A24021 - Printworks, Withy Grove, Manchester

Proposed Digital Signage - Highway Safety Note

Introduction

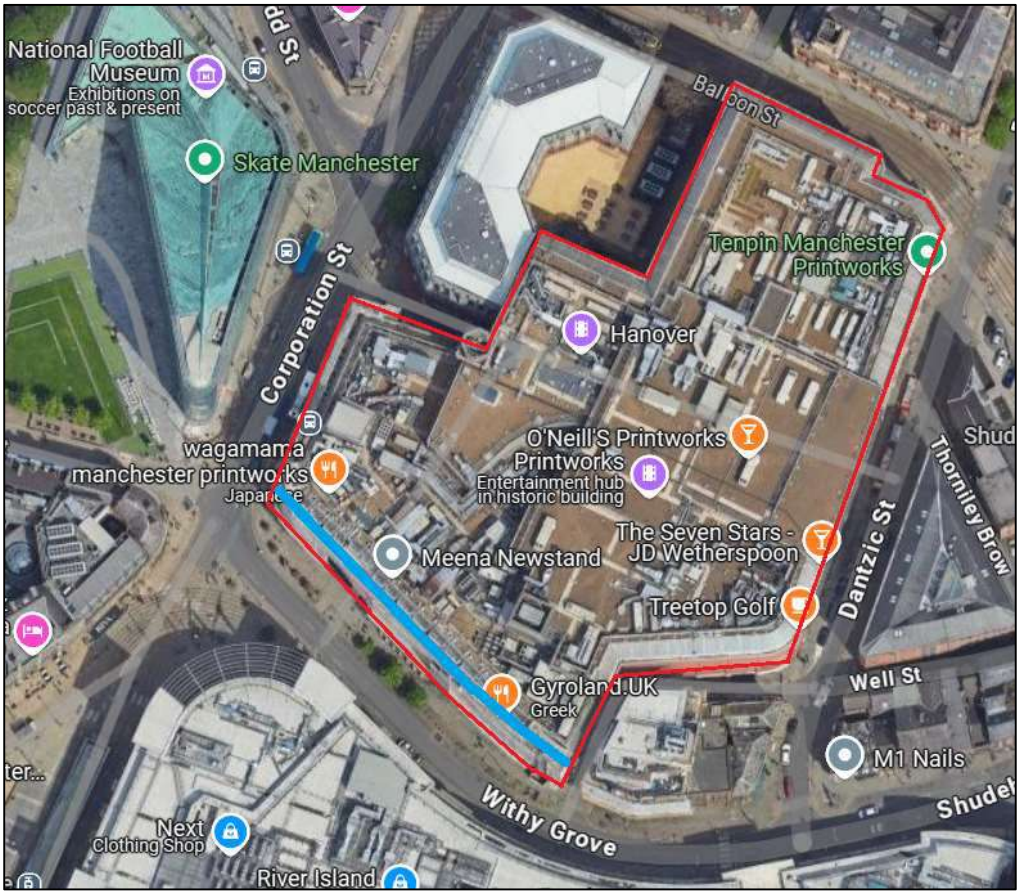
Astute Transport Planning have been commissioned by DTZ in relation to a proposal for digital signage containing moving elements at the Printworks on Withy Grove, Manchester, M4 2BS, and this Highway Safety Note has been prepared to support an advertising application to vary a planning condition that currently does not permit the display of moving images.

The Printworks is an entertainment and leisure complex in Manchester City Centre. It is understood that DTZ have advertisement consent (Manchester City Council (MCC) application reference: 125295/AOH/2019) to install fourteen ribbon screens at the top of the building along the Withy Grove elevation, as shown on the plan in **Appendix A**.

Figure 1 illustrates the Printworks site in the red outline and the blue line shows the location of the ribbon screens on the Withy Grove elevation.

Figure 1: Proposal Site Location

Source - https://www.google.com/maps



Planning Background

The proposal to install proposed LED screens and signage at the above site was approved by MCC on the 11th February 2020. However, condition 4 attached to the Decision Notice included the following:

> *"4) With regards to Sign 3, 4, 5, and 6 - Dantzic Street Elevation and Sign 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14 - Withy Grove Elevation, as shown on drawing ref: - PL(1038) revision P3 - 'Proposed Signage Elevations' the following shall apply:*
>
> *(a) No individual advertisements displayed shall contain moving images, animation, video or full motion images or any images that resemble road signs, traffic lights or traffic signs.*
> *(b) No individual advertisements shall be displayed for duration of less than 10 seconds.*
> *(c) Controls shall be in place to ensure smooth uninterrupted transition of images displayed on the panel.*
> *(d) The display panel shall be fitted with a light sensor, designed to adjust the brightness to changes in ambient light levels.*
> *(e) A mechanism shall be in place so that if the installation breaks down, it defaults to a black screen to avoid any flashing error messages or pixilation.*
> *(f) The maximum luminance level of the advertisements displayed on the panel shall not exceed 300 cd/m2 during non-daylight hours / inclement weather.*
>
> *Reason - To safeguard the amenities of the occupiers of nearby properties and in the interest of highway safety, in accordance with DM1 and T1 of the City of Manchester Core Strategy".*

DTZ are seeking to vary condition 4 associated with advertising application 125295/AOH/2019 to allow the ribbon screens to show static images with moving elements, and this requires a detailed assessment of the potential public safety implications in relation to the adjacent transport networks.

The purpose of this Note is to assess the highway safety implications of displaying static images with moving elements on the ribbon screens at the at the top of the Printworks building (5th floor level) along Withy Grove.

Astute have undertaken a site visit on the 29th October 2024 to assess the proposals.

Site Description

The proposal site is located in Manchester City Centre on the southern boundary of the Printworks adjacent to Withy Grove. The ribbon screens are mounted to the top of the building at 5th floor level, and they face in a southwards direction across Withy Grove, and the ribbon screens on the western part of this elevation face onto Corporation Street and Exchange Square to the southwest of the site, as can be seen in **Figure 2**. Withy Grove is a general traffic route and a single carriageway arrangement, and immediately to the west of the site it forms the Withy Grove / Corporation Street / Fennel Street four-arm signalised junction, which includes the provision of controlled crossings. The Metrolink tram route runs along Corporation Street past the site to the west with the Exchange Square Tram Stop located in close proximity.

There are on-carriageway cycle lanes on Corporation Street in the vicinity of the site, and to the south of the aforementioned junction Corporation Street is pedestrianised except for access by trams and cycles.

Figure 2: Ribbon Screens on the Withy Grove Elevation



Site Assessment

The following photographs capture the views adjacent to the proposal site on Withy Grove – refer to **Figures 3 and 4**.

Figure 3: Withy Grove Eastbound Carriageway



Figure 4: Withy Grove Westbound Carriageway



As can be seen in **Figures 3 and 4**, the height of the ribbon screens on the southern elevation of the Printworks building will be a long way above the movement paths and eyeline of drivers as well as being at an acute sideways angle, which would minimise the potential distraction effect of the static images with moving elements and any associated risk to public safety, and there will be no interaction or conflicts. It is therefore considered that the ribbon screens will not create an unacceptable impact for traffic passing the site on Withy Grove in terms of risk to public safety.

Corporation Street southbound carriageway runs north to south to the west of the Printworks building and comprises of a single lane approach past the proposal site. The direction of the vehicular flow is in the opposite direction from the ribbon screens, which means that drivers on this approach will not see these displays.

Fennel Street approaches the site from the west of the Printworks, forming a four-arm junction with Withy Grove and Corporation Street, and it consists of a restricted access arrangement for vehicles. The following image in **Figure 5** captures the driver field of vision on the Fennel Street eastbound approach towards the site.

Figure 5: Driver Field of Vision from Fennel Street

Source - https://www.google.com/maps



Given the straight alignment of the Fennel Street carriageway, it is considered that approaching drivers will have good visibility and a sight line towards the Withy Grove elevation within the wider streetscape, which would give sufficient time for the presence of the ribbon screens ahead to be assimilated without surprise and before drivers are required to negotiate the junction.

As can be seen in **Figure 5**, the height of the ribbon screens on the southern elevation of the Printworks building will be a long way above the movement paths and eyeline of drivers, which would minimise the potential distraction effect of the static images with moving elements and any associated risk to public safety, and there will be no interaction or conflicts. The position of the ribbon screens do not interfere with the driver sightlines to the other arms of the crossroads junction in relation to vehicles undertaking exiting movements from Fennel Street give way arm, and so there will be no safety conflict.

The route of the Metrolink tram in the vicinity of the site is along Corporation Street, which passes to the west of the site. The photograph in **Figure 6** shows that the ribbon screens on the southern elevation of the Printworks building will not be visible to trams as they arrive at the Exchange Square Tram Stop, therefore there will be no distraction to tram drivers.

Figure 6: Tram Track at the Approach to Exchange Square Station



As northbound trams exit from the Exchange Square Tram Stop the ribbon screens on the western part of the Withy Grove elevation will be in view, however they will be above the movement paths and eyeline of drivers as well as being to the right as can be seen in **Figure 7**. This would minimise the potential distraction effect of the static images with moving elements and any associated risk to public safety, and there will be no interaction or conflicts with regard to the assimilation of pedestrian movements at the crossing point to the north of the tram stop.

The Corporation Street (S) arm tram signal at its junction with Withy Grove and Fennel Street is also shown in **Figure 7**. The tram track alignment is to the west of the Printworks building and so the ribbon screens will not be directly in the tram driver sightline as the tram approaches the aforementioned junction, and they will be above the movement paths and eyeline of drivers and to the right, therefore there will be no distraction to drivers. It is considered that the tram traffic signal and the ribbon screens will not interact in respect of approaching tram drivers.

For the above reasons, it is considered that the proposals for the ribbon screens to show static images with moving elements will not create an unacceptable impact in terms of driver distraction and risk to public safety for traffic and trams passing the proposal site.

Figure 7: Traffic Signal at Withy Grove / Corporation Street / Fennel Street Junction



There are controlled crossings on the Withy Grove and Corporation Street (N) and (S) arms of the adjacent junction. The photograph in **Figure 8** is taken from positions next to the pedestrian signal aspect on the Withy Grove controlled crossing facility, and this clearly shows that the position of the ribbon screens will not obscure or hinder the ready interpretation of green and red man signal aspects by pedestrians at these three crossing points.

Figure 8: Pedestrian Signal Aspects on the South Side of Withy Grove



In addition, as described earlier in this Note, due to the height of the ribbon screens on the building they will have minimal interaction with pedestrian movements through this area, and there will be no safety conflict.

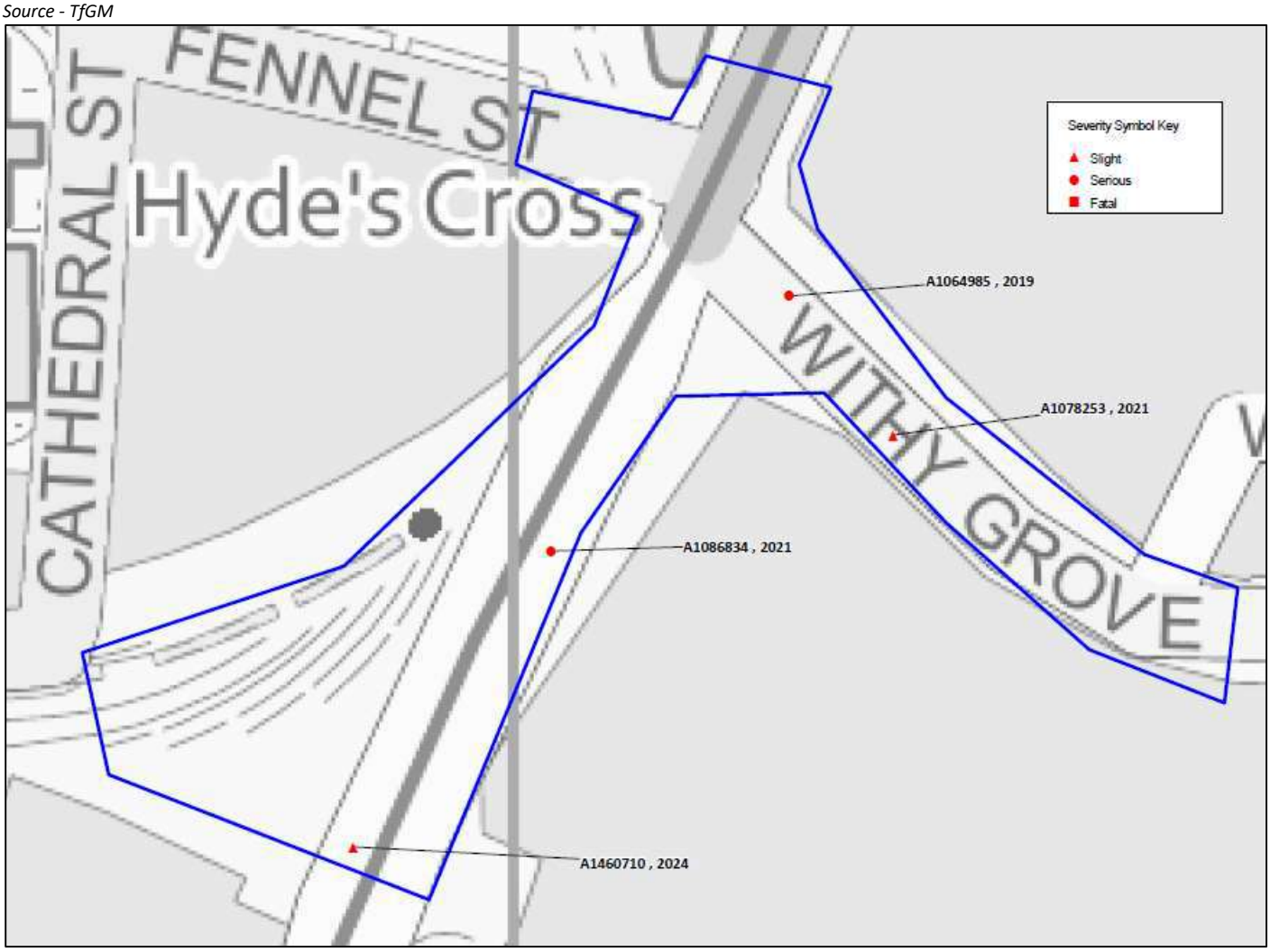
It is concluded that the proposals for the ribbon screens to show static images with moving elements would not raise any public safety issues for pedestrians.

Review of Accident Data

In order to examine whether displaying static images with moving elements on the ribbon screens at the at the top of the Printworks building along Withy Grove is likely to cause a safety concern, accident data from Transport for Greater Manchester (TfGM) for the five-year period up to the 31st August 2024 has been obtained. A plan of accident locations within the five-year period is shown below in **Figure 9**, while the full accident report has been included as **Appendix B** to this Note.

Figure 9: Accident Location Plan

Source - TfGM



This accident data shows that a total of four accidents occurred in the five-year period reviewed up to the 31st August 2024, with two being slight and two classified as serious.

Following a detailed review of the accident data provided by TfGM, it is considered that the following accidents are not relevant in the context of the proposal (i.e., displaying static images with moving elements on the ribbon screens on the Withy Grove elevation would not have been a contributory factor).

- Accident A1460710 occurred to the south of the Exchange Square Tram Stop, at a location where the ribbon screens would not be visible.
- Accident A1086834 happened on the platform of the Exchange Square Tram Stop when a pedestrian lost his footing and his leg got trapped between the platform and the vehicle, resulting in the pedestrian being dragged and a serious injury.
- Accident A1064985 occurred on the controlled crossing on the Withy Grove arm of the junction with Corporation Street and Fennel Street, when a pedestrian crossing from north to south caused a collision with a cyclist who was travelling eastbound along Withy Grove. The ribbon screens would not have been visible to the pedestrian crossing Withy Grove from north to south.
- Accident A1078253 happened when the wing mirror of a Passenger Carrying Vehicle (PCV) that was travelling westbound on Withy Grove hits a pedestrian on the footway. At the accident location the height of the ribbon screens on the southern elevation of the Printworks building would be a long way above the movement paths and eyeline of the driver, as well as being at an acute sideways angle.

There have been no accidents in the study area during the 5-year period up to the 31st August 2024 that are relevant to the proposal site, and as a result it is considered that there are no prevailing safety issues in the vicinity.

In summary, there will not be a conflict with the development proposal to display static images with moving elements on the ribbon screens on the Withy Grove elevation of the Printworks, and it is not likely to cause a road safety problem.

Summary and Conclusions

Astute Transport Planning have been commissioned by DTZ in relation to a proposal for digital signage containing moving elements at the Printworks on Withy Grove, Manchester, M4 2BS. DTZ are seeking to vary a planning condition (MCC advertising application 125295/AOH/2019 condition 4) that currently does not permit the display of moving images.

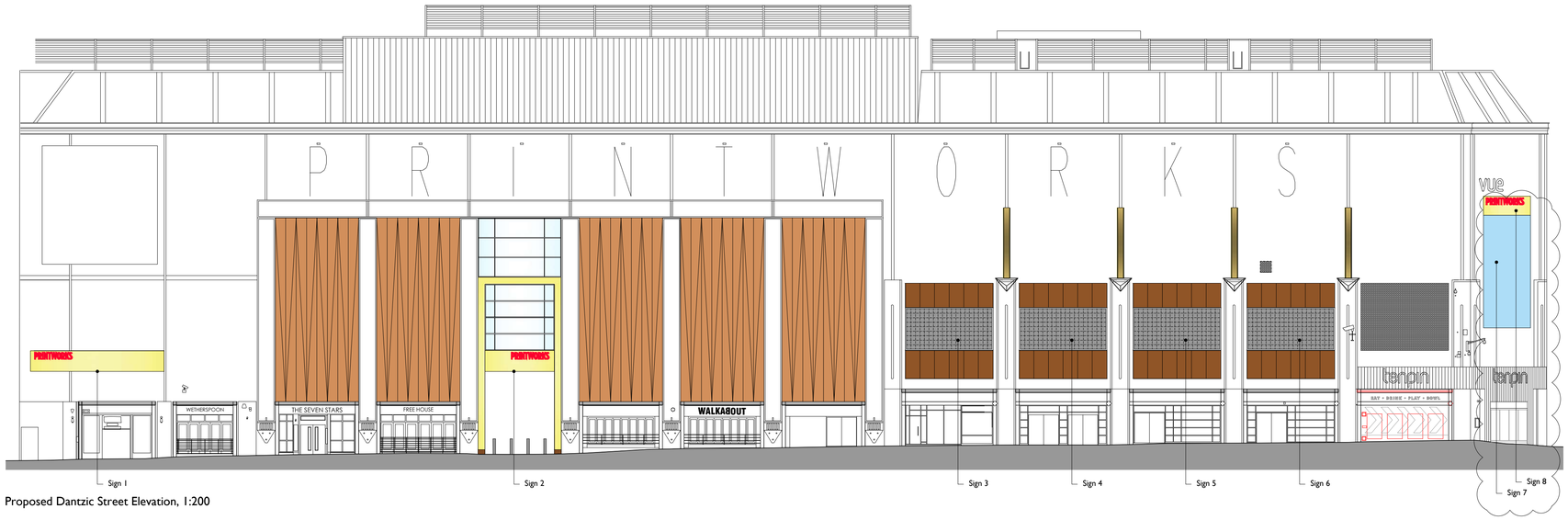
The purpose of this Note is to assess the highway safety implications of displaying static images with moving elements on the ribbon screens at the at the top of the Printworks building (5th floor level) along Withy Grove.

The findings from the assessment of the proposals including the accident data analysis in the Highway Safety Note demonstrate that displaying static images with moving elements on the ribbon screens on the Withy Grove elevation will not adversely impact on the safe operation of the adjacent transport network, and so does not present a risk to road safety or a danger to road users.

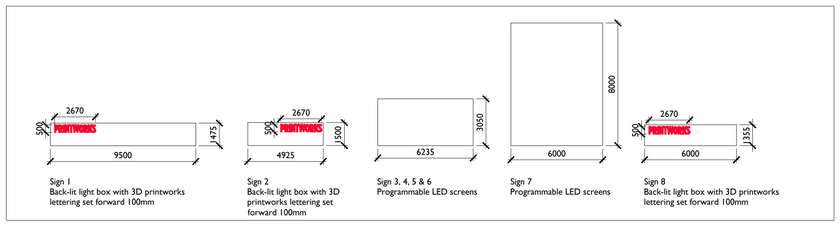
The applicant considers that the development proposal would not have an unacceptable or severe impact on highway safety at this location and is therefore not contrary to the National Planning Policy Framework (December 2023).

In conclusion, there are no significant transport reasons why the development proposal should not be granted planning permission.

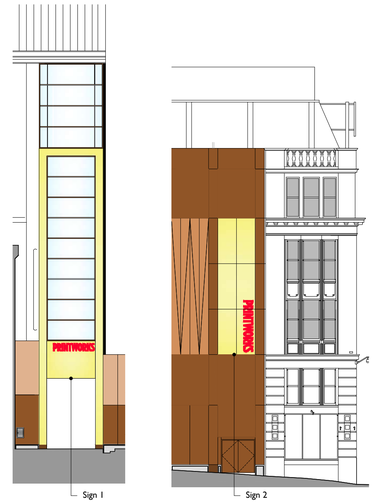
Appendix A - Proposed Scheme Drawings



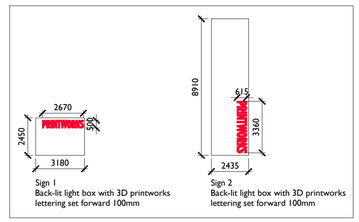
Proposed Dantzic Street Elevation, 1:200



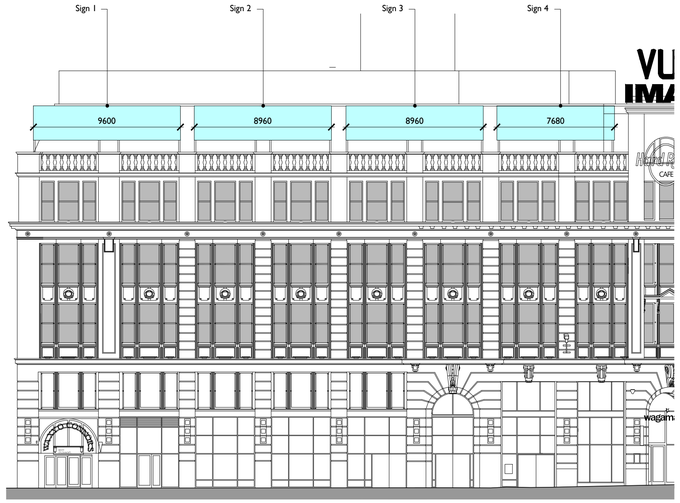
Proposed Dantzic Street Signage, 1:200

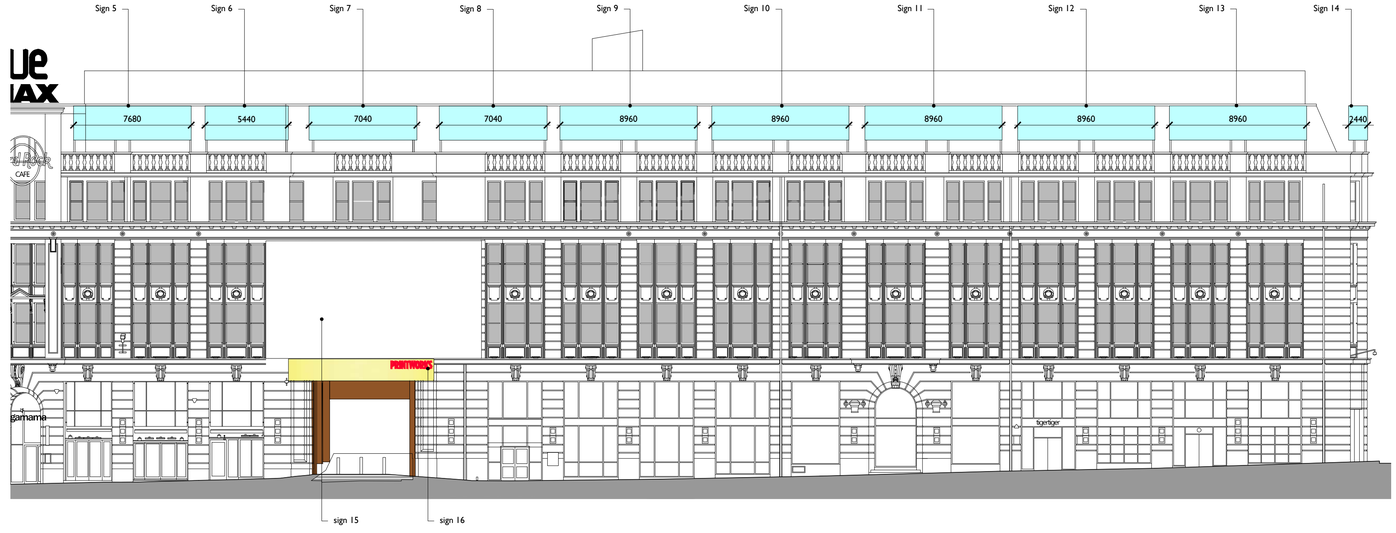


Proposed Part Corporation Street Elevation
Entrance & Return Facade
1:200

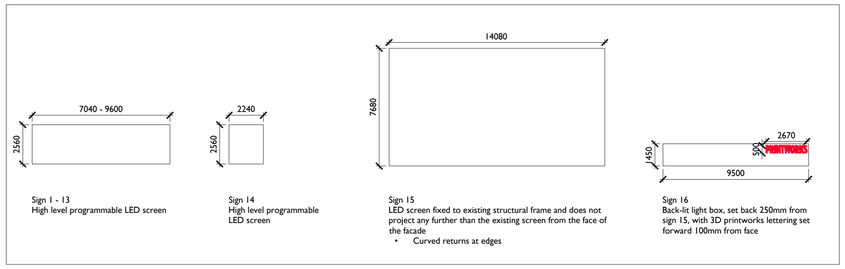


Proposed Corporation Street Signage, 1:200





Proposed Withy Grove Elevation, 1:200



Proposed Withy Grove Signage, 1:200

Note -

All back lit lightboxes and illuminated signage will have less than a 350mm projection above street.

1:200
0 5m 10m 15m

Notes

1. Do not scale off this drawing
2. Drawing to be read in conjunction with the specification and all relevant drawing information
3. Contractor to check all dimensions on site Comprehensive Design Architects to be advised of any discrepancies between this drawing and site conditions immediately
4. Dimensions are in millimetres unless otherwise stated

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CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015

This drawing is to be read in conjunction with CDA's Standard Hazard and Risk Assessment of architectural matters (CDM) series drawings.

Works to be carried out in accordance with the Construction Phase plan prepared by the Principal Contractor.

Note:

Drawings based on archive and limited survey information prepared by others and therefore accuracy cannot be guaranteed. Contractor to be responsible for site size dimensions prior to undertaking works and ordering materials. There has been limited co-ordination with other design team consultants in preparation of employers requirements however design development will continue during the tender period for later negotiation.

Any elements relating to curtain walling, metal cladding, back lit lightboxes, all LED elements & stretched fabric vinyl show design intent only - subject to specialist contractor's design proposals.

Rev	Date	Description	drwn	chkd
P3	05.02.20	DANTZIC ST SIGNS 7-8 CLARIFIED	MJ	MJ
P2	18.12.19	NOTE ADDED	DO	MJ

internal job no
G1707
dwg no
PWM-CDA-01-ZZ-DR-A-PL-1038
revision
P3

Comprehensive Design Architects

299 West George Street Glasgow G2 4LF
T: 0141 226 2226 www.cda-group.co.uk

client
DTZ INVESTORS

key plan

project
PRINTWORKS MANCHESTER

title
PROPOSED
SIGNAGE ELEVATIONS

date	scale	drawn by	checked by
11.12.19	1:200@A1	FM	MJ

status
PLANNING

internal job no
G1707
dwg no
PWM-CDA-01-ZZ-DR-A-PL-1038
revision
P3

Appendix B - Accident Data Outputs

TRANSPORT FOR GREATER MANCHESTER



Traffic Collision Data for

Astute Transport

Reported Road Injury Collisions in Specified Area of Manchester City Centre.
01/09/2019 to 31/08/2024

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Severity Symbol Key

- Slight
- Serious
- Fatal

A1064985 , 2019

A1078253 , 2021

A1086834 , 2021

A1460710 , 2024

Transport for Greater Manchester 2 Piccadilly Place, Manchester, M1 3BG	Reported Road Injury Collisions in Specified Area of Manchester City Centre. 01/09/2019 to 31/08/2024			
	Drawn By : SRAD	Note: A road collision which occurs at or within 20m of a junction, is coded as a junction collision	Date : 13/11/2024	

TRANSPORT FOR GREATER MANCHESTER

Transport for Greater Manchester

Reported Road Injury Collisions in Specified Area of Manchester City Centre.
01/09/2019 - 31/08/2024

Injury Accidents	Sep – Dec 2019	2020	2021	2022	2023	Jan – Aug 2024	Total
Fatal	0	0	0	0	0	0	0
Serious	1	0	1	0	0	0	2
Slight	0	0	1	0	0	1	2
Total	1	0	2	0	0	1	4

Standard Totals Report : Reported Road Injury Collisions in Specified Area of Manchester City Centre. 01/09/2019 to 31/08/2024

Accidents

Serious	2
Slight	2
Total Accidents	**4**

Casualties Broken Down By Type

Pedestrian	**0-15**	**16+**	**Total**
Serious	0	2	2
Slight	0	2	2
Total	**0**	**4**	**4**
Total	**0**	**4**	**4**

Casualties By Age and Sex

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Male	0	2	0	0	2
Total	**0**	**2**	**0**	**0**	**2**
Slight					
Male	0	1	0	0	1
Female	0	1	0	0	1
Total	**0**	**2**	**0**	**0**	**2**
Total Casualties	**0**	**4**	**0**	**0**	**4**

Casualties By Age and Class

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Pedestrian	0	2	0	0	2
Total	**0**	**2**	**0**	**0**	**2**
Slight					
Pedestrian	0	2	0	0	2
Total	**0**	**2**	**0**	**0**	**2**
Total Casualties	**0**	**4**	**0**	**0**	**4**

Cyclist (Rider and Pillion) and Pedestrian Casualties By Age

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious	0	2	0	0	2
Slight	0	2	0	0	2
Total Casualties	**0**	**4**	**0**	**0**	**4**

Standard Report - Reported Road Injury Collisions in Specified Area of Manchester City Centre. 01/09/2019 to 31/08/2024

This printout has been generated from the Transport for Greater Manchester's database of road traffic accident records using the query system, GMAXI.

The road traffic accident database contains STATS19 data supplied by Greater Manchester Police and further validated by the Highways Forecasting and Analytical Services (HFAS) section of Transport for Greater Manchester. It is maintained by HFAS on behalf of the ten District Councils in Greater Manchester.

This information is provided for the sole use of the recipient. It may not be sold, lent, hired out, or in any other way disclosed to a third party nor may it be reproduced in any form which may be obtained by a third party.

Accident Reference Number: A1460710 **Day:** Thursday **Date:** 18/04/2024 **Time:** 16:49

Place Reported: Scene **District:** Manchester

Location: Corporation Street 125 metres NE Of Market Street

Description: V1 (Electric Pedal Cycle) Trav Sw Corporation St, C1 (Pedestrian) Attempts To Cross The Tram Lines From Drivers O/s Heading Se-bd. C1 Is Hit By Front Of V1. V1 Fts

Locational Details

Road:	U	Junction Details:	
OSGR:	383972 398629	Junction Control:	n/a
Speed Limit:	20	Ped Crossing:	

Conditions

Road Surface:	Wet
Light Conditions:	Light
Weather Conditions:	Fine

Accident Details

Severity:	Slight
No. of Vehicles:	1
No. of Casualties:	1

Contributory Factors

Factor	Conf	Ref
DComp	Poss	V1
DCare	Poss	V1
FObs	Poss	V1

Vehicle Details

Type	Move	From	To	Skid
p/c	Ahead	NE	SW	

Casualty Details

Type	Sex	Age	Sev	Pupil
1 Ped	F	31	Sl	Un

Accident Reference Number: A1086834 **Day:** Saturday **Date:** 11/09/2021 **Time:** 23:27

Place Reported: Scene **District:** Manchester

Location: Corporation Street at junction with Exchange Square, 55 metres SW Of Withy Grove

Description: V1 (Tram) Staty At Exchange Square. As V1 Moves Off, C1 (Pedestrian) Walks Parallel To V1 Loses Footing & Leg Traps Btwn Platform & V1. V1 Drags C1 For 37 Metres

Locational Details

Road:	U/U	Junction Details:	Othr
OSGR:	384006 398680	Junction Control:	GW
Speed Limit:	20	Ped Crossing:	

Conditions

Road Surface:	Dry
Light Conditions:	Dark
Weather Conditions:	Fine

Accident Details

Severity:	Serious
No. of Vehicles:	1
No. of Casualties:	1

Contributory Factors

Factor	Conf	Ref

Vehicle Details

Type	Move	From	To	Skid
Tram	Start	SW	NE	

Casualty Details

Type	Sex	Age	Sev	Pupil
1 Ped	M	41	Se	

Accident Reference Number: A1064985 **Day:** Thursday **Date:** 07/11/2019 **Time:** 19:20

Place Reported: Scene **District:** Manchester

Location: Withy Grove at junction with Corporation Street

Description: V1 (Pedal Cycle) Trav Se Withy Grove, C1 (Pedestrian) Crossing From Drivers N/s Heading S-bd On Crossing. Collision Occurs. C1 Throws To Ground & Bang His Head

Contributory Factors

Factor	Conf	Ref
PFLook	Poss	C1

Vehicle Details

Type	Move	From	To	Skid
p/c	Ahead	NW	SE	S&O

Casualty Details

Type	Sex	Age	Sev	Pupil
1 Ped	M	50	Se	

Locational Details

Road:	C/A6042	Junction Details:	Tjun
OSGR:	384047 398724	Junction Control:	TS
Speed Limit:	20	Ped Crossing:	TSX

Conditions

Road Surface:	Wet
Light Conditions:	Dark
Weather Conditions:	Fine

Accident Details

Severity:	Serious
No. of Vehicles:	1
No. of Casualties:	1

Accident Reference Number: A1078253 **Day:** Saturday **Date:** 17/07/2021 **Time:** 15:35

Place Reported: Self **District:** Manchester

Location: Withy Grove 45 metres SE Of Corporation Street

Description: V1 (PCV) Trav Nw Withy Grove, C1 (Pedestrian) Walks On Pavement But Dir Unknown, When V1's N/s Wing Mirror Hits C1 On The Head. V1 Fts

Contributory Factors

Factor	Conf	Ref

Vehicle Details

Type	Move	From	To	Skid
PCV	Ahead	SE	NW	

Casualty Details

Type	Sex	Age	Sev	Pupil
1 Ped	M	30	Sl	Un

Locational Details

Road:	C	Junction Details:	
OSGR:	384065 398700	Junction Control:	n/a
Speed Limit:	20	Ped Crossing:	

Conditions

Road Surface:	Dry
Light Conditions:	Light
Weather Conditions:	Fine

Accident Details

Severity:	Slight
No. of Vehicles:	1
No. of Casualties:	1

Abbreviations used in GMAXI Reports for New Contributory Factors - 2005/06

WARNING: Please note that -
Codes 101 to 999 only relate to accidents from 1 April 2005. - New National Factors introduced by DfT
Codes 1001 to 1154 relate to accidents from 1 April 1999 to 31 March 2005 only. - Local Factors introduced
Accidents before 1 April 1999 do not have contributory factors attached.

Code	ContribFactor1Name	ContribFactor1Abb
0	None	
101	Poor or defective road surface	Surf
102	Deposit on road (eg oil, mud, chippings)	Dposit
103	Slippery road (due to weather)	Slip
104	Inadequate/masked signs or road markings	Mark
105	Defective traffic signals	DefATS
106	Traffic calming (eg speed cushions, road humps, chicanes)	TCalm
107	Temporary road layout (eg contraflow)	TmpRd
108	Road layout (eg bend, hill, narrow carriageway)	RdLay
109	Animal or object in carriageway	ObjInC
201	Tyres illegal, defective or under inflated	VTyres
202	Defective lights or indicators	VLight
203	Defective brakes	VBrake
204	Defective steering or suspension	VSteer
205	Defective or missing mirrors	VMirr
206	Overloaded or poorly loaded vehicle or trailer	VLoad
301	Disobeyed automatic traffic signal	DATS
302	Disobeyed Give Way or Stop sign or markings	DGWorS
303	Disobeyed double white line	DWhite
304	Disobeyed pedestrian crossing facility	DPedX
305	Illegal turn or direction of travel	DITurn
306	Exceeding speed limit	DSpeed
307	Travelling too fast for conditions	DFast
308	Following too close	DTgate
309	Vehicle travelling along pavement	DPave
310	Cyclist entering road from pavement	DCPave
401	Junction overshoot	DJnOvr
402	Junction restart	DJnRst
403	Poor turn or manoeuvre	DTurn
404	Failed to signal/misleading signal	DSign
405	Failed to look properly	DFLook
406	Failed to judge other person's path or speed	DJudge
407	Passing too close to cyclist, horse rider or pedestrian	DClose
408	Sudden braking	DBrake
409	Swerved	DSwerv
410	Loss of control	DLossC
501	Impaired by alcohol	DAlcoh
502	Impaired by drugs (illicit or medicinal)	DDrugs
503	Fatigue	DTired
504	Uncorrected, defective eyesight	DEye
505	Illness or disability, mental or physical	DIllns
506	Not displaying lights at night or in poor visibility	DNoLit
507	Cyclist wearing dark clothing at night	DCDark
508	Driver using mobile phone	DMobPh
509	Distraction in vehicle	DDisIn
510	Distraction outside vehicle	DDisOu
601	Aggressive driving	DAggre
602	Careless/reckless/in a hurry	DCare

603	Nervous/uncertain/panic	DPanic
604	Driving too slow or conditions or slow vehicle (eg tractor)	DSlow
605	Learner or inexperienced driver/rider	DLearn
606	Inexperience of driving on the left	DInDrL
607	Inexperience with type of vehicle	DInVeh
701	Stationary or parked vehicle(s)	DStat
702	Vegetation	DVeg
703	Road layout (eg bend, winding road, hill crest)	DRdLay
704	Buildings, road signs, street furniture	DBuild
705	Dazzling headlights	DHLigt
706	Dazzling sun	DSun
707	Rain, sleet, snow, or fog	DRain
708	Spray from other vehicles	DFog
709	Visor or windscreen dirty or scratched	DSpray
710	Vehicle blind spot	DWscrn
801	Crossed road masked by stationary or parked vehicle	PXMask
802	Failed to look properly	PFLook
803	Failed to judge vehicle's path or speed	PJudge
804	Wrong use of pedestrian crossing facility	PPedX
805	Dangerous action in carriageway (eg playing)	PDange
806	Impaired by alcohol	PAlcoh
807	Impaired by drugs (illicit or medicinal)	PDrugs
808	Careless/reckless/in a hurry	PCare
809	Pedestrian wearing dark clothing at night	PCloth
810	Disability or illness, mental or physical	PIllns
901	Stolen vehicle	StoVeh
902	Vehicle in course of crime	VCrime
903	Emergency vehicle on call	EmVeh
904	Vehicle door opened or closed negligently	VDoor
999	Other	Other
1001	Failed to stop (mandatory sign)	Fstop
1002	Failed to give way	Fgive
1003	Failed to avoid pedestrian (pedestrian not to blame)	FAPed
1004	Failed to avoid vehicle or object in carriageway	FAObj
1005	Failure to signal/misleading signal	Fsig
1006	Loss of control of vehicle	Loss
1007	Pedestrian entered carriageway without due care	Ped
1008	Passenger fell in or near PSV	Pfell
1009	Swerved to avoid object in carriageway	Swerv
1010	Sudden braking	Brake
1011	Poor turn/manoeuvre	Turn
1012	Poor overtaking	Over
1013	Drove wrong way (e.g. 1-way street)	1Way
1014	Opening door carelessly	Door
1015	Other	Other
1101	Impairment alcohol	Alcoh
1102	Impairment drugs	Drugs
1103	Impairment fatigue	Tired
1104	Impairment illness	Ill
1105	Distraction stress/emotional state of mind	Stress
1106	Distraction physical in/on vehicle	DPhIn
1107	Distraction physical outside vehicle	DPhOut
1108	Behaviour panic	Panic
1109	Behaviour careless/thoughtless/reckless	Care
1110	Behaviour nervous/uncertain	Nerve
1111	Behaviour in a hurry	Hurry

1112	Failure to judge other person's path or speed	Fjudg
1113	Disability	Disab
1114	Failed to look	F2look
1115	Looked but did not see	Nsee
1116	Inattention	Inatt
1117	Person hit wore dark or inconspicuous clothing	Cloth
1118	Other (Personal details)	Pother
1119	Crossed from behind parked vehicle etc	Cross
1120	Ignored lights at crossing	Xlight
1121	Excessive Speed	Speed
1122	Following too close	Tgate
1123	Inexperience of driving	InDri
1124	Inexperience of vehicle	InVeh
1125	Interaction or competition with other road users	Users
1126	Aggressive driving	Aggr
1127	Lack of judgement of own path	Judge
1128	Tyres wrong pressure	Press
1129	Tyres deflation before impact	Deflat
1130	Tyres worn/insufficient tread	Tread
1131	Defective lights or signals	Signal
1132	Defective brakes	Brakes
1133	Other (Vehicle defects)	Vother
1134	Site details poor road surface	Surf
1135	Site details poor/no street lighting	Lightg
1136	Site details inadequate signing	Sign
1137	Site details steep hill	Hill
1138	Site details narrow road	Narr
1139	Site details bend/winding road	Rbend
1140	Site details roadworks	Works
1141	Slippery road	Slip
1142	High winds	Winds
1143	Earlier accident	Earli
1144	Other (Local conditions)	Lother
1145	View windows obscured	Obs
1146	View glare from sun	Glare
1147	View glare from headlights	Head
1148	Surroundings bend/winding road	Bend
1149	Surroundings stationary parked vehicle	Stat
1150	Surroundings moving vehicle	Move
1151	Surroundings buildings, fences, vegetation etc	Fence
1152	Weather (e.g. mist or sleet)	Weath
1153	Failed to see pedestrian or vehicle in blindspot	Blind
1154	Animal out of control	Animal
9999	GMP Out of Range	OoR

Mapping from new road safety factor (RSF) codes to previous contributory factor (CF) codes

This worksheet contains one table. Some cells refer to notes which can be found on the notes worksheet.

Filters are active in row 5 and may hide some data. To turn off all filters select the 'Data' ribbon then 'Filters' button or use [Ctrl, Shift, L]'.

RSF section	RSF code	RSF label	CF section	CF section name	CF code	CF name	Participants [note 1]
B	B1	Driver / rider illegal turn / direction of travel or failed to comply with traffic sign / signal	300	Injudicious action	301	Disobeyed automatic traffic signal	V
B	B1	Driver / rider illegal turn / direction of travel or failed to comply with traffic sign / signal	300	Injudicious action	302	Disobeyed 'Give Way' or 'Stop' sign or markings	V
B	B1	Driver / rider illegal turn / direction of travel or failed to comply with traffic sign / signal	300	Injudicious action	304	Disobeyed pedestrian crossing facility	V
B	B1	Driver / rider illegal turn / direction of travel or failed to comply with traffic sign / signal	300	Injudicious action	305	Illegal turn or direction of travel	V
B	B2	Driver/rider disobeyed double white lines	300	Injudicious action	303	Disobeyed double white lines	V
B	B3	Driver / rider overshot junction or poor turn / manoeuvre	400	Driver/Rider error or reaction	401	Junction overshoot	V
B	B3	Driver / rider overshot junction or poor turn / manoeuvre	400	Driver/Rider error or reaction	403	Poor turn or manoeuvre	V
B	B4	Ineffective observation by either the driver, rider or pedestrian	400	Driver/Rider error or reaction	405	Driver/Rider failed to look properly	VCU
B	B4	Ineffective observation by either the driver, rider or pedestrian	400	Driver/Rider error or reaction	406	Driver/Rider failed to judge other person`s path or speed	VCU
B	B4	Ineffective observation by either the driver, rider or pedestrian	800	Pedestrian only (casualty or uninjured)	802	Pedestrian failed to look properly	VCU
B	B4	Ineffective observation by either the driver, rider or pedestrian	800	Pedestrian only (casualty or uninjured)	803	Pedestrian failed to judge vehicle`s path or speed	VCU
B	B5	Driver/rider inexperienced or learner	600	Behaviour or inexperience	603	Driver/Rider nervous, uncertain or panic	V
B	B5	Driver/rider inexperienced or learner	600	Behaviour or inexperience	605	Learner or inexperienced driver/rider	V
B	B5	Driver/rider inexperienced or learner	600	Behaviour or inexperience	606	Inexperience of driving on the left	V
B	B5	Driver/rider inexperienced or learner	600	Behaviour or inexperience	607	Unfamiliar with model of vehicle	V
B	B6	Driver/rider passing too close to another road user or pedestrian	400	Driver/Rider error or reaction	407	Too close to cyclist, horse rider or pedestrian	V
B	B7	Vehicle door opened into path of another road user or pedestrian	900	Special codes	904	Vehicle door opened or closed negligently	V
B	B8	Sudden braking or braking in a way unsuitable for conditions	400	Driver/Rider error or reaction	408	Sudden braking	V
D	D1	Affected by alcohol	500	Impairment or distraction	501	Driver/Rider impaired by alcohol	VCU
D	D1	Affected by alcohol	800	Pedestrian only (casualty or uninjured)	806	Pedestrian impaired by alcohol	VCU
D	D2	Affected by drugs	500	Impairment or distraction	502	Driver/Rider impaired by drugs (illicit or medicinal)	VCU
D	D2	Affected by drugs	800	Pedestrian only (casualty or uninjured)	807	Pedestrian impaired by drugs (illicit or medicinal)	VCU
D	D3	Driver/rider too tired to drive/ride safely	500	Impairment or distraction	503	Fatigue	V
D	D4	Driver/rider had uncorrected or defective eyesight	500	Impairment or distraction	504	Uncorrected, defective eyesight	V
D	D5	Illness or disability	500	Impairment or distraction	505	Driver/Rider illness or disability, mental or physical	VCU
D	D5	Illness or disability	800	Pedestrian only (casualty or uninjured)	810	Pedestrian disability or illness, mental or physical	VCU
D	D6	Using mobile device	500	Impairment or distraction	508	Driver using mobile phone	VCU
D	D7	Distraction to driver/rider from inside/outside or on vehicle	500	Impairment or distraction	509	Distraction in vehicle	V
D	D7	Distraction to driver/rider from inside/outside or on vehicle	500	Impairment or distraction	510	Distraction outside vehicle	V
D	D7	Distraction to driver/rider from inside/outside or on vehicle	700	Vision affected by external factors	705	Dazzling headlights	V
P	P1	Incorrect use of crossing facility by person crossing the road	800	Pedestrian only (casualty or uninjured)	804	Pedestrian wrong use of pedestrian crossing facility	VCU
P	P2	Vehicle entering road from pavement	300	Injudicious action	310	Cyclist entering road from pavement	V
P	P3	Pedestrian showing risk taking behaviour in carriageway	800	Pedestrian only (casualty or uninjured)	805	Dangerous action in carriageway (eg. playing)	CU
P	P4	Pedestrian careless or in a hurry	800	Pedestrian only (casualty or uninjured)	808	Pedestrian careless, reckless or in a hurry	CU
P	P5	Pedestrian, cyclist, equestrian hard to see	500	Impairment or distraction	507	Rider wearing dark clothing	VCU
P	P5	Pedestrian, cyclist, equestrian hard to see	800	Pedestrian only (casualty or uninjured)	809	Pedestrian wearing dark clothing at night	VCU
R	R1	Poor or defective road surface or deposits on road	100	Road environment contributed	101	Poor or defective road surface	VCU
R	R1	Poor or defective road surface or deposits on road	100	Road environment contributed	102	Deposit on road (eg. oil, mud, chippings)	VCU
R	R2	Road surface was slippery due to weather	100	Road environment contributed	103	Slippery road (due to weather)	VCU
R	R3	Driver/riders view obscured by stationary or parked vehicles	700	Vision affected by external factors	701	Stationary or parked vehicle(s)	V
R	R4	Drivers/riders view obscured by vegetation, buildings, layout or road signs	700	Vision affected by external factors	702	Vegetation	V
R	R4	Drivers/riders view obscured by vegetation, buildings, layout or road signs	700	Vision affected by external factors	703	Road layout (eg. bend, winding road, hill crest)	V
R	R4	Drivers/riders view obscured by vegetation, buildings, layout or road signs	700	Vision affected by external factors	704	Buildings, road signs, street furniture	V
R	R5	Drivers/riders vision affected by adverse weather or dazzling sun	700	Vision affected by external factors	706	Dazzling sun	V
R	R5	Drivers/riders vision affected by adverse weather or dazzling sun	700	Vision affected by external factors	707	Rain, sleet, snow, or fog	V
R	R5	Drivers/riders vision affected by adverse weather or dazzling sun	700	Vision affected by external factors	708	Spray from other vehicles	V
S	S1	Driver/rider exceeding speed limit	300	Injudicious action	306	Exceeding speed limit	V
S	S2	Driver/rider travelling too fast for conditions (including loss of control or swerving)	300	Injudicious action	307	Travelling too fast for conditions	V
S	S2	Driver/rider travelling too fast for conditions (including loss of control or swerving)	400	Driver/Rider error or reaction	409	Swerved	V
S	S2	Driver/rider travelling too fast for conditions (including loss of control or swerving)	400	Driver/Rider error or reaction	410	Loss of control	V
S	S3	Vehicle used in course of crime	900	Special codes	902	Vehicle in course of crime	V

Mapping from new road safety factor (RSF) codes to previous contributory factor (CF) codes

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RSF section	RSF code	RSF label	CF section	CF section name	CF code	CF name	Participants [note 1]
S	S4	Driver/rider being aggressive, dangerous or reckless	300	Injudicious action	308	Following too close	V
S	S4	Driver/rider being aggressive, dangerous or reckless	600	Behaviour or inexperience	601	Aggressive driving	V
S	S4	Driver/rider being aggressive, dangerous or reckless	600	Behaviour or inexperience	602	Driver/Rider careless, reckless or in a hurry	V
S	S5	Driver/rider moving too slowly for conditions	600	Behaviour or inexperience	604	Driving too slow for conditions or slow veh (eg tractor)	V
V	V1	Vehicle defective tyres	200	Vehicle defects	201	Tyres illegal, defective or under inflated	V
V	V2	Vehicle defect (excluding tyres and light)	200	Vehicle defects	203	Defective brakes	V
V	V2	Vehicle defect (excluding tyres and light)	200	Vehicle defects	204	Defective steering or suspension	V
V	V3	Vehicle or trailer was overloaded or poorly loaded	200	Vehicle defects	206	Overloaded or poorly loaded vehicle or trailer	V
V	V4	Driver/Rider view obscured by blind spot	700	Vision affected by external factors	710	Vehicle blind spot	V
V	V5	Vehicle with defective lights or not using headlights when visibility is reduced	200	Vehicle defects	202	Defective lights or indicators	V
V	V5	Vehicle with defective lights or not using headlights when visibility is reduced	500	Impairment or distraction	506	Not displaying lights at night or in poor visibility	V