Mile End Roundabout Oswestry

1 / Background and Purpose of Today

This consultation has been designed to give you more information about the planned junction improvement scheme at Mile End Roundabout and how the project will develop over the coming months and years. The following boards will inform you of:

- The requirements for the scheme
- Optioneering elements
- Details of current proposals
- Programme and funding

Shropshire Council has strategic aspirations to grow Oswestry and offer increased housing and employment opportunities. Mile End roundabout will experience significant increases in traffic as a result of the planned allocation of residential and commercial properties.

To mitigate for this a number of options were considered, and the optioneering exercise identified a preferred option which incorporates an additional roundabout and local diversion of the A5 to form a new “dumbbell” junction.

External funding for the scheme is currently being explored.

Thank you for attending today’s consultation.

All of the material presented today on the display boards is available on Shropshire Council's website. www.shropshire.gov.uk

The closing date for the questionnaire is 1st November 2019

We trust that you will find the consultation informative.

Note: Over the coming months the design will be developed further and therefore the final planning submission may differ from the information presented on these boards

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2 / Requirements for the Scheme

Shropshire Council's local plan promotes the building of homes on the adjacent Oswestry Sustainable Urban Extension site (SUE). The SUE site to the northwest of Mile End Roundabout is approximately 29.3 hectares, and will accommodate approximately 800 homes and some commercial use.

Mile End Roundabout in its current form would experience additional congestion as these developments come online. The proposals displayed today, will accommodate the traffic from these new dwellings and improve the local network. In Oswestry the local plan aims to provide 1,800 residential dwellings and 19 hectares of employment between 2016 and 2036.

The core objectives for the improvement scheme are:

OB1	**Make use of external funding sources** The junction improvements are affordable and make best use of external funding streams	✓
OB2	**To improve the local network** The junction and the associated development will not have a detrimental impact on the Strategic Road Network within the current Local Plan period	✓
OB3	**To support Oswestry's Growth Corridor** The scheme supports Shropshire Council's aspirations for the Oswestry Growth Corridor	✓
OB4	**To aid in the growth of Oswestry** The junction improvements supplement the local plan for Oswestry	✓

The land surrounding Mile End Roundabout has been allocated as an area for strategic growth. The case for the junction improvement considers the traffic delays in the 2021 future year with the proposed development in place and compares the 'Do Minimum' with the 'Do Something' highway network. 'Do Minimum' situation represents the current highway network within the surrounding area, 'Do Something' situation includes the proposals presented on these boards:

Do Minimum	Do Something
Increased traffic queue times	Decreased traffic queue times
Journey time reliability reduced	Journey time reliability increased
Growth within Oswestry and surrounding areas limited	Promote and support growth within Oswestry Growth Strategy and Local Plan

Traffic Levels

A traffic base model was provided by Highways England, this model demonstrates that traffic levels on each of the roundabouts arms will increase. The average queue on the A483 currently stands at 120m (2017 Base Year). With the expected levels of growth and planned commercial and residential development, the A483 will exhibit an increase in the average queue length up to 1,387m by 2021 if the current highway network remains the same. If by 2021 the improvement proposals presented on these boards are implemented (Do Something) the average queue will reduce to 129m even with the expected levels of growth and planned development.

	A5 North Average Queue (AM)	A5 East Average Queue (AM)	Services Average Queue (AM)	A483 Average Queue (AM)	B4579 Average Queue (AM)
Base Year 2017 Do Nothing (Existing)	1m	2m	1m	120m	49m
Future Year 2021 Do Minimum (No Improvements)	3m	12m	5m	1,387m	95m
Future Year 2021 Do Something (With Improvements)	1m	1m	2m	129m	5m

View from existing Innovation Park Stub

View of existing offline site

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3 / Optioneering

In order to analyse the most appropriate solution, an options sifting exercise was undertaken for the junction with twenty-one options being considered during this process, taking into account the short to medium and long-term benefits of each option.

From this an online and offline option was taken forward, principally based on cost, improvement capacity and deliverability. The online option, involves an improvement to the existing roundabout, broadly at its current location. The offline option involves a ‘dumbbell arrangement’ which would incorporate a second roundabout in the land identified for the Innovation Park already owned by Shropshire Council.

Online Option

The online option has three variants and all benefit from a larger roundabout diameter, with increased circulatory carriageway to accommodate more traffic on the roundabout. DS1 proposes a one-way cut through taking all of the A5 east traffic up towards the A5 north, this option also benefits from each leg containing traffic signals. DS3 uses the same layout as DS1, but without the cut through. The final online variation brought forward was DS2A, which was an enlarged roundabout without traffic signals.

The main issue presented with the online variants was the ability to build the scheme without causing significant disruption to road users for an extended period of time. All variations of the online option have a neutral impact on the landscape with minimal tree loss and vegetation along the approach arms.

Offline Option

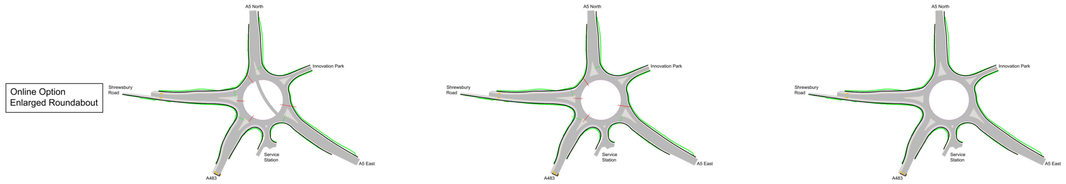
The offline option also has three variants which all include an additional roundabout, to by-pass the A5 traffic north and east. DS4 and DS4B are very similar, with DS4B benefiting from keeping the existing A5 east arm operational one-way for traffic travelling to Oswestry, the services and the A483 south. DS4A closed the existing A5 in both directions such that all traffic to and from Oswestry and the A483 south travels through the existing and proposed roundabout.

DS4B will be carried forward to planning. This is due to the traffic model predicting it to have the best performance with least traffic delays. This option also benefits from the majority of the construction taking place off the highway network. Although the A5 north and A5 east will need traffic management in place to construct the connections to the existing road network.

The offline options will have some detriment to the landscape as trees and hedge rows will require removal, however the current proposals involve planting additional trees and hedgerows to accommodate for the loss of habitat. Along with this a drainage pond will create improved local biodiversity. Details of the proposals can be seen on board five.

Impacts	Online	Offline
Maximising positive economic benefits to Oswestry	×	✓
Minimise disruption to highway network during construction	×	✓
Planning permission required	×	✓
Reduction of traffic queues	✓	✓
Improved air quality	✓	✓
Protection of veteran treeline	✓	✓

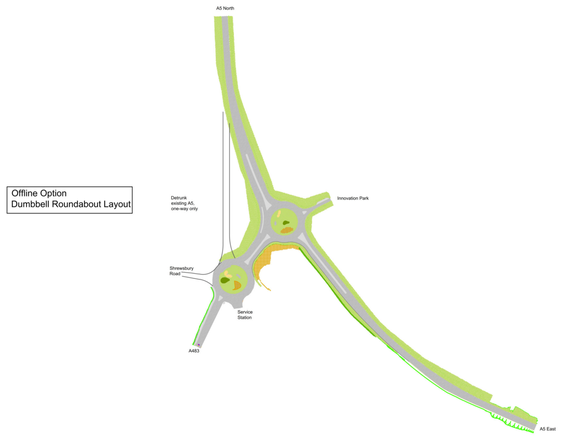
Oswestry - Option Schematics



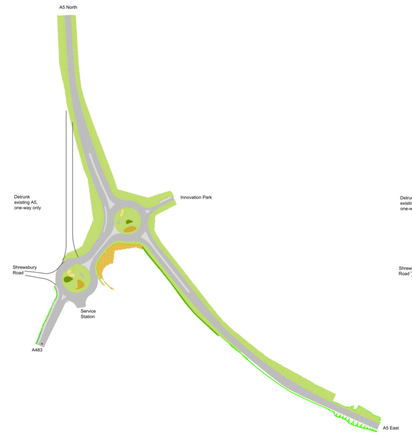
DS1 Enlarged Signalised Roundabout with one-way cut-through

DS3 Enlarged Signalised Roundabout

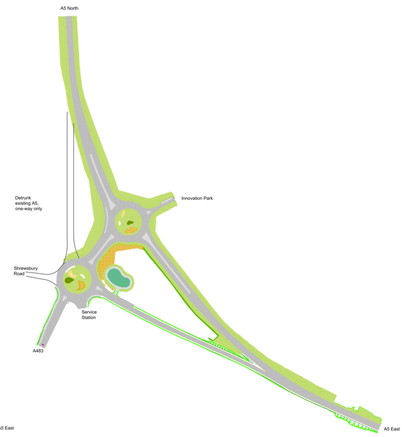
DS2A Enlarged Roundabout



DS4 Dumbbell, A5 diverted to proposed roundabout. existing A5 detrunked.



DS4A Dumbbell, A5 diverted to proposed roundabout. existing A5 detrunked. Existing junction circulatory closed at proposed link



DS4B Dumbbell, A5 diverted to proposed roundabout. existing A5 detrunked. Existing junction circulatory closed at proposed link

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4 / Optioneering continued

The below table is a summary appraisal for each option stated within the ‘online’ and ‘offline’ options. The appraisals compare numerous environmental factors from landscape to water environment:

Environmental Appraisal Table

Impacts	Summary of Key Impacts	Assessment Qualitative					
		Online			Offline		
		DS1	DS2A	DS3	DS4	DS4A	DS4B
Noise	• Within 500m of the existing roundabout there is a single dwelling on Shrewsbury Road, approximately 360m to the south. Beyond 500m, sensitive receptors include dwellings on Maple Avenue to the north west; and isolated dwellings to the north east and east.	Traffic data is not available for individual design options. Identification of the number of dwellings and other sensitive receptors which will experience an increase or decrease in noise level resulting from the individual design options cannot be determined at this stage. .					
Air Quality	• The online options have the potential to impact local air quality at sensitive receptors in proximity to the roundabout; primarily the staff and customers using the Oswestry Gateway and Euro Garage services. • The offline options have the potential to impact local air quality at sensitive receptors in proximity to the roundabouts; primarily the staff and customers using the Oswestry Gateway and Euro Garage services. • The distance between the sensitive receptors located at these locations and the extent of the proposed improvements will be broadly similar to the existing layout and therefore will not alter the pathway distance from vehicle emissions to the receptors. • Option DS1 and DS3 require signalling changes and therefore there is potential for changes to the speed of road traffic, which could impact local air quality. • The offline options will likely reduce flows and congestion at the Mile End Roundabout, potentially leading to a improvement in air quality at nearby receptors (Oswestry Gateway and Euro Garage Services). • None of the design options lie within an Air Quality Management Area.	Neutral					
Greenhouse gases	• Alleviation of road traffic congestion as a result of the implementation of any of the design options has the potential to reduce greenhouse gas emissions. However, any increase in road traffic flows may negate the potential benefit. Confirmation of changes to traffic flows and speeds along the affected road links would be required to assess this quantitatively.	Not Calculated					
Landscape/Townscape	• For the online options, the proposed enlarged roundabout is expected to result in a neutral impact on landscape character and visual receptors, being largely contained within the existing highway boundary and reflecting the form of the existing junction. As a result there would be a low level of tree loss, hedgerows and agricultural land, but the majority of screening vegetation along the A5 would be retained, resulting in no discernible change in landscape character. • For the offline options, the proposed double roundabout is expected to result in a slight adverse impact on landscape character and visual receptors, extending to the east, making it more visually prominent than the existing junction. There would be the loss of vegetation, impacting trees, hedgerows and agricultural land. Some screening vegetation would be removed, making the existing A5 more visible in the landscape. There would be a perceptible change to the landscape character with the introduction of a second roundabout and substantially larger footprint than the existing junction.	Neutral	Neutral	Neutral	Slight adverse	Slight adverse	Slight adverse
Historic Environment	• No statutorily designated heritage assets would be affected (including setting); the impacts would be on known and possible archaeological remains. The key heritage assets comprise the site of a Second World War prisoner of war (POW) camp of low heritage significance and the potential for unknown prehistoric remains of uncertain significance, although considering likely past impacts assumed from adjacent road construction, extensive surviving remains of high significance are unlikely to be present. The online options will comprise groundworks during the construction phase within the field to the north east of the Mile End roundabout, as well as road widening works to the existing highway boundary. The offline options will comprise the construction of a new highway and roundabout within the field to the north east of the Mile End roundabout, as well as road widening works within the highway boundary. Previous archaeological investigations in the field to the north east have confirmed the survival of archaeological remains associated with the POW camp and, dependant upon disturbance from the construction of the POW camp, there is also a low to moderate potential for unknown prehistoric remains to survive. Whilst construction of the existing road network in the late 20th century is likely to have truncated below ground archaeological remains within the highway boundary, there is still the potential for the survival of deeper cut features.	Moderate adverse					
Biodiversity	• No statutory or non-statutory designated sites are within or surrounding 2km of any of the design options. • All design options would impact several habitats recorded present on site during the Preliminary Ecological Appraisal, including improved grassland, scattered trees, hedgerows and ephemeral grassland. • All design options have the potential to impact local biodiversity through the loss of scattered trees and hedgerows, which are suitable for a range of protected and notable species. • A great crested newt derogation licence will be required from Natural England, as the footprint of all design options is within 500m of ponds confirmed as supporting great crested newts. No aquatic habitat is anticipated to be lost. Suitable terrestrial habitat will be affected, namely improved grassland and hedgerows. • Three trees recorded within the site were reported as supporting bat roosts in 2007 by EcoTech. Further aerial tree climbing and emergence and re-entry surveys by WSP in 2019 have found no evidence of bats roosting in these trees. However, linear features including trees lines and hedgerows across the site are considered to provide commuting and foraging opportunities for bats.	Slight adverse					
Water Environment	• All design options are located in Flood Zone 1 and therefore at very low fluvial flood risk. There is a medium to high risk of surface water flooding at the south east of all design options. There are no sensitive surface water bodies located within 100m. Having the A5 continue through the roundabout, there is more impermeable surface, which will increase risk of pollution from routine runoff, and pose an impact to surface water flood risk. Option DS4 is expected to have a greater risk of spillage than the other design options, due to the complete western roundabout introducing more junctions. The impermeable area of Option DS4B, and therefore risk of pollution from routine runoff, is greater than the other design options. However, these differences are manageable with mitigation (pollution control and a sustainable drainage system).	Neutral					

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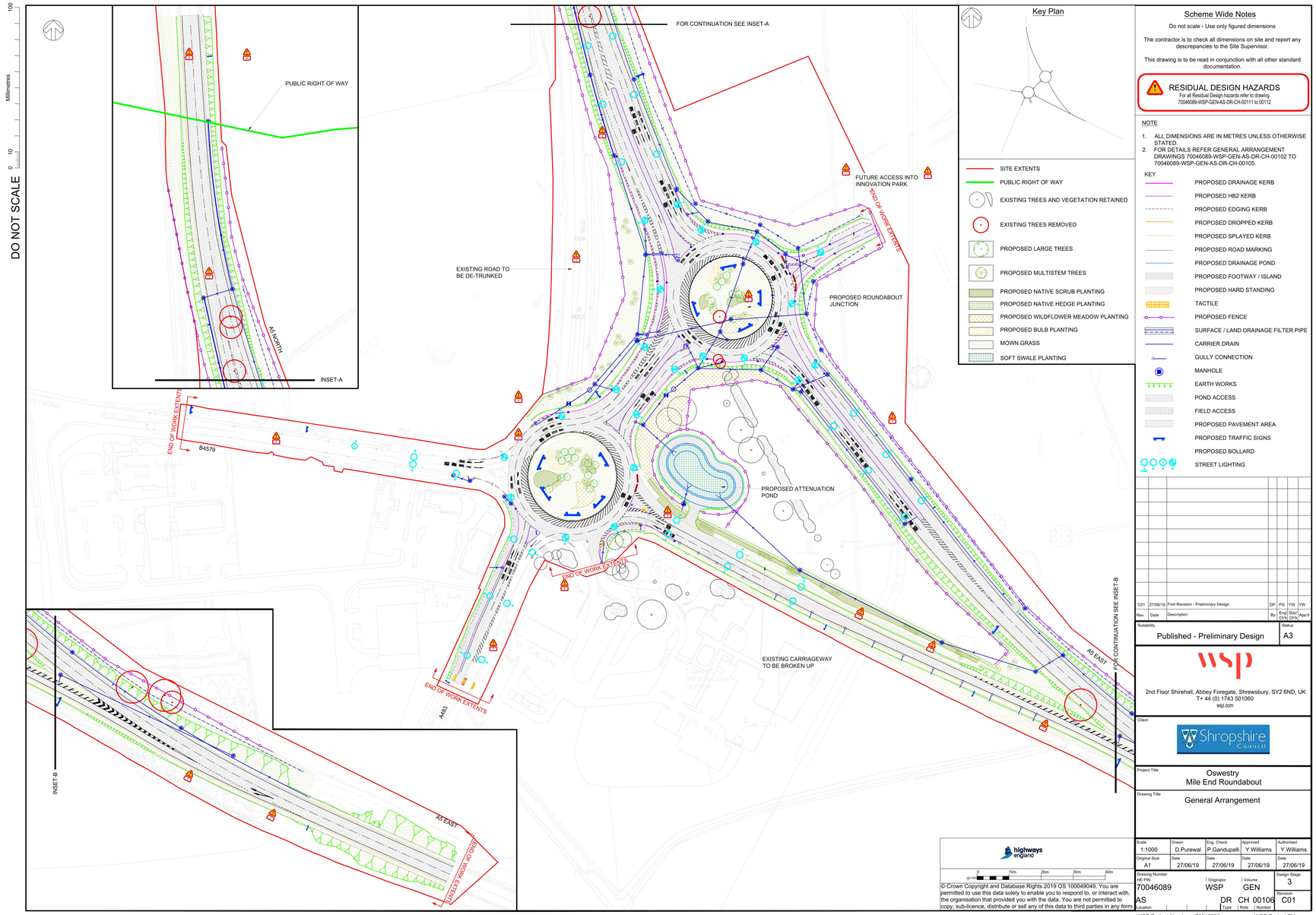
5 / DS4B Offline Proposed Option



Scheme Wide Notes

Do not scale - Use only figured dimensions

The contractor is to check all dimensions on site and report any descrepancies to the Site Supervisor.

This drawing is to be read in conjunction with all other standard documentation.

RESIDUAL DESIGN HAZARDS
For all Residual Design hazards refer to drawing 70046089-WSP-GEN-AS-DR-CH-00111 to 00112

NOTE

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. FOR DETAILS REFER GENERAL ARRANGEMENT DRAWINGS 70046089-WSP-GEN-AS-DR-CH-00102 TO 70046089-WSP-GEN-AS-DR-CH-00105.

KEY

- PROPOSED DRAINAGE KERB
- PROPOSED HB2 KERB
- PROPOSED EDGING KERB
- PROPOSED DROPPED KERB
- PROPOSED SPLAYED KERB
- PROPOSED ROAD MARKING
- PROPOSED DRAINAGE POND
- PROPOSED FOOTWAY / ISLAND
- PROPOSED HARD STANDING
- TACTILE
- PROPOSED FENCE
- SURFACE / LAND DRAINAGE FILTER PIPE
- CARRIER DRAIN
- GULLY CONNECTION
- MANHOLE
- EARTH WORKS
- POND ACCESS
- FIELD ACCESS
- PROPOSED PAVEMENT AREA
- PROPOSED TRAFFIC SIGNS
- PROPOSED BOLLARD
- STREET LIGHTING

Rev.	Date	Description	By	Eng/ Ch'k	Desc/ Ch'k	Appr'd
C01	27/06/19	First Revision - Preliminary Design	DP	PG	YW	YW

Suitability: Published - Preliminary Design
Status: A3

2nd Floor Shirehall, Abbey Foregate, Shrewsbury, SY2 6ND, UK
T+ 44 (0) 1743 501060
wsp.com

Client: Shropshire Council

Project Title: Oswestry Mile End Roundabout

Drawing Title: General Arrangement

Scale	Drawn	Eng. Check	Approved	Authorised
1:1000	D.Purewal	P.Gandupalli	Y.Williams	Y.Williams
Original Size: A1	Date: 27/06/19	Date: 27/06/19	Date: 27/06/19	Date: 27/06/19

Drawing Number HE PIN	Originator	Volume	Design Stage
70046089	WSP	GEN	3
Location: AS	Type: DR	Role: CH	Number: 00106	Revision: C01

WSP Security Class: Confidential

WSP Project Number: 70046089 WSP Project Title:
WSP Drawing Number: 70046089-WSP-GEN-AS-DR-CH-00106

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6 / Programme & Funding

Funding Status

The cost estimates for the proposed offline option is £9,384,856. External funding for the scheme is currently being explored, increased land revenues or other funding may need to be secured by Shropshire Council. The development programme for Oswestry requires the improvement to be undertaken in the two years to prevent extended delays for motorist using Mile End.

Programme

Design work has already commenced, with the preliminary design being submitted to Highways England and Shropshire Council. The next steps will be to develop the design to a stage suitable for a planning application in Winter of this year. Following this the detail design submission will be issued for final review and sign off in Summer of 2020, with construction expected to start in Summer 2020.

Further Information and Consultation

The current programme will allow the design team to take the scheme forward to a planning submission in Winter, with a formal period of public consultation. Anyone can respond to the planning consultation.

In addition to individuals who might be directly affected by a planning application, community groups and specific interests groups may wish to provide representations on planning applications.

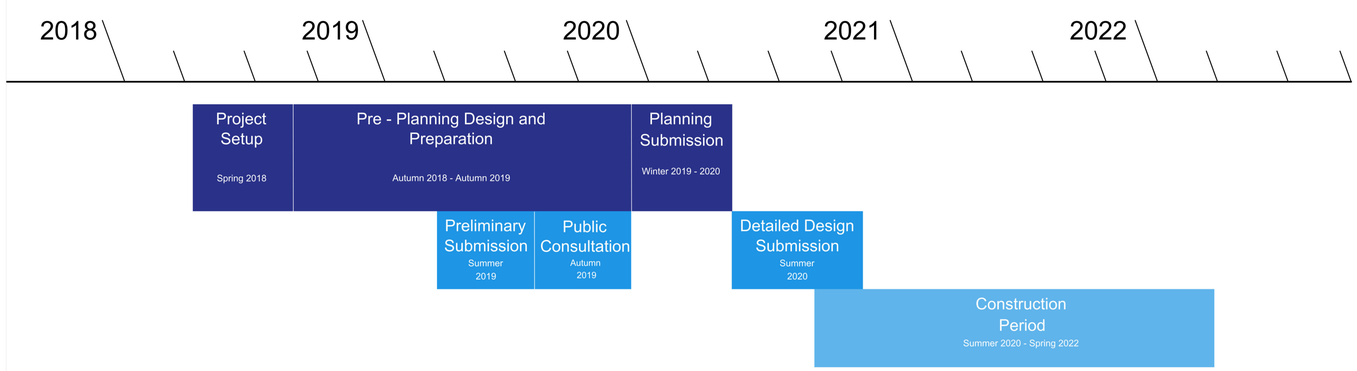
Thank you for attending today's consultation.

All of the material presented today on the display boards is available on Shropshire Council's website.

The closing date for the questionnaire is 1st November 2019

We trust that you will find the consultation informative,

Programme



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