Powderhall Junction

A public conversation on the preferred layout.

City of Edinburgh Council | January 2024



Introduction

This project seeks to enhance the 'Powderhall Junction' to **improve** conditions for pedestrians, cyclists and other wheelers (for example wheelchair or mobility scooter users).

The 'five ways' junction is comprised of McDonald Road, Broughton Road (east and west), St Marks Path (quiet route 20) and a new service / vehicular access for the former Powderhall Waste Transfer Site, opening the area up for a proposed development (to include a minimum of 35% affordable housing).

A community engagement was held at:

Link building classrooms, Broughton Primary School, 132 Broughton Road, EH7 4LD



Wednesday 24th January 2024, 15:30 until 19:00

Wider Project Area

The Powderhall Junction upgrade is linked to the redevelopment of the former Waste Transfer Site at Powderhall and its adjacent sites for new housing (proposed as car free), a new early year's centre and flexible work and studio space in the refurbished stables building. The infrastructure in question is:

- A section of St Mark's Path, part Edinburgh's Core Path network, at Powderhall between the Water of Leith and Broughton Road. St Mark's Path is part of quiet route 20 and runs north / south through the proposed development site at Powderhall giving access to national cycle route 75 to the north and connections to the wider Edinburgh cycling and walking network
- An improved entrance and connecting junction to the site: McDonald Road, Broughton Road, St Marks Path's and a new entrance to serve the redeveloped Powderhall
- A new connection between the former bowling greens site and Powderhall Village by introduction of steps and an accessible ramp for wheelers and cyclists
- A new east / west cycle and pedestrian path connecting the above connection through the Powderhall site to St Mark's Path and a new proposed cycle and walking route along the Powderhall railway line

More information on St Mark's Path and the new east / west cycle and pedestrian path will be shared at a later date.

The potential to convert the former Powderhall Railway Line to an active travel route is being explored separately.

Prioritising Sustainable Transpor



Vision

The vision for area is to make it as easy as possible for people to move about the local area by sustainable modes without the need for motorised transport, contributing to an improvement in health and wellbeing and a reduction in car use.

This vision matches closely to the aims of Places for Everyone to create safer, more attractive, healthier places by increasing the number of trips made by walking, cycling and wheeling for everyday journeys.



Objectives

The project objectives are:

- To promote a healthy, active and inclusive City through improved connectivity and providing attractive, safe spaces;
- To improve access to key services via active travel for communities in the local area;
- To achieve a measurable increase in cycling as an everyday mode choice within five years of construction;
- To contribute to the creation of a community led active travel corridor that incorporates local placemaking ideas through continued engagement with the local community; and
- To cater for users of all abilities (inclusive and accessible).



Option Appraisal

As part of Stantec's work to create a design for the junction, an option appraisal was undertaken. This aligns with the Design Review process outlined in <u>Cycling by Design</u>, the latest design requirements for cycling published by Transport Scotland in 2021.

The guidance supports the integration of cycling with people walking and wheeling in a holistic and attractive environment that serves the needs of all users

Cycling by Design (2021)



Figure 5.9: Protected signal-controlled junction layout (no internal stop lines) (3D)

Preferred Option

Through this process a preferred option was identified. The preferred option is an adaptation of a protect signal-controlled junction layout, shown in Figure 5.9 of Cycling by Design (see opposite).

The preferred option represents a full reconfiguration of the junction to include cycle tracks at carriageway level and traffic signals which provide more priority, and improve safety, for pedestrians and cyclists.



Protected signal-controlled junction layout (no internal stop lines)

The full signal-controlled layout requires pedestrians to cross the road and the associated cycle track in a single movement. Crossing timings will be set to enable crossing of the full width of both facilities.

The advantages of a full signal-controlled layout includes:

- Less space is required than for layouts with a zebra crossing associated with the cycle track
- Pedestrians have more controlled priority (and potentially greater perception of safety) over the cycle track than for layouts with a zebra crossing of the cycle track. This may be desirable where cycle volumes are high and pedestrian crossing opportunities would otherwise be limited.



Technical Work

To inform the detail of the design of the junction, the following work has been undertaken:

- 1. Preliminary Ecological Appraisal (PEA)
- 2. Stage 1 Road Safety Audit
- 3. Vehicle tracking
- 4. Multi-modal modelling
- 5. Utility surveys (C2)



Engagement

A full Stakeholder and Community Engagement schedule has been prepared and delivered based on information compiled for the Equality Impact Assessment (EqIA).

The main components of the consultation for Powderhall Junction at Stages 0 to 2 were:

- An online Microsoft Forms survey, open between 1st September and 25th September 2022, which received **412 responses**.
- Stakeholder workshops which were conducted over Microsoft Teams with the following groups:
 - CEC Officers
 - External stakeholders including Community Councils, local schools and parent councils and emergency services
 - Disability and protected characteristics groups / individuals, including Edinburgh Access Panel
- A public event held at Broughton Primary School on Thursday, 15th September 2022 between 15:00 and 19:00.

• Discussions with the School Crossing Patrol Officer operating at Powderhall Junction.

The public event and online survey were publicised through:

- Emails to all of the stakeholders asking them to further distribute the information to their associated groups
- Social media posts
- Council webpage
- Approximately 7,000 flyers distributed to nearby properties.

Stakeholder Engagement

The main themes from stakeholder comments were:

- Traffic congestion at junction due to poor set-up of temporary traffic lights associated with the tram works, and concern that further use of temporary solutions will also be ineffective.
- Priority for pedestrians should be reinforced along St Marks Path.
- Interchange between St Marks Path and Powderhall Junction needs to provide a coherent transition area.
- Preferred option is circuitous and does not provide for cyclist desire lines.
- Consideration should be given to installing yellow box markings at junction to ensure junction remains clear of vehicle traffic.
- Existing footways towards Broughton Road Railway Bridge are inadequate (too narrow).

Community Engagement

The project team **reached approximately 426 people** through the online survey (412 responses) and the public drop in event at Broughton Primary School (~14 attendees).

The following were key statistics from community comments:

 366 local residents responded, 67 taking their child(ren) to school, 49 working in the area, 8 local business owners, and various others (including 4 campaigners). 29 respondents consider themselves to have a disability, 9 of which said there are particular considerations relating to their disability that should be considered with regard to redesigning the junction.

Although there was a high level of support for the proposed scheme, a range of constructive feedback was received. The main themes were:

- The cycle lanes should extend further.
- There should be more space for pedestrians (with some suggesting the cycle lanes are too wide).
- The design is too complicated and difficult to understand.
- The bus stops on Broughton Road (south of the junction) should be retained where they are.
- Concern about the proximity of the entrance to the former waste transfer site.



You Said, We Did

Based on the feedback of stakeholders and the local community, the following changes to the design layout were considered at developed design stage in consultation with relevant stakeholders (including disability, mobility and protected characteristics groups) and Sustrans. The designer comments provided detail the designers response to each consideration:

Key Consideration for Developed Design	Designer Comments
Advanced Stop Lines for cyclists could be provided on some, or all, approaches to the junction.	The guidance in Cycling by Design does not include these.
Segregation detail for cycle lanes; height and width of kerbs etc. with particular consideration to users with mobility / visual impairments.	It is intended that there will be a buffer of 0.5 m between the carriageway and cycle tracks formed by a 60 mm kerb at a 45 degree angle as indicated in Cycling by Design which is based on research commissioned by The Guide Dogs for the Blind Association. Some small section of kerb within the carraigeway have been removed to reduce the potential for trip hazards.

Key Consideration for Developed Design	Designer Comments
Extension of cycle lane to Broughton Primary.	Following consultation with Broughton Primary and Sustrans it has been agreed to extend the design to connect to the Broughton Primary entrance on McDonald Road. Broughton Primary suggested there is no merit in extending the cycle lanes to their entrance on Broughton Road as this is only serves part of the school and pupils on bikes are encouraged to access via McDonald Road
The position of right turn cycle storage lane for cyclists (opposite St Mark's Path) could be adjusted.	This is being reviewed in consultation with the design team for the bowling green and waste transfer site.

Key Consideration for Developed Design	Designer Comments
A two-way cycle crossing should be provided on the north side of Broughton Road so cyclists travelling south and turning right into St Mark's Path have a more direct route. This is not shown as an option in Cycling by Design, but could be considered.	A two-way cycle crossing is not part of the Cycling by Design guidance and could create confusion.
Potential for "keep clear" or yellow hatch markings to aid vehicles exiting from the former waste transfer site.	Keep clear marking have been added.
Northbound cyclists on Broughton Road should be able to always cycle through the junction except during the pedestrian crossing phase.	This is how the signals for northbound cyclists will operate.

Key Consideration for Developed Design	Designer Comments
Cycle users turning left should be able to continue at all times, again with the exception of the pedestrian crossing phase.	This is how the signals will operate.
The signals should be designed such that the overall delay for cycle users at the junction is less than the overall delay for motor traffic, ideally with detection of approaching cyclists.	Delay for cyclists will be minimised through the traffic signal operation.

Table of designer comments to the community and stakeholder feedback received on the previous designs.



Traffic Signal Staging

- It was asked if zebra crossings could be provided for pedestrians to cross the cycle lanes rather than traffic lights. These cannot be included as there is not sufficient space for refuge islands between the cycle lane and traffic lane for pedestrians to safely wait.
- The footway crossover of the former waste transfer site will be raised (i.e. the footway is one level and vehicles are ramped up and over it). This will make it clear that pedestrians have priority and will reduce vehicle speeds.
- Modelling has been undertaken using industry standard software packages and shows that, at most times of the day, the level of queuing and delay for vehicles is within acceptable ranges. Some queuing and delay may be experienced at the busiest times, which is normal for an urban area, and it will be managed by the traffic signals. For example, the delay for vehicles turning right into or out of McDonald Road will be reduced at busy times.



Extension to the North

Due to stakeholder and community feedback, the extent of the proposals has been extended north along Broughton Road over the railway bridge.

The key features are:

- Widening of the footway on the eastern side of the carriageway from around 1.0m to 2.0m in accordance with "Inclusive Mobility" guide. This provides more space for pedestrians, particularly those in wheelchairs, mobility scooters or pushing prams.
- Narrowing of the road to 6.5m in accordance with Edinburgh Street Design Guidance which states this width is appropriate for a bus route.
- Widening of the footway on the western side of the carriageway from between 2.2m to 3.6m to between 2.6m and 4.2m. This provides more space for pedestrians, particularly those in wheelchairs, mobility scooters or pushing prams and creates a more welcoming environment for The Stables building which is being redeveloped.
- There is no loss of on-street parking on Broughton Road as part of this proposal.

Positive engagement has already taken place with the Council teams dealing with Traffic Regulations, the Citywide Roadworks Coordination Team and The Stables Project Programme Development Officer.



Extension to Broughton Primary Entrance

Due to stakeholder and community feedback, the extent of the proposals has been extended along McDonald Road to the entrance with Broughton Primary.

There are a number of considerations on this route, including:

- · Requirement to accommodate bus services
- On-street parking
- Car club bays
- Retention of established trees

A number of options have been considered and discounted:

- School Street does not meet the criteria because it is a bus route
- Unidirectional cycle track cannot be accommodated with retention of trees and required width for a bus route

- Bi-directional bus route with one way traffic would impact on bus route and wider traffic flow
- Footway level cycle track the trees would be within the cycle track and this is not appropriate
- Mixed traffic layout with advisory cycle lane advisory cycle lanes are not appropriate in terms of safety
- Shared footway layout these are not best practice in urban areas and are particularly unsuitable for those with visual impairments

The preferred layout is therefore a mixed traffic street, as shown opposite.

Cycling by Design defines that mixed traffic streets allow cycle traffic to mix with motor traffic and bring the following potential benefits:

- Freedom of movement for cycle users for access and egress
- Space efficiency and flexibility of the street's function and use
- Increased driver awareness of cycle users, particularly where the design enables more cycle users to use the street, supporting the control of traffic speed
- Easier and less expensive to provide and maintain.



Extension to Broughton Primary Entrance

The following will be incorporated:

- Widening of western footway with removal of on-street parking and relocation of car club bays
- Retention of all established trees
- Use of bollards / planters / planting / cycle parking to prevent inappropriate parking on the footway
- At the entrance to Broughton Primary it is proposed that there will be a safe, direct crossing point for pedestrians. Lothian Buses have requested that this crossing is not raised as McDonald Road is a bus route. Pencil bollards will be included to improve safety and reinforce to drivers that this is a school environment
- Further north, on McDonald Road, there will be a priority working arrangement with a bypass for cyclists travelling north
- The priority working arrangement will have the benefit of reducing vehicle speeds making the environment safer for

cyclists on the road and those travelling south on the road will have priority over oncoming vehicles

Survey

Let us know your thoughts on the preferred option!

The survey will be live until Friday the 16th February 2024

Please allow 10 minutes to compete the survey.

You can access the survey either through the embedded survey on the right/above or by clicking this button:

Survey

Paper copies or alternative formats of the survey are available on request or you can telephone +44 (0)131 335 4200 to complete the survey over the phone.

Email correspondence can be directed to: PowderhallJunction@Stantec.com

Next Steps

A community engagement event will be held in the Link Building at Broughton Primary School (132 Broughton Road, EH7 4LD) on Wednesday 24th January 2024 between 15:30 and 19:00. All are welcome, so please feel free to share the invite more widely.

We will be reviewing the feedback received through the survey and updating this webpage to answer queries and provide more clarity, so please visit again for more information.

Following this round of stakeholder and community engagement, updated designs will be prepared. The Council will continue to refine them in consultation with key stakeholders and then intends to use them to apply for Sustrans Places for Everyone funding for the scheme to be constructed. If this is successfully secured, the Council will undertake a tender exercise to appoint a suitably qualified contractor to build the scheme. The construction period will be co-ordinated with that of the nearby developments and further information will be provided nearer the time. Traffic management will be in place to minimise disruption to the local area and it is not envisaged that the junction will be closed for a significant period of time.

Thank you

Thank you for taking the time to read about and participate in our public conversation on the updated designs for Powderhall Junction.