet increases in demand once the station is open.

Fig 22 Centre point of postcode areas which would experience a time saving travelling to the employment areas to the north east of Cambridge

KEY:
- Greater than 40 minute time saving
- Up to 40 minute time saving
- Up to 20 minute time saving
- Centre point of employment areas to the north east of Cambridge
Reflect the history of the Chesterton sidings site by exploring the following:

- Engineering,
- Local history,
- Fen Road Access.

We do not currently consider any alterations to the interventions to be focussed on the public square,

- Working with schools in the area,
- Passive provision for future public art works by others,
- Freight and materials transported to and through the site,
- The potential future development of the wider site restricts the locations for railway standards and operational requirements must be respected.

- Seating
- Covered
- Working with the local community.
- Science and technology,

Cambridge Cycling Campaign are covered in the following paragraphs.

3.1.6 The main access aims of the proposals are:
- to increase access to the wider rail network and busway to areas along the A10 and A14 corridors and the northern fringes,
- reduce private car journeys through the historic centre of Cambridge to Cambridge Station,
- alleviate existing passenger and platform congestion problems at Cambridge Station,
- act as a platform for sub regional growth.

3.1.7 A Transport Assessment (Appendix 26 of the Environmental Statement) which forms part of this application estimates some 2400 daily trips to the station will be created of which approximately 1100 will have been abstracted from Cambridge Station.

3.1.8 At this stage in the design process a number of detailed elements of design which impact on the accessibility of the proposals are still to be refined e.g. TOC signage strategy, lift manufacturer details. There are however a number of positive features that have already been successfully incorporated within the current design. These include:

Externally
- creation of a new pedestrian and cycle route from Cowley Road leading directly to the station building without the requirement of additional crossing points.
- New pedestrian and cycle level access to the station interchange from Moss Bank, the Bramblefields LNR and Nuffield Road for the Chesterton residential area which connect directly to the busway service path / cycle way.
- lighting to the busway service path / cycleway to provide increased passenger security.
- clearly designated, well lit, direct pedestrian routes through the car park area to the public square.
- provision of a taxi rank in close proximity to the station building entrance including adequate space for use of ramps to access / egress cars.

3.1.9 Buses access the site either from the busway or from Cowley road. There is one designated set of bus stops accessed from the public square to prevent the need for pedestrians crossing a dedicated bus route. Kerb heights to the bus stops are to be raised locally to 180mm above the road surface to provide improved access for passengers.

3.1.10 Pedestrian routes from bus stops to the station building form a direct route at concourse level with views through the station building to the platforms.

3.1.11 Covered cycle parking has been provided to the north and south of the main station building following consultation with the Cambridge Cycling Campaign.

3.1.12 Although there is no obligation for this application, public art will be an organic part of the development. The form of any art elements is open but the following constraints and opportunities have been identified:

Constraints:
- No public art is required under SCDC Policy SF/6 Public Art and New Development
- Railway standards and operational requirements must be respected
- The potential future development of the wider site restricts the locations for intervention

Opportunities:
- Reflect the history of the Chesterton sidings site by exploring the following themes:
  1. Engineering,
  2. Railways and linear features,
  3. Freight and materials transported to and through the site,
  4. Local history,
  5. Science and technology,
- Passive provision for future public art works by others,
- Interventions to be focussed on the public square,
- Potential for lighting projects, recurring motifs on street furniture, detailing and similar,
- Working with schools in the area,
- Working with the local community.

This outline captures consultation comments and feedback made at the three Urban Design Forums. This concept for incorporating art into the development could be implemented as the project comes forwards by community involvement facilitated by partnership led funding and stakeholders.

Fig 21 Illustration showing connectivity and journey times within the wider transport network.
4.0 CONCLUSIONS

The proposals offer an integrated solution that will:

- act as a gateway to Cambridge and the northern fringes,
- form an elegant and legible interchange between 5 modes of transport,
- provide a platform for sub-regional growth and investment,
- alleviate existing capacity issues at Cambridge station,
- provide step free access to the rail network and the CGB,
- reduce private car journeys through the historic centre of Cambridge to Cambridge Station,
- provide the capacity needed to accommodate forecast growth in the region,
- encourage the redevelopment of the wider Chesterton sidings site without restricting opportunities for growth,
- meet relevant current safety and security standards,
- deliver a platform for future public engagement to provide public art for the new building and square and the wider Chesterton sidings site,
- create a building and public square rooted in the scale and language of historic Cambridge and its rail heritage while at once being modern and forward looking - reflecting the aspirations of Cambridgeshire and the Science based industries which it will be serving.
Fig 24. visualisation of the station building from the kiss and ride area to the north west