

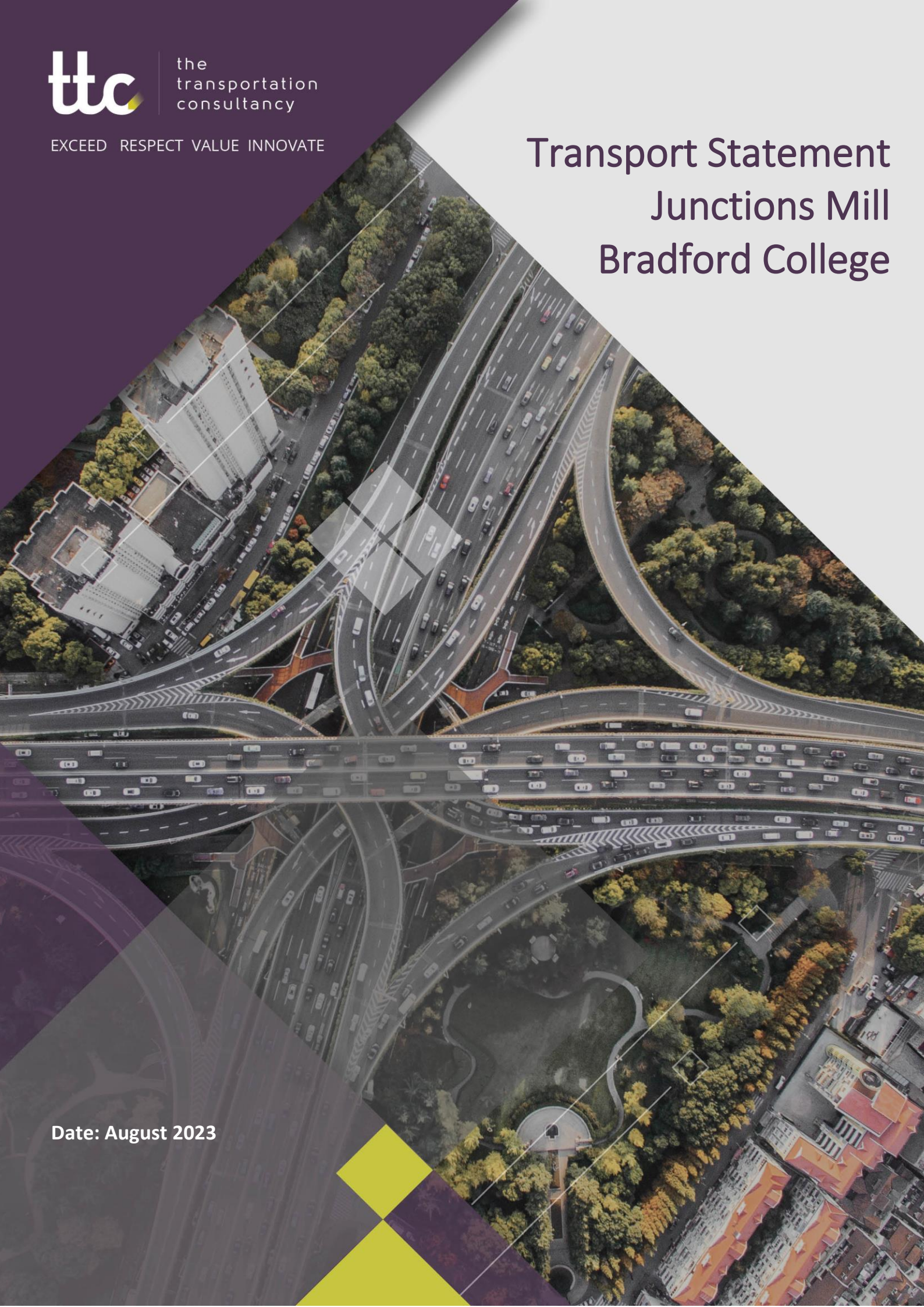


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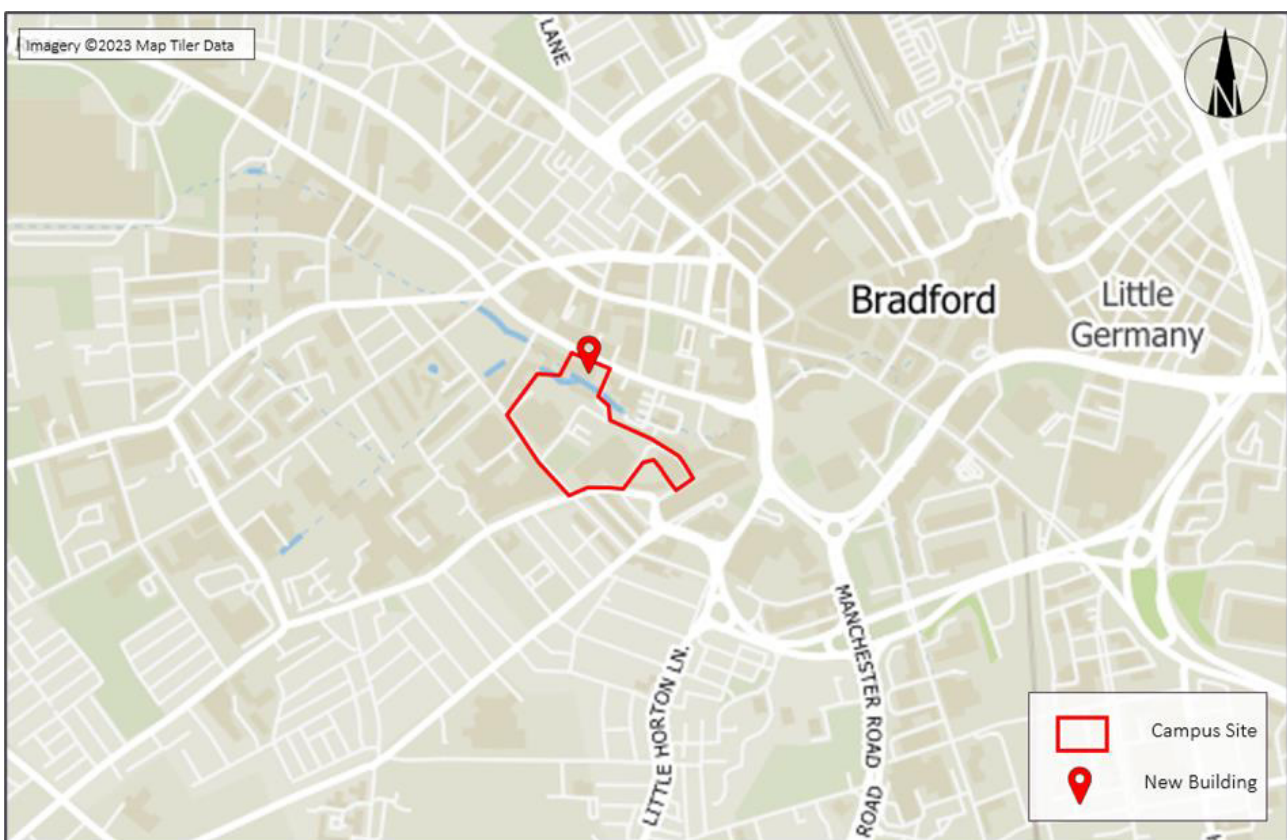
1. Introduction

1.1 Background

The Transportation Consultancy Ltd ('ttc') has been commissioned by Bradford College (the client) to prepare a Travel Plan (TP) in support of a planning application for the redevelopment of Junction Mill into a teaching building referred to as the 'Future Technologies Building'.

The site location is shown below in **Figure 1.1**.

Figure 1.1 Site Location



1.2 Purpose of Report

This Transport Statement, together with a Travel Plan, have been prepared to accompany the main planning application for the Future Technologies Centre.

1.3 Structure of Report

This Transport Statement is structured as follows:

- **Chapter 2:** Describes the existing situation, the surrounding local highway network as well as identifying the sustainable transport options and any existing highway safety concerns.
- **Chapter 3:** Determines the Local and National Policy context in relation to the proposed redevelopment.

- **Chapter 4:** Describes the proposed development and site access options.
- **Chapter 5:** Sets out the anticipated traffic generation as a result of the development proposals.
- **Chapter 6:** Presents a summary and conclusion of the report.

2. Existing Situation

2.1 Introduction

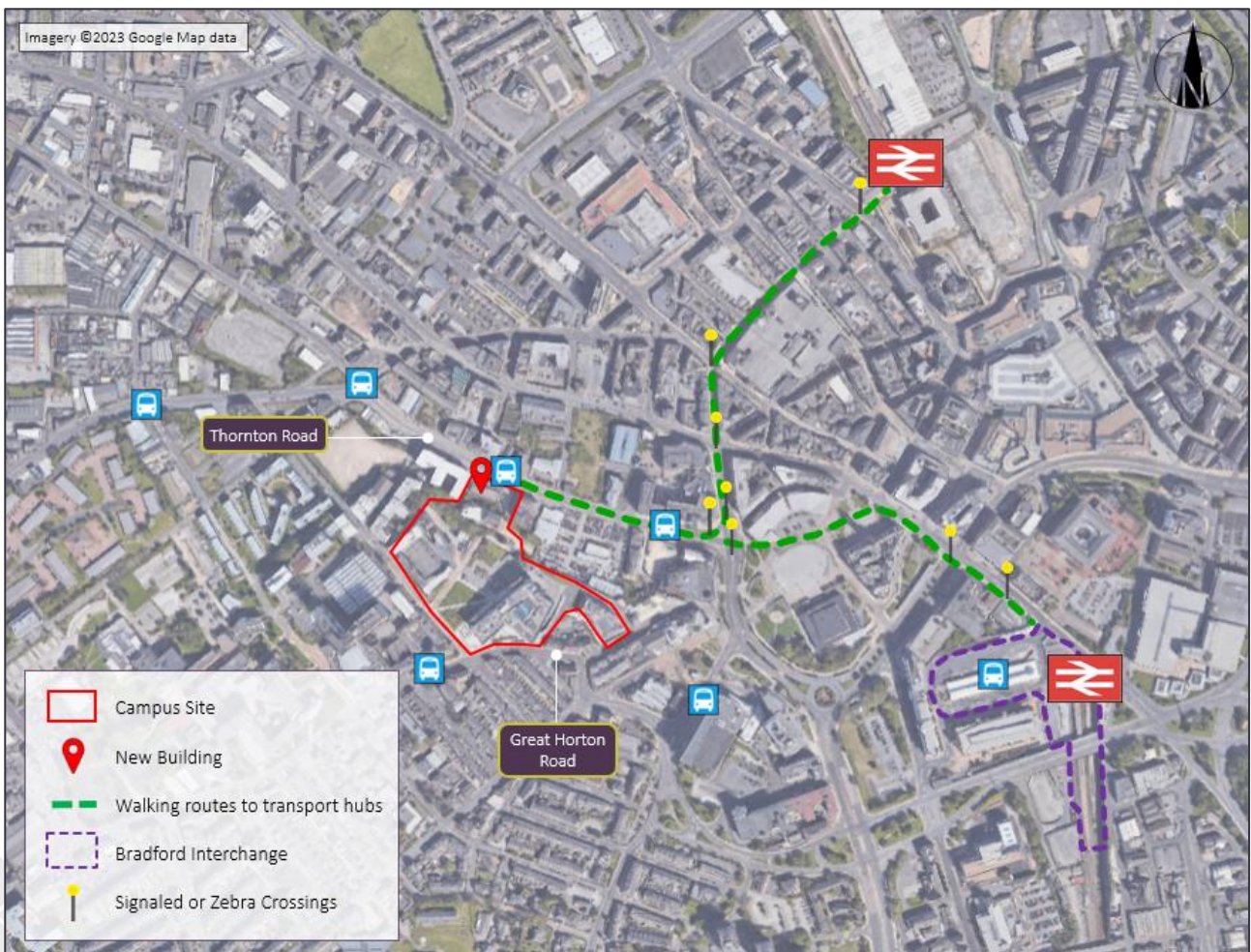
This section of the Transport Statement (TS) outlines the existing site conditions, sustainable transport links and the local road network, as well as a review of highway safety within the vicinity of the site.

2.2 Site Location and Context

The existing wider college site is situated between Thornton Road (B6145) and Great Horton Road. The site is surrounded by a mix of commercial, residential and leisure.

Figure 2.1 below illustrates the site in a local context.

Figure 2.1 Site in Local Context



In terms of operation, teaching commences at 08:40, with students predominantly arriving between 08:00 and 10:00. Scheduled lessons end at between 15:00 and 17:00, when the majority of students leave, with staff leaving during and after this period.

The college is one of the regions major education and training providers, offering a broad curriculum to c.10,000 students. The Future Technologies Centre plans to house 650 students by 2024/2025 across a mix of

full time and apprenticeship courses – this will require around 8,200 weekly learning hours in the new building. It should however be noted that the building will be capable of accommodating a maximum of 360 staff/students at any one time.

2.3 Highway Network

B6145 (Thornton Road)

The B6145 (Thornton Road) is a single carriageway highway. Thornton Road routes along an east to west alignment and is one of the main arterial routes out of Bradford city centre.

In the vicinity of the site the B6145 (Thornton Road) is lit, approximately 11.0m wide and subject to a 30mph speed limit and affords pedestrian footways along both sides of the carriageway.

Great Horton Road

Great Horton Road is a single carriageway highway which runs along a northeast to southwest alignment. The highway measures approximately 11.0m wide and is subject to a 20mph speed limit. There are pedestrian footways along both sides of the carriage way.

2.4 Sustainable Transport

Walking

Walking and cycling form sustainable modes of transport which not only provide benefits to residents but help to reduce the amount of congestion and pollution within the area.

It is generally considered that 2km for walking (25-minute journey) and 8km for cycling (30-minute journey) are acceptable distances to travel to work or nearby facilities and amenities (*Providing for Journeys on Foot* (2000), *Manual for Streets* (2007) and *Local Transport Note 1/20: Cycle Infrastructure Design* (2020)). These distances are illustrative, will vary by individual according to their personal mobility and fitness, and will be influenced by their perception and prejudices on such factors such as local topography and attitude towards travel modes.

In regard to walking, the local environment surrounding the site has an excellent network of permeable and well-connected footways, which provide convenient and safe access to/from the site. The footways are contiguous, hard surfaced and generally in good condition. Along the B4116 Witherley Road, the northern footway is segregated from the carriageway by a grassed verge and the southern footway routes alongside the carriageway.

A signal-controlled pedestrian crossing is present within the vicinity of the school access, with advanced warning signs to TSRGD Diag. 545 'Children going to school or playground' and accompanied by 'flashing amber lights' to TSRGD 4004. In addition, there are also TSRGD Diag. 545 accompanied by vehicle activated Speed Control Sign to Diag. 670. A view of the pedestrian environment is displayed within **Figure 2.2**.

Figure 2.2 Local Pedestrian Environment

Signal Controlled Crossing – West of the Junction Mills Building



Uncontrolled Crossing – Next to the Junction Mills Building



The surrounding area is highly accessible by foot and **Figure 4.3** illustrates a 2.0km walking catchment from the site, which demonstrates that a number of local suburbs, including Great Horton, Manningham and the city centre are accessible to the college.

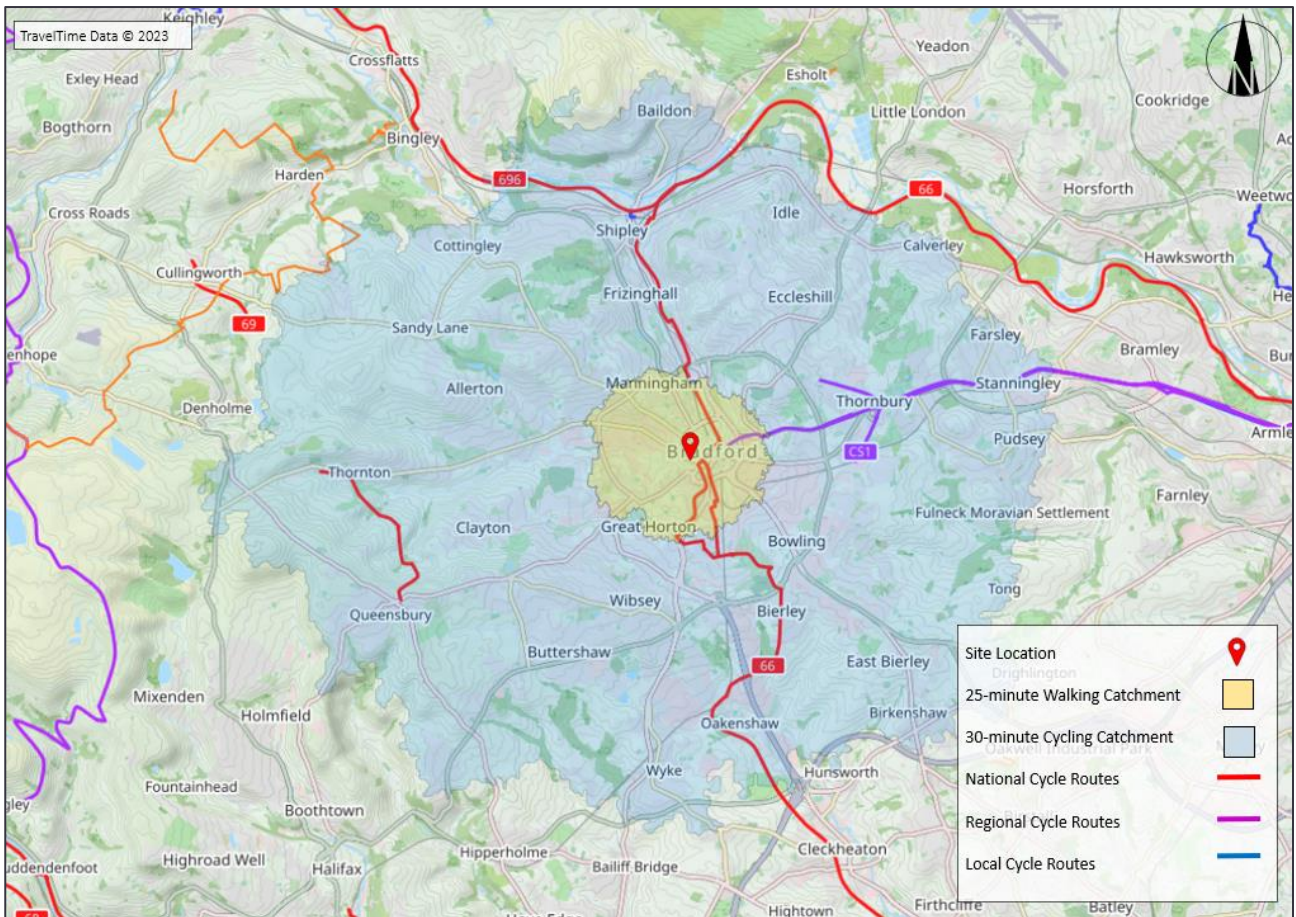
Cycling

With regard to cycling, the National Cycle Route (NCR) 66 runs through Bradford City Centre, which links Manchester and Spurn Head via Bradford, Leeds, York, Beverley and Kingston upon Hull. Route 66 also affords access into local suburbs/neighbourhoods like Manningham, Shipley, Great Horton and Oakenshaw.

In addition to the NCR, Regional Cycle Route C51 also routes from Bradford City Centre to the east through the suburbs Thornbury and Stanningley. The extent of the local area accessible by bike is illustrated within **Figure 2.3**.

In terms of cycle parking, the college currently provides 380 cycle parking spaces across the whole campus including provision at the David Hockney building situated c.400m from the site.

Figure 2.3 Walking and Cycling Catchment



Bus Services

The nearest bus stops to the Junction Mills building are ‘Thornton Road Westholme Street’. The bus stops are approximately 50m from the Junction Mills building. Both eastbound and westbound bus stops are in-carriageway, the westbound stop features a ‘digital count down board’ departures board whereas the eastbound is features a conventional flag and paper bus timetable.

There are also bus stops located southwest of the college campus, these stops are named ‘Shearbridge Great Horton Road Mannville Terrace’. Both bus stops are in-carriageway, feature shelters and paper timetables. The bus stops on Great Horton Road are c.450m from the new college building.

A summary of the service numbers, frequencies and routes are included within **Table 2.1** and **Table 2.2**:

Table 2.1 Bus Services on Thornton Road

Service No	Route	Peak Frequency	Hours of Operation
615	Bradford Interchange – Eldwick (Via Cottingley)	One bus an hour	06:23-22:08
	Eldwick – Bradford Interchange (Via Cottingley)		05:47-23:30
616	Bradford Interchange – Eldwick (Via Priestthorpe)	One bus an hour	06:37-21:52
	Eldwick – Bradford Interchange (Via Priestthorpe)		06:27-21:42

Service No	Route	Peak Frequency	Hours of Operation
619	Bradford Interchange – Eldwick	One bus an hour	06:01-17:54
	Eldwick – Bradford Interchange		07:28-19:24
636	Bradford Interchange - Clayton	One bus every 30 minutes	06:08-21:30
	Clayton – Bradford Interchange		05:25-22:10
637	Bradford Interchange - Clayton	One bus every 30 minutes	05:49-22:00
	Clayton – Bradford Interchange		05:48-21:12

Table 2.2 Bus Services on Great Horton Road

Service No	Route	Peak Frequency	Hours of Operation
576	Bradford Interchange – Halifax Bus Station (Via Boothtown)	One bus every 15 minutes	05:25-22:37
	Halifax Bus Station – Bradford Interchange (Via Boothtown)		05:38-23:51

Source: <https://bustimes.org/>

As can be gauged from **Table 2.1** and **Table 2.2**, the site is situated within proximity of an extensive and comprehensive range of bus services.

Train Services

The closest railway station to Bradford College is Bradford Interchange, located approximately 0.8km east of the Junction Mills building, this equates to a 14-minute walk, or a 6-minute cycle journey time from Bradford College, based on Google Maps journey planner.

Bradford Interchange has 8no. cycle parking spaces, and no parking bays. The station is managed by Northern but sees services from both Grand Central and Northern. Northern operates services to Blackpool, Chester, Halifax, Huddersfield, Hull, Leeds, Manchester and York.

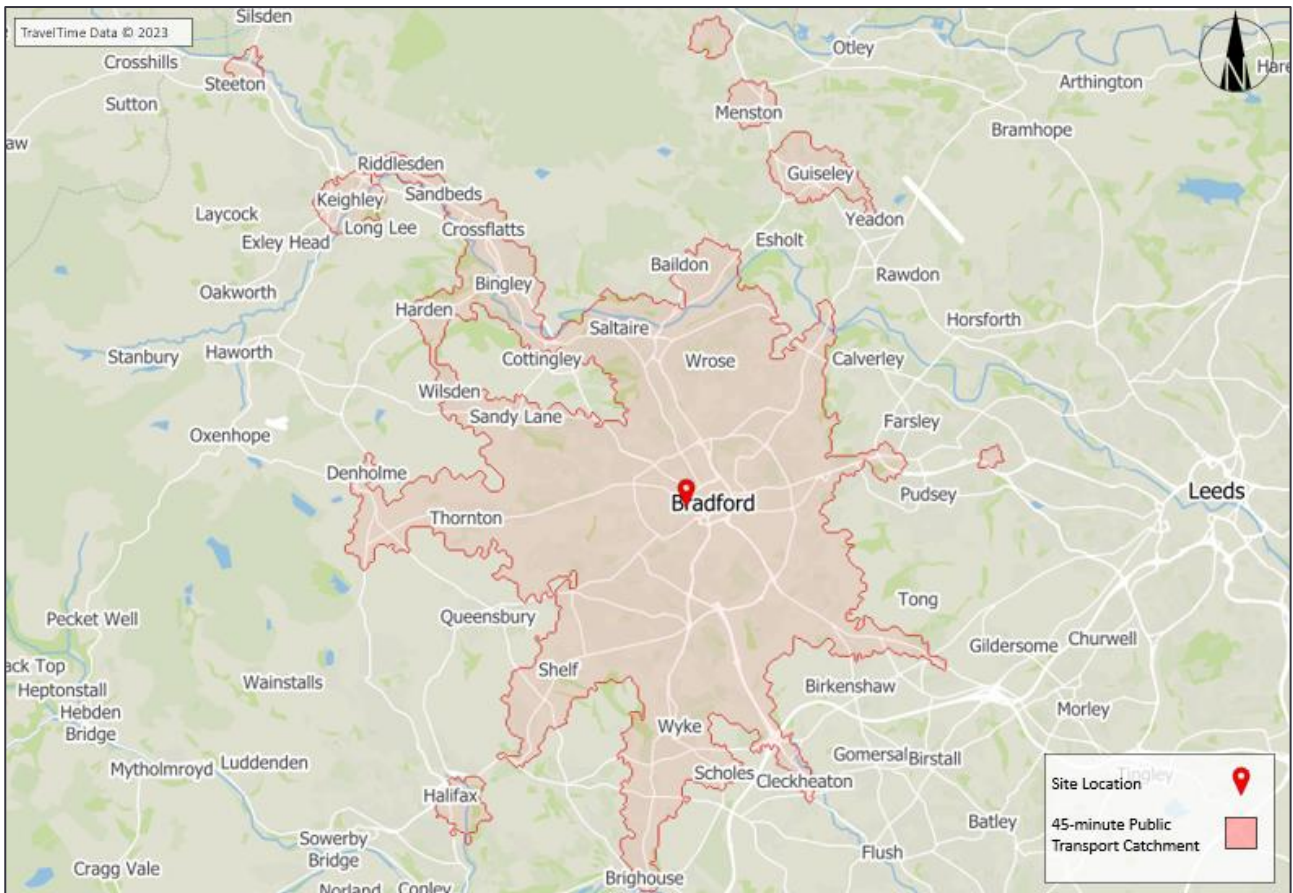
Grand Central offers a service to London Kings Cross, there are 3 departures in each direction. Trains stop at Halifax, Wakefield Kirkgate and Doncaster (as well as other smaller towns in between) before continuing to London Kings Cross.

Bradford Foster Square is also within the vicinity of the college, located 0.9km east from the Site, this equates to a 15-minute walk, or a 5-minute cycle journey time from Bradford College, based on Google Maps journey planner.

Bradford Foster Square has 13no. cycle parking spaces, and a car park with 50no. parking bays which includes 4no disabled bays and a daily charge of £4.00. The station is managed by Northern, who are also the main operator out of Bradford Foster Square. Northern operate services from Bradford Foster Square to Ilkley, Leeds and Skipton.

LNER also operate two services a day to and from Bradford Foster Square to London Kings Cross. All services stop at Shipley, Leeds and Wakefield Westgate before continuing to London Kings Cross on different stopping patterns. There are two services to London in the AM peak and two services from London in the evening.

Figure 2.5 Public Transport Coverage: Departure at 17:00



2.5 Personal Injury Accident Data

Personal Injury Accident (PIA) data has been extracted from Crashmap (www.crashmap.com), the data is collected by the police and is approved by the National Statistics Authority and audited by the Department for Transport each year.

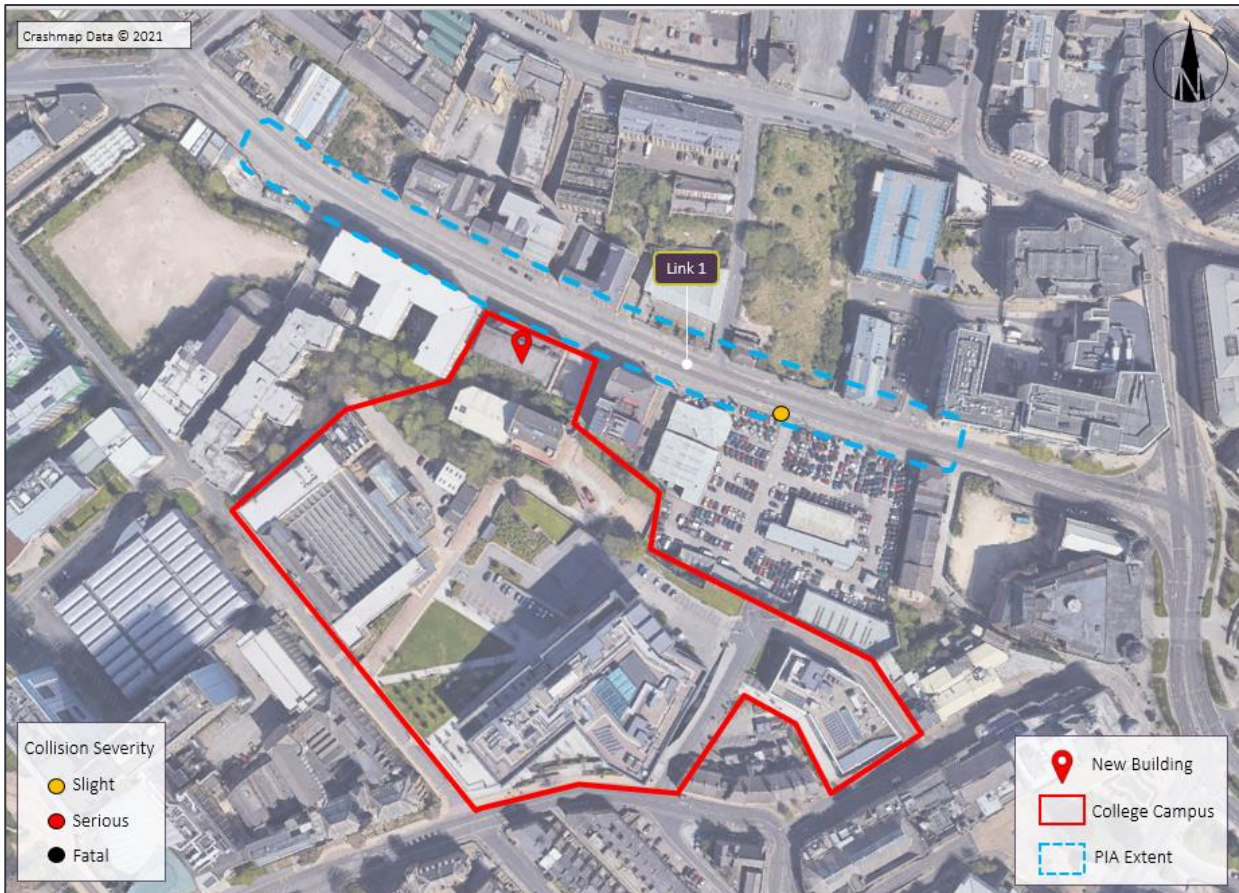
The purpose of assessing recorded PIAs is to determine whether there is a history of accidents in proximity to the Site and to investigate whether there are any patterns or contributing factors to the accidents recorded.

The impact of casualties differs according to the severity of the injuries sustained. Three groups are usually differentiated as follows:

- **Fatal:** any death that occurs within 30 days from causes arising out of the accident.
- **Serious:** records casualties who require hospital treatment and have lasting injuries, but who do not die within the recording period for a fatality.
- **Slight:** where casualties have injuries that do not require hospital treatment, or, if they do, the effects of the injuries quickly subside.

Only links or clusters which exhibit an accident rate of greater than one accident per annum are considered to be significant within this assessment. The extent of the search area and results of the search are illustrated within **Figure 2.6**.

Figure 2.6 Personal Injury Accidents



As can be gauged from **Figure 2.6**, there has been a single recorded accident within the search area, with the accident classified as being slight in severity.

It is therefore considered that there are no highway safety issues on the local highway network that the proposed redevelopment would be expected to exacerbate.

2.6 Summary

The site is:

- Sufficiently connected to the surrounding highway and footway network.
- There are public transport connections situated within close proximity to the site that provide regular access from local and regional origins.
- There are no highway safety issues that the proposed redevelopment would be expected to exacerbate.

It should be noted that further details on the proposed development sites accessibility via sustainable means is considered within the accompanying Travel Plan.

3. Policy Context

3.1 Introduction

This chapter of the Transport Statement outlines the relevant national and local policy guidance that the proposed redevelopment contributes to.

3.2 National Planning Policy Framework

In July 2021 the Ministry of Housing, Communities and Local Government published the revised **National Planning Policy Framework (NPPF)**, which sets out the Government’s planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. The NPPF must be taken into account in the preparation of local and neighbourhood plans and is a material consideration in planning decisions.

At the heart of the NPPF is a presumption in favour of sustainable development, an approach which should be followed by local planning authorities in their plan making and decision taking. Decision takers at every level are encouraged, where appropriate, to consider favourably applications for sustainable development and an emphasis is also made within the NPPF on local planning authorities working proactively with applicants at pre-application stage to secure this.

One of the core land-use planning principles, underpinning plan-making and decision-taking, is that *‘opportunities to promote walking, cycling and public transport use are identified and pursued.’*

The NPPF sets out how sustainable development will be delivered, which includes promoting sustainable transport (**Paragraphs 104 - 113**). Within this section of the NPPF it is recognised that transport policies have an important role to play in facilitating sustainable development and contribute to wider sustainability and health objectives. The NPPF identifies the need to favour sustainable transport modes to enhance travel choice, and to locate developments that generate significant movement where the need to travel will be minimised and the use of sustainable transport modes can be maximised. The NPPF sets out that all developments that generate significant amounts of movement should be supported by a Transport Statement or a Transport Assessment and a Travel Plan (**Paragraph 111**), the latter being identified as a key tool to deliver sustainable transport objectives.

Paragraph 110 identifies that plans and decisions should take account of whether:

- *a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *b) safe and suitable access to the site can be achieved for all users;*
- *c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and*
- *d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.’*

Paragraph 112 identifies that development should be located and designed where practical to:

- *‘a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

- *b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- *d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'*

With regards to impacts on highways, **Paragraph 111** states:

'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

3.3 Local Planning Policy Framework

Bradford District Local Plan 2020 – 2038 (Draft)

The **Bradford District Local Plan (BDLP)** is an adopted planning document to guide development and land use practices in the Bradford District. The BDLP sets out a list of strategies and policies to guide growth through development can be sustained ecologically, economically, and socially through to 2038.

The Local Plan includes the following relevant policies, with pertinent sections highlighted in **bold** text:

Policy TR3: Integrating Sustainable Transport and Development

The Council will promote sustainable travel in new developments by supporting the following mechanisms:

A. The application of accessibility standards, in Appendix 6 will be used to guide the allocation and phasing of development sites in the Local Plan and for development proposals for windfall development. Development proposals through the allocation of land through the local plan and from windfall development should maximise the use of walking, cycling and public transport as the primary means of transportation. Applicants will be expected to adhere to Healthy Streets and 15 Minute Neighbourhood Principles

B. Development should support and contribute to appropriate levels of enhancement to all transport networks, in order of priority:

- a. cycling and walking,*
- b. public transport, and*
- c. highways infrastructure and services.*

C. Require all new developments to encourage walking and cycling by connecting to the existing street and path network, and cycle routes, bus stops and train stations where feasible. In so doing, the developments should refer to the latest applicable Government guidance (LTN 1/20 and successors) to create and expand on an active travel network which is:

- a. coherent,*
- b. direct, including by maintaining and providing direct routes through such development,*
- c. safe,*

- d. comfortable, and*
- e. attractive,*
- f. access arrangements,*
- g. parking provision (Appendix 3),*
- h. appropriate location,*
- j. design and layout. taking the necessary steps to ensure that interventions within and outside the development are considered.*

D. Require all new major developments to encourage the use of public transport, through:

- a. expansion of the public transport network to serve the development where it does not already,*
- b. greater density of development closest to public transport stops,*
- c. facilitated access by foot or cycle to these stops.*

E. Ensure all major developments provide a costed, deliverable Travel Plan with SMART objectives and suitable finances to ensure Travel Plan delivery.

F. The Council will require applicants to submit design and access statements which demonstrate how their plans are inclusive of people with a range of needs including -

- a. children,*
- b. older people,*
- c. disabled and mobility impaired people and people with non-visible disabilities and conditions including dementia and autism, are in line with current Local and Government Guidance through -*

G. Maximise the place making opportunities of public transport stops, interchange points, hubs and new stations.

H. To protect and facilitate sites and routes for proposed transport improvement schemes, as identified in the Local Plan and the Local Infrastructure Plan.

Policy TR5: Parking

The Council will act through the following mechanisms:

A. Assessing new developments against indicative car, cycle, freight and electric vehicle parking standards (see Appendix 7). Encouraging developments which minimise the need for motor vehicle parking and actively manage down parking levels below these standards:

- a. In response to high public transport accessibility where this exists or is proposed by the developer (PTAM)*
- b. In response to nearby low traffic street typologies and/or accessible nearby services*
- c. If the development is designated 'car-free' whereby all motor vehicle parking is consolidated in a contiguous or proximate location***
- d. If the development is designated 'car-light' whereby motor vehicle parking is split between conventional (co-located with development) and proximate locations*

e. By securing part of the parking quantum through contingent parking rights, whereby parking spaces are neutralized post-opening or post occupation where these are surplus to requirement.

f. Through other measures as addressed through a Travel Plan.

B. The requirement for new developments to take a design led approach to parking which:

a. is well integrated within the overall layout so that it is inclusive and accessible to all users,

b. supports the efficient use of land,

c. encourages the use of more sustainable modes of transport (e.g. by catering for pedestrian and cycling desire lines),

d. is designed in consideration of the street scene and local character,

e. Incorporates greenery and sustainable drainage, and

f. creates a safe and pleasant environment in parking areas.

C. The progressive reduction in temporary and long-stay parking in town centres and other highly accessible locations (other than in locations to encourage interchange with more efficient vehicular modes).

D. The improvement in quality of parking in the city and town centres for shoppers and other short stay uses so that it is accessible, safe and secure, responding to the needs of disabled users in particular

E. The improvement in quality of parking in the city and town centres for shoppers and other short stay uses so that it is accessible, safe and secure, responding to the needs of disabled users in particular.

F. A reduction and re-allocation of on-street parking in town centres and other locations readily accessible by public transport, cycling and walking, to encourage sustainable travel behaviours and efficient use of space.

G. Support the delivery of park and ride facilities and infrastructure, including infrastructure to increase public transport capacity, reliability and journey times.

West Yorkshire Local Transport Plan 2011 – 2026

The West Yorkshire Local Transport Plan (LTP) was adopted by the LHA, City of Bradford Metropolitan District Council. The plan sets out the transport policies up to 2026.

The plan states the following five objectives for Bradford:

- 1. supporting the delivery of new housing and jobs and helping to regenerate existing local communities
- 2. *making it easier to access places, services and amenities by sustainable means*
- 3. *creating high quality, distinctive, cohesive and safe environments*
- 4. *reducing congestion and supporting greener*
- 5. *serving the transport needs of the most vulnerable members of the community and reducing the harmful effects of road traffic within neighbourhoods*

4. Development Proposals

4.1 Introduction

This chapter of the Transport Statement describes the proposed development, vehicle access, servicing arrangements, and parking provision for the site.

4.2 Development Description

The development proposals at Bradford College comprise:

- The creation of a new building facility of approx. 3,000sqm over four floors to accommodate automotive and advanced engineering provision.
- Planned student demand of approx. 650 students by 2024 / 2025, with around 8,200 teaching hours per week.
- Proposed teaching space of approx. 1,950sqm.

Whilst the development plans to house 650 students by 2024 / 2025, it will not accommodate more than 360 staff / students at any one time.

Proposed general arrangement floor plans illustrating the development proposals are provided in **Appendix A**.

4.3 Access Arrangements

Vehicular Access

The site access arrangements will remain as per the existing situation, with vehicles accessing the frontage via the Thornton Road/B6145.

Pedestrian Access

The pedestrian access arrangements from the external highway will remain as entry via:

- Thornton Road
- Westholme Street

4.4 Parking

Vehicle

The existing vehicle parking arrangements will be retained as part of the redevelopment with no proposed changes to the level of provision currently afforded along Thornton Road and Westholme Street.

Cycle

In terms of cycle parking, the college currently provides 380 cycle parking spaces across the whole campus including provision at the David Hockney building situated c.400m from the site.

4.5 Servicing Arrangements

The building will be serviced from the kerb side, in keeping with the servicing arrangements of other college buildings. This is expected to occur weekly and outside of the typical peak hours.

5. Traffic Impact

5.1 Introduction

This section of the TS provides an overview of the methodology used to calculate the potential trip generation associated with the development proposal.

5.2 Trip Generation

Multi-Modal trip rate data has been extracted from the latest version of the TRICS database for '04 – Education/C – College' to determine the likely trip generation for the existing use class. The following survey selection parameters were utilised:

- Surveys conducted England only, excluding Greater London;
- Surveys conducted on a weekday only;
- Surveys conducted in 'Town Centre', 'Edge of Town Centre' and Built-Up Zone' locations; and
- Surveys conducted for sites between 178-2600sqm.

Full and detailed Multi-Modal TRICS outputs are provided in **Appendix B**.

Table 5.1 below presents the multimodal trip rates and Table 5.2 presented the likely trip generation by mode, based a max building occupancy of 360 staff/students.

Table 5.1 Trip Rates

Time Range	Total Vehicles	Cyclists	Pedestrians	Public Transport Users	Total
AM Peak Period (08:00 – 09:00)	0.046 (0.055)	0.003	0.048	0.019	0.116
PM Peak Period (17:00 – 18:00)	0.037 (0.045)	0.002	0.039	0.013	0.091

(x) = Vehicle Occupants

Table 5.2 Trip Generation

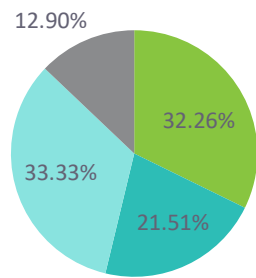
Time Range	Total Vehicles	Cyclists	Pedestrians	Public Transport Users	Total
AM Peak Period (08:00 – 09:00)	17 (20)	1	17	7	42
PM Peak Period (17:00 – 18:00)	13 (16)	1	14	5	33

(x) = Vehicle Occupants

As can be gauged from the above, the development is expected to generate c. 17 and c. 13 vehicle trips in the morning and evening peak hours, out of a total of 42 and 33 total people trips, this indicates that a high proportion of staff/students are expected to travel to the site sustainably, which is also reflected within the travel behaviour data presented within the accompanying Travel Plan. The modal split is presented within **Figure 5.1**.

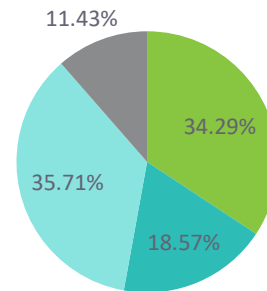
Figure 5.1 Modal Split

AM Peak



■ Total Vehicles ■ Cyclists
■ Pedestrians ■ Public Transport Users

PM Peak



■ Total Vehicles ■ Cyclists
■ Pedestrians ■ Public Transport Users

5.3 Traffic Impact

Based on the outcome of the TRICS exercise, it has been determined that the development could generate c.17 and c.13 vehicle trips in the morning and evening peak hours. This level of traffic is not expected to have a material impact on the safe operation of the highway network and cannot be categorised as being ‘severe’ under NPPF, Para 111.

6. Summary and Conclusions

6.1 Summary

The Transportation Consultancy Ltd ('ttc') has been commissioned by Bradford College (the client) to prepare a Travel Plan (TP) in support of a planning application for the redevelopment of Junction Mill into a teaching building referred to as the 'Future Technologies Building'.

In summary:

- The site is well connected to the existing footway / cycle network.
- The site is located within close proximity of varied and frequent public transport services.
- A review of the Personal Injury Accident record within the vicinity of the site has revealed there are no pre-existing highway safety issues, which the development would likely exacerbate.
- The application is being supported by the inclusion of a Travel Plan, which will seek to influence the travel behaviour of all staff / students. This will assist in minimising the school's overall impact on the highway network.

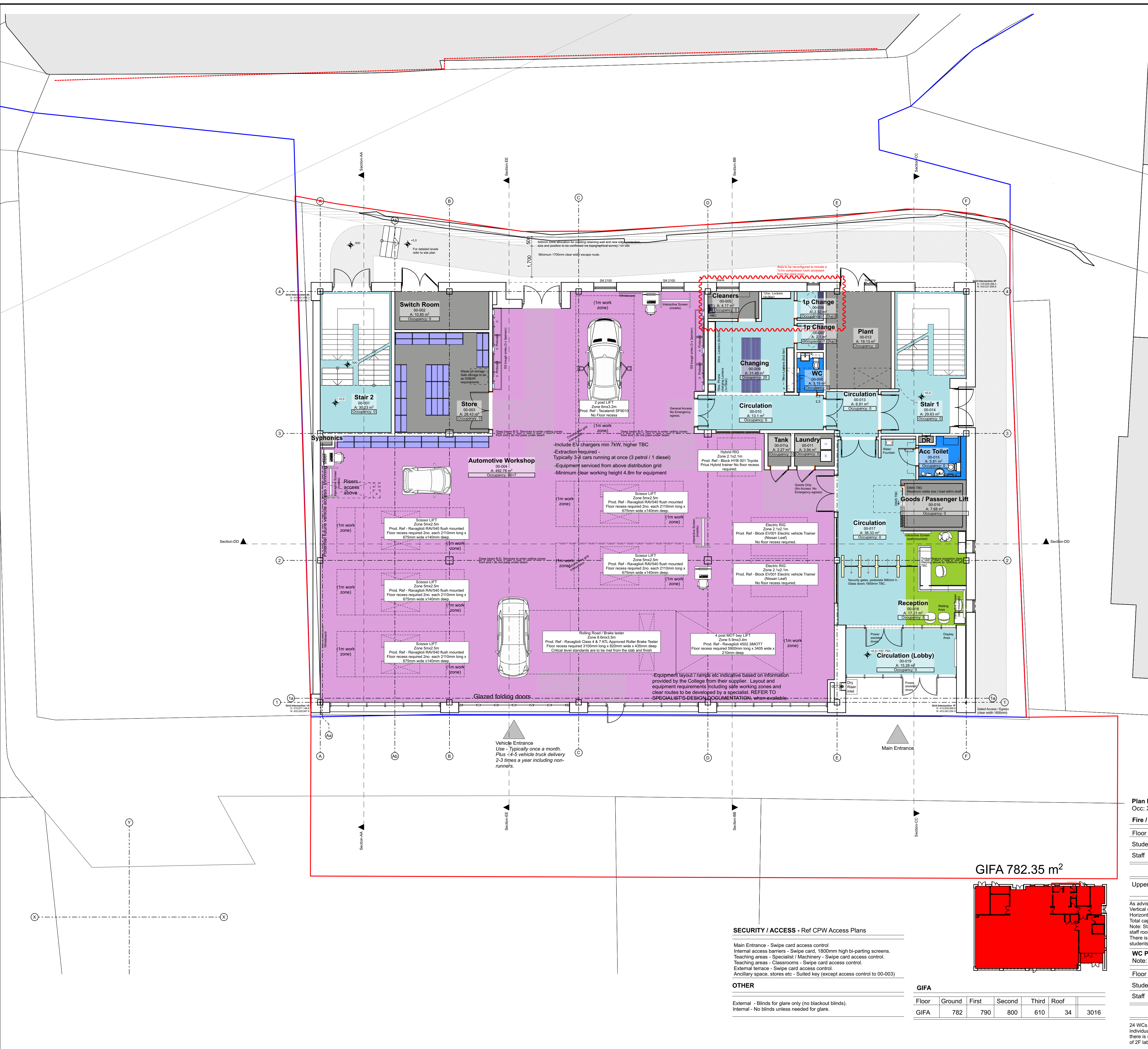
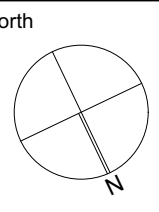
6.2 Conclusion

On the basis of the information presented in this report it is considered that the proposed development can be comfortably accommodated within the local area. As such there should be no reason why the application cannot be recommended for approval in terms of highways and transportation.

It is therefore considered that the proposed development is compliant with Paragraph 111 of the NPPF, which states that *'development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'*.

Appendix A

Proposed General Arrangement Floor Plans



Plan Key - Occupancy
 Occ: X+X - Occupancy: Student No. + Staff No.

Fire / Design Occupancy

Floor	Ground	First	Second	Third	
Student	88	113	172	140	513
Staff	12	10	24	11	57
	100	123	196	151	570
Upper levels	Staff / Student / Total 425 / 45 / 470				

As advised by Bureau Veritas - Read with current Bureau Veritas Fire Report - Vertical capacity over staircase 1 and 2 = 850 persons.
 Horizontal capacity 1F/2F/3F 1700/3.6 = 472 persons.
 Total capacity to each of the upper levels 280 persons.
 Note: Staff within the building are double counted - within both teaching and staff rooms. With even distribution, in practice, staff can be counted once.
 There is spare capacity within upper floor staircase capacity for additional students / staff with any future division of 2F lab into two (two groups, +27).

WC Provision Occupancy
 Note: Duplicate occupancies discounted ('Duplication' / 'Dup')

Floor	Ground	First	Second	Third	
Student	66	98	130	128	422
Staff	12	10	7	5	34
	78	108	137	133	456

24 WCs provided. Calculations as BS 6465-1:2006+A1:2009. +25% for individual WC provision. At 100% staff utilisation and 64% student utilisation, there is spare capacity for additional students / staff with any future division of 2F lab into two (two groups).

SECURITY / ACCESS - Ref CPW Access Plans

Main Entrance - Swipe card access control
 Internal access barriers - Swipe card, 1800mm high bi-parting screens.
 Teaching areas - Specialist / Machinery - Swipe card access control.
 Teaching areas - Classrooms - Swipe card access control.
 External terrace - Swipe card access control.
 Ancillary space, stores etc - Suited key (except access control to 00-003)

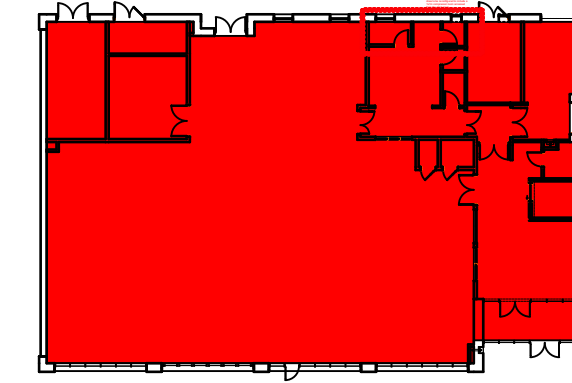
OTHER

External - Blinds for glare only (no blackout blinds).
 Internal - No blinds unless needed for glare.

GIFA

Floor	Ground	First	Second	Third	Roof	
GIFA	782	790	800	610	34	3016

GIFA 782.35 m²



- P11 Development. KR RN 04/08/2023
Workshop layouts and slab recesses co-ordinated with specialist information and adjusted for fire escape routes. Powered entrance doors indicated. Water heater tank room added. Note added re compressor room. Security strategy notes updated. Notes added.
- P10 Development. KR RN 14/07/2023
Workshop layouts minor changes to specialist layout information. Electrical riser amended. Facade build up further development incorporated. Workshop / Specialist area teaching desks added.
- P09 Development. KR RN 07/07/2023
Workshop layouts indicated to end user requirements / information. Syphonic and data risers adjacent stair 2 swapped positions as per Services Engineer's request. Dry riser inlet / outlet positions indicated. Facade build up development incorporated. Occupancy notes updated in line with Fire engineer information.
- P08 Development. KR RN 19/06/2023
Window positions revised as per elevations. GIFA adjusted to suit elevational impact on external walls. Risers added / amended for co-ordination. Reception area amended to end user feedback. Notes re Equipment added.
- P07 Development. Detail added. KR RN 19/05/2023
Occupancies updated. Staircases refined. Staff kitchenettes added. Balustrades amended. Model refined.
- P06 WIP - Reconfigured scheme to 4 storeys. KR RN 15/05/2023
2023 February scheme revisited - third floor added, return to 4 storeys, following additional funding. Includes full floor plate at first floor, and an area of roof terrace at third floor level. Principals agreed 04/05/2023 based on option 1 set out in BCCTF-BBA-XX-PP-A-021 and meeting discussion.
- P05 Development. Detail added. KR RN 06/02/2023
Occupancies / GIFA indicated. Building depth reduced by 500mm to support rear escape.
- P04 Reconfigured scheme. KR RN 10/11/2023
2021 Stage 2 scheme revisited to align with funding. Building reduced to three storeys, voids infilled, envelope straightened and main layout principals mirrored. Principals agreed 15/12/2022 based on option B set out in BCCTF-BBA-XXX-PP-A-016.
- P03 Client comments incorporated: Changing. JB RN 26/08/2021
Room opened up and glazed screen added for supervision.
- P02 Stairs updated and M&E stores and risers. JB RN 20/07/2021
added.
- P01 First issue. JB RN 25/07/2021

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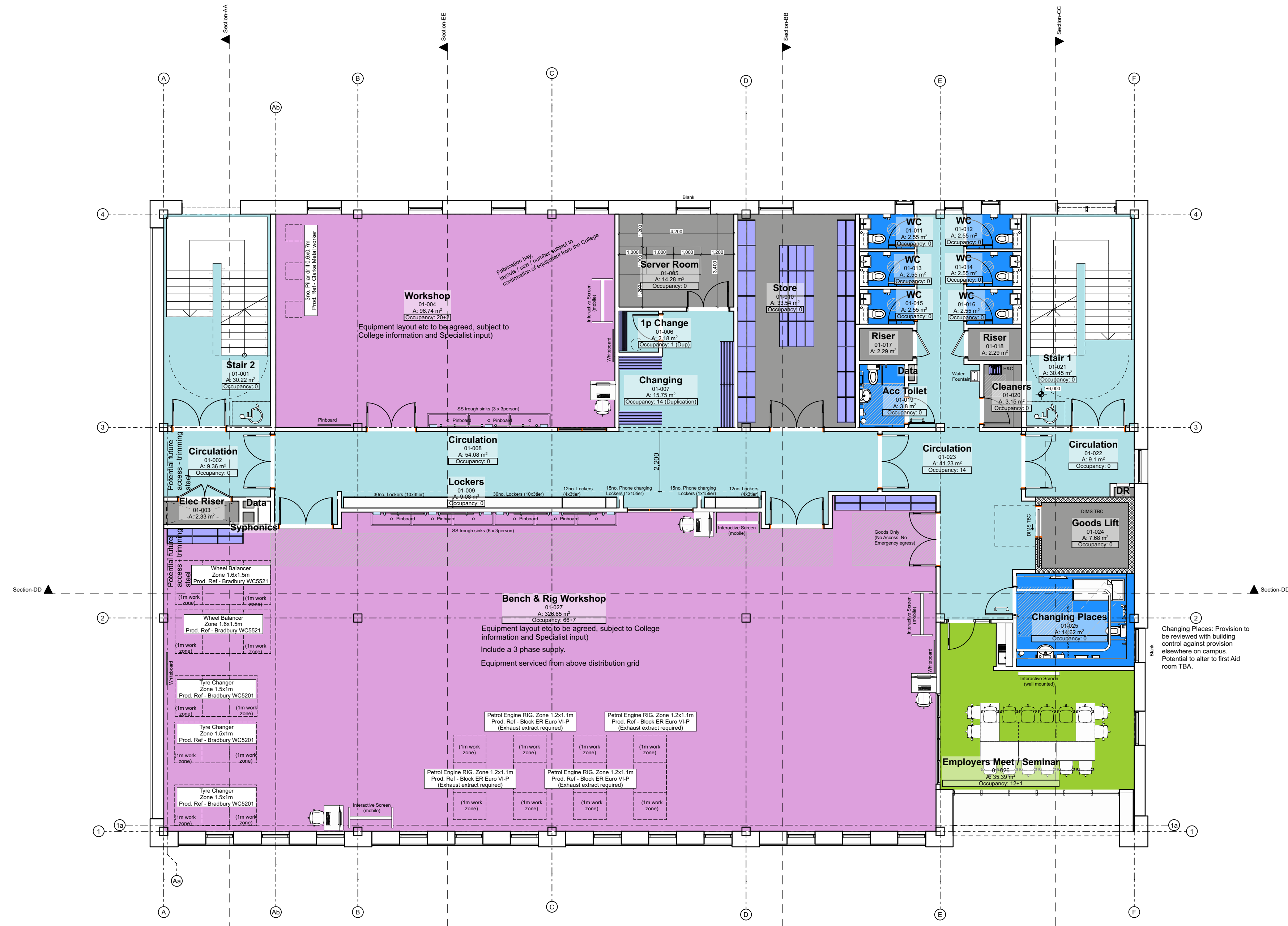
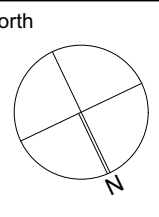
Bradford College

Bradford College CTF
 Thornton Road Site (JM)
 Future Technologies Centre (FTC)

Bradford College

Proposed Ground Floor GA Floor Plan

Originator project ref	Purpose of Issue
21030	Design
Scale(s)	Status
1:100	S2 Suitable for Information
Paper size	Revision
A1	P11 Preliminary



Changing Places: Provision to be reviewed with building control against provision elsewhere on campus. Potential to alter to first Aid room TBA.

SECURITY / ACCESS - Ref CPW Access Plans

Main Entrance - Swipe card access control
 Internal access barriers - Swipe card, 1800mm high bi-parting screens.
 Teaching areas - Specialist / Machinery - Swipe card access control.
 Teaching areas - Classrooms - Swipe card access control.
 External terrace - Swipe card access control.
 Ancillary space, stores etc - Suited key (except access control to 00-003)

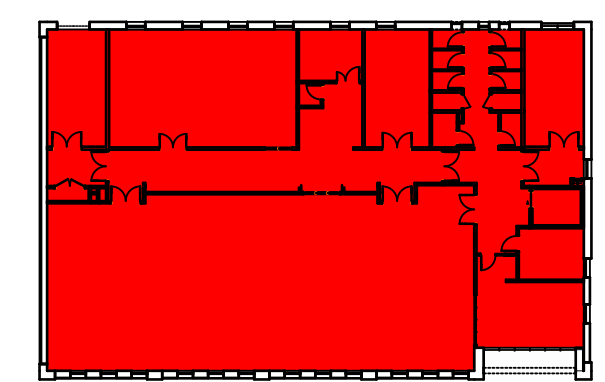
OTHER

External - Blinds for glare only (no blackout blinds).
 Internal - No blinds unless needed for glare.

GIFA

Floor	Ground	First	Second	Third	Roof	Total
GIFA	782	790	800	610	34	3016

GIFA 790.36 m²



Plan Key - Occupancy
 Occ: X+X - Occupancy: Student No. + Staff No.

Fire / Design Occupancy

Floor	Ground	First	Second	Third	Total
Student	88	113	172	140	513
Staff	12	10	24	11	57
	100	123	196	151	570
Upper levels		Staff / Student / Total			425 / 45 / 470

As advised by Bureau Veritas - Read with current Bureau Veritas Fire Report - Vertical capacity over staircase 1 and 2 = 850 persons.
 Horizontal capacity 1F/2F/3F 1700/3.6 = 472 persons.
 Total capacity to each of the upper levels 280 persons.
 Note: Staff within the building are double counted - within both teaching and staff rooms. With even distribution, in practice, staff can be counted once.
 There is spare capacity within upper floor staircase capacity for additional students / staff with any future division of 2F lab into two (two groups, +27).

WC Provision Occupancy

Note: Duplicate occupancies discounted ('Duplication' / 'Dup')

Floor	Ground	First	Second	Third	Total
Student	66	98	130	128	422
Staff	12	10	7	5	34
	78	108	137	133	456

24 WCs provided. Calculations as BS 6465-1:2006+A1:2009. +25% for individual WC provision. At 100% staff utilisation and 64% student utilisation, there is spare capacity for additional students / staff with any future division of 2F lab into two (two groups).

P12	Development. Security strategy notes updated. Notes added.	KR	RN	04/08/2023
P11	Development. Electrical riser amended. Facade build up further development incorporated. Workshop / Specialist area teaching desks added. Changing places note added.	KR	RN	14/07/2023
P10	Development. Workshop layouts indicated to end user requirements / information. Syphonic and data risers adjacent stair 2 swapped positions as per Services Engineer's request. Dry riser inlet / outlet positions indicated. Facade build up development incorporated. Occupancy notes updated in line with Fire engineer information.	KR	RN	07/07/2023
P09	Development. Window positions revised as per elevations. GIFA adjusted to suit elevational impact on external walls. Risers added / amended for co-ordination. Toilet cores refined. Notes re Equipment added.	KR	RN	19/06/2023
P08	Development. Detail added. Occupancies updated. Staircases refined. Staff kitchenettes added. Balustrades amended. Model refined.	KR	RN	19/05/2023
P07	WIP - Reconfigured scheme to 4 storeys. 2023 February scheme revisited - third floor added, return to 4 storeys, following additional funding. Includes full floor plate at first floor, and an area of roof terrace at third floor level. Principals agreed 04/05/2023 based on option 1 set out in BCCTF-BBA-XX-XX-PP-A-0021 and meeting discussion.	KR	RN	15/05/2023
P06	Development. Detail added. End User comments incorporated. Occupancies / GIFA indicated. Building depth reduced by 500mm to support rear escape.	KR	RN	06/02/2023
P05	Reconfigured scheme. 2021 Stage 2 scheme revisited to align with funding. Building reduced to three storeys, voids infilled, envelope straightened and main layout principals mirrored. Principals agreed 15/12/2022 based on option B set out in BCCTF-BBA-XX-XX-PP-A-0016.	KR	RN	10/11/2023
P04	Client comments incorporated. Changing Room opened up and glazed screen added for supervision. Male / Female toilets changed to individual unisex WCs.	JB	RN	26/08/2021
P03	Server Room moved to Second Floor	JB	RN	18/08/2021
P02	Stairs updated and M&E stores and risers added	JB	RN	20/07/2021
P01	First issue	JB	RN	25/07/2021

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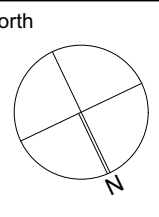
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 Thornton Road Site (JM)
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Bradford College

Proposed First Floor GA Floor Plan

Originator project ref	Purpose of Issue
21030	Design
Scale(s)	Status
1:100	S2 Suitable for Information
Paper size	Revision
A1	P12 Preliminary

project originator volume level type role number	status revision
BCCTF-BBA-JM-01-DR-A-2201	S2 P12



Plan Key - Occupancy
Occ: X+X - Occupancy: Student No. + Staff No.

Fire / Design Occupancy

Floor	Ground	First	Second	Third	
Student	88	113	172	140	513
Staff	12	10	24	11	57
	100	123	196	151	570
Upper levels		Staff / Student / Total			
		425 / 45 / 470			

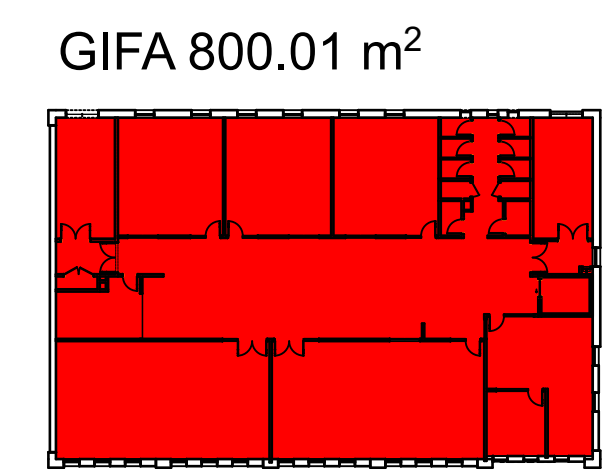
As advised by Bureau Veritas - Read with current Bureau Veritas Fire Report - Vertical capacity over staircase 1 and 2 = 850 persons.
Horizontal capacity 1F/2F/3F 1700/3.6 = 472 persons.
Total capacity to each of the upper levels 280 persons.

Note: Staff within the building are double counted - within both teaching and staff rooms. With even distribution, in practice, staff can be counted once. There is spare capacity within upper floor staircase capacity for additional students / staff with any future division of 2F lab into two (two groups, +27).

WC Provision Occupancy
Note: Duplicate occupancies discounted ('Duplication' / 'Dup')

Floor	Ground	First	Second	Third	
Student	66	98	130	128	422
Staff	12	10	7	5	34
	78	108	137	133	456

24 WCs provided. Calculations as BS 6465-1:2006+A1:2009. +25% for individual WC provision. At 100% staff utilisation and 64% student utilisation, there is spare capacity for additional students / staff with any future division of 2F lab into two (two groups).



SECURITY / ACCESS - Ref CPW Access Plans

Main Entrance - Swipe card access control
Internal access barriers - Swipe card, 1800mm high bi-parting screens.
Teaching areas - Specialist / Machinery - Swipe card access control.
Teaching areas - Classrooms - Swipe card access control.
External terrace - Swipe card access control.
Ancillary space, stores etc - Suited key (except access control to 00-003)

OTHER

External - Blinds for glare only (no blackout blinds).
Internal - No blinds unless needed for glare.

GIFA

Floor	Ground	First	Second	Third	Roof	
GIFA	782	790	800	610	34	3016

P12	Development.	KR	RN	04/08/2023
	Security strategy notes updated. Notes added. Syphonic drainage route indicated.			
P11	Development.	KR	RN	14/07/2023
	Electrical riser amended. Facade build up further development incorporated. Workshop / Specialist area teaching desks added. Kitchen FFE expanded.			
P10	Development.	KR	RN	07/07/2023
	Syphonic and data risers adjacent stair 2 swapped positions as per Services Engineer's request. Dry riser inlet / outlet positions indicated. Facade build up development incorporated, and cladding profile indicated to area above entrance. Meeting room glazing enhanced to support fire strategy. Occupancy notes updated in line with Fire engineer information.			
P09	Development.	KR	RN	19/06/2023
	Window positions revised as per developing elevations. GIFA adjusted to suit elevational impact on external walls Risers added / amended for co-ordination. Toilet core refined. Specialist lab FFE amended to suit end user discussions.			
P08	Development. Detail added.	KR	RN	19/05/2023
	Occupancies updated. Staircases refined. Staff kitchenettes added. Balustrades amended. Model refined.			
P07	WP - Reconfigured scheme to 4 storeys.	KR	RN	15/05/2023
	2023 February scheme revisited - third floor added, return to 4 storeys, following additional funding. Includes full floor plate at first floor, and an area of roof terrace at third floor level. Principals agreed 04/05/2023 based on option 1 set out in BCCTF-BBA-XX-PP-A-021 and meeting discussion.			
P06	Development. Detail added.	KR	RN	06/02/2023
	End User comments incorporated. Occupancies / GIFA indicated. Building depth reduced by 500mm to support rear escape.			
P05	Reconfigured scheme.	KR	RN	10/11/2023
	2021 Stage 2 scheme revisited to align with funding. Building reduced to three storeys, voids infilled, envelope straightened and main layout principals mirrored. Principals agreed 15/12/2022 based on option B set out in BCCTF-BBA-XXX-PP-A-016. Developed and refined for discussion in end user meetings 11/12/2023.			
P04	Client comments incorporated: Male / Female toilets changed to individual unisex WC's	JB	RN	26/08/2021
P03	Server Room moved from First Floor and Cafe reconfigured to allow changes	JB	RN	18/08/2021
P02	MAE stores and risers added	JB	RN	20/07/2021
P01	First issue	JB	RN	25/07/2021
rev	description	drawn	checked	date

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Bradford College

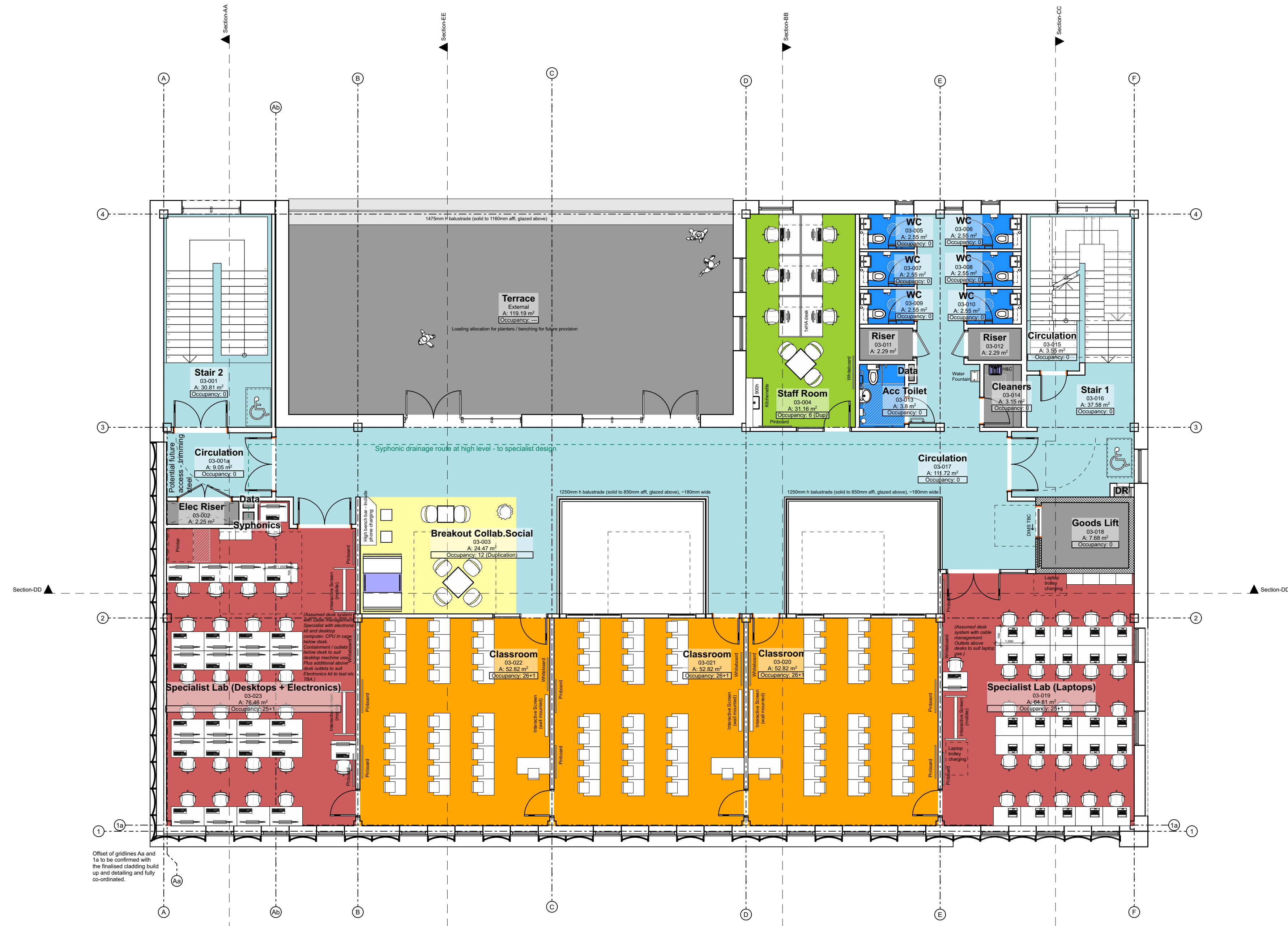
Bradford College CTF
Thornton Road Site (JM)
Future Technologies Centre (FTC)

Bradford College

Proposed Second Floor GA Floor Plan

Originator project ref	Purpose of Issue
21030	Design
Scale(s)	Status
1:100	S2 Suitable for Information
Paper size	Revision
A1	P12 Preliminary

project	originator	volume	level	type	role	number	status	revision
BCCTF-BBA-JM-02-DR-A-2201							S2	P12



Offset of grilles Aa and 1a to be confirmed with the finalised cladding build up and detailing and fully co-ordinated.

SECURITY / ACCESS - Ref CPW Access Plans

Main Entrance - Swipe card access control
 Internal access barriers - Swipe card, 1800mm high bi-parting screens.
 Teaching areas - Specialist / Machinery - Swipe card access control.
 Teaching areas - Classrooms - Swipe card access control.
 Ancillary space, stores etc - Suited key (except access control to 00-003)

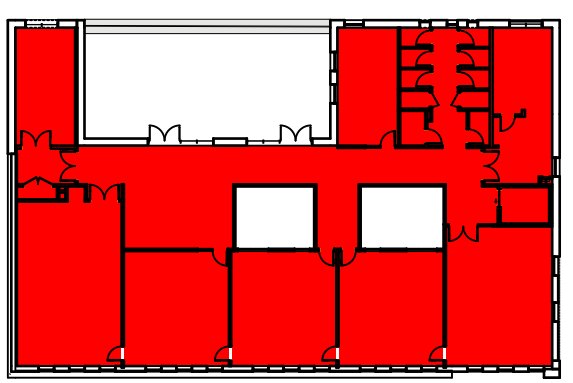
OTHER

External - Blinds for glare only (no blackout blinds).
 Internal - No blinds unless needed for glare.

GIFA

Floor	Ground	First	Second	Third	Roof	Total
GIFA	782	790	800	610	34	3016

GIFA 609.97 m²



Plan Key - Occupancy
 Occ: X+X - Occupancy: Student No. + Staff No.

Fire / Design Occupancy

Floor	Ground	First	Second	Third	Total
Student	88	113	172	140	513
Staff	12	10	24	11	57
	100	123	196	151	570
Upper levels		Staff / Student / Total			425 / 45 / 470

As advised by Bureau Veritas - Read with current Bureau Veritas Fire Report - Vertical capacity over staircase 1 and 2 = 850 persons.
 Horizontal capacity 1F/2F/3F 1700/3.6 = 472 persons.
 Total capacity to each of the upper levels 280 persons.
 Note: Staff within the building are double counted - within both teaching and staff rooms. With even distribution, in practice, staff can be counted once. There is spare capacity within upper floor staircase capacity for additional students / staff with any future division of 2F lab into two (two groups, +27).

WC Provision Occupancy
 Note: Duplicate occupancies discounted ('Duplication' / 'Dup')

Floor	Ground	First	Second	Third	Total
Student	66	98	130	128	422
Staff	12	10	7	5	34
	78	108	137	133	456

24 WCs provided. Calculations as BS 6465-1:2006+A1:2009. +25% for individual WC provision. At 100% staff utilisation and 64% student utilisation, there is spare capacity for additional students / staff with any future division of 2F lab into two (two groups).

- P10 Development. KR RN 04/08/2023
Security strategy notes updated. Notes added. Syphonic drainage route indicated. Door / lobby added to staircase 2 for fire and services requirements. Glass screens updated.
- P09 Development. KR RN 14/07/2023
Emergency egress pass doors added to teaching spaces to north to support fire strategy, and teaching space layout marginally reconfigured. Electrical riser amended. Facade built up further development incorporated - Cladding area reduced. Cladding area stepped steelwork / additional grids indicated. Workshop / Specialist area teaching desks added.
- P08 Development. KR RN 07/07/2023
Syphonic and data risers adjacent stair 2 swapped positions as per Services Engineer's request. Dry riser inlet / outlet positions indicated. Meeting room glazing enhanced to support fire strategy. Occupancy notes updated in line with Fire engineer information. Facade built up development incorporated - Cladding profile indicated. Area of cladding reduced, brickwork increased (refer to elevations). Terrace parapet coping shown.
- P07 Development. KR RN 19/06/2023
Window positions revised as per developing elevations. GIFA adjusted to suit elevational impact on external walls. Risers added / amended for co-ordination. Toilet core refined. Specialist labs FFE amended to suit end user discussions.
- P06 Development. Detail added. KR RN 19/05/2023
Occupancies updated. Staircases refined. Staff kitchenettes added. Balustrades amended. Model refined.
- P05 WIP - Reconfigured scheme to 4 storeys. KR RN 15/05/2023
2023 February scheme revisited - third floor added, return to 4 storeys, following additional funding. Includes full floor plate at first floor, and an area of roof terrace at third floor level.
Principals signed 04/05/2023 based on option 1 set out in BCTF-BBA-XX-PP-A-001 and meeting discussion.

rev	description	drawn	checked	date

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Bradford College

Proposed Third Floor GA Floor Plan

Originator project ref	Purpose of Issue
21030	Design
Scale(s)	Status
1:100	S2 Suitable for information
Paper size	Revision
A1	P10 Preliminary

project	originator	volume	level	type	role	number	status	revision
BCTF	BBA	JM	03	DR	A	2201	S2	P10

Appendix B

TRICS Outputs

Calculation Reference: AUDIT-154301-230824-0842

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : C - COLLEGE/UNIVERSITY
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BU BUCKINGHAMSHIRE	1 days
	WS WEST SUSSEX	2 days
04	EAST ANGLIA	
	PB PETERBOROUGH	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of students
 Actual Range: 1473 to 4050 (units:)
 Range Selected by User: 360 to 16000 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 06/04/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	2 days
Wednesday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town Centre	4
---------------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	1
Built-Up Zone	2
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:

Use Class:

F1(a) 4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	1 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	4 days
-----------------	--------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BU-04-C-01	UNIVERSITY		BUCKINGHAMSHIRE
	QUEEN ALEXANDRA ROAD			
	HIGH WYCOMBE			
	Edge of Town Centre			
	Built-Up Zone			
	Total Number of students:		3795	
	Survey date: TUESDAY		24/01/17	Survey Type: MANUAL
2	PB-04-C-02	COLLEGE		PETERBOROUGH
	BROOK STREET			
	PETERBOROUGH			
	Edge of Town Centre			
	Built-Up Zone			
	Total Number of students:		3000	
	Survey date: MONDAY		17/10/16	Survey Type: MANUAL
3	WS-04-C-08	UNIVERSITY OF CHICHESTER		WEST SUSSEX
	COLLEGE LANE			
	CHICHESTER			
	Edge of Town Centre			
	No Sub Category			
	Total Number of students:		4050	
	Survey date: TUESDAY		05/04/22	Survey Type: MANUAL
4	WS-04-C-09	UNIVERSITY OF CHICHESTER		WEST SUSSEX
	UPPER BOGNOR ROAD			
	BOGNOR REGIS			
	Edge of Town Centre			
	Residential Zone			
	Total Number of students:		1473	
	Survey date: WEDNESDAY		06/04/22	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
 MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 3.29

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	3080	0.012	4	3080	0.003	4	3080	0.015
08:00 - 09:00	4	3080	0.041	4	3080	0.005	4	3080	0.046
09:00 - 10:00	4	3080	0.032	4	3080	0.007	4	3080	0.039
10:00 - 11:00	4	3080	0.015	4	3080	0.009	4	3080	0.024
11:00 - 12:00	4	3080	0.011	4	3080	0.010	4	3080	0.021
12:00 - 13:00	4	3080	0.017	4	3080	0.016	4	3080	0.033
13:00 - 14:00	4	3080	0.013	4	3080	0.013	4	3080	0.026
14:00 - 15:00	4	3080	0.010	4	3080	0.017	4	3080	0.027
15:00 - 16:00	4	3080	0.009	4	3080	0.019	4	3080	0.028
16:00 - 17:00	4	3080	0.008	4	3080	0.030	4	3080	0.038
17:00 - 18:00	4	3080	0.010	4	3080	0.027	4	3080	0.037
18:00 - 19:00	4	3080	0.013	4	3080	0.014	4	3080	0.027
19:00 - 20:00	4	3080	0.006	4	3080	0.015	4	3080	0.021
20:00 - 21:00	4	3080	0.004	4	3080	0.012	4	3080	0.016
21:00 - 22:00	4	3080	0.003	4	3080	0.007	4	3080	0.010
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.204			0.204			0.408

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 1473 - 4050 (units:)
 Survey date range: 01/01/15 - 06/04/22
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 4
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
 MULTI-MODAL CYCLISTS
 Calculation factor: 1 STUDEN
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	3080	0.001	4	3080	0.000	4	3080	0.001
08:00 - 09:00	4	3080	0.002	4	3080	0.001	4	3080	0.003
09:00 - 10:00	4	3080	0.002	4	3080	0.001	4	3080	0.003
10:00 - 11:00	4	3080	0.002	4	3080	0.001	4	3080	0.003
11:00 - 12:00	4	3080	0.000	4	3080	0.001	4	3080	0.001
12:00 - 13:00	4	3080	0.001	4	3080	0.001	4	3080	0.002
13:00 - 14:00	4	3080	0.001	4	3080	0.001	4	3080	0.002
14:00 - 15:00	4	3080	0.002	4	3080	0.001	4	3080	0.003
15:00 - 16:00	4	3080	0.001	4	3080	0.001	4	3080	0.002
16:00 - 17:00	4	3080	0.001	4	3080	0.001	4	3080	0.002
17:00 - 18:00	4	3080	0.001	4	3080	0.001	4	3080	0.002
18:00 - 19:00	4	3080	0.001	4	3080	0.002	4	3080	0.003
19:00 - 20:00	4	3080	0.000	4	3080	0.001	4	3080	0.001
20:00 - 21:00	4	3080	0.000	4	3080	0.001	4	3080	0.001
21:00 - 22:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.015			0.014			0.029

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
 MULTI-MODAL VEHICLE OCCUPANTS
 Calculation factor: 1 STUDEN
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	3080	0.014	4	3080	0.003	4	3080	0.017
08:00 - 09:00	4	3080	0.051	4	3080	0.004	4	3080	0.055
09:00 - 10:00	4	3080	0.040	4	3080	0.006	4	3080	0.046
10:00 - 11:00	4	3080	0.018	4	3080	0.010	4	3080	0.028
11:00 - 12:00	4	3080	0.013	4	3080	0.012	4	3080	0.025
12:00 - 13:00	4	3080	0.022	4	3080	0.019	4	3080	0.041
13:00 - 14:00	4	3080	0.016	4	3080	0.015	4	3080	0.031
14:00 - 15:00	4	3080	0.012	4	3080	0.022	4	3080	0.034
15:00 - 16:00	4	3080	0.012	4	3080	0.024	4	3080	0.036
16:00 - 17:00	4	3080	0.007	4	3080	0.037	4	3080	0.044
17:00 - 18:00	4	3080	0.012	4	3080	0.033	4	3080	0.045
18:00 - 19:00	4	3080	0.018	4	3080	0.018	4	3080	0.036
19:00 - 20:00	4	3080	0.006	4	3080	0.021	4	3080	0.027
20:00 - 21:00	4	3080	0.005	4	3080	0.020	4	3080	0.025
21:00 - 22:00	4	3080	0.003	4	3080	0.011	4	3080	0.014
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.249			0.255			0.504

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
 MULTI-MODAL PEDESTRIANS
 Calculation factor: 1 STUDEN
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	3080	0.005	4	3080	0.002	4	3080	0.007
08:00 - 09:00	4	3080	0.041	4	3080	0.007	4	3080	0.048
09:00 - 10:00	4	3080	0.033	4	3080	0.010	4	3080	0.043
10:00 - 11:00	4	3080	0.028	4	3080	0.015	4	3080	0.043
11:00 - 12:00	4	3080	0.028	4	3080	0.024	4	3080	0.052
12:00 - 13:00	4	3080	0.033	4	3080	0.029	4	3080	0.062
13:00 - 14:00	4	3080	0.040	4	3080	0.029	4	3080	0.069
14:00 - 15:00	4	3080	0.028	4	3080	0.031	4	3080	0.059
15:00 - 16:00	4	3080	0.021	4	3080	0.028	4	3080	0.049
16:00 - 17:00	4	3080	0.020	4	3080	0.035	4	3080	0.055
17:00 - 18:00	4	3080	0.013	4	3080	0.026	4	3080	0.039
18:00 - 19:00	4	3080	0.013	4	3080	0.022	4	3080	0.035
19:00 - 20:00	4	3080	0.014	4	3080	0.018	4	3080	0.032
20:00 - 21:00	4	3080	0.006	4	3080	0.015	4	3080	0.021
21:00 - 22:00	4	3080	0.005	4	3080	0.009	4	3080	0.014
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.328			0.300			0.628

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 STUDEN
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	3080	0.002	4	3080	0.002	4	3080	0.004
08:00 - 09:00	4	3080	0.012	4	3080	0.007	4	3080	0.019
09:00 - 10:00	4	3080	0.012	4	3080	0.005	4	3080	0.017
10:00 - 11:00	4	3080	0.005	4	3080	0.004	4	3080	0.009
11:00 - 12:00	4	3080	0.006	4	3080	0.004	4	3080	0.010
12:00 - 13:00	4	3080	0.011	4	3080	0.008	4	3080	0.019
13:00 - 14:00	4	3080	0.008	4	3080	0.007	4	3080	0.015
14:00 - 15:00	4	3080	0.004	4	3080	0.008	4	3080	0.012
15:00 - 16:00	4	3080	0.005	4	3080	0.009	4	3080	0.014
16:00 - 17:00	4	3080	0.004	4	3080	0.013	4	3080	0.017
17:00 - 18:00	4	3080	0.004	4	3080	0.009	4	3080	0.013
18:00 - 19:00	4	3080	0.003	4	3080	0.006	4	3080	0.009
19:00 - 20:00	4	3080	0.003	4	3080	0.006	4	3080	0.009
20:00 - 21:00	4	3080	0.001	4	3080	0.004	4	3080	0.005
21:00 - 22:00	4	3080	0.000	4	3080	0.003	4	3080	0.003
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.080			0.095			0.175

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
 MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 3.29

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	3080	0.023	4	3080	0.006	4	3080	0.029
08:00 - 09:00	4	3080	0.105	4	3080	0.019	4	3080	0.124
09:00 - 10:00	4	3080	0.087	4	3080	0.022	4	3080	0.109
10:00 - 11:00	4	3080	0.052	4	3080	0.029	4	3080	0.081
11:00 - 12:00	4	3080	0.048	4	3080	0.041	4	3080	0.089
12:00 - 13:00	4	3080	0.066	4	3080	0.057	4	3080	0.123
13:00 - 14:00	4	3080	0.064	4	3080	0.052	4	3080	0.116
14:00 - 15:00	4	3080	0.045	4	3080	0.062	4	3080	0.107
15:00 - 16:00	4	3080	0.040	4	3080	0.063	4	3080	0.103
16:00 - 17:00	4	3080	0.032	4	3080	0.086	4	3080	0.118
17:00 - 18:00	4	3080	0.029	4	3080	0.069	4	3080	0.098
18:00 - 19:00	4	3080	0.036	4	3080	0.048	4	3080	0.084
19:00 - 20:00	4	3080	0.024	4	3080	0.047	4	3080	0.071
20:00 - 21:00	4	3080	0.012	4	3080	0.039	4	3080	0.051
21:00 - 22:00	4	3080	0.008	4	3080	0.024	4	3080	0.032
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.671			0.664			1.335

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
 MULTI-MODAL MOTOR CYCLES
 Calculation factor: 1 STUDEN
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
08:00 - 09:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
09:00 - 10:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
10:00 - 11:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
11:00 - 12:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
12:00 - 13:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
13:00 - 14:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
14:00 - 15:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
15:00 - 16:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
16:00 - 17:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
17:00 - 18:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
18:00 - 19:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
19:00 - 20:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
20:00 - 21:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
21:00 - 22:00	4	3080	0.000	4	3080	0.000	4	3080	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP* FACT. Trip rates are then rounded to 3 decimal places.