

## 1. EXECUTIVE SUMMARY

The purpose of this report is to provide a recommendation to York Central Partnership Board of the preferred route for an access road into the York Central site. This paper is for YCP decision making purposes only. The selected preferred access will be taken through the statutory planning process which will determine whether or not planning permission should be granted.

The position of a suitable access route has been evolving over many years during different iterations of the York Central project. In June 2017, the York Central Partners (YCP) agreed to reduce six potential access locations to two locations following the recommendations in the Access Options Study (Arup, June 2017). A variant on the initial Western Option alignment considered in this report was developed in more detail by Arup to give three access options to take forward for consultation on community impacts – two from the west and one from the south. This approach was agreed by City of York Council Executive on 13 July 2017.

At this stage, evidence to date shows no material reasons why either a Southern or Western Option should not be supported in terms of planning policy. The Western Options are more expensive and difficult to construct than a Southern Option and there are challenges regarding land availability in the Millennium Green area. However, it is considered that there are three clear qualitative benefits that should be considered in any decision making. These are:

- the benefits for scheme design referred to in the masterplan section (Section 3) including better scheme legibility, improved gateway and enhanced connectivity to existing communities;
- the environmental benefits of being able to provide a route into the site that is away from the Holgate Road/Wilton Rise communities; and,
- the potential for through traffic to be diverted away from the Leeman Road and Salisbury Terrace community with corresponding environmental benefits.

Since the access consultation, a high level variant of the design / alignment of a Western Option 1 has been progressed in response to the public consultation. This would avoid additional Millennium Green land take but would also avoid the need for a large span bridge and would only require partial widening of Water End bridge. This mitigated western option has been proposed to YCP by ARUP as part of ongoing feasibility and testing work on iterations of the project. This has been included as part of the recommendation to YCP.

The key challenge relating to the Millennium Green area is the requirement to use some of the land in the lease area. It is acknowledged that the Trust land is difficult to release from its charitable status, even if the Trustees were willing. Using additional land from Millennium Green would allow a more aesthetically sympathetic landscaped route to be provided which would complement the area. A western route which is constrained by the land immediately available to YCP would provide a structure adjoining the Millennium Green supported by retaining walls. This may not be as aesthetically appealing.

The supporting reports included in the Appendices 1 – 3, respectively, contain technical details and comprise:

1. Access Options Study containing details on the effects of different routes on impacts such as traffic, ecology, air quality, heritage etc. (Arup, June 2017)
2. Leeman Road, Transport Modeling (Arup, October 2017)
3. Access Options Consultation Report (Arup, October 2017)

The access options consultation in August/September 2017 highlighted that the majority of responses favored a western access approach, although there were reservations around the potential loss of some of the green space associated with this option.

The consultation related to Western Option 1 which requires a substantial structure over the East Coast Mainline. Recent iteration of design and feasibility work by Arup has shown that a smaller structure may be deliverable; hence the cost estimates used in this report are based on this more recent variant for Western Option 1.

The key concerns for residents in relation to the access location appear to be traffic, air quality and noise. In summary, the key transport and associated environmental considerations are:

1. The York Central development will generate additional traffic delay on the surrounding highway network regardless of access location. In response to this, mitigation will form part of the future Planning Application. However, it should be noted that the total delay on the network is slightly less if the Southern Option is selected.
2. The additional traffic generated by the development will inevitably generate more noise and has the potential to affect air quality. However, modeling indicates that the overall effects would be low.

In comparing the two access locations, the Southern Option has a slight adverse impact on air quality. In addition, even with mitigation measures, the Southern Option will have greater noise impact. In the Wilton Rise area, this would be raised to moderate. The Western Option will improve air quality for those in the Salisbury Terrace and Leeman Road areas and noise impacts anticipated to be negligible.

**Therefore, based on an assessment of the effects on each location, the aspirations for future development of the site and the recommendations from YCP consultant team, the recommendation to the YCP Board is:**

- 1. To take forward a Western Option for access into the site. However, the final alignment of this should be assessed in more detail to seek to mitigate the effects of such a route on the Millennium Green.**
- 2. To safeguard land within YCP's control that could be used for a Southern Option in order to protect against any risk to the York Central development caused by circumstances preventing successful delivery of a Western Option.**

A synopsis comparing each option is shown below, additional detail on all evidence is contained in the supporting chapters and appended reports.

**York Central Access Options - Consideration Summary Table**

	<b>Western Option 1 (A1)</b>	<b>Western Option 2 (A2)</b>	<b>Mitigated Western Option (A3)</b>	<b>Southern Option (E)</b>
<b>Access Bridge Cost (inc primary access road)</b>	£58m - £68m	£15m – £25m	£33m - £43m	£10m - £20m
<b>Funding Availability</b>	Additional EZ backed borrowing required WY+TF	Additional EZ backed borrowing required WY+TF	Additional EZ backed borrowing required WY+TF	WY+TF approval through Gateway 1
<b>Masterplan</b>	Favor Western Access approach Improved placemaking	Favor Western Access approach Improved placemaking	Favor Western Access approach Improved placemaking	Complex entry sequence from Southern Access but solutions to constraints
<b>Land Ownership</b>	Not constrained by land availability	Requires part of Millennium Green	Not constrained by land availability	Not constrained by land availability
<b>Community Impact</b>	Traffic, noise and air quality issues of most concern Least impact on Millennium Green Partial loss of existing community facilities - could be mitigated through the provision of new facilities within the York Central scheme	Traffic, noise and air quality issues of most concern Would require an area of Millennium Green Partial loss of existing community facilities - could be mitigated through the provision of new facilities within the York Central scheme	Traffic, noise and air quality issues of most concern Least impact on Millennium Green Partial loss of existing community facilities - could be mitigated through the provision of new facilities within the York Central scheme	Traffic, noise and air quality issues of most concern Closest to residential areas and result in the loss of Holgate Community Garden Loss of existing community facilities - could be mitigated through the provision of new facilities within the York Central scheme

<b>Technical/ Construction</b>	<p>Widening of Water End bridge required</p> <p>Greatest bridge span across ECML with tied arch bridge</p> <p>Longest construction period with greatest disruption to the rail network</p> <p>Reduced vehicular track access for railway maintenance</p>	<p>Does not require widening of Water End bridge</p> <p>Shorter bridge span across ECML</p> <p>Shorter construction period than Western Option 1 but still requires disruption to ECML for construction works to be completed</p>	<p>Variant to original A1 option reviewed</p> <p>Partial widening of Water End bridge required</p> <p>Conventional beam bridge with reduced span</p> <p>Shorter construction period than Western Option 1 but still requires disruption to ECML for construction works to be completed</p> <p>Reduced vehicular track access for railway maintenance</p>	<p>Relatively short bridge span</p> <p>Shortest construction period and disruption to rail network as possession of FAL rather than ECML</p>
<b>Highways and Connectivity</b>	<p>Overall increase in highway traffic</p> <p>Significant reduction in traffic through Leeman Road and Salisbury Terrace communities</p> <p>Improved pedestrian and cycle connectivity</p>	<p>Overall increase in highway traffic</p> <p>Significant reduction in traffic through Leeman Road and Salisbury Terrace communities</p> <p>Improved pedestrian and cycle connectivity</p>	<p>Overall increase in highway traffic</p> <p>Significant reduction in traffic through Leeman Road and Salisbury Terrace communities</p> <p>Improved pedestrian and cycle connectivity</p>	<p>Overall increase in highway traffic</p> <p>Through traffic would continue through Salisbury Terrace communities</p> <p>Improved pedestrian and cycle connectivity</p>
<b>Air Quality</b>	<p>Improved air quality in Leeman Road and Salisbury Terrace areas</p>	<p>Improved air quality in Leeman Road and Salisbury Terrace areas</p>	<p>Improved air quality in Leeman Road and Salisbury Terrace areas</p>	<p>Improved air quality in Leeman Road area</p> <p>Adverse impact on air quality around Cleveland Street/St Paul's area</p>
<b>Townscape</b>	<p>Localised visual impact on Millennium Green – mitigation limited due to land availability</p>	<p>Localised visual impact on Millennium Green – mitigation through landscaping possible</p>	<p>Localised visual impact on Millennium Green – mitigation through landscaping possible</p>	<p>Localised impact on Cleveland Street and Upper St Paul's Terrace due to proximity to existing residential dwellings</p>
<b>Visual Impact</b>	<p>Potential impact on key view to Minster</p>	<p>Potential impact on key view to Minster</p>	<p>Potential impact on key view to Minster</p>	<p>High impact on close range views for local residents</p>
<b>Noise</b>	<p>Negligible impact due to existing ambient noise levels and proximity of existing dwellings</p>	<p>Negligible impact due to existing ambient noise levels and proximity of existing dwellings</p>	<p>Negligible impact due to existing ambient noise levels and proximity of existing dwellings</p>	<p>If no mitigation, major impact on Cleveland Street with negligible impact on Holgate Road</p> <p>Could be reduced to moderate impact with mitigation</p>

<b>Ecology</b>	Impact on habitats ecological designations	Impact on habitats and ecological designations	Impact on habitats and ecological designations	Impact on habitats
<b>Flood Risk and Water</b>	Flood Zone 2 – less preferable than Southern Option but mitigation possible  Sequential and exceptions testing required as part of planning process	Flood Zone 3 – least preferable sequentially but mitigation possible  Sequential and exceptions testing required as part of planning process	Flood Zone 2 – less preferable than Southern Option but mitigation possible  Sequential and exceptions testing required as part of planning process	Flood Zone 1 - least impact on flood risk  Sequentially preferred

## 2. FINANCIAL IMPACT

The following chapter sets out a summary of the financial impacts of alternative access points. This is a high level analysis at this stage and all future work will look to minimise the cost to the Partners in relation to infrastructure funding, whichever access is selected.

### 2.1 Infrastructure Cost

The bridge and primary access cost varies depending on engineering requirements for the route chosen. The table below sets out the financial cost of each of the three access options being considered, based on October 2017 cost estimates.

	Access Bridge Cost (inc primary access)	Additional cost compared to Southern Option
<b>Western Option 1 (A1)</b>	£58m - £68m	+£48m
<b>Western Option 2 (A2)</b>	£15m - £25m	+£5m
<b>Mitigated Western Option (A3)</b>	£33m – £43m	+£23m
<b>Southern Option (E)</b>	£10m - £20m	£0m

When it comes to purely financial considerations, there are cost reductions between Western Options and the Southern Option. However, further qualitative and quantitative impacts should be considered as part of the preferred access to be taken forward for more detailed design.

### 2.2 Development Capacity and Land Value

Recent evolution of the high level masterplan demonstrates a marginal difference in development capacity between a Western and Southern Access.

Advice from YCPs Commercial Advisors suggests that the net impact on land values for any changes in masterplan layout associated with alternative access points is a difficult to quantify at this point in time. For example, a southern access would be more complex in terms of the layout of some of the potential development plots towards the southern edge of the 'commercial area'. This would lead to a less flexible plot layout which may affect overall plot sizes and immediate environs and therefore impact take up and rental levels. This being the case, the net impact on land values associated with alternative access points is not regarded as a material consideration in the selection of a preferred access option.

### 2.3 Compensation Claims

The Valuation Office Agency has undertaken an assessment of the level of claims and associated fees that may be payable to affected residents under *Part 1 of the 1973 Land Compensation Act*. The scale of estimated claims is considered negligible in financial terms when considered relative to the estimated construction costs. In all cases, compensation is estimated to be less than 3% of construction costs.

## 2.4 Funding Availability

York Central is viewed as a key strategic site available to promote economic growth and delivery of housing on a city centre brownfield site with unparalleled public transport connections due to its location adjacent York station.

The funding available has been allocated on the strength of strategic business cases to National Government Departments. Terms of the funding provide clear objectives, target dates and expectations, such as:

- Increased GVA levels and sustained economic growth across the country
- Accelerated pace of delivery for housing units
- Quality placemaking to create places people wish to live and work
- Enabling brownfield land to come forward to address housing shortages

Impacts on timescale due to factors such as planning risk etc. need to be considered in making a decision on the preferred access location as this could impact on the objectives of the funding bodies.

Set against the cost assessments for each access option, a corresponding funding package is available to support scheme delivery. Current funding is comprised principally of West Yorkshire + Transport Fund (WY+TF) and potential Enterprise Zone (EZ) backed borrowing. A component of the recently submitted Housing Infrastructure Fund (HIF) is also provisionally identified to support access road delivery (though bids are yet to be determined).

The WY+TF will require an Exception Report to be taken to West Yorkshire Combined Authority if a Western Access is selected as the preferred route.

This funding package is summarised in more detail in the table below:

Funding Source	Allocation to access and bridge	Comment/Description	Timescales
WY+TF	£24.1m	<ul style="list-style-type: none"> <li>• Exception Report to WYCA required if western access route chosen</li> </ul>	To be drawn down by 2021
EZ backed borrowing	£tbc	<ul style="list-style-type: none"> <li>• Potential for up to £110m received from retained business rates</li> <li>• Risk to YCP/CYC to be considered and inform proportion/%</li> </ul>	EZ status finishes 2042 – delays increase risk if using this income stream
HIF	£23.3m	<ul style="list-style-type: none"> <li>• c.£57m total application</li> <li>• EOI, full bid to be determined Spring 2018</li> </ul>	To be committed by 2021
CYC EIF	£tbc	<ul style="list-style-type: none"> <li>• £7.1m potentially available via CYC.</li> <li>• Executive agreement required for further draw down</li> </ul>	Flexible

## 2.5 Funding Summary

- Potential to fund any of the shortlisted access options
- Escalating financial risk/reliance on EZ backed borrowing as costs increase
- Increased funding requirement for access may impact the scale to which the Partners can invest in/support other aspects of the scheme e.g. quality placemaking, affordable housing levels

### 3. MASTERPLAN IMPACT

N.B. Western options have similar impacts on the masterplan layout and are commented on collectively. The table below summarises the narrative and comparison relating to the evolving masterplans from the YCPs consultant team.

At a high level, two forms of masterplan have been developed in recent months to understand the impact of the different access options on the overall scheme. This work was completed in October 2017 and will be used as the base masterplanning to evolve further for future public consultation.

Masterplan Impact	Western Access Options	Southern Access Option
<p><b>Site Entry, Experience and Legibility</b></p>	<ul style="list-style-type: none"> <li>• A clear and legible entry sequence into the site, offering views of the York Central district while entering the area, as well as views beyond to the city / Minster.</li> <li>• An entry experience that mirrors the historic railway movement into the site, and highlighting the railway-inspired heritage of the site.</li> </ul>	<ul style="list-style-type: none"> <li>• A complex entry sequence resulting from the sharply curved geometry needed to drop the entry road from +8 m (above rail) to grade via rear of building plots.</li> </ul>
<p><b>Connectivity</b></p>	<ul style="list-style-type: none"> <li>• A clear street network with a primary entry road from the west, offering a legible pattern of movement through the site.</li> <li>• Allows downgrading the vehicular site entry from the Salisbury Terrace neighbourhood reducing the traffic through the area; eliminates need for a vehicular crossing across the park area.</li> <li>• Potential for good ecological connection between the park and Millennium Green which can be designed in conjunction with the entry road and bridge.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced connectivity to western end of the site, increasing isolation.</li> <li>• Access to western end of the site will require traffic looping back from the south (if arriving from southern access) or looping west across the park if arriving from the north.</li> <li>• Traffic from N &amp; NW could continue to move through the Salisbury Terrace neighbourhood streets potentially increasing traffic impacts.</li> <li>• A major vehicular road across the Green Park will be required.</li> <li>• Missed opportunity to integrate Millennium Green with the park area due to the continued severance by ECML.</li> <li>• Better connectivity with communities to the south including Holgate Road, Acomb Road and Tadcaster Rd corridor and beyond.</li> </ul>



<b>Public Space</b>	<ul style="list-style-type: none"> <li>The park can develop in a more continuous way increasing the efficiency of its use and allowing a better pedestrian connection along the green heart of the site. The most western part of the park can connect with the Millennium Green.</li> </ul>	<ul style="list-style-type: none"> <li>The need for a major vehicular crossing across the park bringing traffic from N &amp; NW will divide the park in two. This could be mitigated through the use of shared surfaces and crossings that give priority to pedestrians.</li> </ul>
<b>Views and Heritage</b>	<ul style="list-style-type: none"> <li>A western access at the moment of entrance, offers a memorable introduction to the site, its heritage assets and views into and beyond the site.</li> </ul>	<ul style="list-style-type: none"> <li>A southern access is not the most suitable alignment to take advantage of expansive views of the site and its ensemble of heritage buildings.</li> </ul>
<b>Visual Impact</b>	<ul style="list-style-type: none"> <li>Western bridge design is dependent on the span required to cross the ECML. If a more complex structure is required, it may impact on views of the Minster from Water End. Careful design and choice of materials may be required to avoid detracting from the protected view corridor.</li> <li>Visual impact of access on Millennium Green would need to be addressed through appropriate and sensitive landscaping which may require additional space to be occupied in Millennium Green.</li> </ul>	<ul style="list-style-type: none"> <li>A southern access does not impact on protected view corridors.</li> <li>The area between Wilton Rise and a new access can be landscaped to minimise visual impact on existing properties along Wilton Rise.</li> </ul>
<b>Plot Pattern</b>	<ul style="list-style-type: none"> <li>The clear circulation pattern from a western access results in a clear and efficient plot pattern across the site. Further refinements can be made in the next phase of design development should this option be chosen as preferred.</li> </ul>	<ul style="list-style-type: none"> <li>Plot pattern generally similar to the one achieved with the western access option; however, there are a few areas where the impact of the southern option and consequent movement pattern has some disadvantage.</li> <li>Vertical geometry of access road interferes with pedestrian crossing into the site from the south (Wilton Rise).</li> </ul>
<b>Movement within the site</b>	<ul style="list-style-type: none"> <li>Movement through the site follows a more linear alignment and will be more legible for users.</li> <li>Through traffic will be directed along the length of the development.</li> </ul>	<ul style="list-style-type: none"> <li>Southern access concentrates movements in the southern part of Cinder Lane. As movement does not follow visual cues, more signage will be required to direct users to their destinations.</li> <li>Through traffic will be focussed on the eastern part of the site. The western part of</li> </ul>

		the site will experience lower traffic volumes and feel more “private”.
--	--	---

### 3.1 Masterplan Summary:

The recommendation from YCP’s consultant team is that an access from the west would be preferable in masterplanning terms due to:

- Better linkages for those communities towards the western end of the scheme
- Traffic will no longer use the Salisbury Terrace residential area to access the city centre, with the corresponding air quality and safety issues it brings
- Better legibility for the overall scheme
- Better entrance quality/gateway/long range views across the site and wider city
- Better response to the historic layout and alignment of previous uses on the site

## **4. LAND OWNERSHIP**

The Southern Option is not constrained by land ownership but the Western Options are subject to the risk that Millennium Green land may not be available.

### **4.1 Western Access - Millennium Green Summary**

The Leeman Road Millennium Green comprises 1.8ha of land at Water End designated as a Millennium Green. The land is leased from CYC for 999 years by the Millennium Green Trust. The lease area has a restrictive covenant limiting use in accordance with the Trust Deed for the benefit of the local community.

Under an existing option, a small area of the land can be taken back by the Council for an access road. Access alignments restricted to the use of this section of land are more expensive than alternative solutions and they are reliant on a heavily engineered solution for the location. Alternative solutions encroach further onto the Millennium Green but create a landscaped road more integrated into the green landscape around it and hence would be less visually intrusive and more beneficial to use and enjoyment of the land.

See Appendix 4 for the red line lease plan for Millennium Green.

### **4.2 Access Options Impact on Millennium Green**

- Western Access 1 proposes the road using the area currently available to the Partners, passing over land in the ownership of CYC and NR and using land which can be released from the Trust lease area.
- Western Access 2 proposes an alternative alignment that uses NR and CYC land but also takes additional land from Millennium Green.

### **4.3 Engagement with Board of Trustees**

YCP will need to engage with members of the Millennium Green Trust to see if they are willing (after consulting Natural England) to consider alternative solutions which may include release of some land in addition to that already referred to in the lease. However, even if a solution is agreed that releases land the implementation may not be something that can be achieved by private treaty arrangements due to the Trust constitution and charitable status.

### **4.4 Legal risk associated with acquiring additional land from Millennium Green Trust**

There is a risk to delivery in proposing an access option involving additional land from the Millennium Green Trust. However, despite the challenging legal arrangements, the legal advice obtained does highlight that there is the opportunity to further explore with the Trust a mechanism to release any land.

### **4.5 Mitigation**

Since the access consultation, a high level variant of the design / alignment of a Western Option 1 has been progressed in response to the public consultation. This would avoid additional Millennium Green land take but would also avoid the need for

a large span bridge and would only require partial widening of Water End bridge. This mitigated western option has been proposed to YCP by ARUP as part of ongoing feasibility and testing work on iterations of the project. However, it remains a complex engineering solution and further design work and landscaping proposals are required to create a solution that mitigates the impact on Millennium Green.

#### **4.6 Southern Access – Holgate Community Garden**

The land required to deliver an access from the south is in the ownership of CYC. The access point does not require acquisition of additional land but would create a road which runs very close to existing dwellings.

#### **4.7 Asset of Community Value**

Part of the land required to deliver an access from the south is registered as an Asset of Community Value (ACV). The extent of the land, registered as 'Holgate Community Garden', is shown on the plan in Appendix 5.

ACVs are buildings or land that are of value to local communities, and provision to nominate is contained in the Localism Act 2012 (community right to bid). In the event of the proposed sale of an ACV, a process will be triggered that allows a community interest group to express an interest in bidding to purchase the property. As it is anticipated that the road would be constructed by, and remain in the ownership of the Partners (in this case the Council), this is not considered to limit the deliverability of the southern access option.

## **5. COMMUNITY CONSULTATION AND IMPACT**

### **5.1 Introduction**

In November 2016, CYC Executive considered a report which set out proposals to fund the access route to the York Central site using the West Yorkshire Transport Fund (WYTF) and to undertake further consultation on the route of the proposed new access to the site. Members resolved to undertake further consultation on the access route for York Central as part of a future York Central planning strategy, with high level, ongoing engagement across the City in relation to the access route, with particular regard being given to residents most directly affected.

### **5.2 YCP Community Consultation**

As a consequence, YCP undertook a non statutory public consultation comprising drop-in sessions and provision of feedback forms in relation to the provision of a new vehicular access point into the York Central site between 23 August 2017 and 13 September 2017. In total, 644 people attended the ‘drop-in’ events and the consultation generated a total of 619 responses.

### **5.3 Consultation Analysis**

Following the consultation period, Arup prepared an Access Options Consultation Report (October 2017) to provide factual analysis of the consultation responses. The analysis provides a summary of the feedback as given and has been prepared without weighting or conclusions where a preference was expressed by the respondents. This Report provides Community Impact information for YCP to use as one of the considerations in making a decision on the preferred access route location.

#### **Q1: Postcode**

The responses to Q1 identified a significant proportion of attendees live in the two post codes in which the York Central site is located (292 responses from within YO24 and 118 responses from YO26).

#### **Q2: Priority Impact Criteria**

For Q2, respondents were asked to rank the impact criteria (construction, transport, townscape, heritage, air quality, noise, ecology and flood risk) as priorities on a scale of 1 to 8.

The responses highlighted air quality, transport and noise as the issues of most concern (when taking the 3 highest ranked criteria into account). This demonstrates a concern that tends towards the impact of traffic – air quality and noise being issues that are directly related to traffic generation.

Heritage and ecology were ‘middle-ranking’ issues which were neither identified as of highest or lowest concern.

Construction, townscape and flood risk were the lowest ranked issues.

### **Q3: Impact on local communities**

For Q3, respondents were asked to provide further commentary of how each option would specifically impact on the communities adjacent to the proposed accesses. As the responses are free form, Arup has coded and grouped the responses based on the issues raised, with respondents often raising a number of issues on a single form. For clarity, the public were not asked to specify a preference for a particular access option but, as would be expected, many respondents have stated a preference and these results, along with more issue-specific matters, are set out below.

The responses demonstrated a preference for the Western Option(s):

- Western Option 1: 196 for and 39 against;
- Western Option 2: 115 for and 66 against;
- Southern Option: 29 for and 336 against.

In addition, the respondents identified specific issues relating to community impact, traffic and transport, the environment and construction, alongside issues not specifically related to this consultation such as future development of the site. The particular community issues raised regarding impacts such as air quality, noise and traffic on the existing Network are considered in Section 6 of this report.

The most numerous issues raised by respondents (i.e. those raised by more than 100 respondents) were:

- The impact on the Holgate Community Garden as a result of the Southern Option (260 comments);
- Increasing congestion on Holgate Road (198 comments);
- Impact on air quality as a result of the Southern Option (197 comments);
- Existing congestion on Holgate Road (150 comments);
- Noise impact as a result of the Southern Option (116 comments); and
- The impact on Millennium Green as a result of Western Option 2 (115 comments).

Appendix 3 contains the Access Options Consultation Report (Arup, October 2017).

## 6. TECHNICAL AND ENVIRONMENTAL IMPACTS

6.1 Full detail of the technical and environmental impacts of each access option can be found in the following Arup reports contained in Appendices 1 and 2, respectively.

- Access Options Study (June 2017)
- Leeman Road, Transport Modeling (October 2017)

The Access Options Study (June 2017) contained in Appendix 1 provided a basis for the decision to discount three alternative options, known as B, C and D due to the following reasons:

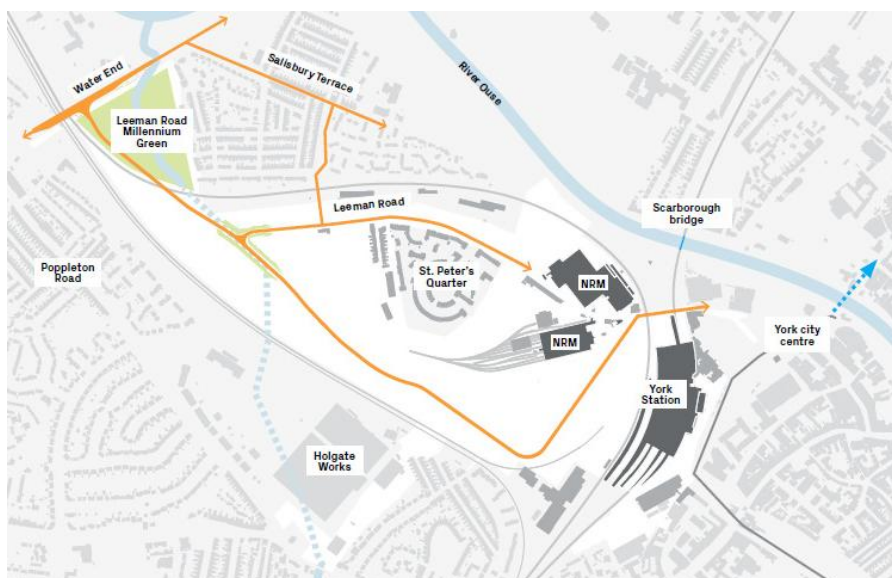
- Lack of certainty regarding future rail requirements for land and the effect on existing rail requirements;
- timing associated with funding criteria; and,
- lack of compatibility with masterplanning.

This approach was approved in the June 2017 YCP Project Board and at the subsequent City of York Council June 2017 Executive meeting.

### 6.2 Access Options Summary

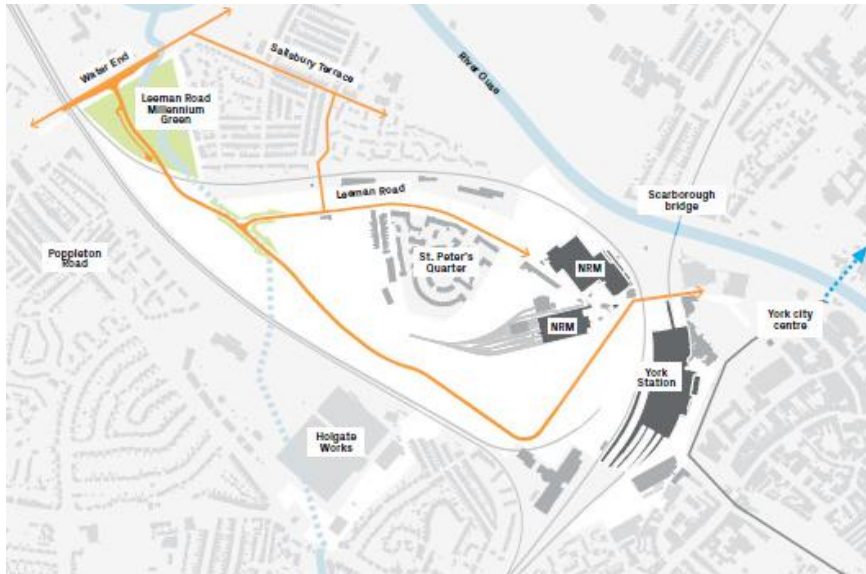
A summary of the access option alignments which formed part of the consultation are provided below.

#### Western Option 1:



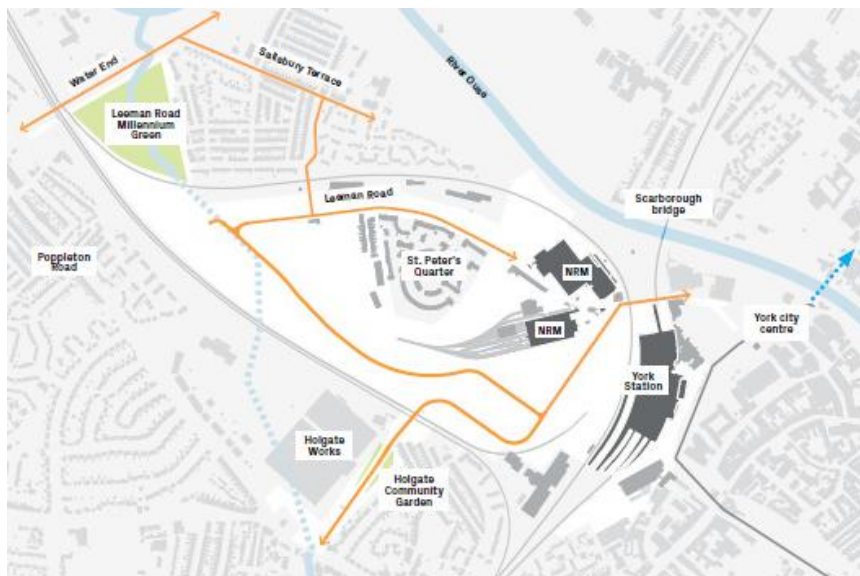
- New junction on Water End
- Junction design requires significant widening of the Water End Bridge
- Road on retaining wall alongside Millennium Green
- Relocation of siding to NRM South Yard

## Western Option 2:



- New junction on Water End
- No requirement for the widening of the Water End Bridge
- Requirement for Millennium Green land outside area capable of reverting back to CYC
- Relocation of two Network sidings to location identified in Masterplan work.
- Relocation of siding to NRM South Yard

## Southern Option:



- The Southern Option land requirement within control of YCP
- Asset of Community Value – Holgate Community Garden would be lost
- Substantial remodeling of existing junction on Holgate Road



### 6.3 Technical and Environmental Summary

A summary table of the technical and environmental impacts is provided below but full background and details are provided in the appended reports. All adverse impacts would have mitigation measures which would form part of a future Planning Application as part of the statutory planning process.

<b>Technical and Environmental Summary</b>	<b>Western Option 1 (A1)</b>	<b>Western Option 1 (A2)</b>	<b>Southern Option (E)</b>
<b>Technical/ Construction</b>	<p>Widening of Water End bridge required</p> <p>Greatest bridge span across ECML with tied arch bridge</p> <p>Longest construction period with greatest disruption to the rail network</p> <p>Reduced vehicular track access for railway maintenance</p>	<p>Does not require widening of Water End bridge</p> <p>Shorter bridge span across ECML</p> <p>Shorter construction period than Western Option 1 but still requires disruption to ECML for construction works to be completed</p>	<p>Relatively short bridge span</p> <p>Shortest construction period and disruption to rail network as possession of FAL rather than ECML</p>
<b>Highways and Connectivity</b>	<p>Overall increase in highway traffic</p> <p>Significant reduction in traffic through Leeman Road and Salisbury Terrace communities</p> <p>Improved pedestrian and cycle connectivity</p>	<p>Overall increase in highway traffic</p> <p>Significant reduction in traffic through Leeman Road and Salisbury Terrace communities</p> <p>Improved pedestrian and cycle connectivity</p>	<p>Overall increase in highway traffic</p> <p>Through traffic would continue through Salisbury Terrace communities</p> <p>Improved pedestrian and cycle connectivity</p>
<b>Air Quality</b>	<p>Improved air quality in Leeman Road and Salisbury Terrace areas</p>	<p>Improved air quality in Leeman Road and Salisbury Terrace areas</p>	<p>Improved air quality in Leeman Road area</p> <p>Adverse impact on air quality around Cleveland Street/St Paul's area</p>
<b>Townscape</b>	<p>Localised visual impact on Millennium Green – mitigation limited due to land availability</p>	<p>Localised visual impact on Millennium Green – mitigation through landscaping possible</p>	<p>Localised impact on Cleveland Street and Upper St Paul's Terrace due to proximity to existing residential dwellings</p>
<b>Visual Impact</b>	<p>Potential impact on key view to Minster</p>	<p>Potential impact on key view to Minster</p>	<p>High impact on close range views for local residents</p>
<b>Noise</b>	<p>Negligible impact due to existing ambient noise levels and proximity of existing dwellings</p>	<p>Negligible impact due to existing ambient noise levels and proximity of existing dwellings</p>	<p>If no mitigation, major impact on Cleveland Street with negligible impact on Holgate Road</p> <p>Could be reduced to moderate impact with mitigation</p>

<b>Ecology</b>	Impact on habitats ecological designations	Impact on habitats and ecological designations	Impact on habitats
<b>Flood Risk and Water</b>	Flood Zone 2 – less preferable than Southern Option but mitigation possible Sequential and exceptions testing required as part of planning process	Flood Zone 3 – least preferable sequentially but mitigation possible Sequential and exceptions testing required as part of planning process	Flood Zone 1 - least impact on flood risk Sequentially preferred

## 6.4 Mitigated Western Option

Since the access consultation, a high level variant of the design / alignment of a Western Option 1 has been progressed in response to the public consultation. This would avoid additional Millennium Green land take but without the need for a large span bridge and with only partial widening of Water End bridge. This mitigated western option has been proposed to YCP by ARUP as part of ongoing feasibility and testing work on iterations of the project.

The technical and environmental impacts are anticipated to be similar to Western Option 1 and summarised below in this context. The alignment of a Mitigated Western Option is contained in Appendix

<b>Technical and Environmental Impact Summary</b>	<b>Mitigated Western Option</b>
<b>Technical/ Construction</b>	Variant to original A1 option reviewed Partial widening of Water End bridge required Conventional beam bridge with reduced span Shorter construction period than Western Option 1 but still requires disruption to ECML for construction works to be completed Reduced vehicular track access for railway maintenance
<b>Highways and Connectivity</b>	Overall increase in highway traffic Significant reduction in traffic through Leeman Road and Salisbury Terrace communities Improved pedestrian and cycle connectivity
<b>Air Quality</b>	Improved air quality in Leeman Road and Salisbury Terrace areas
<b>Townscape</b>	Localised visual impact on Millennium Green – mitigation through landscaping possible
<b>Visual Impact</b>	Potential impact on key view to Minster
<b>Noise</b>	Negligible impact due to existing ambient noise levels and proximity of existing dwellings

<b>Ecology</b>	Impact on habitats and ecological designations
<b>Flood Risk and Water</b>	Flood Zone 2 – less preferable than Southern Option but mitigation possible Sequential and exceptions testing required as part of planning process