


IP07-F01: Design Risk Log		Project name:	Project number:	Design Element:	Designer/ Originator	Checked by	Technical Authority Approval	Issue date	SWECO					
		Spaces for People	Client Number: 12727	Detailed Design	Alexander MacNaughton	Alex Blackmore	Chris Fettes	15/07/2020						
H&S14	Drive Way Access	Operation Stage	Reversing from main road into driveway access.	Reduction in lanes will mean residents will have to stop and reverse into driveways from main traffic lane, previously lane 2 will have been the main flow lane due to parked cars in lane 1.	Traffic may fail to anticipate slowing and stopping vehicles when accessing driveways. This could result in rear end or side on 'shunts'.	Members of the Public	N/A	- Reduction in speed limit from 40mph to 30mph - Design updated to maximise areas where on street parking will be retained which can also act as nearside lane/space when not occupied - This manoeuvre and risk will already exist along this section when parked vehicles along the kerb 'pushing' vehicles into lane 2	2	2	RESIDUAL	CEC to monitor Comiston Road usage and evaluate risks during operation. Once speed limit change has come into force, re-evaluation of 85%ile may reduce severity resulting in MINIMAL residual risk	AMcN	03/08/2020
H&S15	Braid Hills Road - Southbound Bus Stop	Design Stage Operation Stage	Location of Moved Bus Stop under Phase 2 design	Reduction in visibility splay from Braid Hills Road	Increased risk of collisions from reduced visibility	Members of the Public	N/A	Visibility Splay has been checked on OS Data under design of phase 2. Bus stop Placement has been altered to ensure 40m Visibility as outlined in CEC Edinburgh Street Design Guidance. Reduced speed limit to 30mph	1	1	MINIMAL	Contractor to implement location of stop as shown in design	AMcN	11/08/2020
H&S16	Riselay Road	Design Stage Operation Stage	Visibility from Junction around parked cars.	Reduced Visibility splay form junction	Increased risk of collisions from reduced visibility	Members of the Public	N/A	Visibility Splays at junction have been checked to 40m requirements of Edinburgh Street Design Guidance. This junction is likely to have less vehicle movements than adjacent junction, reducing likelihood. Parking bays have splayed hatch zones at junctions to aid in visibility from junction. The side road has an elevation gain providing further improvements in the visibility splay	1	1	MINIMAL	Contractor to implement location of hatched markings	AMcN	11/08/2020
H&S17	Riselay Place	Design Stage Operation Stage	Visibility from Junction around parked cars.	Reduced Visibility splay form junction	Increased risk of collisions from reduced visibility	Members of the Public	N/A	Visibility Splays at junction have been checked to 40m requirements of Edinburgh Street Design Guidance. The parked cars may partially block visibility however this junction is likely to have significant vehicle movements than adjacent junction, reducing likelihood. Parking bays have splayed hatch zones at junctions to aid in visibility from junction. The side road has an elevation gain providing further improvements in the visibility splay.	1	1	MINIMAL	Contractor to implement location of hatched markings	AMcN	11/08/2020
H&S18	Comiston Rise	Design Stage Operation Stage	Visibility from junction around bus stop	Reduced Visibility splay form junction	Increased risk of collisions from reduced visibility	Members of the Public	N/A	Visibility Splay at the junction has been checked to the 40m requirements of Edinburgh Street Design Guidance. The bus stop will be within this splay however not permanent features will be blocking the view.	1	1	MINIMAL	Contractor to implement location of stop as shown in design	AMcN	11/08/2020
H&S19	Visibility Defenders	Design Stage Operation Stage	Visibility at junctions around Cycle Lane Defenders	Reduced Visibility from the Cycle Lane Defenders	Decreasing visibility	Members of the Public	N/A	The defenders have been spaced at 5m which will reduce any visual impact. The kerbs are low profile at less than 200mm, the poles in the defenders are narrow at 150mm diameter and are approximately 800mm in height. Strategic Decision by CEC to use the lane defender units at 5m spacing	1	1	MINIMAL	CEC to check visibility as installed by contractor.	AMcN	11/08/2020
H&S20	Crossing Cycle Lane	Design Stage Operation Stage	Pedestrians Crossing Cycle Lane	Collisions or conflict between cyclists and pedestrians crossing the cycle lane.	Injury of cyclists and pedestrians	Members of the Public	N/A	The entire route has good forward visibility which provides all users sight of each other. The uni-directional cycle lanes are wide to provide space for cyclists to safely pass pedestrians, most of the route has lane widths between 2-2.5m with localised sections at 1.5m wide. Cyclist speeds will be lower than free flowing traffic which is an existing risk under the unaltered design.	1	1	MINIMAL		AMcN	11/08/2020
H&S21	Parked Cars nearer running lanes	Design Stage Operation Stage	Pedestrians accessing parked cars in running lane	Collisions or conflict between pedestrians and traffic in the running lane.	Injury of pedestrians or vehicles	Members of the Public	N/A	The existing layout has parked cars next to live traffic, with the new layout reducing traffic speeds from 40mph down to 30mph. The route has good forward visibility on all sections, including parking.	1	1	MINIMAL		AMcN	11/08/2020
H&S22	Cyclists NB through bus stop bypass	Design Stage Operation Stage	Downhill cyclists going through bus bypass	Collisions or conflict between cyclists and bus users.	Injury of cyclists and pedestrians	Members of the Public	N/A	The cycle lane widths on approach to bus stops have been greatly reduced in width to slow cyclists on approach. The bus stop by-pass will be raised for pedestrians which provides vertical deflection for the cyclist. The bus stop by-pass will be marked to show priority for pedestrians/bus users over cyclists.	1	1	MINIMAL	CEC to confirm final layout and product types for bus stop pads	AMcN	11/08/2020
H&S23	Parallel Parking from live lane	Design Stage Operation Stage	Parallel parking from live lane	Manoeuvre in live lane with free flowing traffic	Risk of shunts or conflict between road users when a vehicle stops to manoeuvre into a space	Members of the Public	N/A	- Reduction in speed limit from 40mph to 30mph - Design updated to maximise areas where on street parking will be retained which can also act as nearside lane/space when not occupied - This manoeuvre and risk will already exist along this section when parked vehicles along the kerb 'pushing' vehicles into lane 2	1	1	MINIMAL		AMcN	11/08/2020
H&S24	Exiting Minor road onto Major	Design Stage Operation Stage	Turning into and out off minor priority junctions from the major road.	Turning manoeuvres in the road	Risk of shunts or conflict between road users when a vehicle enter or exit a minor road	Members of the Public	N/A	Visibility splays at each junction have been reviewed to ensure adequate visibility of oncoming traffic in both directions. The speed limit of the route has been reduced from 40mph to 30mph. At larger junctions which could have had high entry speeds, these have been reduced with road markings to reduce radii and control traffic more effectively.	1	1	MINIMAL		AMcN	11/08/2020

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H&S25	Collision between Buses and other vehicles	Design Stage Operation Stage	Buses travelling north and south along the route	Narrower traffic lanes	risk of buses 'clipping' stationary vehicles or traffic traveling in the opposing direction	Members of the Public	N/A	All lane widths along the route have been reviewed to ensure they are minimum 3.25m to ensure adequate space for passing large vehicles. Lothian buses consulted and highlighted that lane widths must be suitable. All parking bay widths have been increase from 2m where possible up to 2.5m, only one section is 2m. Design of lanes and parking in line with CEC Edinburgh Street Design Guidance. Speed limit has been reduced from 40mph to 30mph.	1	1	MINIMAL	AMcN	11/08/2020
H&S26	Collision between large vehicles traveling in opposing directions	Design Stage Operation Stage	LGVs and HGVs travelling north and south along the route.	Narrower traffic lanes	risk of LGVs & HGVs 'clipping' stationary vehicles or traffic traveling in the opposing direction	Members of the Public	N/A	All lane widths along the route have been reviewed to ensure they are minimum 3.25m to ensure adequate space for passing large vehicles. All parking bay widths have been increase from 2m where possible up to 2.5m, only one section is 2m. Design of lanes and parking in line with CEC Edinburgh Street Design Guidance. Speed limit has been reduced from 40mph to 30mph.	1	1	MINIMAL	AMcN	11/08/2020
H&S27	Cyclists colliding with parked car doors	Design Stage Operation Stage	Cyclists traveling along the route next to parked vehicles	Collisions between cyclists and open car doors	injury to Cyclists and pedestrians	Members of the Public	N/A	Widths of the cycle lane adjacent to parking have been reviewed and put to 2m wide over most of parking areas, with 1.5m the absolute minimum at localised areas. These localised narrow sections are uphill with 2.5m wide parking bays, which will mean slower cyclists speeds and more space for vehicles to position next to the cycle lanes.	1	1	MINIMAL	AMcN	11/08/2020
H&S28	Two Stage Right turn	Design Stage Operation Stage	Using the right turn box to the left of the junction.	Cyclists and motorists not understanding the process for the right turn box resulting in conflict	Potential injury if cyclists or motorists turn at same time	Members of the Public	N/A	The narrow junction is busy with right turning traffic likely at the junction. The narrow space may pose a risk for cyclists waiting to turn right in the middle of the junction. The allocation of space on the left of the junction for right turning cyclists will improve their safety at the junction. The waiting area will be clearly marked in red HFS with cycle symbols. To educate road users on the new layout signage will be put out. Further information on two stage right turns can be promoted on social media by CEC.	1	1	MINIMAL	AMcN	11/08/2020
H&S29	Defender visibility in low light	Design Stage Operation Stage	Driving along the route at night or in low light.	striking unsighted cycle lane defenders	damage to cars and cycle defenders	Members of the Public	N/A	The entire route is lit with street lighting. The poles on the defenders will have reflective markings to provide better visibility to motorists, similar to traffic cones	1	1	MINIMAL	AMcN	11/08/2020
H&S30	Comiston Springs Avenue	Design Stage Operation Stage	Vehicle manoeuvres at junction along with cyclists movements through junction	unsighted cyclists coming into conflict with turning motorist at the junction.	Injury of cyclists	Members of the Public	N/A	The junction radii have been dramatically reduced, down to 6m. The carriageway width of Comiston Springs Ave has been reduced to 7m, from 15-20m. Segregation units will be provided to highlight narrowed carriageway. Cycle lane has been moved to a 'bend out' style alignment which provides space for a turning vehicle to stop before entering the junction. The reduced radii of the junction will mean vehicles turn into the junction at more of a 90deg angle, which will improve visibility of oncoming cyclists	1	1	MINIMAL	AMcN	11/08/2020
H&S31	Loading Bay	Design Stage Operation Stage	Existing cycle lane passing loading bays at shops	Collison between cyclists and loading vehicles	Injury of cyclists	Members of the Public	N/A	The cycle lane width at the loading bay has been increased with segregation units at each end to highlight the presence of the cycle lane	1	1	MINIMAL	AMcN	11/08/2020
H&S32	Pedestrian Guard Rails Removed	Design Stage Operation Stage	Crossing East Comiston junction	turning vehicles close to bellmouth of junction	risk of collisions or injury between pedestrians and motorists	Members of the Public	N/A	The junction radii will be reduced to slow the entry speeds of vehicles entering the junction. The existing guard rail provided little deflection so removal will not change crossing point. The junction has good sight lines, both along the main road and the minor road.	1	1	MINIMAL	AMcN	11/08/2020
H&S33	Bus stop Location before signalised crossing south of Camus Avenue	Design Stage Operation Stage	Floating bus stop	stopped bus blocking visibility to traffic signal head	vehicle overtakes stationary bus and does not see traffic signal heads.	Members of the Public	N/A	Cycle lane width and bus stop pad widths have been reduced to 1.5m each. This provides more visibility to heads, which has been checked against OS Data to ensure it can still be seen	1	1	MINIMAL	AMcN	11/08/2020