

Dunbar Belhaven

Options Appraisal Report

On behalf of East Lothian Council



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1 Introduction

1.1 Background

- 1.1.1 Stantec have been appointed by East Lothian Council (ELC) to undertake an options appraisal for junction improvements, footpaths, and active travel paths at several locations in Belhaven, Dunbar. The project will involve the development and assessment of concept design options in order to identify preferred options for further development.. The findings from this options appraisal will be used to inform the development of the Belhaven Masterplan.
- 1.1.2 The areas to be considered within the options appraisal are as follows:
 - A: Improvements to the current junction of A1087/ Shore Road/ Beveridge Row
 - B: Improvements to cycling facilities on Beveridge Row
 - C: Improvements to pedestrian and cycling facilities on Back Road
 - D: Development of an active travel path from A1087 to north Shore Road car park
 - E: A1087 Footpath Widening and Duke Street/ Brewery Lane Crossing Improvements
 - F: Traffic calming on A1087 between Shore Road and Bayview Circus
 - G: A new Shore Road car park access junction
- 1.1.3 The locations of the concept designs are show in Figure 2.1 below:

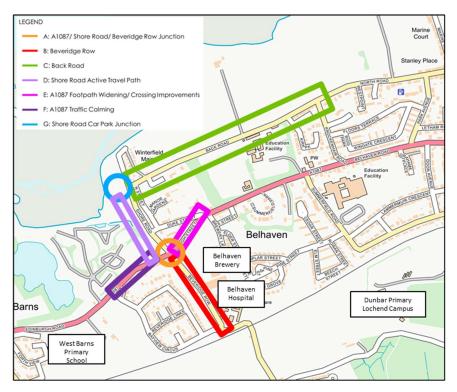


Figure 1-1: Map of Project Scope



1.2 Project Objectives

- 1.2.1 The objectives of this project are:
 - To deliver a more attractive and safer environment for pedestrians and cyclists.
 - To reduce the overall dependence on cars and environmental impacts of traffic.
 - To promote the availability and use of more sustainable means of travel.
 - To maximise accessibility for all and reduce social exclusion.
- 1.2.2 Several relevant studies have been undertaken previously by or on behalf of ELC including:
 - Safer Active Travel Back Road Dunbar (Stantec 2019).
 - Shore Road, Dunbar Campervan Park Feasibility Study (ELC 2019).
 - Spaces for People (ELC 2020).



2 Design Options

2.1 A: A1087/ Shore Road / Beveridge Row Junction

2.1.1 Background

The sub-standard geometry of this junction is a known issue. Tight radii and poor visibility make access and egress difficult. Shore Road is narrow at this location with varying substandard widths - the minimum width at a pinch point being 4.4m. Typically, vehicles turning in to Shore Road from the A1087 Edinburgh Road have to wait on the A1087 until the junction is clear. The existing footpaths around the junction are narrow and there is no tactile paving provision. There is currently no footway on the South side of the A1087 to the eastern side of the Shore Road junction. There is no scope to provide one at this location due to the vulnerable heritage wall foundation, which is not an ELC asset, and the close proximity of a substation. No consideration has been given to the provision of pedestrian crossings on this arm of the junction.







Figure 2-1 Shore Road Junction

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2.1.2 Proposals

The proposed improvements to the A1078/ Shore Road Junction will improve junction operation by allowing vehicles to enter the junction when a car is waiting to turn from Shore Road. Visibility will also be improved by increasing the junction entry and exit radii and widening the footway by repositioning a section of the existing wall further back from the edge of the carriageway. These changes to the footways will also improve access for non-motorised users.

Four options have been identified for improvements to this junction. For all options, shared paths will be provided over a short distance at the toucan crossing to connect into proposals on Beveridge Row and to the proposed active travel path from the A1087 to Shore Road Car Park. See sections 2.4 and 3.2 for more details on the Beveridge Row and the active travel path proposals.

2.1.3 OPTION 1 - No widening of Shore Road, Crossroads Junction

Option 1 involves widening the corner radius of Shore Road to 10.5m to allow for improved visibility and a wider turning area for access and egress to Shore Road. The footways at the junction will be increased to 2m in width and gradually taper back into the existing footways to the north of the junction and along the A1087. No changes are proposed to the existing road width other than the improvements to the corner radius. Additionally, there will be an uncontrolled crossing across Shore Road and a 4m wide toucan crossing on the A1087.

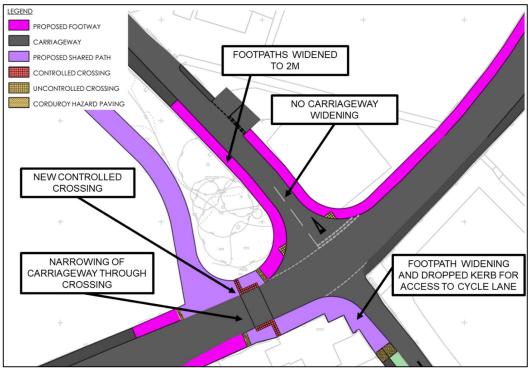


Figure 2-2 Shore Road Junction Option 1

2.1.4 OPTION 2 - Widening of Shore Road West, Crossroads Junction

Option 2 involves widening Shore Road to 6m over a length of 55m into the grassed area to the west and increasing the corner radius to 10.5m. In addition, the proposed footways will be widened to 2m and gradually tapered back into the existing footways. The footway on the west of Shore Road will be reinstated at 1m wide and will tie into the existing footway where



applicable.. An uncontrolled crossing and raised table will be constructed across Shore Road and a 4m wide controlled crossing across A1087 to priorities pedestrian movements.

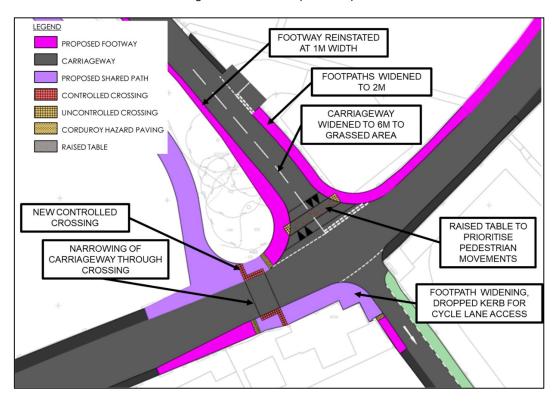


Figure 2-3 Shore Road Junction Option 2

2.1.5 OPTION 3 - Widening of Shore Road East, Crossroads Junction

Option 3 involves widening Shore Road to 6m over a length of 27m towards the existing car park to the East and increasing the corner radius to 6m. Footways at the junction will be widened to 2m and gradually taper back into the existing footways. An uncontrolled crossing will be provided across Shore Road and a 4m wide controlled crossing on the A1087. This option will have an impact on the number of residents parking spaces available within the car park. It is estimated that approximately 6 spaces will be lost.



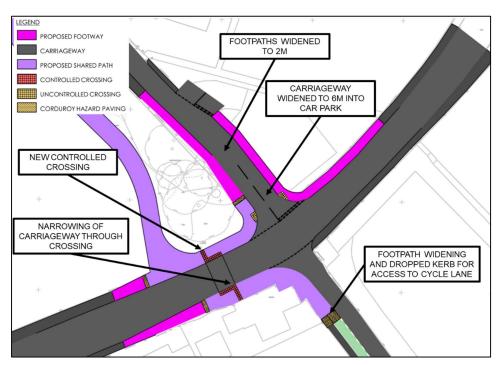


Figure 2-4 Shore Road Junction Option 3

2.1.6 **OPTION 4 – Widening of Shore Road West, Signalised Junction**

Option 4 is a fully signalised junction layout with crossings on two arms. The carriageway width of Shore Road is increased to 6m over a length of 55m towards the grassed area to the West of the Road and the corner radii is increased to 6m.

It was identified that pedestrians accessing properties on Shore Road would use the path behind the car park and with the addition of the active travel path there would be little use for a footway on the west of Shore Road. Therefore, this footway will be reinstated at 1m to reduce the required land take and provide a buffer to vehicles on Shore Road.

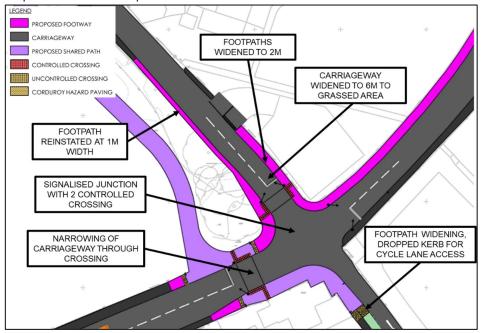


Figure 2-5 Shore Road Junction Option 4



2.2 A1087/ Shore Road / Beveridge Row Junction – Options Appraisal Matrix

2.2.1 Table 2-1 below scores each option based on objectives taken from the ELC Local Transport Strategy (LTS) and ELC LTS Active Travel Improvement Plan. Each objective is scored between -3 (lowest score) and 3 (highest score) and a justification of scoring is provided.

Table 2-2-1 Options Appraisal Matrix Shore Road/Beveridge Row Junction

	OPTION 1	OPTION 2	OPTION 3	OPTION 4
STRATEGIC OBJECTIVES To deliver a more attractive and	Shore Road width unchanged Increased corner radii/ footway widths I Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks Increased corner radius improving visibility for pedestrians,	Shore Road widened to 6m into grassed area Increased corner radii/ footway widths Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks Increased corner radius improving visibility for pedestrians, cyclists, and vehicles.	Shore Road widened to 6m into car park Increased corner radius/ footway widths I Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks Widened footways improve safety — prevents pedestrians walking on	Shore Road widened to 6m into grassed area Junction signalised/ footway widths Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks Signals provide the safest option for pedestrians/ cyclists crossing—two controlled crossing
safer environment for pedestrians and cyclists	cyclists, and vehicles. • Widened footways improve safety - prevents pedestrians walking on carriageway to avoid others on the footway.	Widened footways improve safety - prevents pedestrians walking on carriageway to avoid others on the footways. Road widening improves traffic flow through junction and beginning of Shore Road Raised table to prioritise pedestrian movements	carriageway to avoid others on the footways. • Road widening improves traffic flow through junction and beginning of Shore Road.	points providing a higher level of service to users than other options • Signals will slow traffic on approach. • Signals will remove any concerns with junction visibility. • Widened footways improve safety - prevents pedestrians walking on carriageway to avoid others on the footways.



	OPTION 1	OPTION 2	OPTION 3	OPTION 4
STRATEGIC OBJECTIVES	Shore Road width unchanged Increased corner radii/ footway widths	Shore Road widened to 6m into grassed area Increased corner radii/ footway widths	Shore Road widened to 6m into car park Increased corner radius/ footway widths	Shore Road widened to 6m into grassed area Junction signalised/ footway widths
	1	1	1	1
	•Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars	•Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars	•Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars	•Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars
To reduce the overall dependence on cars and environmental impacts of traffic	Further education/ behaviour change engagement required in addition to development of active travel network	Further education/ behaviour change engagement required in addition to development of active travel network	Further education/ behaviour change engagement required in addition to development of active travel network	Further education/ behaviour change engagement required in addition to development of active travel network
	2	2	2	3
To promote the availability and use of more	•Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks	•Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks	•Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks	 Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel networks Signals provide the safest option for pedestrians/ cyclists crossing – two controlled crossing points providing a
sustainable means of				higher level of service to users that other
travel				options
To maximise accessibility	1 Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel network	•Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel network • Raised table to	1 Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel network	•Improved access for pedestrians, cyclists, and those with protected characteristics through footway widening and connections to further active travel network • Signals provide the
for all and reduce social exclusion	Existing road width unchanged which is	prioritise pedestrian movements	•Reduces the amount of residents	safest option for pedestrians/ cyclists crossing – two



	OPTION 1	OPTION 2	OPTION 3	OPTION 4
STRATEGIC OBJECTIVES	Shore Road width unchanged Increased corner radii/ footway widths	Shore Road widened to 6m into grassed area Increased corner radii/ footway widths	Shore Road widened to 6m into car park Increased corner radius/ footway widths	Shore Road widened to 6m into grassed area Junction signalised/ footway widths
	causing access issues at present		parking spaces available.	controlled crossing points providing a higher level of service to users that other options
Cost	3 £340,860.10	1 £430,147.17	2 £350,714.38	0 450,016.53
TOTAL	8	9	7	10

2.3 A1087/ Shore Road / Beveridge Row Junction – Preferred Option

2.3.1 The preferred option for this section of the route is Option 4 which can be seen in more detail on drawing 10835-STN-00-XX-DR-C-0002 in Appendix A.



2.4 B: Beveridge Row

2.4.1 Background

Beveridge Row is currently a narrow, two-way street with limited pedestrian facilities. Cyclists currently cycle on road. The majority of properties along this location have driveways, however there are a couple of properties to the north of Beveridge Row that do not, therefore on street parking may need to be maintained.





Figure 2-6 Beveridge Row Southbound



Figure 2-7 Beveridge Row Junction with A1087



2.4.2 Proposals

Beveridge Row is proposed to be one way southbound for vehicles (towards the railway line) due to width constraints of the carriageway and to facilitate an advisory cycle lane. The choice of an advisory cycle lane was made based on the constraints due to limited carriageway width and the number of expected users of the cycle lane.

There may be scope to make a section of the cycle lane mandatory, depending on minimum road widths which are currently under discussion with ELC. Mandatory sections of cycle lane would restrict parking along its length. Further parking restrictions may be considered where relevant, as outlined in each option.

Three concept options have been produced and these are as detailed below:



2.4.3 OPTION 1 - One-way Northbound Cycle Lane West side of Carriageway

- 2.4.4 Cyclists travelling northbound towards Beveridge Row will join the advisory cycle lane at the junction with Bayview Circus. The cycle lane will then follow the West edge of the carriageway for a distance of approximately 310m. At the end of the cycle lane cyclists will be directed off carriageway to join a section of shared path providing access to the crossing on Edinburgh Road and onward travel to other parts of the network. Throughout the majority of this section, the carriageway width will be a minimum of 3.7m. with the exception of a 20m section where the carriageway width drops below 3.7m to a minimum of 3.0m over a short section. The width of the cycle lane will range between 1.2m and 3.6m depending on carriageway width constraints. Southbound cyclists will join Beveridge Row either from an on-carriageway position from the A1087 junction or from the proposed shared path at the north end of Beveridge Row.
- 2.4.5 Double yellow lines may be considered along the length of the cycle lane, with parking permitted on the east side of the carriageway. Access to driveways will be maintained at all times. Double yellow lines on both sides of the carriageway may be required through the pinch point.

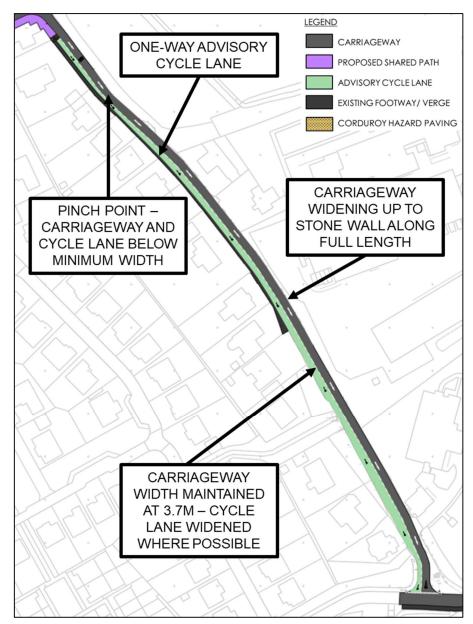


Figure 2-8 Beveridge Row Option 1



2.4.6 OPTION 2 - One-way Northbound Cycle Lane East side of Carriageway

As per Option 1, northbound cyclists will join the cycle lane at the junction with Bayview Circus. The cycle lane then follows the Eastern edge of the carriageway adjacent to the wall. At the north end of Beveridge Row cyclists will cross the carriageway and join the shared path to access the crossing on Edinburgh Road. Option 2 has the same proposed cycle lane and carriageway widths as Option 1. Southbound cyclists will join Beveridge Row either from an oncarriageway position from the A1087 junction or from the proposed shared path at the north end of Beveridge Row.

2.4.7 Double yellow lines may be considered along the length of the cycle lane, with parking permitted on the west side of the carriageway. Access to driveways will be maintained at all times. Double yellow lines on both sides of the carriageway may be required through the pinch point.

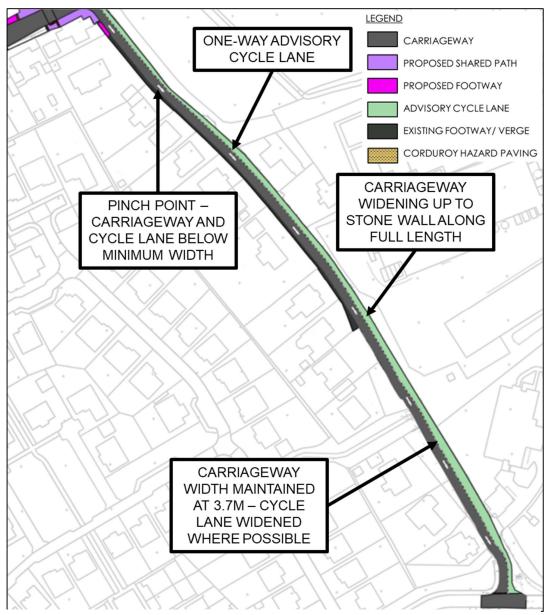


Figure 2-9 Beveridge Row Option 2



2.4.8 OPTION 3 – Two-way Cycle Lane West side of Carriageway

Cyclists travelling northbound on Beveridge row will join the advisory cycle lane at the junction with Bayview Circus. Southbound cyclists will join Beveridge Row either from an on carriageway position from the A1087 junction or from the proposed shared path at the north end of Beveridge Row. This option requires carriageway widths to be reduced below 3.7m over a distance of 20m (pinch point 2.8m wide), however as the cycle lane is advisory, vehicles are allowed to overrun the cycle lane where required. Consideration could be given to providing a "give and take" priority give way on the cycle lane on approach to the pinch point. Need for this should be based on usage figures to determine if it is necessary.

2.4.9 Double yellow lines may be considered along the length of the cycle lane, with parking permitted on the east side of the carriageway. Access to driveways will be maintained at all times. Double yellow lines on both sides of the carriageway may be required through the pinch point.

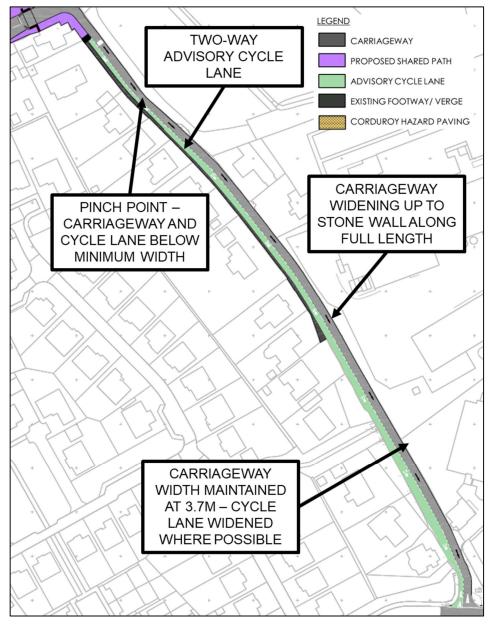


Figure 2-10 Beveridge Row Option 3



2.5 Beveridge Row – Options Appraisal Matrix

2.5.1 Table 2-2 shows the scoring of each of the design options and the justification of the given score:

Table 2-2 Options Appraisal Matrix - Beveridge Row

	OPTION 1	OPTION 2	OPTION 3
STRATEGIC OBJECTIVES	Advisory one-way cycle lane on west of road Beveridge Row one way southbound	 Advisory one-way cycle lane on east of road Beveridge Row one way southbound 	Advisory two-way cycle lane on west of road Beveridge Row one way southbound
	2	1	2
	Minimally intrusive to the environment as provisions will be in the form of road markings along one side of the road.	Minimally intrusive to the environment as provisions will be in the form of road markings along one side of the road.	Minimally intrusive to the environment as provisions will be in the form of road markings along one side of the road.
	Ties well into the proposed junction improvements to the A1087/ Shore Road/ Beveridge Row - promoting cyclist safety for accessing the cycle lane.	Start of lane does not tie into proposal for junction improvements to the A1087/ Shore Road/ Beveridge Row - involves crossing Beveridge Row to access the shared path.	Ties well into the proposed junction improvements to the A1087/ Shore Road/ Beveridge Row - promoting cyclist safety for accessing the cycle lane for cyclists travelling both directions
To deliver a more attractive and safer environment for pedestrians and cyclists	If vehicles are parked on the Western Side of the carriageway, cyclists will need to leave the cycle lane and join the road to safely pass.	If vehicles are parked on the Western side of the carriageway, vehicles travelling southbound will need to utilise the cycle lane to safely pass	If vehicles are parked on the Western Side of the carriageway, cyclists will need to leave the cycle lane and join the road to safely pass.
	1	1	2
	•Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars	•Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars	•Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars
To reduce the overall dependence on cars and environmental impacts of traffic	Further education/ behaviour change engagement required in addition to further development to the active travel network	Further education/ behaviour change engagement required in addition to further development to the active travel network	 Allows northbound and southbound cyclists to use the facility. Further education/ behaviour change engagement required in addition to further development to the active travel network



	OPTION 1	OPTION 2	OPTION 3
	Advisory one-way cycle	Advisory one-way cycle	Advisory two-way cycle
	lane on west of road	lane on east of road	lane on west of road
STRATEGIC	Beveridge Row one way	Beveridge Row one way	Beveridge Row one way
OBJECTIVES	southbound 1	southbound 1	southbound 2
	•	•	2
To promote the availability and use of more sustainable means of	The addition of the cycle lane connects the proposed active travel route to Belhaven Bay and with local housing developments for northbound cyclists. Further development required to better connect this route in addition to education/ behaviour	The addition of the cycle lane connects the proposed active travel route to Belhaven Bay and with local housing developments for northbound cyclists. Further development required to better connect this route in addition to education/ behaviour change.	The addition of the cycle lane connects the proposed active travel route to Belhaven Bay and with local housing developments in both directions. Further development required to better connect this route in addition to education/ behaviour
travel	change.		change.
	1	1	2
	Improvements to the current cycling provision by providing a degree of segregation between cyclists and vehicles but only for northbound cyclists	Improvements to the current cycling provision by providing a degree of segregation between cyclists and vehicles but only for northbound cyclists	Improvements to the current cycling provision by providing a degree of segregation between cyclists and vehicles Does not provide as high
To create accessibility for all and reduce social exclusion	Does not provide as high a level of service as a mandatory cycle lane or segregated facility but is suitable within the parameters of the project	Does not provide as high a level of service as a mandatory cycle lane or segregated facility but is suitable within the parameters of the project	a level of service as a mandatory cycle lane or segregated facility but is a suitable facility within the parameters of the project
0 (1	1	1
Cost	• £209,333.48	• £210,368.93	• £209,333.48
TOTAL	6	5	9

2.6 Beveridge Row – Preferred Option

2.6.1 The preferred option for Beveridge Row is Option 3 which can be seen in more detail on drawings 10835-STN-00-XX-DR-C-0018-0022 in Appendix A



2.7 C: Back Road

Background

- 2.7.1 Back Road is part of an extended west/east route through Dunbar and is used by some drivers as an alternative to the A1087. Previous studies have indicated that vehicle speeds are an issue along Back Road, and there is currently limited pedestrian and cyclist facilities. There is no continuous footway along either side of Back Road. There is currently no fixed surface water drainage system and over the edge drainage exists along the extent of Back Road.
- 2.7.2 The width of the carriageway is variable along the length and there is poor definition to the extents of the carriageway.





Figure 2-11 Back Road Eastbound

Proposals

- 2.7.3 The proposals for Back Road aim to deliver improved facilities for pedestrians/ active travel while maintaining vehicle access along the length. This location is particularly constrained due to the width of carriageway available. After careful consideration of the site constraints and the available width it is proposed that Back Road will become one way from Shore Road towards Knockenhair Road. A number of options have been considered as follows in sections 2.7.7 2.7.9.
- 2.7.4 Concerns have been raised by parents of children who attend Belhaven Hill School with regards to access for drops offs. Currently parents access the school grounds via the junction on the A1087 and exit onto Back Road and then either turn left or right for onward travel. Visibility from the junction onto Back Road is poor due to the location of the school boundary wall. As Back Road is proposed to be one way eastbound, this should reduce the potential for conflicts at this junction as all vehicles will be travelling eastbound and traffic volumes will be reduced.
- 2.7.5 There may be an option to utilise the existing verge space up to the stone wall on the south side of Back Road, but this would require further considerations and may require a structural assessment of the wall. This could potentially add a further 0.5m to the width of the carriageway.
- 2.7.6 All proposals need to be discussed with emergency services to determine minimum access requirements.



2.7.7 OPTION 1 - Advisory one-way cycle lane North side of Back Road

This option provides an advisory one-way cycle lane on the north side of Back Road. In addition, extension of the existing footpath is proposed over a length of 365m along a section where there are currently no pedestrian facilities.

The advisory cycle lane is of varying width of between 1.2m and 2m. The existing footpaths are unchanged, and the proposed new footpath section is between 1.5 and 1.8m wide depending on the road width constraints. The carriageway is a minimum of 2.5m at the narrowest sections, however as the proposed cycle lane is advisory, vehicles are permitted to utilise this space also – providing a carriageway width of 3.7m. This is an isolated pinch point and in general the carriageway is approximately 4.5m wide including the advisory cycle lane. This option involves building out into the golf course with a retaining wall. See Figure 2.12

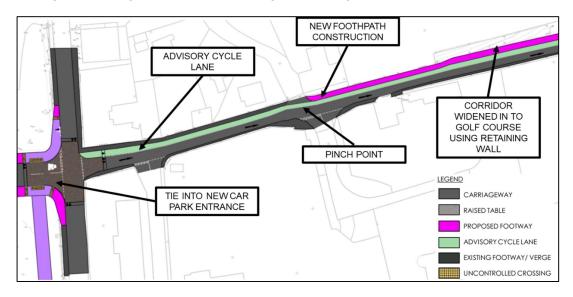


Figure 2-12 Back Road Option 1

2.7.8 OPTION 2 - Shared Path North side of Back Road

Option 2 is a shared path on the North side of Back Road for the entirety of the section between the junction with Shore Road and Knockenhair Road. This provides a carriageway width of a minimum of 3.7m at the narrowest sections. The shared path is of varying width along the length from 1.5m to 3m depending on the constraints of carriageway width, with the majority of the shared path being approximately 3m wide. This option involves the relocation of a stone wall, which will require planning permission, and building out into the golf course land with a retaining wall due to level differences. The required road width for emergency service vehicles is 3.7m, or 3.5m in constrained areas over short distances. The carriageway has been widened into the verge against the stone wall to the south of Back Road where the existing road width does not meet this requirement. See Appendix B for swept path analysis of a fire engine along Back Road and adjoining junctions.



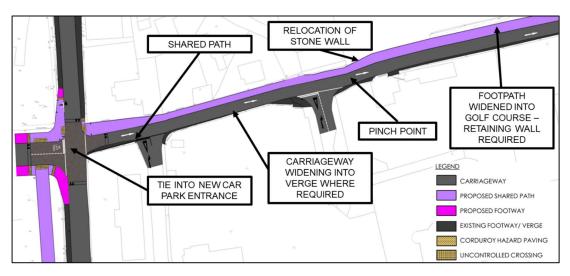


Figure 2-13 Back Road Option 2

2.7.9 OPTION 3 - Combination of Shared Path and Advisory Cycle Lane North side of Back Road

Option 3 proposes approximately 100m of advisory cycle lane, at a consistent width of 1.5m through the narrower carriageway section. A narrow footway of approximately 1.5m is also provided along this length. At the end of the advisory cycle lane, the remaining route is a shared path and cyclists will be encouraged to leave the carriageway at this point to join the shared path. The shared path is of varying width along the length from 2.4m to 3m depending on the constraints of carriageway width, with the majority of the path being approximately 3m wide. This option involves building out into the golf course with a retaining wall. See Figure 2-14.

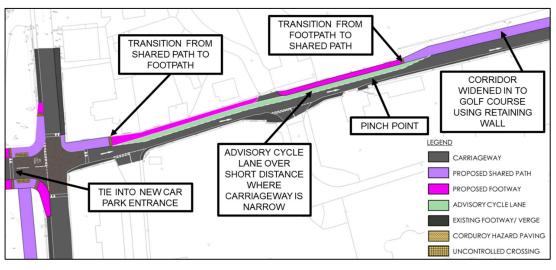


Figure 2-14 Back Road Option 3



2.8 Back Road – Options Appraisal Matrix

2.8.1 Table 2-3 shows the scoring of each of the design options and the justification of the given score:

Table 2-3 Options Appraisal Matrix Back Road

	OPTION 1	OPTION 2	OPTION 3
STRATEGIC OBJECTIVES	Advisory cycle lane Continuous footpath	Shared use path	Mixed shared path/ advisory cycle lane
To produce an attractive and safe environment for pedestrian and cyclists	. Continuous footpath improving safety for pedestrians - pinch points due to carriageway width constraints Safer provision for cyclists than existing	•Safer for pedestrians/ cyclists as provides more protection against vehicle movements (physical kerb) •Pinch points due to carriageway width constraints •Conflict between pedestrians and cyclists on shared path not considered to be high due to observed use of the road	Majority shared path providing protection for pedestrian/ cyclists from vehicles Confusion due to lack of coherence of advisory section Additional conflicts between pedestrians and cyclists is cyclists stay on footpath at advisory section
To reduce the overall dependence on cars and environmental impacts of traffic	Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars. Further education/behaviour change engagement required in addition to further development to the active travel network	Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars. Further education/behaviour change engagement required in addition to further development to the active travel network Safer option for younger/less experienced cyclists as a more physical barrier of the kerb separates them from vehicles	Improved access for pedestrians, cyclists, and those with protected characteristics which should reduce dependency on cars. Further education/behaviour change engagement required in addition to further development to the active travel network
To promote the availability and use of more sustainable means of travel	The route provides provision for both pedestrians and cyclists to use Back Road that does not currently exist	The route provides provision for both pedestrians and cyclists to use Back Road that does not currently exist Provides a more physical means of segregation by using a kerb although pinch points do narrow the path in places	The route provides provision for both pedestrians and cyclists to use Back Road that does not currently exist This option is not as coherent as the other options and thus may cause confusion and deter some users



	OPTION 1	OPTION 2	OPTION 3
STRATEGIC OBJECTIVES	Advisory cycle lane Continuous footpath	Shared use path	Mixed shared path/ advisory cycle lane
To maximise accessibility for all and reduce social exclusion	Provides facilities for pedestrians/ cyclists that doesn't currently exist Advisory cycle lane may exclude less confident cyclists from using the facilities	Provides a facility for pedestrians/ cyclists that doesn't currently exist Shared path will be more inclusive to cyclists of different abilities Pinch points may cause issues for prams, wheelchairs, etc	Provides a facility for pedestrians/ cyclists that doesn't currently exist Changing from shared path to advisory lane, and back to shared path may result in confusion
Cost	2 • £444,804.12	• £808,222.33	1 • £633,348.21
TOTAL	7	8	4

2.9 Back Road – Preferred Option

2.9.1 The preferred option for Back Road is Option 2, shared use path. This can be seen in further detail on drawings 10835-STN-00-XX-DR-C-0008 - 0012 in Appendix A



3 Additional Concept Designs

3.1.1 Several additional locations have been considered as part of the Masterplan process throughout the Belhaven area to enhance accessibility, these proposals are detailed below.

3.2 D: Shore Road Active Travel Path

- 3.2.1 An off-road active travel path is proposed between the A1087 and the proposed new car park junction. This path will be shared and a width of 4m over a length of around 300m. The concept design of the path alignment is shown in Figure 3-1 and drawing 10835-STN-00-XX-DR-C-0013 in Appendix A.
- 3.2.2 The proposed active travel path will be connected to the existing John Muir Way cycle path and provide off road access from the Toucan crossing proposed at Shore Road. The existing John Muir Way path south of Back Road would be diverted onto the new off-road path. The proposed route may result in some loss of parking within the car park. Re-configuration of the car park will be considered however improved active travel access to this location should reduce the dependency on vehicle trips.
- 3.2.3 Further consideration is required to determine the type of surface used for this path. Cost estimates have been based on standard footpath construction, however as the path is remove from the carriageway whindust may be more appropriate.. The cost estimate also allows for provision of street lighting a the path, but further considerations will be given to the use of low-level lighting at this location.
- 3.2.4 Planning Permission is required for this section of the project which will provide an opportunity for further consultation.

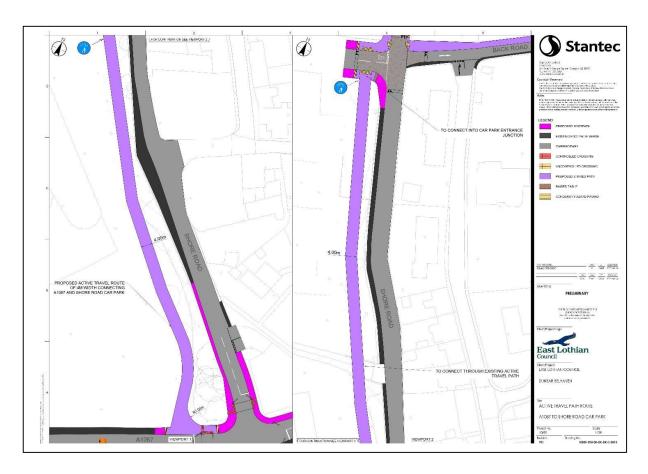




Figure 3-1 Shore Road Active Travel Path

3.3 E: A1087 - Footpath Widening/ Duke Street/ Brewery Lane Crossing Improvements

3.3.1 The footpath on the North side of Duke Street is currently approximately 1.7m wide. The proposal will widen the footpath to 2m from the junction with Shore Road to Duke Street. Parking will be maintained along the majority of this section, with indicative parking areas shown by the marked bay locations on Figure 3-4. Parking has been observed at this location, however numbers appear to be low, and it is not considered that any parking will be displaced by the proposals.



Figure 3-2 A1087



Figure 3-3 A1087/Brewery Lane/Duke Street



- 3.3.2 Improvements to the crossing facilities at the junctions of Duke Street and Brewery Lane are proposed as shown in Figure 3.4. This includes the widening of footpaths, provision of a pedestrian build-out and dropped kerb pedestrian crossings with tactile paving. Previous consultation on this proposal was positive with residents being in support of the proposals. See Figure 3.4 and Drawing 10835-STN-00-XX-DR-C-0015 in Appendix A.
- 3.3.3 A crossing facility across Duke Street at the junction was considered, however due to the acute angle of the junction there is insufficient space to widen the footpath and still achieve two-way vehicle movements at the junction.

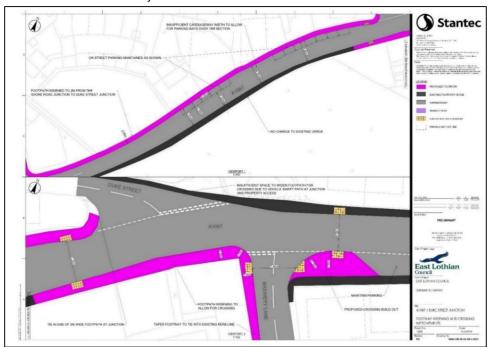


Figure 3-4 Duke Street/Brewery Lane Proposals

3.3.4 Vehicle Swept Path Analysis has been undertaken for Brewery Lane to ensure that Articulated vehicles will still be safely able to make the turn from and to the A1087. See Figure 3-5A.

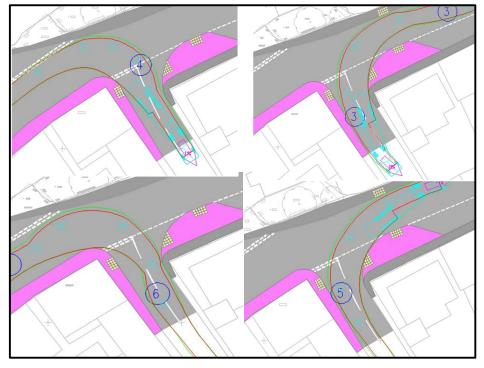


Figure 3-5A Swept Path Analysis A1087 High Street



3.3.5 It is acknowledged that the A1087 Edinburgh Road/ High Street is the diversion route for the A1 and thus it has been considered that larger vehicles may be required to use this route. Figure 3-5B below shows the swept path analysis of two articulated vehicles passing:

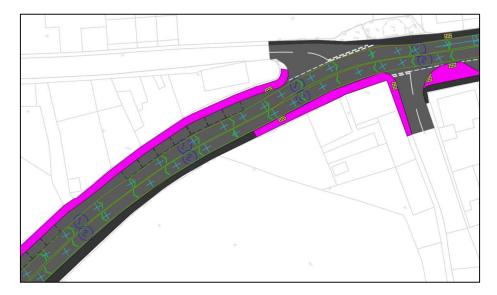


Figure 3-5B Swept Path Analysis A1087 High Street

3.4 F: A1087 – Traffic Calming

3.4.1 To reduce speeds along the A1087 in advance of the proposed Toucan Crossing, additional traffic calming measures in the form of speed cushions are proposed. There will be a total of 5 sets of speed cushions installed at 80m intervals between the Shore Road junction and Bayview Circus. The existing pedestrian crossing island at Bayview Circus will be maintained. See Figure 3-6 and drawing number 10835-STN-00-XX-DR-C-0014 in Appendix A.

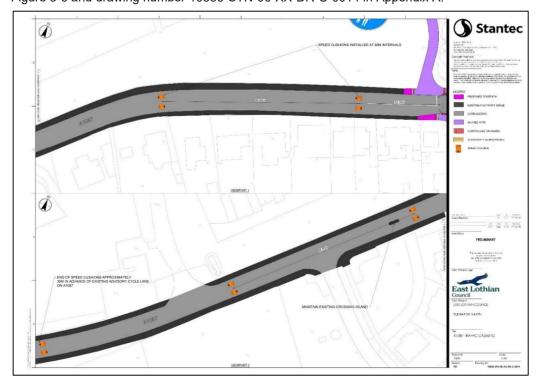


Figure 3-6 A1087 Traffic Calming



3.5 G: Changes to the Coastal Car Park access

- 3.5.1 Concerns have been previously expressed by local residents, Council Officers and the Belhaven Surf Centre over traffic and pedestrian movements in the area around the existing car park junction which is situated directly opposite access to the Surf Centre.
- 3.5.2 Consideration has therefore been given to relocating the existing car park access south and creating a crossroads at the Junction with Back Road. This arrangement was used as a temporary car park access point during April 2022 while resurfacing works were undertaken and feedback received was that the arrangement worked incredibly well and it improved visibility and access for all.



Figure 3-7 Car Park Temporary Access

3.5.3 The proposed arrangement with the car park junction being relocated to opposite Back Road also provides better connectivity for pedestrians and cyclists as it connects with the Back Road shared path and the proposed active travel path from the A1087, as well as footway improvements around the junction and crossing facilities. See Figure 3-8 and Drawing number 10835-STN-00-XX-DR-C-0008 in Appendix A.

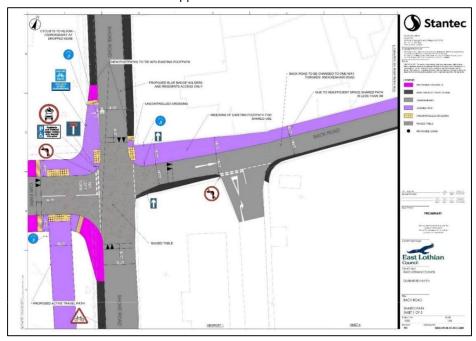


Figure 3-8 Proposed Car Park Access/Shore Road/Back Road improvements.



3.5.4 There would be potential to continue the Shore Road Active Travel Path beyond the junction to the Belhaven Bay recreational area, inside the hedge line however this has not been considered as part of the proposed concept layouts.

Coastal Car Park Access Restrictions

- 3.5.5 The section of Shore Road North of Back Road has high numbers of pedestrians as they walk between the Car Park, The Bridge to Nowhere and the John Muir Way Coastal Route. This area is also used by cyclists and residents accessing the Coastal Chalets. The footway over this section is narrow at just over 1m wide.
- 3.5.6 Residents of the holiday chalets have also expressed concerns about access and parking availability. A number of drivers attempt to park at this section of road as it offers free parking, however this has resulted in additional traffic and turning manoeuvres when drivers cannot find a space, therefore during peak times this increases the potential for conflict between non-motorised users and vehicles. There have also been reports of Motorhomes parking overnight and residents not being able to park.
- 3.5.7 Is it therefore proposed that north of the new car park junction will be for Residents and Disabled Badge holders only. Signage will be provided in advance to ensure drivers are aware of the restrictions. In addition, there will be no left turn allowed when exiting the car park to further discourage drivers attempting to access this area.
- 3.5.8 Differential surfacing will also be considered along the northern section of Shore Road to further enhance the change in road type at this location.

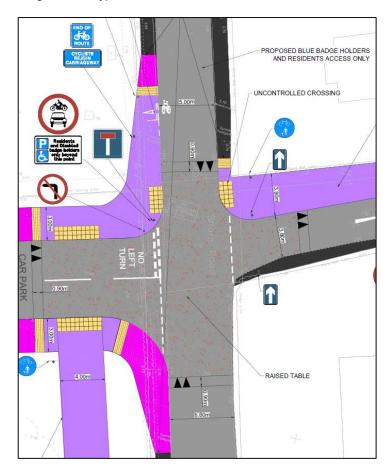


Figure 3-9 Shore Road Access North of Proposed Car Park Junction



4 Summary

4.1.1 Table 4-1 below gives a summary of the required steps to deliver each identified preferred option and the respective costs of each section:

Table 4-1: Summary Table

Project	Description	Planning Permission Required	Engineering Design Required	TRO Required	Cost
Α	A1087/ Shore Road Junction	✓	√		£450,016.53
В	Beveridge Row		✓	√	£209,333.48
С	Back Road	✓	✓	✓	£784,991.08
D	Shore Road Active Travel Path	√	√		£314,855.47
E	Footway Widening/ Crossing Improvements		√		£123,349.49
F	A1087 Traffic Calming				£53,100.00
G	New Shore Road Car Park Access	✓	✓		£183,193.73



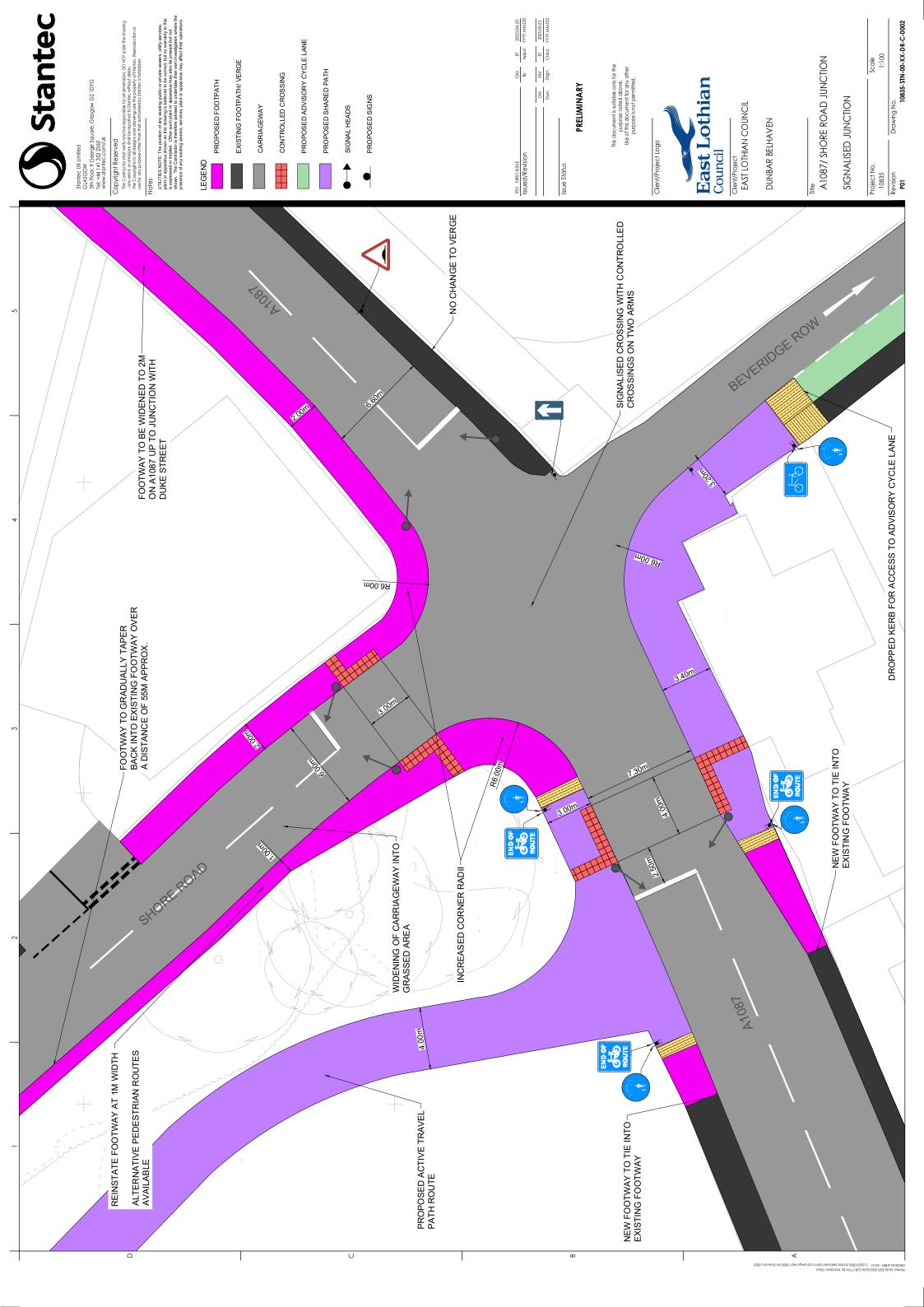
5 Community Engagement Feedback

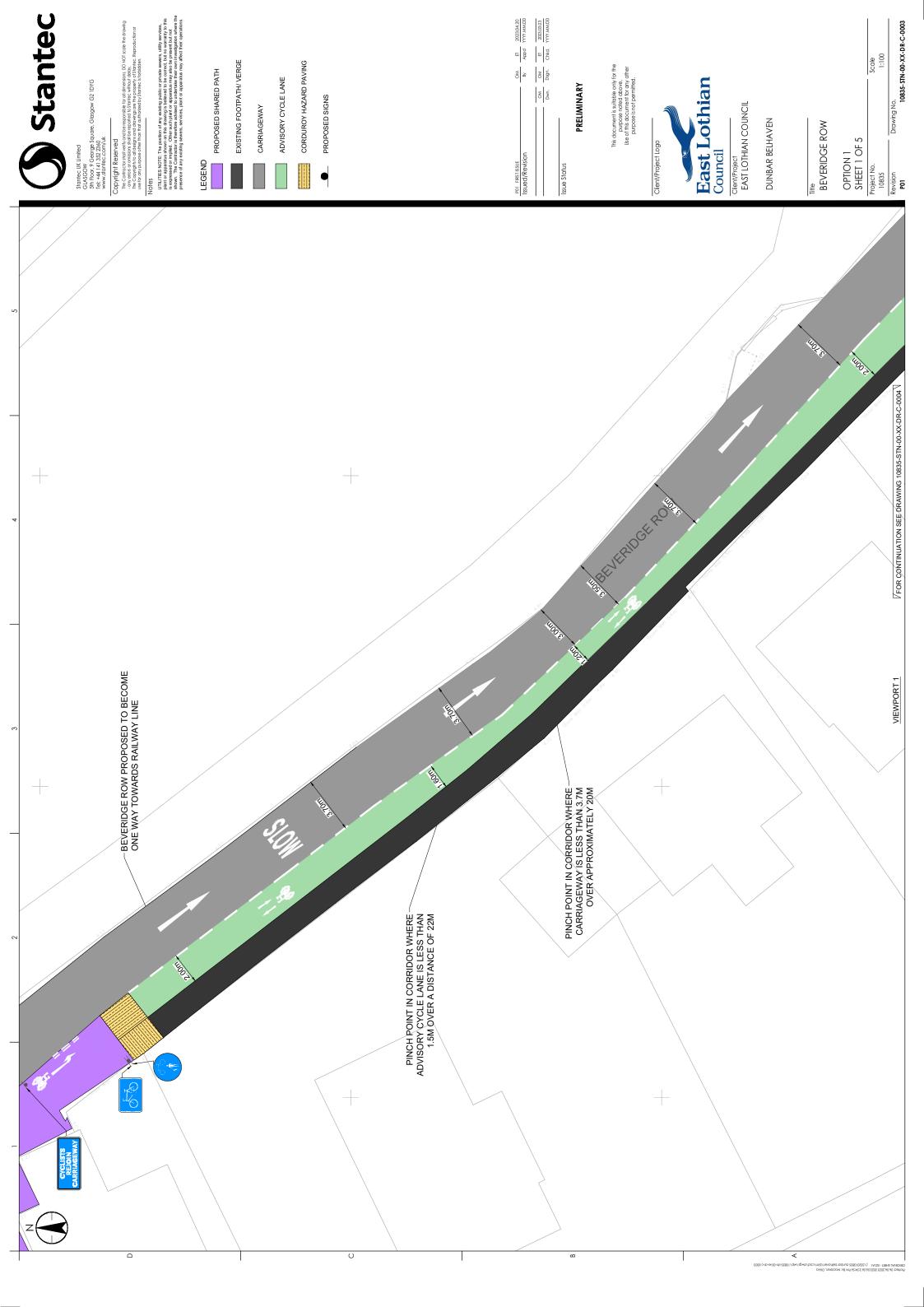
5.1.1 Community Engagement will be undertaken in June/July 2023 and findings recorded post conclusion of the engagement.



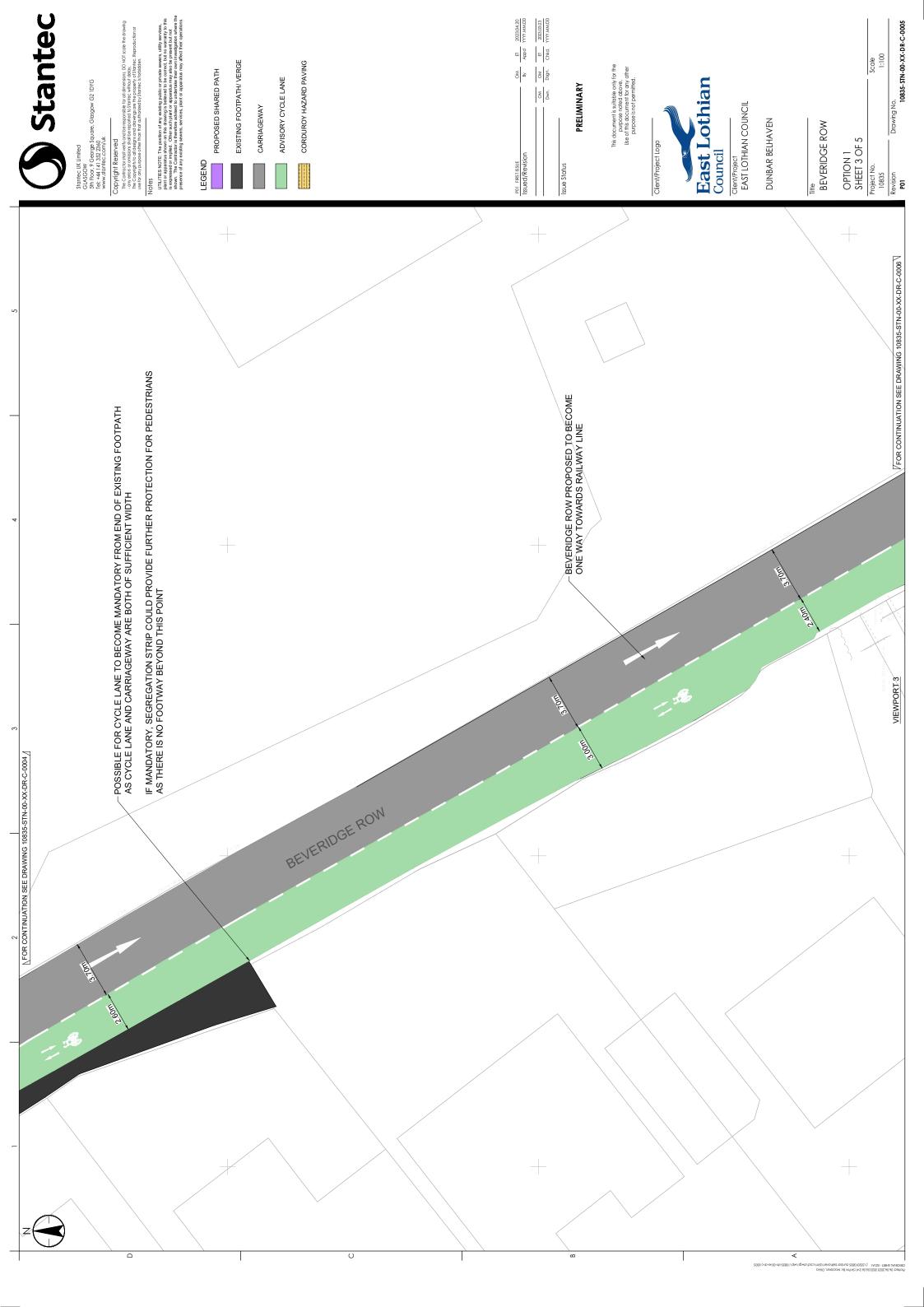
Appendix A

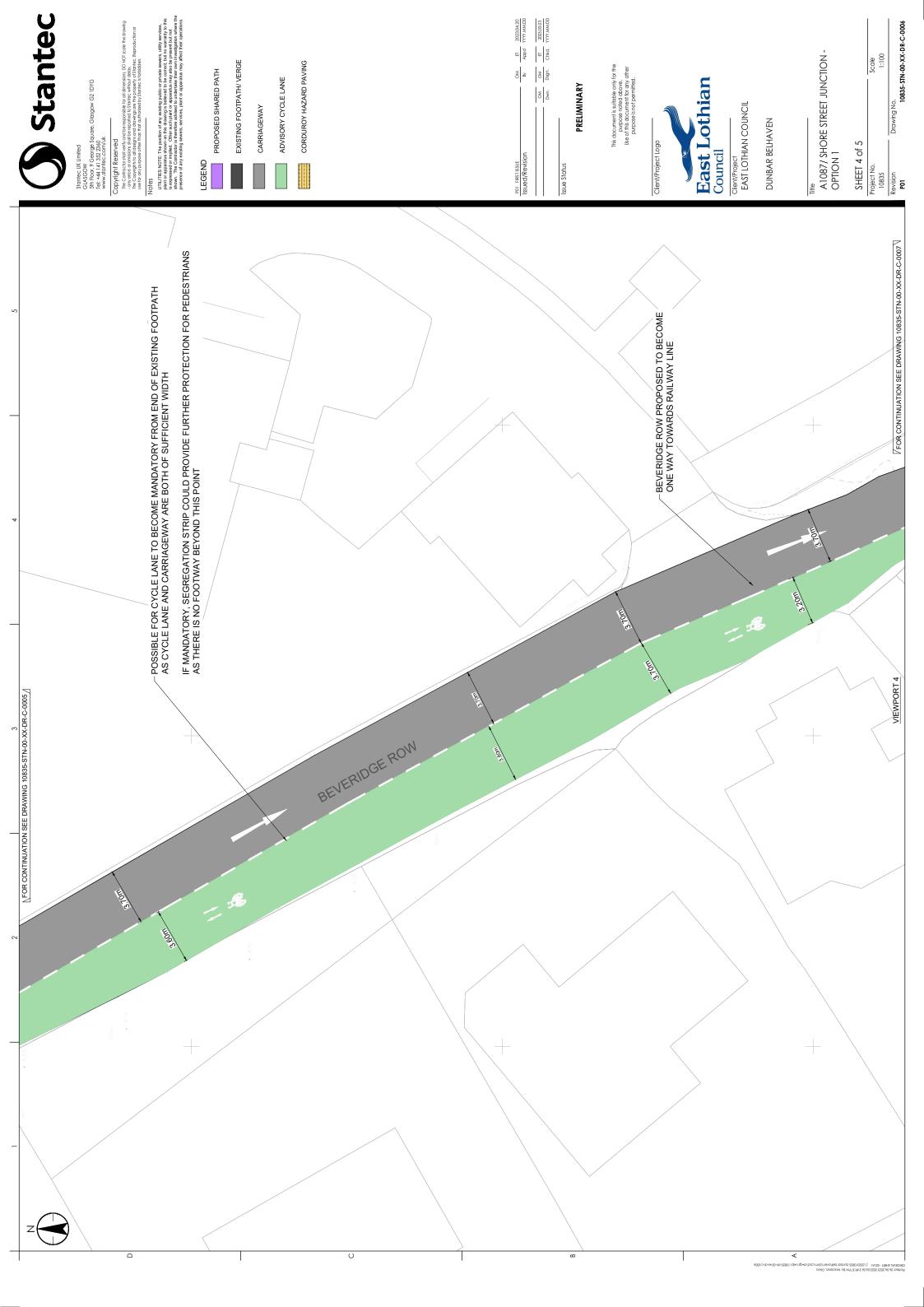
Options Drawings

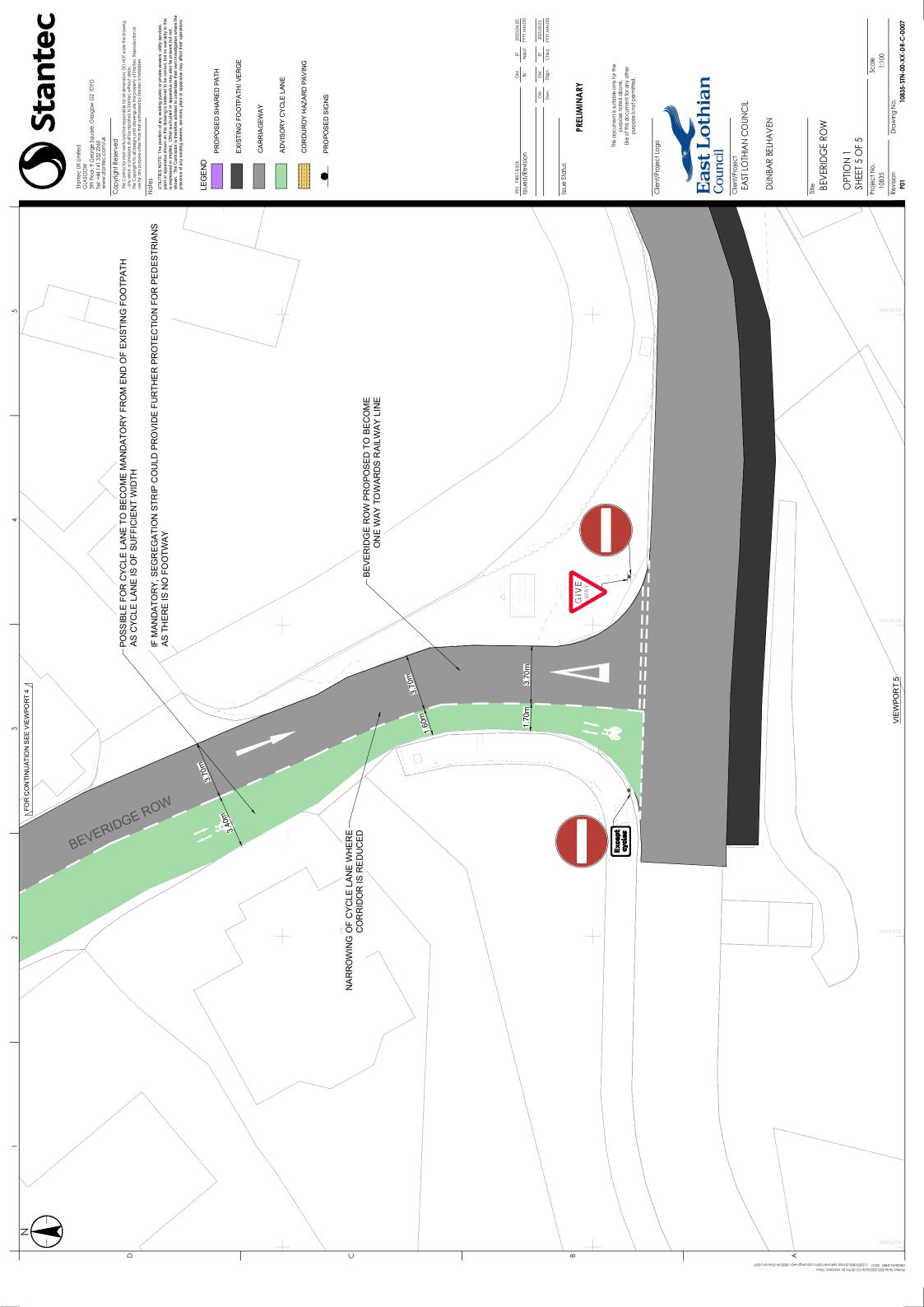


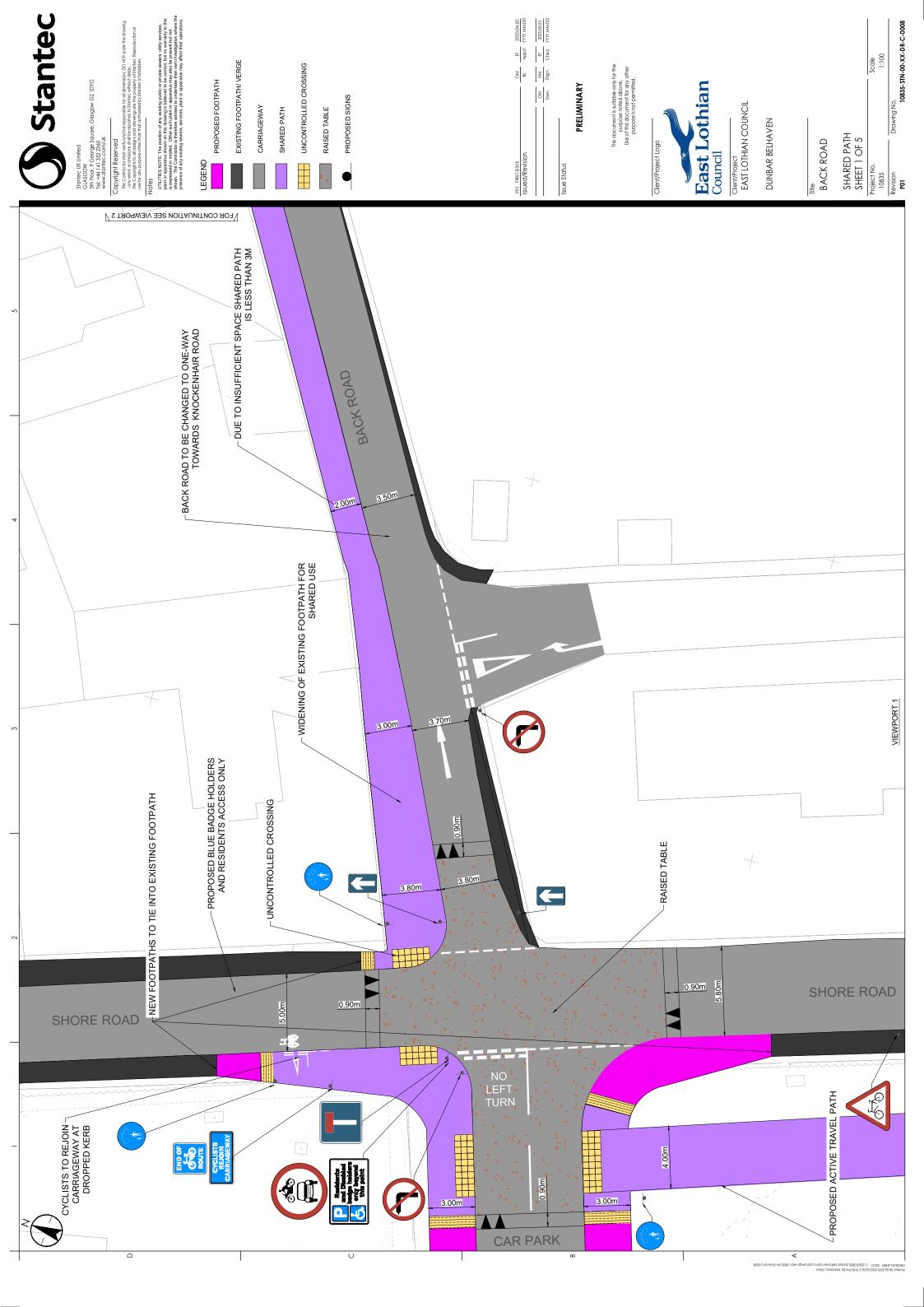


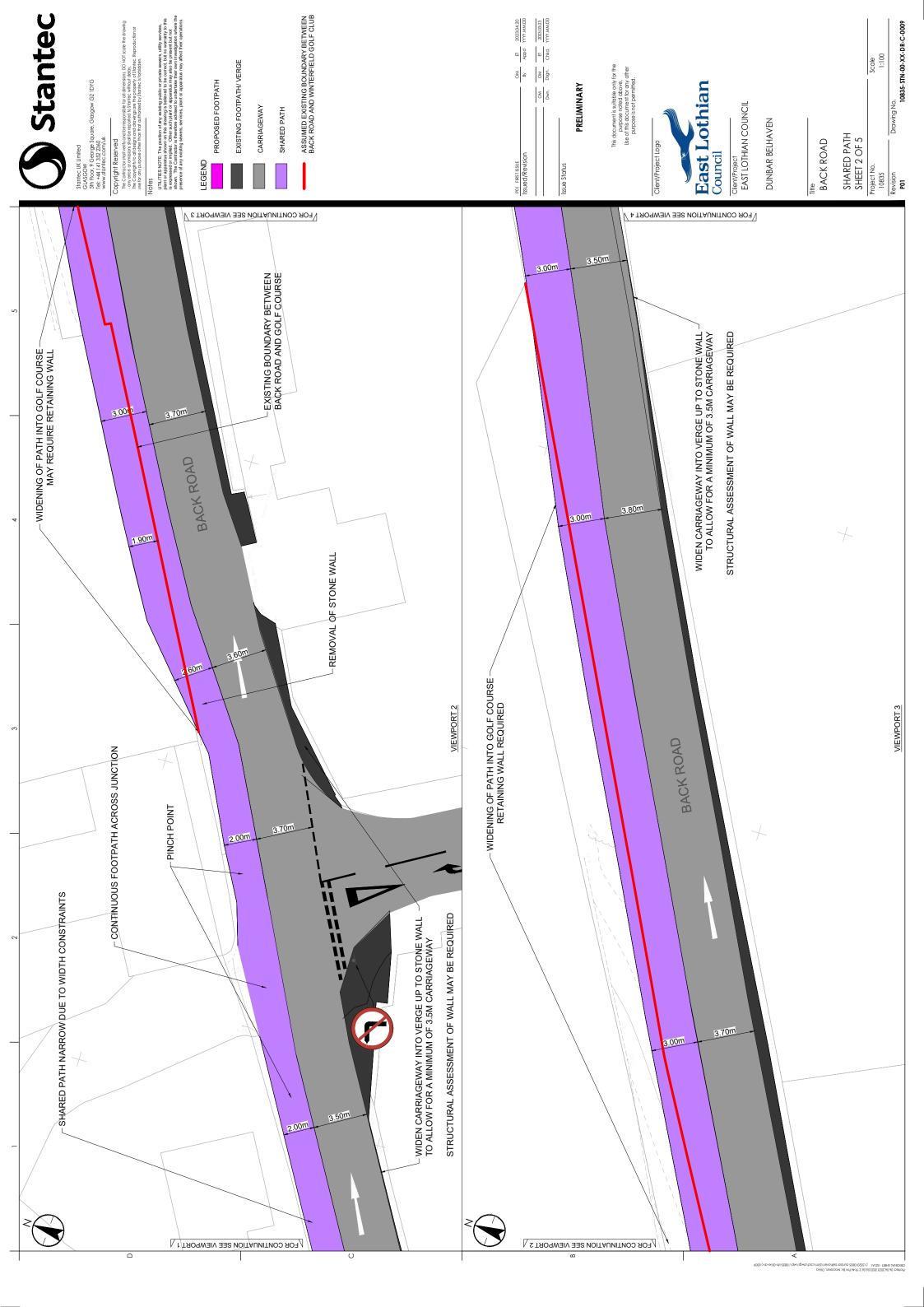


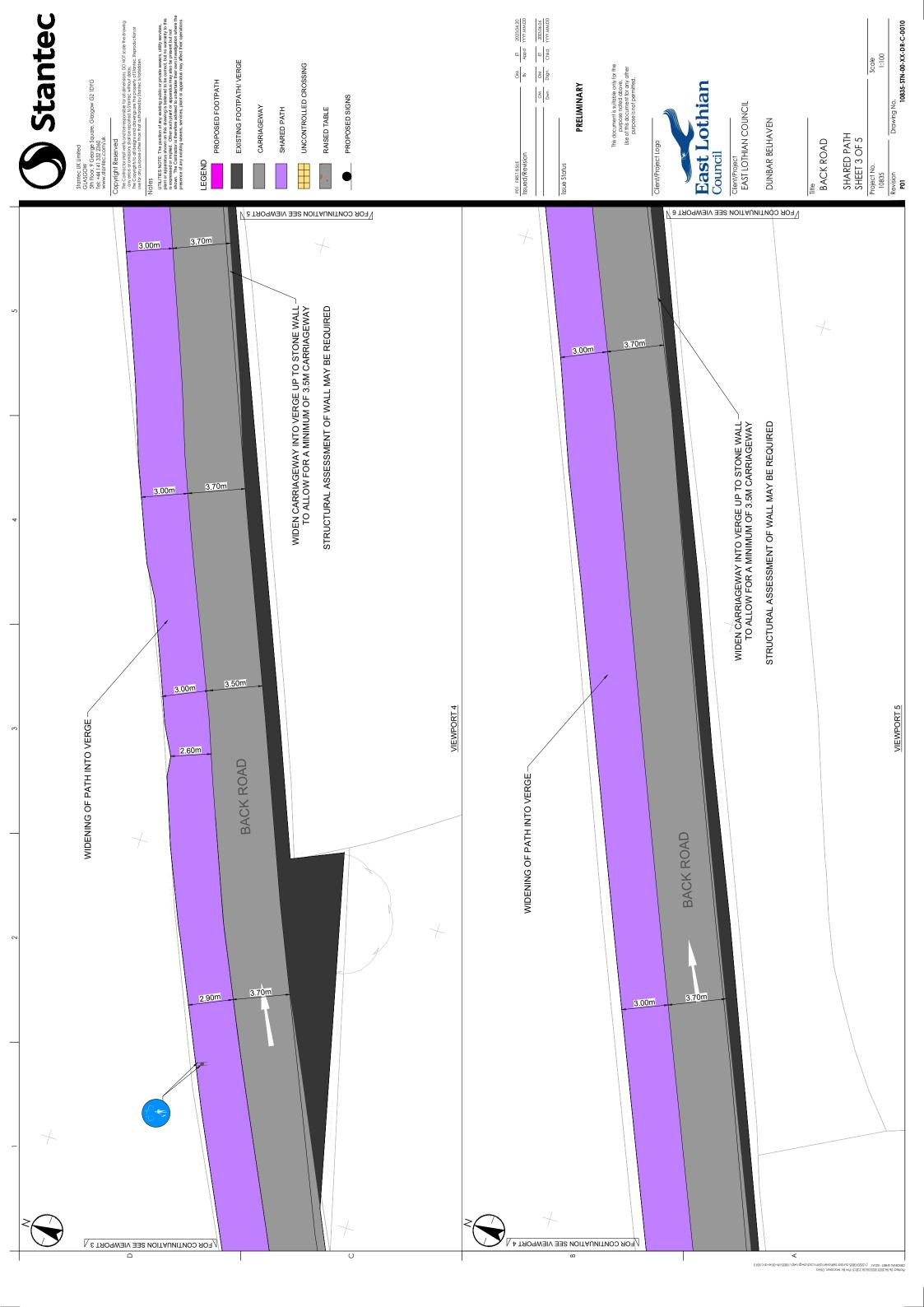




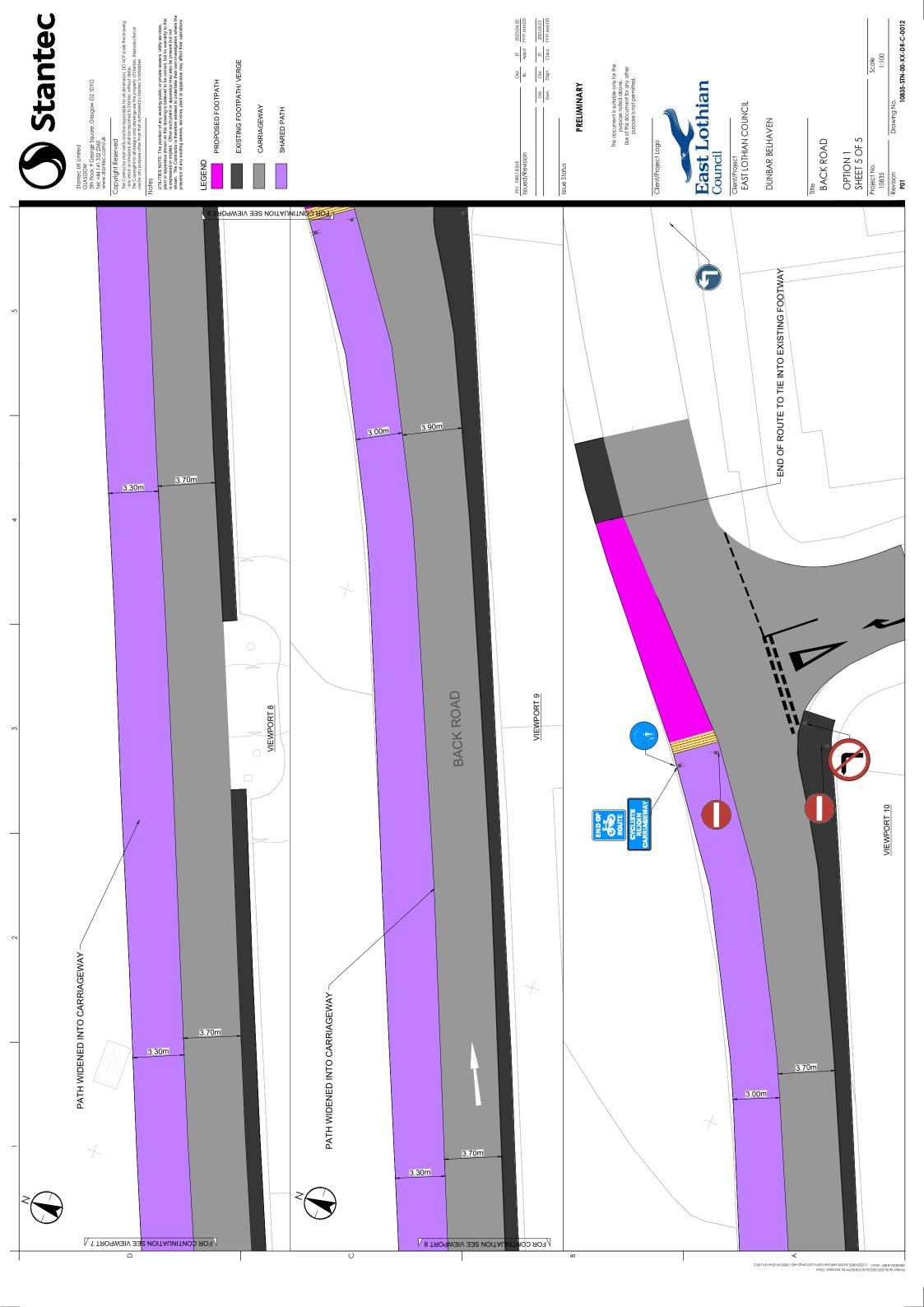




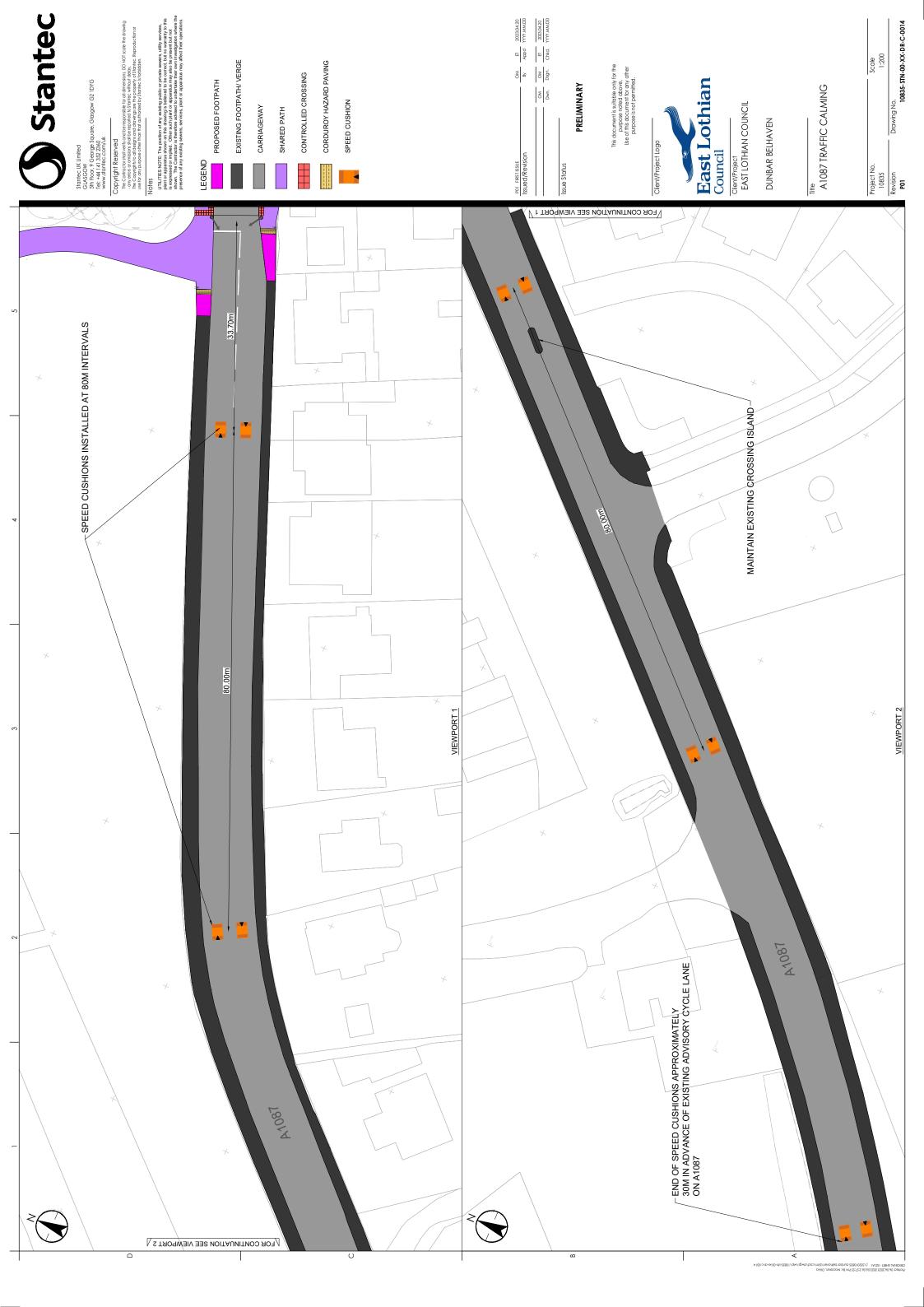


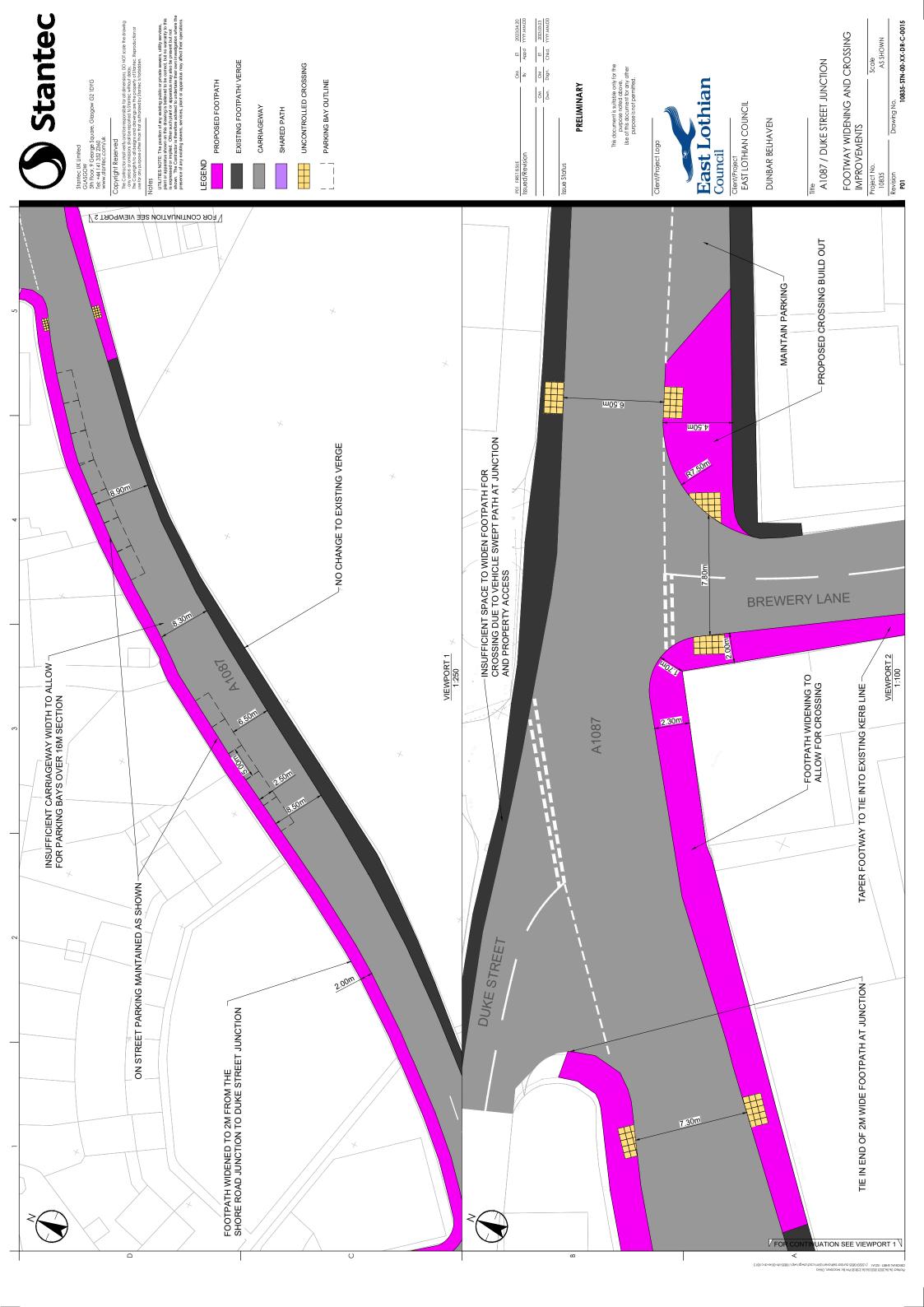














Appendix B

Swept Path Analysis





