

A66 Northern Trans-Pennine project

Draft Construction
Method and
Management
Statement

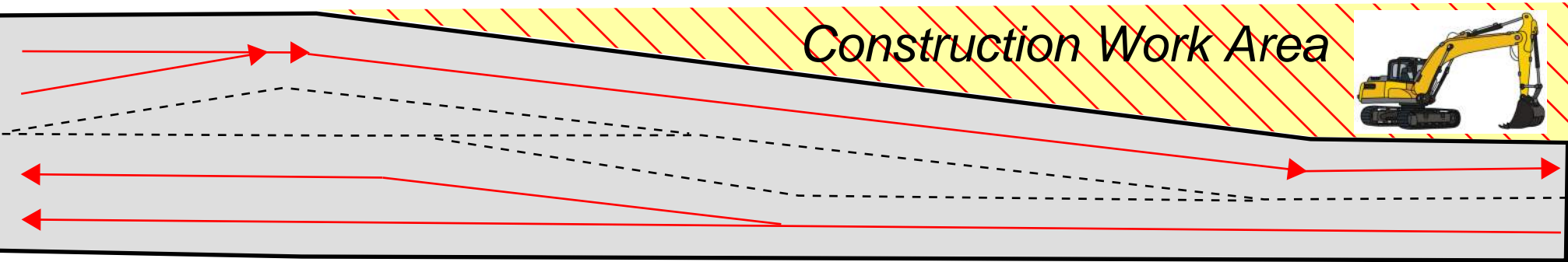
**Indicative
schematic drawings
Volume 2**

Penrith to Temple Sowerby

A66 - Key Proposed Construction Activities (Phase 1 Works)

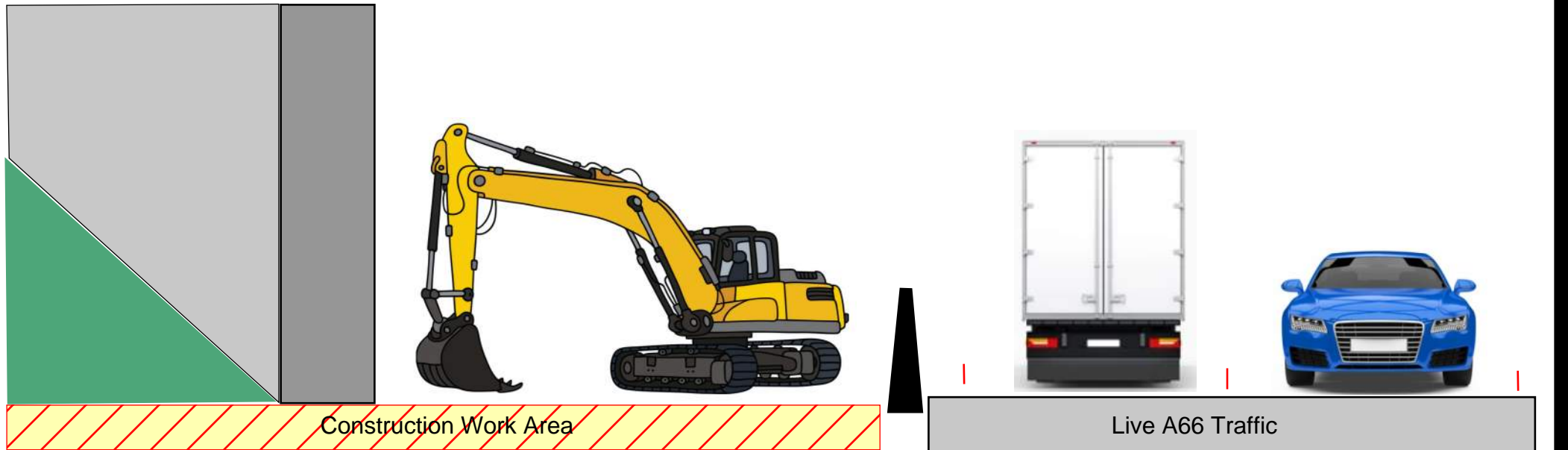
Traffic management for construction works

Traffic will be relocated / diverted using traffic management to enable works to safely take place.



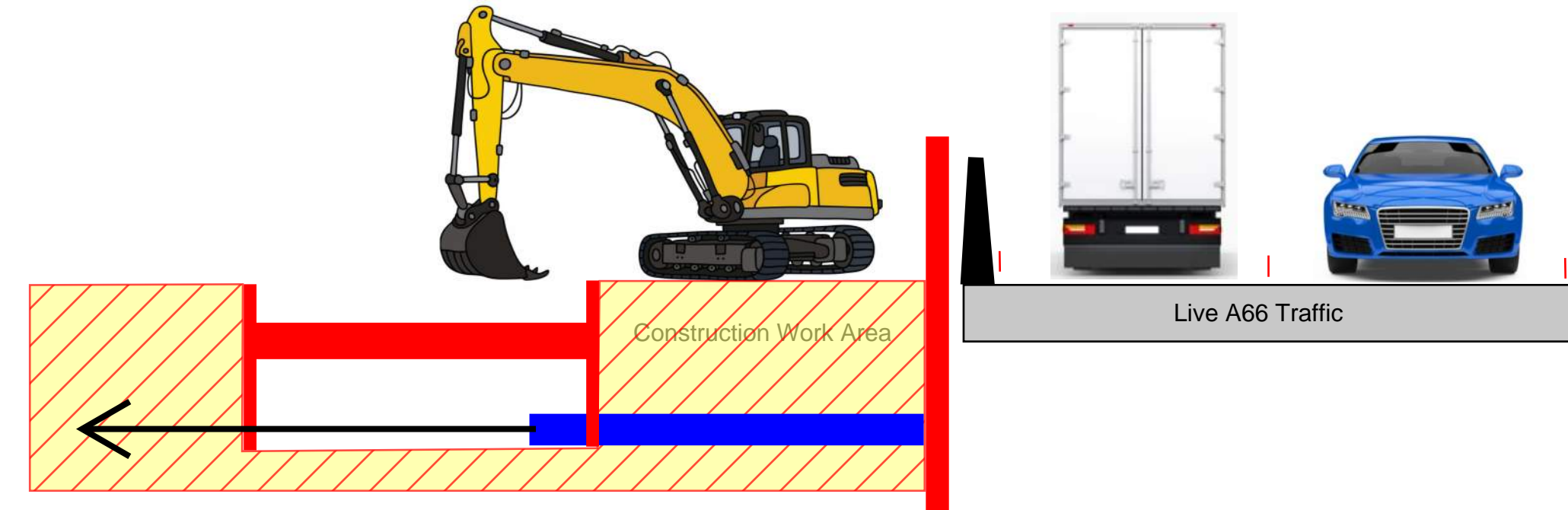
Construction works - Overbridge

The overbridge has been designed with sufficient working widths to enable the construction of the abutment whilst A66 traffic is maintained. Once complete it will help reduce local access movements on and across the A66. The remaining part of the bridge will be constructed as part of the Westbound works, including the deck.



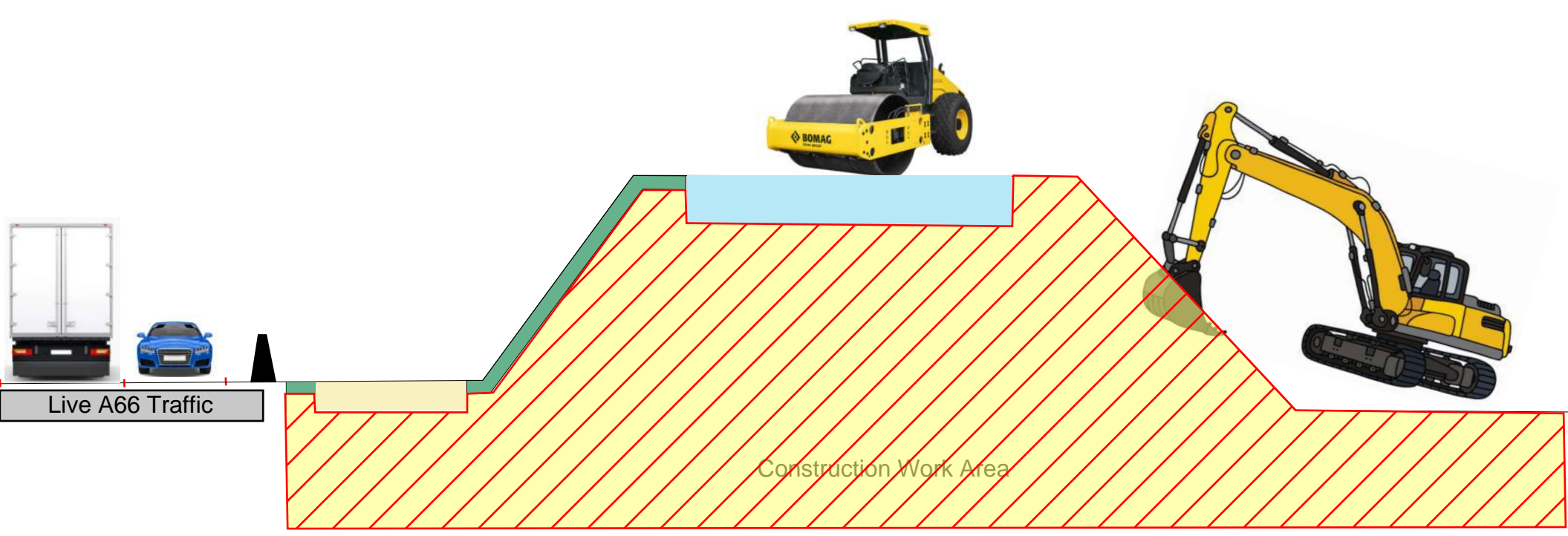
Construction works - Drainage culverts

Drainage works will be undertaken, assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



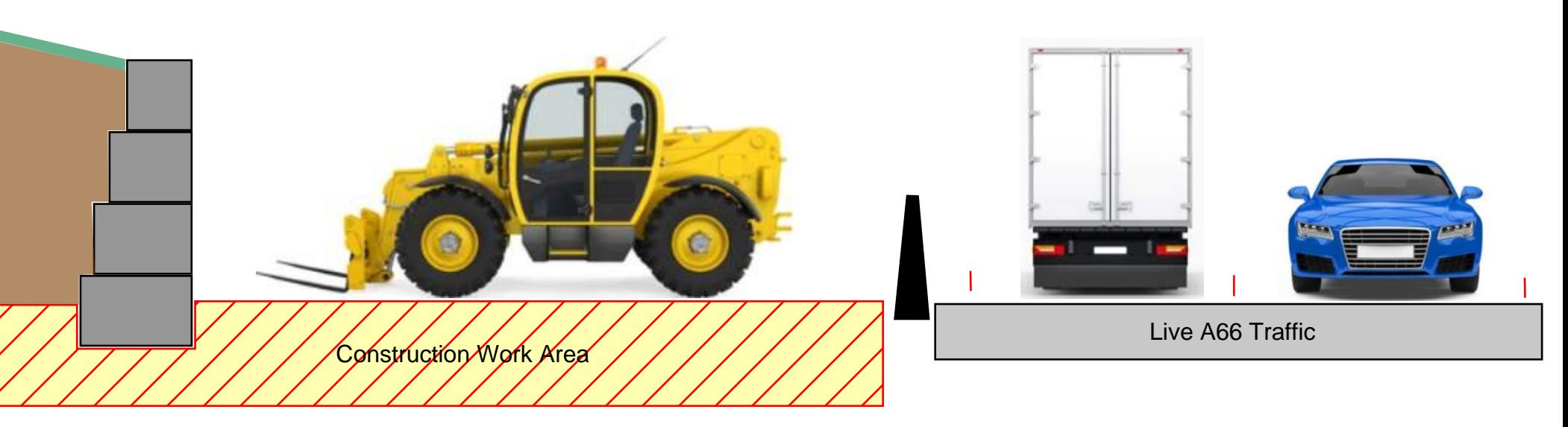
Construction works - Embankment

The embankment construction can be undertaken without impacting on A66 live traffic. The access road will help service local vehicles machinery, helping the new A66 scheme to flow smoothly with reduced turning vehicles. The embankment will be constructed from suitably selected fill materials, constructed in layers with the access road integrated at the top.



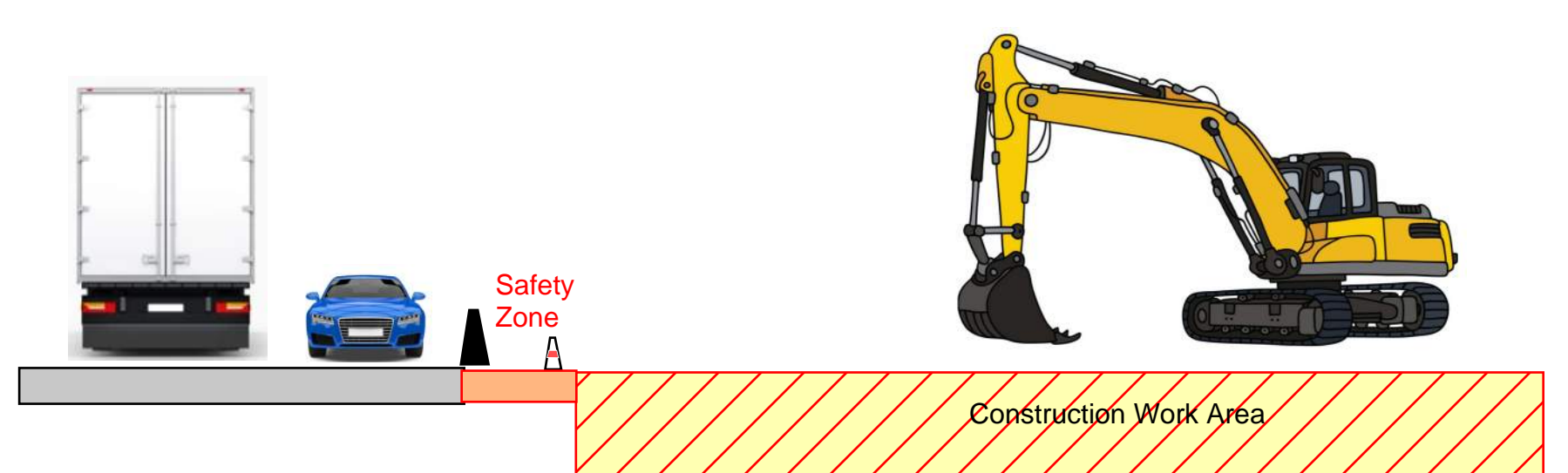
Construction works - Retaining wall

The retaining wall is essential to enable the widening new A66 carriageway to be constructed. The wall has a small footprint and helps minimise the impacts on the surrounding landscape. Upon completion the new A66 carriageway will be constructed away from the live A66.



Construction of new carriageway next to existing A66

With traffic maintained on the existing A66 with traffic management in place, the new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.

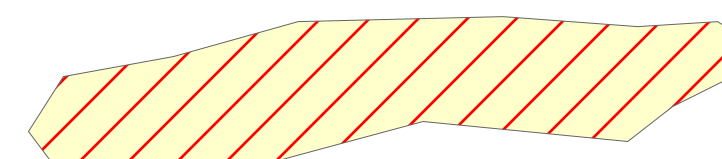


Legend

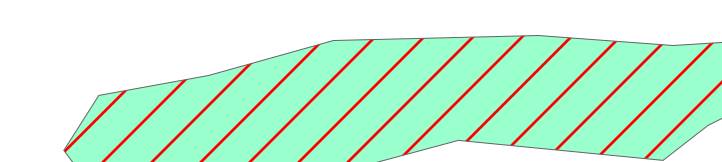
Roads open & in public use



Construction Work Area Phase 1



Construction Work Area Phase 2



RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup JV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
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KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond

- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Created	Checked	Reviewed	Approved	Authorised
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P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
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Client
3 Piccadilly Place
Manchester
M1 3BN



Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 1 of 6

Project Ref. No. Stage Scale: 1:1000 @ A0
--- PCF3 Dimensions: M

Drawing Number
Project HE565627 - AMY - HGN - S03 -DR-CH- 200001
Location | Type | Role | Number

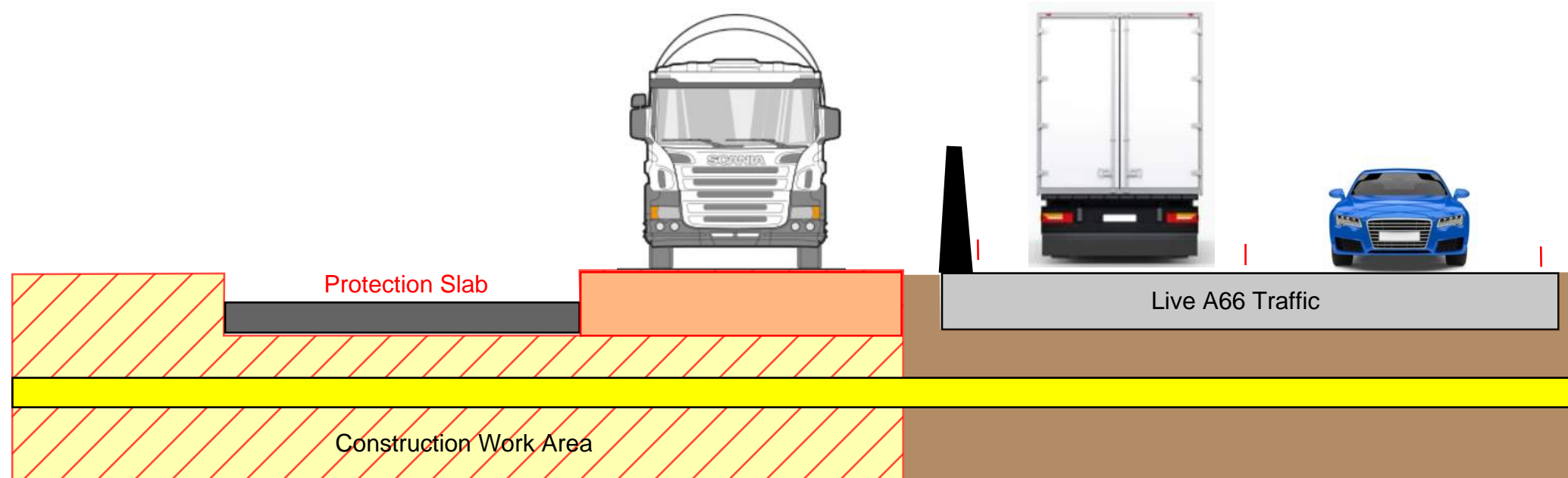
Suitability Suitability Description Revision
S1 Fit for Co-ordination P02

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

A66 - Key Proposed Construction Activities (Phase 1 Works)

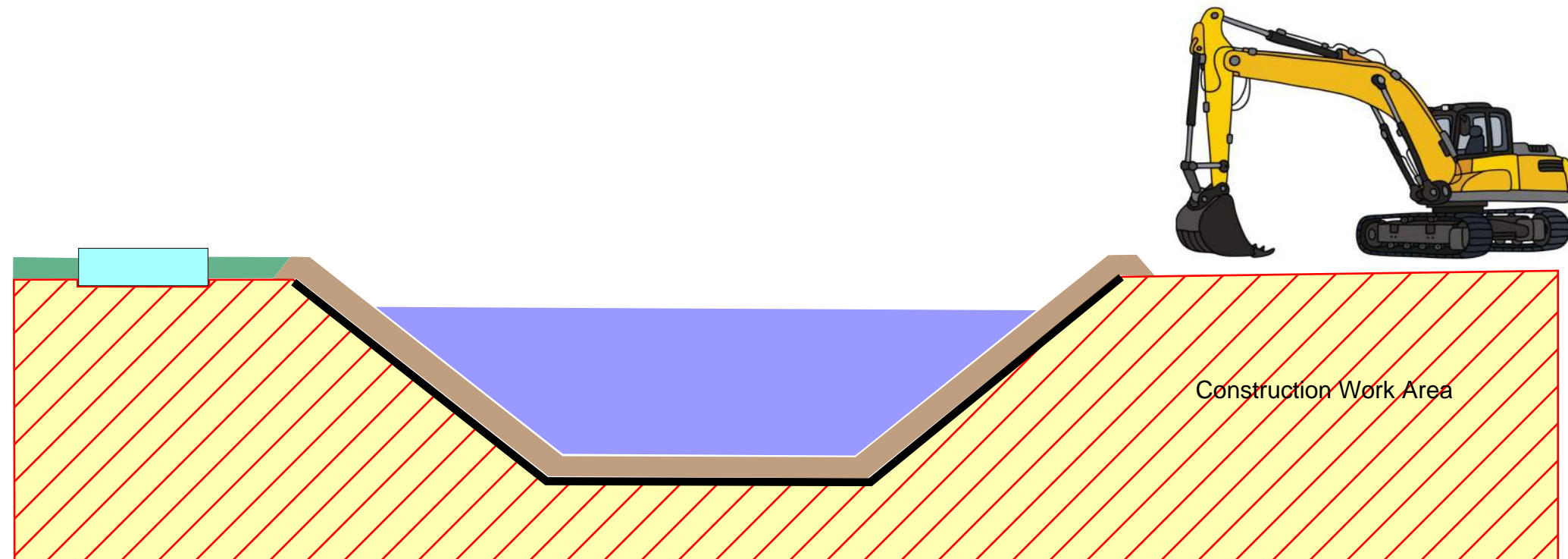
Construction works - Gas service protection

Gas protection measures are required to be undertaken to prevent large diversion works and disruption to the A66 traffic. A protection slab will be installed under the surface of the ground to prevent heavy vehicles damaging the service where the new road is required to be installed.



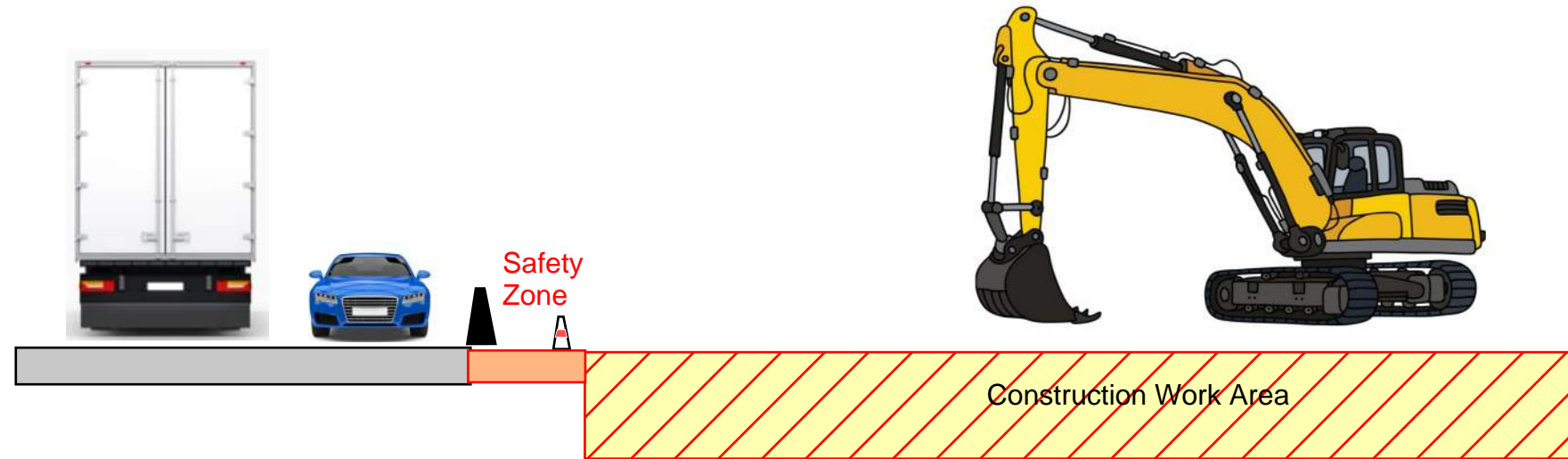
Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



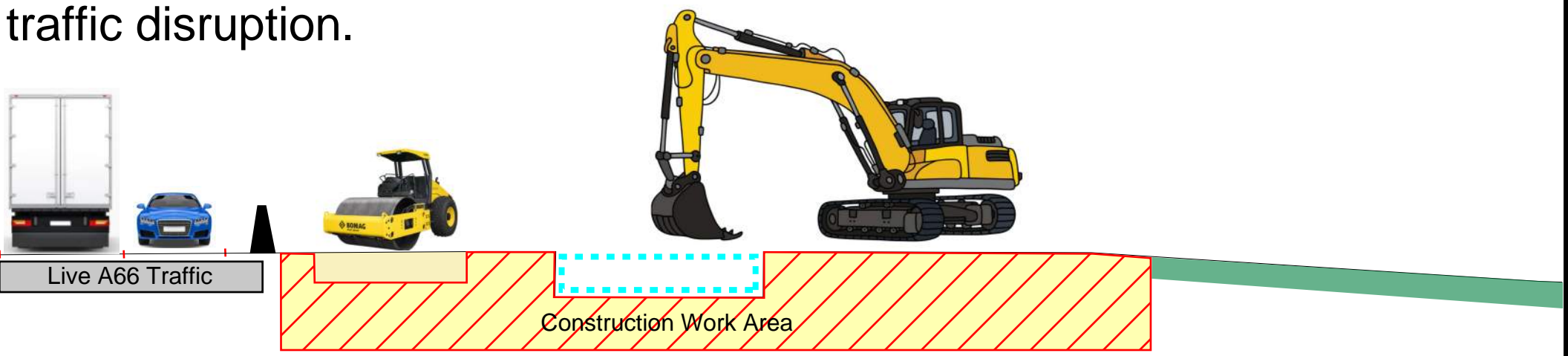
Construction of new carriageway next to existing A66

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Construction works - Access roads

The Non-Motorised User (NMU) route and access road will be constructed offline with little impact on the live A66 due to the setback distance from the road. Earth will be excavated along the required routes and imported material placed and compacted. Material movements will be maintained off the A66 where possible, to minimise traffic disruption.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

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- Demolished buildings
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- Proposed Environmental Mitigation

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P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21
Revision details					
Revision	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
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Project Name
A66 Northern Trans-Pennine

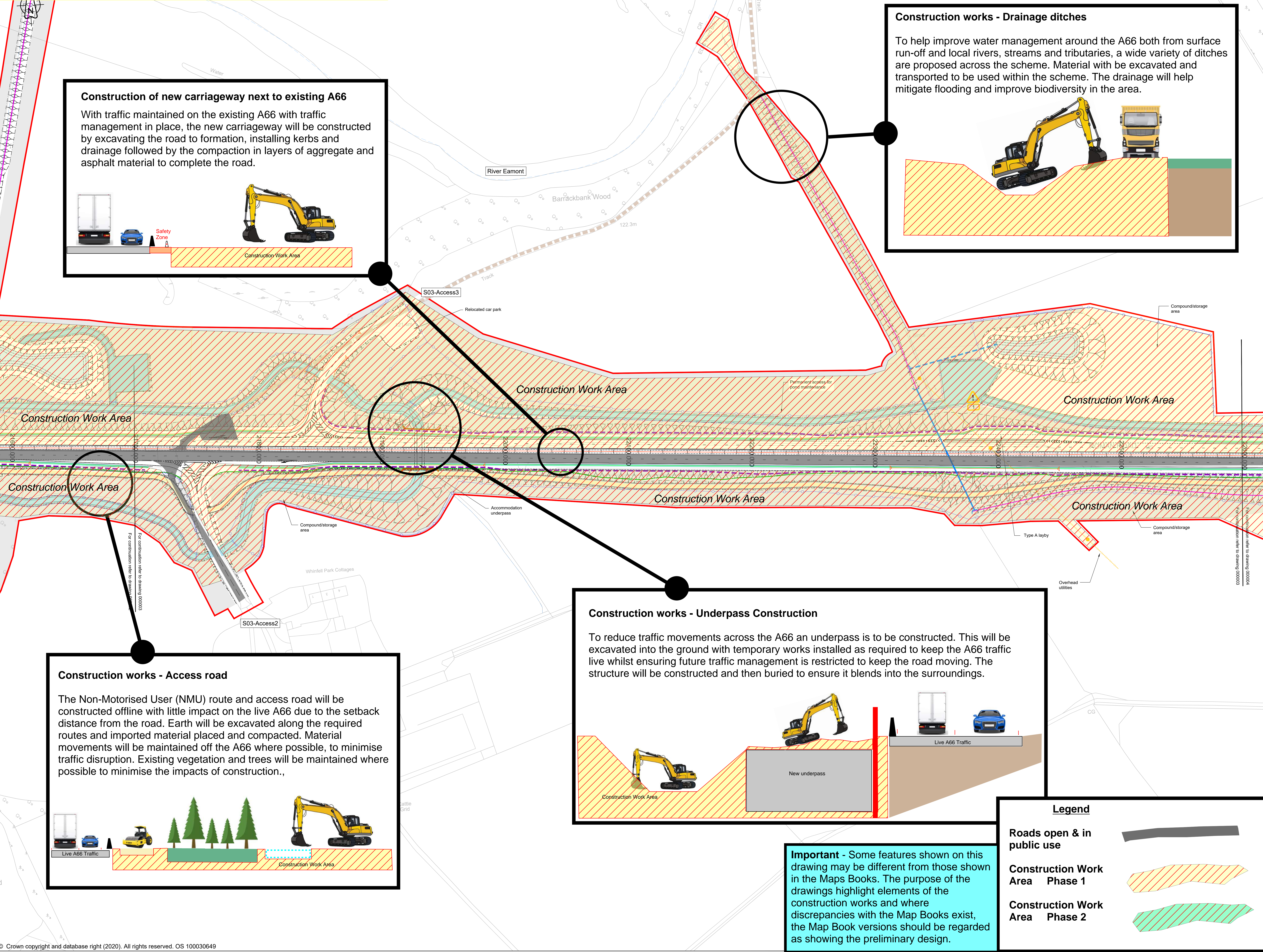
Drawing Title
Center Parcs
General Arrangement
Sheet 2 of 6

Project Ref. No. Stage Scale : 1:1000 @ A0
--- PCF3 Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200002
Location | Type | Role | Number

Suitability Suitability Description Revision
S1 Fit for Co-ordination P02

A66 - Key Proposed Construction Activities (Phase 1 Works)



RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Arney Arup J/V CDM Hazard Management Process.)

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2. Underground Services.

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P02	FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21
Revision	Created dd/mm/yy	Checked dd/mm/yy	Reviewed dd/mm/yy	Approved dd/mm/yy	Authorised dd/mm/yy

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Integrated Project Team

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highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
**Center Parcs
General Arrangement
Sheet 3 of 6**

Project Ref. No.	Stage	Scale	@ A0
---	PCF3	Dimensions : M	

Drawing Number	Project	Originator	Volume
	HE565627 - AMY - HGN - S03		
	Location	Type	Role
			Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

Legend

Roads open & in public use

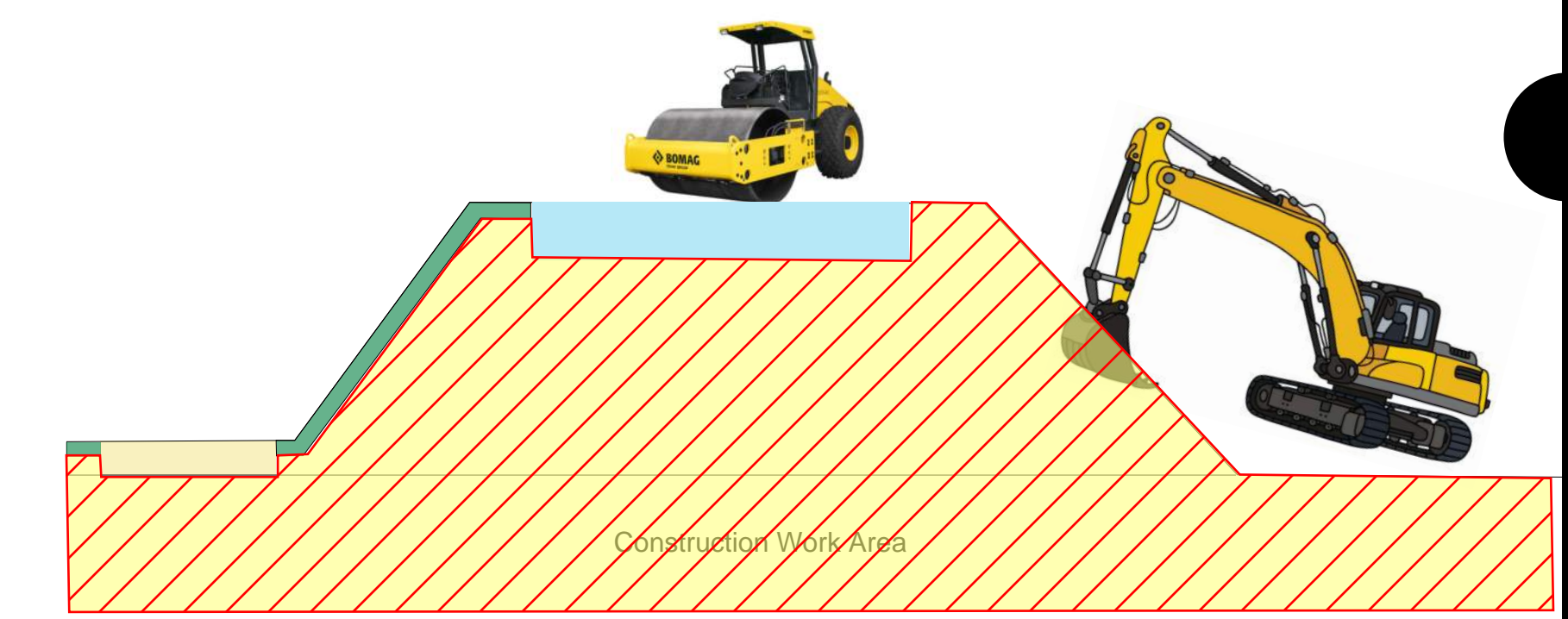
Construction Work Area Phase 1

Construction Work Area Phase 2

A66 - Key Proposed Construction Activities (Phase 1 Works)

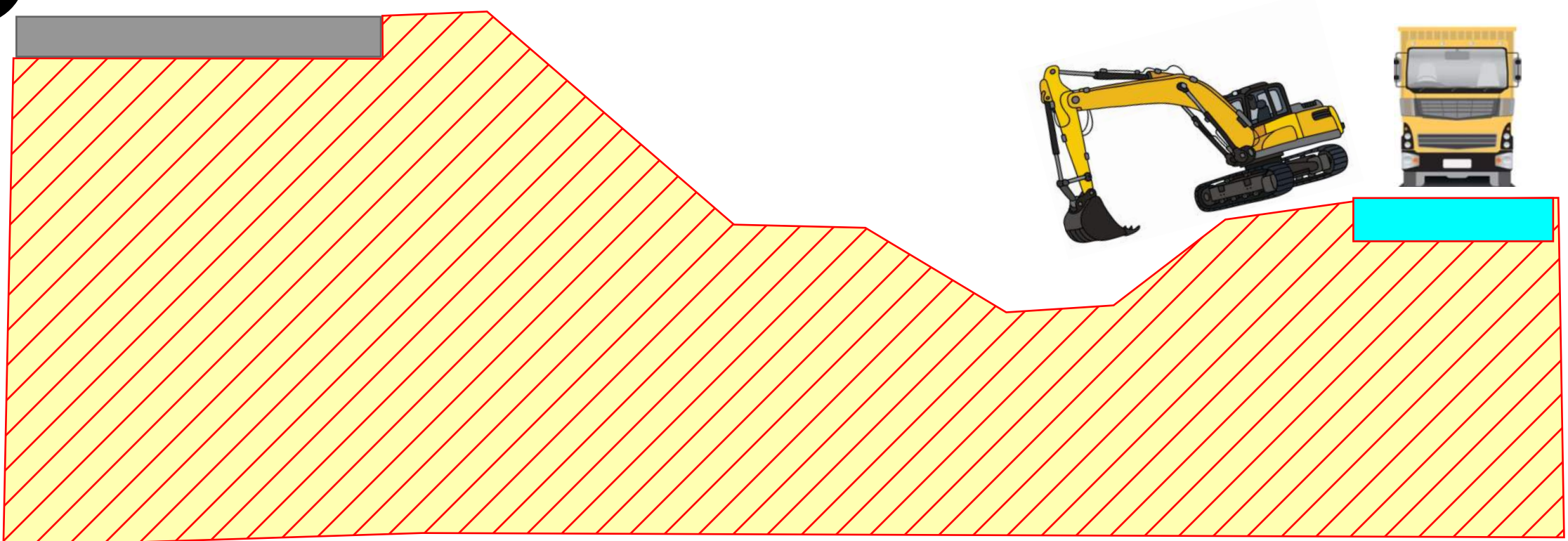
Construction works - A66 and access road embankment

The embankment construction will be undertaken without impact on A66 live traffic (traffic will be using the newly constructed diversion). The road will help service Centre Parcs, helping the new A66 scheme to flow smoothly with direct access points off the A66. The embankment will be constructed from suitably selected fill materials, constructed in layers with the access road integrated at the top.



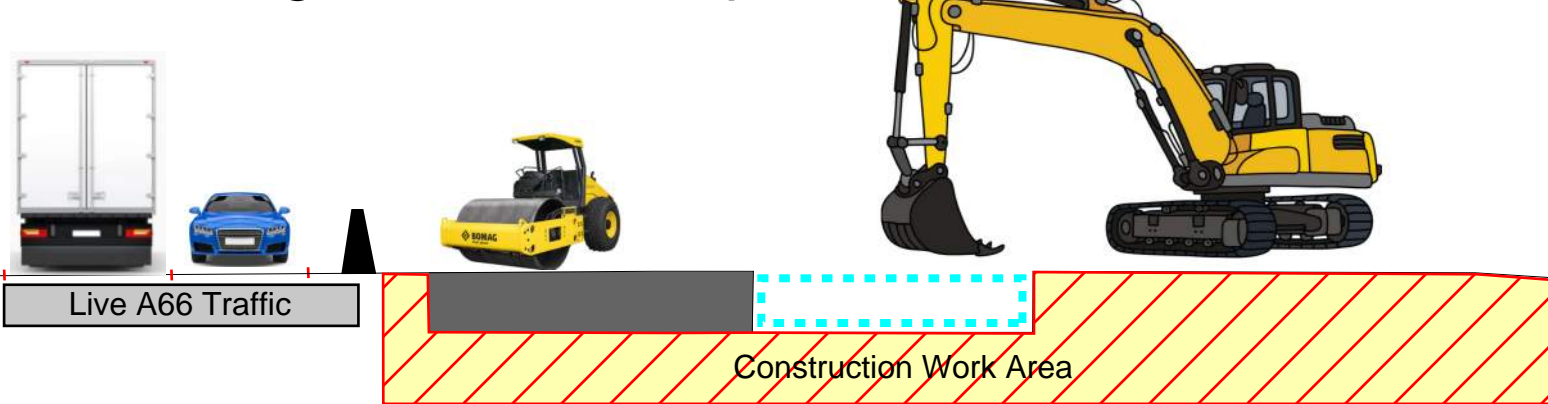
Construction works - Drainage ditches

To help improve water management around the A66 both from surface run-off and local rivers, streams and tributaries, a wide variety of ditches are proposed across the scheme. Material will be excavated and transported to be used within the scheme. The drainage will help mitigate flooding and improve biodiversity in the area.



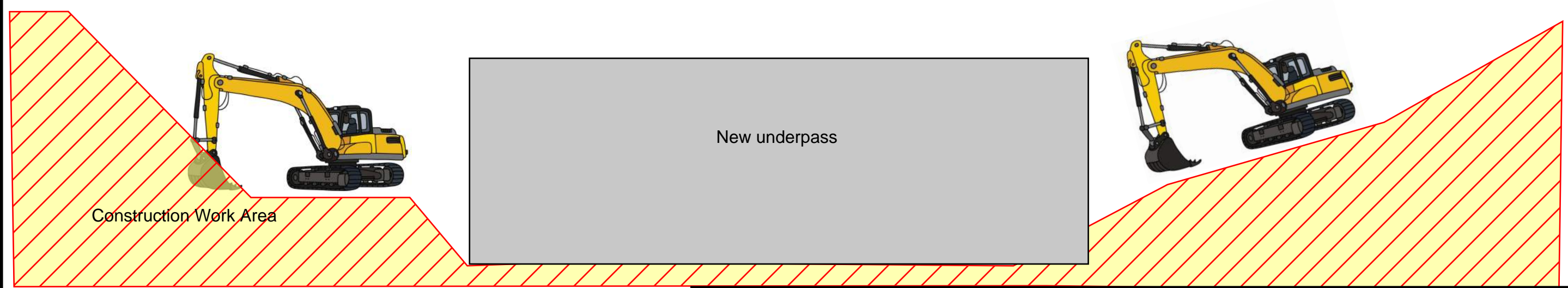
Construction works - New diversion route

To facilitate the construction of the new underpass for the Centre Parcs junctions, it is expected that a diversion route will be established to move traffic away from the work area. This will allow the works to be constructed away from live traffic, reducing programme times and aiding with safety. The new temporary road will be excavated out of the ground and new granular and asphalt.



Construction works - Underpass Construction

The new access junction to Center Parcs requires an underpass is to be constructed. This will be excavated into the ground with temporary works. The structure will be constructed below ground and then the new A66 embankment constructed over the top.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Arup DJV CDM Hazard Management Process.)

Overhead Services.
Underground Services.

NOTES

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KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
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- Pond
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- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
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- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

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P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	Freeze D 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21
Revision details					
Revision	Created dd/mm/yy	Checked dd/mm/yy	Reviewed dd/mm/yy	Approved dd/mm/yy	Authorised dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP
Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways
england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 4 of 6

Project Ref. No. Stage Scale : 1:1000 @ A0
--- PCF3 Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200004
Location | Type | Role | Number

Suitability Suitability Description Revision
S1 Fit for Co-ordination P02

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A66 - Key Proposed Construction Activities (Phase 1 Works)

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Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

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NOTES

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KEY

Red line boundary

Existing layout

Existing watercourse

Proposed layout

Highway structure

Culvert

Cut-off drain

Surface water channel

Dry stone wall

Noise barrier

Proposed boundary treatment

Proposed gate

Traffic sign

Technology site

Proposed vehicle restraint system

Headwall

Pipe to Outfall

Earthworks

Pond

Proposed Byway Open to All Traffic (BOAT)

Abandoned Byway Open to All Traffic (BOAT)

Existing Byway Open to All Traffic (BOAT)

Proposed Footway/Footpath

Abandoned Footway/Footpath

Existing Footway/Footpath

Proposed Cycleway

Abandoned Cycleway

Existing Cycleway

Proposed Shared Cycle Footway

Abandoned Shared Cycle Footway

Existing Shared Cycle Footway

Farm Track/Access

Designated Walkers, Cyclists and Horse Riders Route

Maintenance Lay-by

Compound/Storage Area

Demolished buildings

Flood Compensation Area

Proposed Environmental Mitigation

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P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21
Revision	Created dd/mm/yy	Checked dd/mm/yy	Reviewed dd/mm/yy	Approved dd/mm/yy	Authorised dd/mm/yy

Designer
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A66 NTP
Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways
england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 5 of 6

Project Ref. No.

Stage
PCF3

Scale : 1:1000 @ A0

Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200005
Location | Type | Role | Number

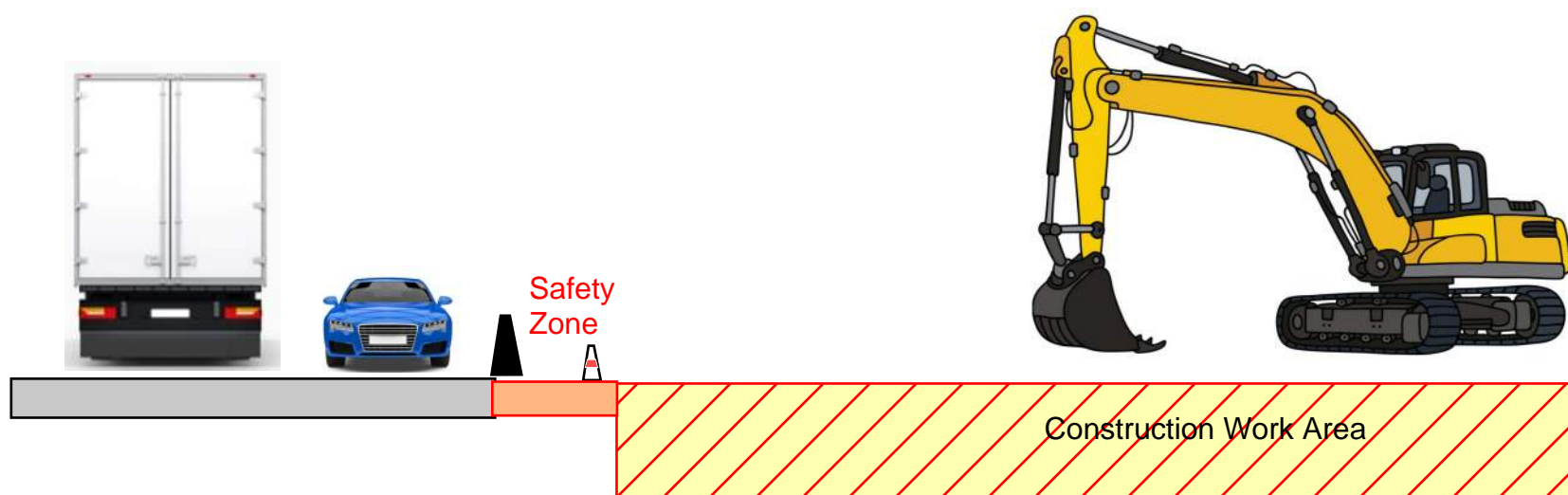
Suitability
S1

Suitability Description
Fit for Co-ordination

Revision
P02

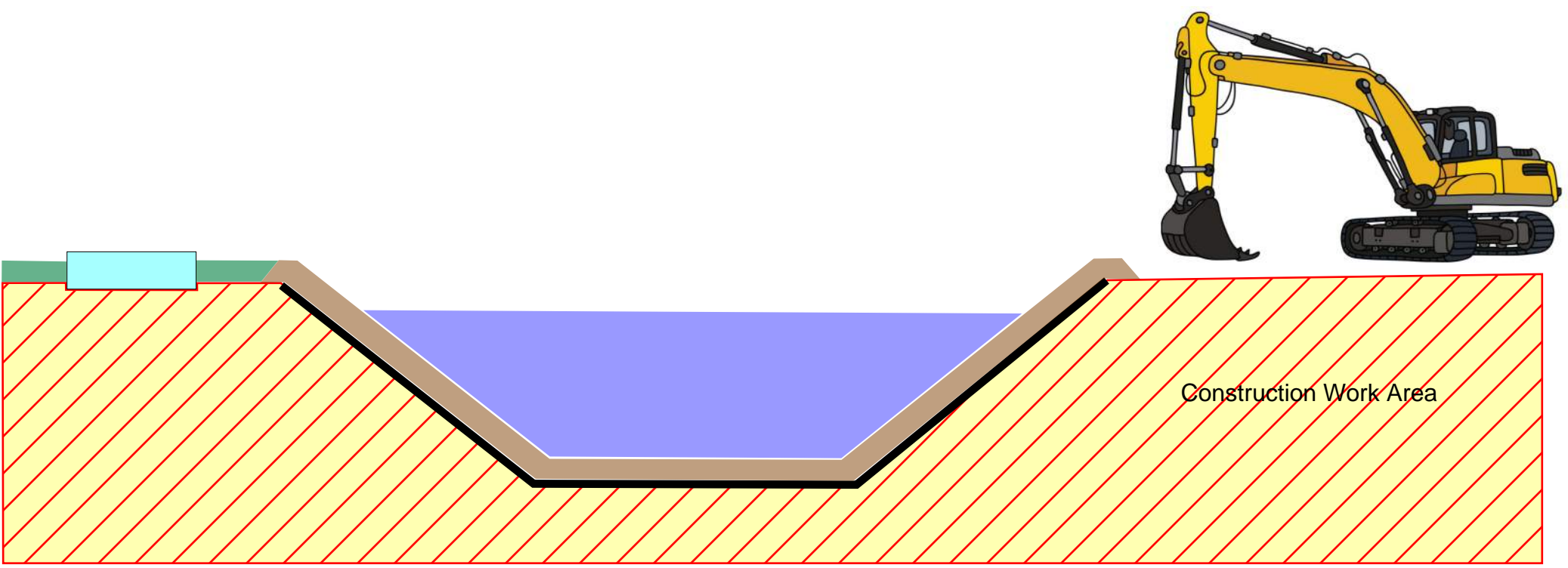
Construction of new carriageway next to existing A66

With traffic maintained on the existing A66 with traffic management in place, the new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.



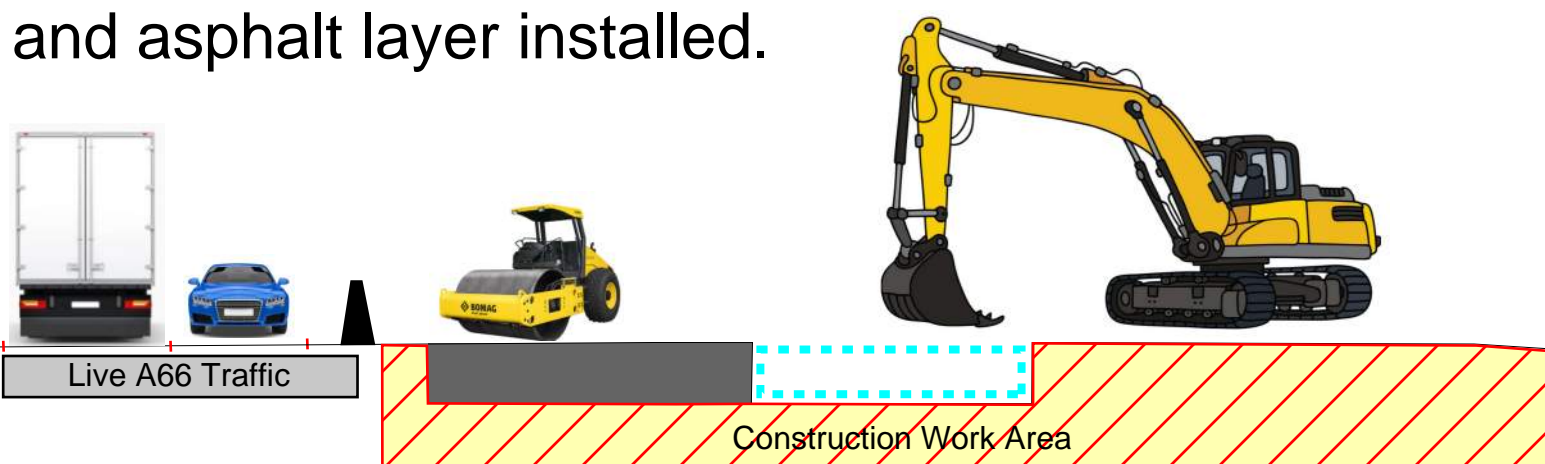
Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



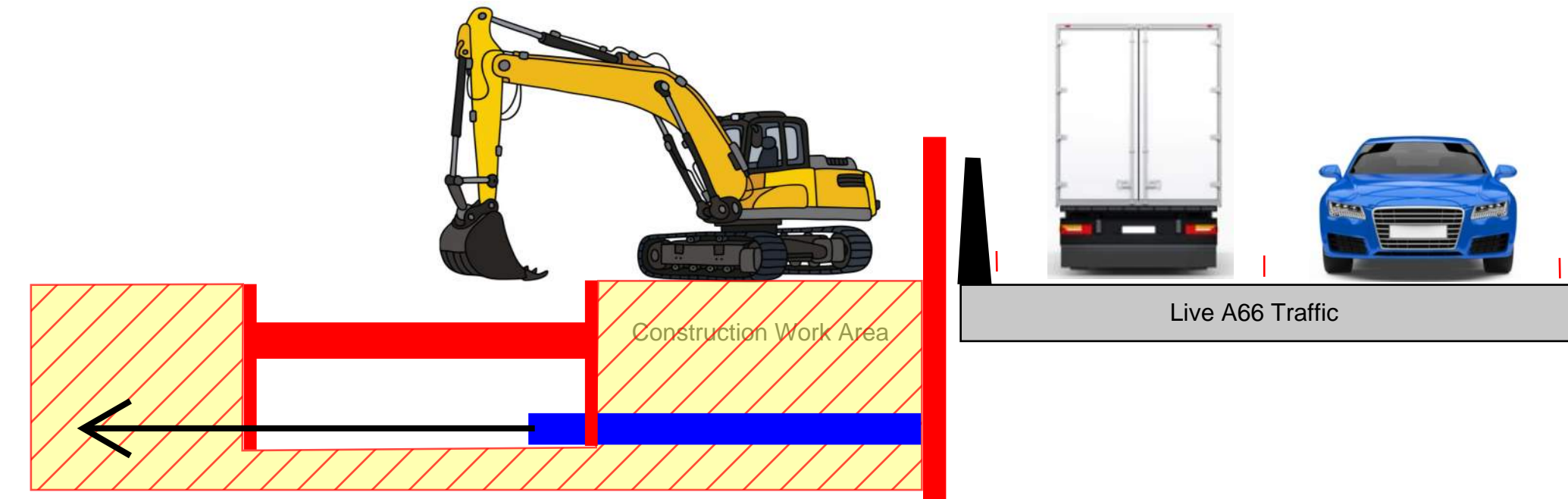
Construction works - New diversion route

To facilitate the construction of the new A66 in parts, it is expected that a diversion route will be established to move traffic away from the key work area. This will allow the works to be constructed away from live traffic, reducing programme times and aiding with safety. The new temporary road will be excavated out of the ground and new granular and asphalt layer installed.

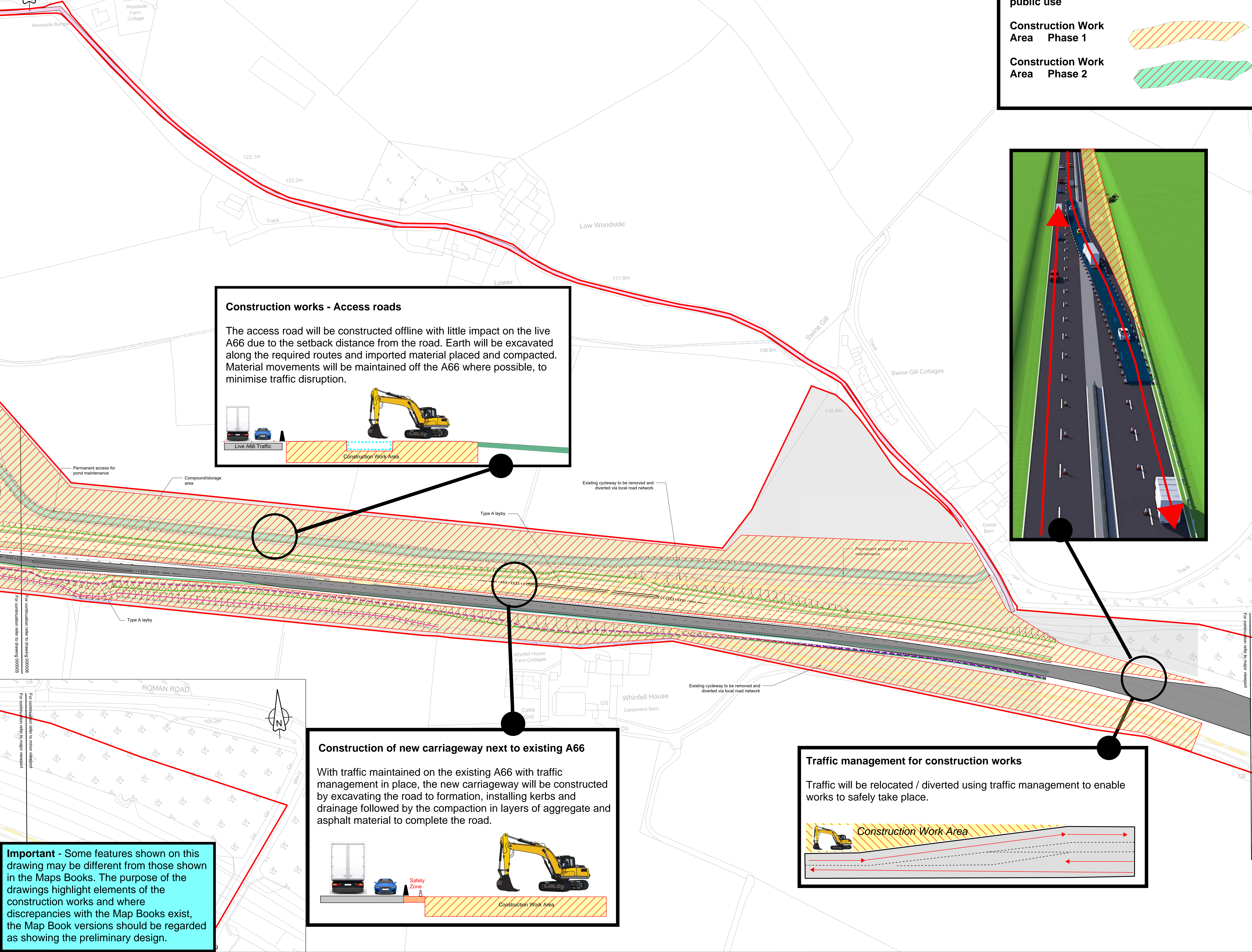


Construction works - Drainage culverts

Drainage works will be undertaken, assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - Access roads

The access road will be constructed offline with little impact on the live A66 due to the setback distance from the road. Earth will be excavated along the required routes and imported material placed and compacted. Material movements will be maintained off the A66 where possible, to minimise traffic disruption.

Construction of new carriageway next to existing A66

With traffic maintained on the existing A66 with traffic management in place, the new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.

Traffic management for construction works

Traffic will be relocated / diverted using traffic management to enable works to safely take place.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Arney Arup DJV CDM Hazard Management Process.)

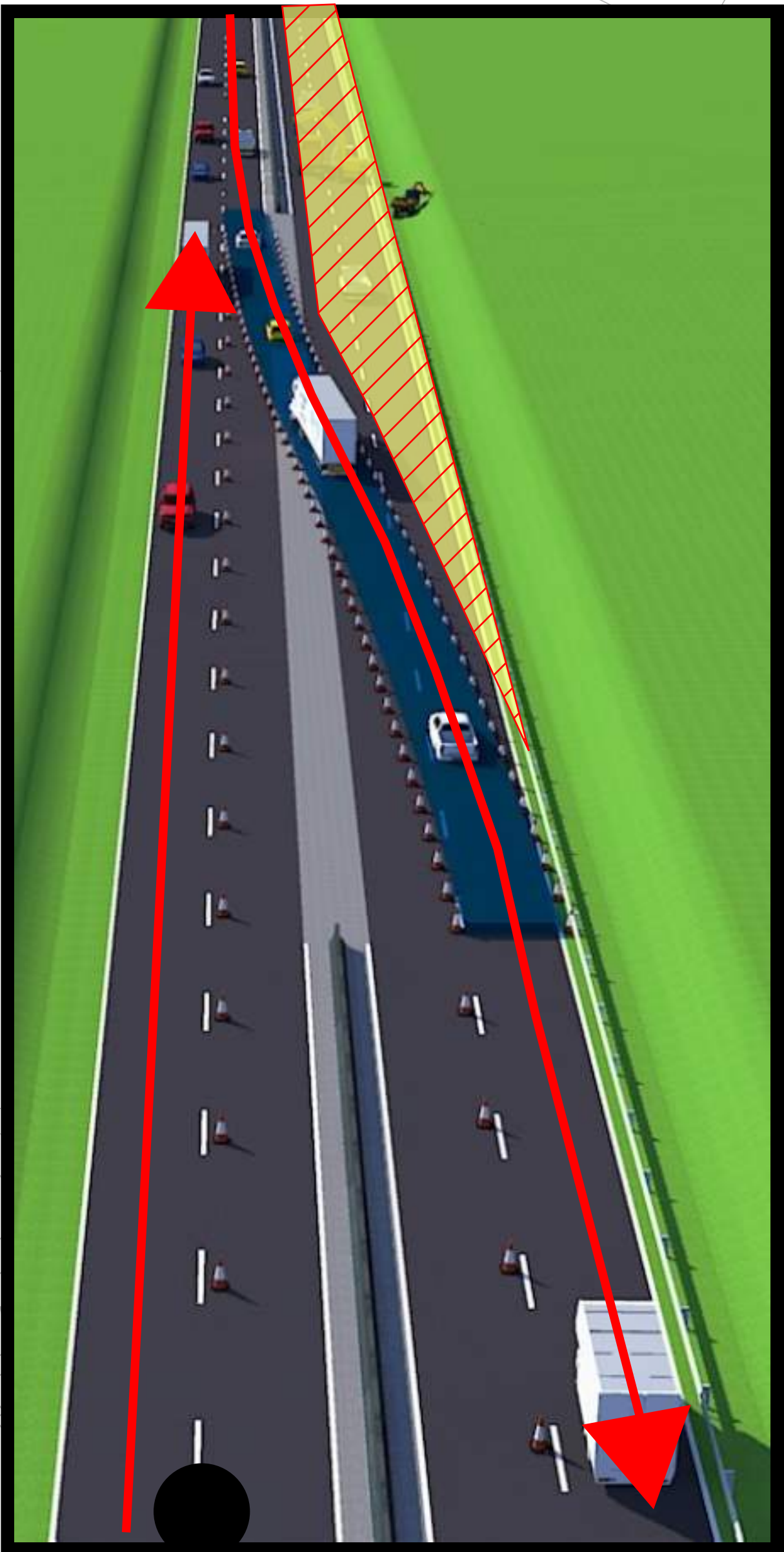
1. Overhead Services.
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M1 3BN



Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 6 of 6

Project Ref. No. Stage Scale : 1:1000 @ A0
--- PCF3 Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200006
Location | Type | Role | Number

Suitability Suitability Description Revision
S1 Fit for Co-ordination P02

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.