IP07-F01: Design Risk Log	Project name: Spaces for People Comiston Road	Project number: Client Number: 12727 Sweco: 65201810		Design Element: Detailed Design	Designer/ Originator Alexander McNaughton		Checked by Alan Blacklaws	Technical Authority Approval Chris Fallen	Issue date 15.07.2020	SWECO Revision 06

The Design Risk Assessment Form is a live document to be reviewed & amended as an ongoing record of the evolution of solutions and should include the impact of changes at construction stage if required!

Ref no	Design Concept	Reason for selection / rejection	Activity	Hazard	Risk / Potential outcomes	Receptors at risk	Health and Safety or Environmental Legislation/Guidance	Design measures taken to mitigate the risk/provide compliance with Legislation	Risk Likelihood	Risk Severity	Risk	Residual risk actions	Name	Date
H&S1	Greenwich Orca Wands	Client Specified Product Design Stage	Locations of Proposed Greenwich Orca Wands	Orcas Blocking Accesses/Driveways along route	Vehicles stricking Orca Wands	Members of the Public	N/A	Approximate locations of all driveways along the route have been identified on the drawings. Design shows approximate locations of Orcas to be installed with gaps at driveway locations	1	1	MINIMAL	Notes have been added to drawings highlighting the need to ensure driveways are kept clear. Client and Principle Designer to highlight this requirement to Contractor.	AMcN	23/06/2020
H&S2	Vectorial Bus Stop Islands	Client Specified Product Design Stage	Locations of Proposed Vectorial Bus Stop Islands	Road Users, Cyclists and Pedestrians safely navigating Proposed Floating Bus Stops	Conflict of different road users	Members of the Public	N/A	Standard Layout of Vectorial Floating Bus Stops shown at every bus stop location. Design has been reviewed to ensure bus stops have been staggered on each side of the road.	1	1	MINIMAL	Drawings include a standard layout detail of the bus stop to ensure consistent design.	AMcN	23/06/2020
H&S3	Greenwich Orca Wands	Client Specified Product Construction Stage	Installation of Greenwich Orca Wands	Manual Handling See H&S5 For Working Next to Live Traffic	Injury from Manual Handling of Orca Wands.	Operatives	N/A	Client Specified Product. Material is recycled Rubbers with low weights, 7-10.5kg. Data Sheets have been included in Designer Pack	1	1	MINIMAL	Client and Principle Designer to ensure competent Contractor is appointed to conduct construction works. Contractor to have suitable Risk Assessments and Method Statements (RAMS) for the installation works.	AMcN	23/06/2020
H&S4	Vectorial Bus Stop Islands	Client Specified Product Construction Stage	Installation of Vectorial Bus Stop Islands	Manual Handling See H&S5 For Working Next to Live Traffic	Injury from Manual Handling of Vectorial Units	Operatives	N/A	Client Specified Product. Material is recycled Rubbers with low weights, 9-18.4kg. Data Sheets have been included in Designer Pack	1	1	MINIMAL	Client and Principle Designer to ensure competent Contractor is appointed to conduct construction works. Contractor to have suitable Risk Assessments and Method Statements (RAMS) for the installation works.	AMcN	23/06/2020
H&S5	Construction Works On Live Road/ Live Traffic	Construction Stage	Main Construction Works	Conflicts and injury from Live Traffic	Conflict between road users and Operatives during construction Phase	Operatives Members of the Public	N/A	Drawings prepared showing detailed layout of design measures to provide contractors with suitable level of detail to safely plan the works.	1	1	MINIMAL	Client and Principle Designer to ensure competent Contractor is appointed to conduct construction works. Contractor to ensure all works carried out are done safely with Temporary Traffic Management (TTM) designed to Traffic Signs Manual Chapter 8 requirements	AMcN	23/06/2020
H&S6	COVID-19	Construction Stage	Main Construction Works	COVID-19 - Risk of Spreading & Social Distancing requirements	the Spread or contraction of COVID-19	Operatives	N/A		2	2	RESIDUAL	Client and Principle Designer to ensure competent Contractor is appointed to conduct construction works. Contractor to ensure all works can be carried out safely, and that work force are following Contractor RAMS for COVID-19 prevention and control, such as suitable distancing of operatives, Suitable PPE and training where required	AMcN	23/06/2020
H&S7	Cycle Lanes at Junctions	Operation Stage	Operation of Cycle Lanes	Road Users (motorists) exiting junctions and turning into new Cycle Lanes	Vehicle stricking Orcas, Vehicle Hitting Pedestrians, Vehicle hitting Cyclists.	Members of the Public	N/A	Widths of Cycle Lanes have been kept consistant at junctions to show they are less wide than the traffic lanes. Red HFS will be applied across junctions to highlight the cycle lanes. Additional Signage can be provided to highlight the presence of cycle lanes.	1	2	MINIMAL	Maintenance of route to ensure any temporary signage along the route is kept in place and visible.	AMcN	23/06/2020
H&S8	Vectorial Bus Stop Islands	Client Specified Product Removal/Dismantling Stage	Removal of Bus Stop Islands	Road Users, Cyclists and Pedestrians safely navigating Proposed Floating Bus Stops	Conflict of different road users	Members of the Public	N/A	Standard Layout of Vectorial Floating Bus Stops shown at every bus stop location. Design has been reviewed to ensure bus stops have been staggered on each side of the road.	1	1	MINIMAL	Client and Principle Designer to ensure competent Contractor is appointed to conduct construction works. Contractor to have suitable Risk Assessments and Method Statements (RAMS) for the installation works.	AMcN	23/06/2020
H&S9	Greenwich Orca Wands	Client Specified Product Removal/Dismantling Stage	Removal of Orca Wands	Manual Handling See H&S5 For Working Next to Live Traffic	Injury from Manual Handling of Orca Wands.	Operatives	N/A	Client Specified Product. Material is recycled Rubbers with low weights, 7-10.5kg. Data Sheets have been included in Designer Pack	1	1	MINIMAL	Client and Principle Designer to ensure competent Contractor is appointed to conduct construction works. Contractor to have suitable Risk Assessments and Method Statements (RAMS) for the installation works.	AMcN	23/06/2020
H&S10	Construction Works On Live Road/ Live Traffic	Removal/Dismantling Stage	Main Removal/Dismantling Works	Conflicts and injury from Live Traffic	Conflict between road users and Operatives during construction Phase	Operatives Members of the Public	N/A	Drawings prepared showing detailed layout of design measures to provide contractors with suitable level of detail to safely plan the works.	1	1	MINIMAL	Client and Principle Designer to ensure competent Contractor is appointed to conduct construction works. Contractor to ensure all works carried out are done safely with Temporary Traffic Management (TTM) designed to Traffic Signs Manual Chapter 8 requirements	AMcN	23/06/2020
H&S11	Cycle Movements at Junctions with Parking Bays	Design Stage	Cyclists exiting cycle lane to cross full carriageway width to enter adjacent side road, and vise versa.	Parked vehicles blocking access to and from cycle lane and blocking visibility along carraigeway of oncoming vehicles.	Cyclists coming into confilct with parked vehicles and road users. Cyclsits edging from cycle lane through parked cars and onto carraigeway with no visibility of oncoming vehicles	Members of the Public	N/A	Parking bays at junctions have been removed and red HFS and TSRGD Dia 1040 hatching added to emphasize no parking in this area. This provides space and visibility for cyclsits when crossing	1	1	MINIMAL		AMcN	25/06/2020
H&S12	Parking Bay Widths	Design Stage	Width of parking bays along route at 2m wide	Parking bay widths resulting in parked vehicles positioning vehicle away from Orcas and into carriageway	Conflict of parked cars and live traffic in lane, vehicle strikes and collisions	Members of the Public	N/A	Suitable car parking bay widths confirmed from CEC at minimum 2.0m, preferred 2.5m. Parking bay widths widened where possible and removed in tighter areas such as at bus stops.	1	1	MINIMAL	Recommend continual monitoring of parking usage along route.	AMcN	25/06/2020
H&S13	*Bus Stops - Existing Kerb Upstands*	Design Stage	Temporary Bus Stop Units adjoining existing footway	Varying level differences between existing footway kerb and temporary bus pad units	Trips from members of the public using bus stops, wheelchair users being unable to access or egress safely from BusPads	Members of the Public	N/A	Some design mitigation has been conducted through desktop study, identifying stops with flush kerbs and offering design solutions.	2	2	RESIDUAL	CEC and Sustrans to review bus stop requirements and products (as selected by CEC and Sustrans) at the bus stops. Additional on site measurements will be required by either client or contractor prior to works.	AMcN	06/07/2020