

Cambridge Waste Water Treatment Plant Relocation Project
Anglian Water Services Limited

Appendix 19.3: Transport Assessment Part 2

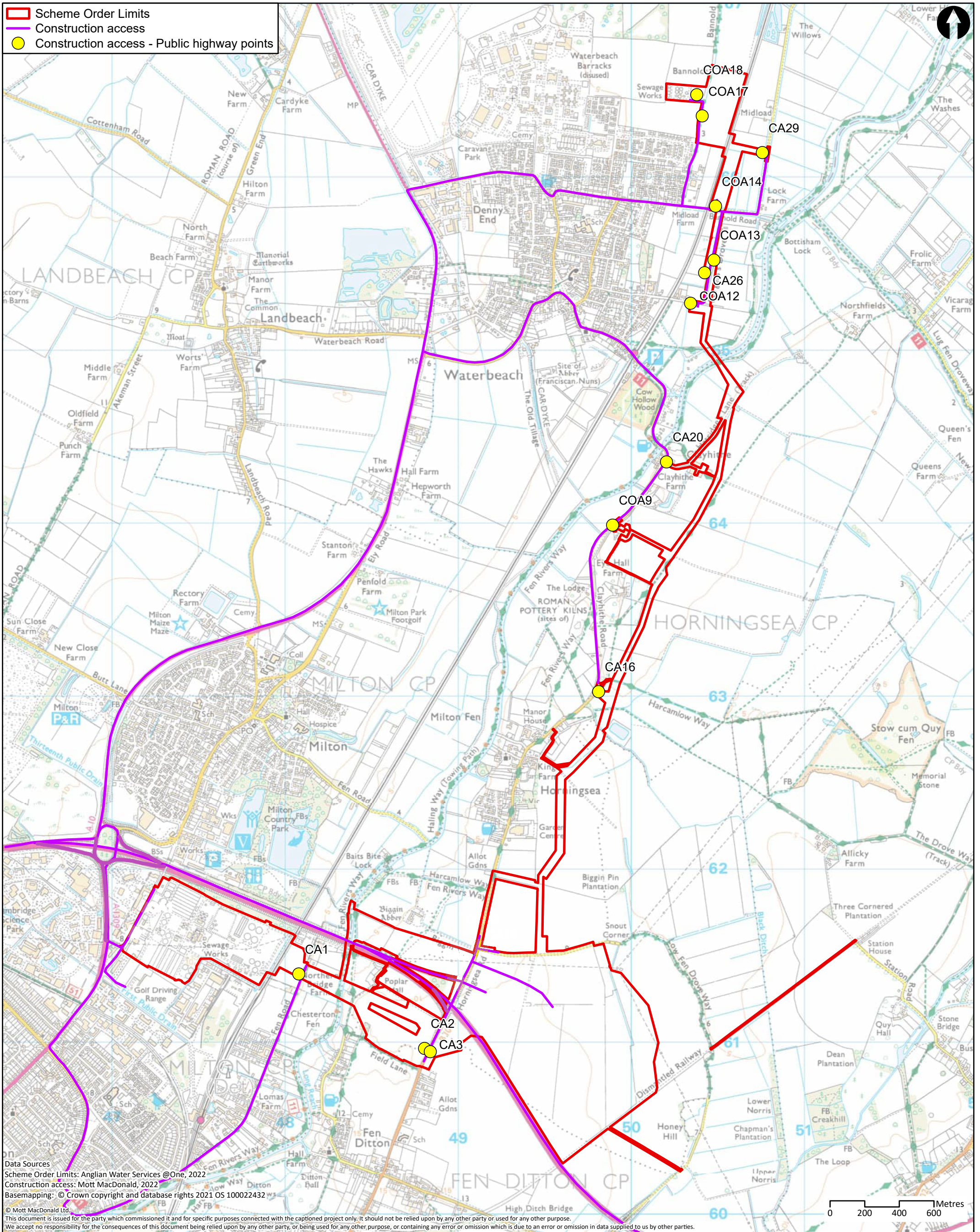
Application Document Reference: 5.4.19.3
PINS Project Reference: WW010003
APFP Regulation No. 5(2)a

Revision No. 05
19 February 2024

Cambridge Waste Water Treatment Relocation Project
Transport Assessment

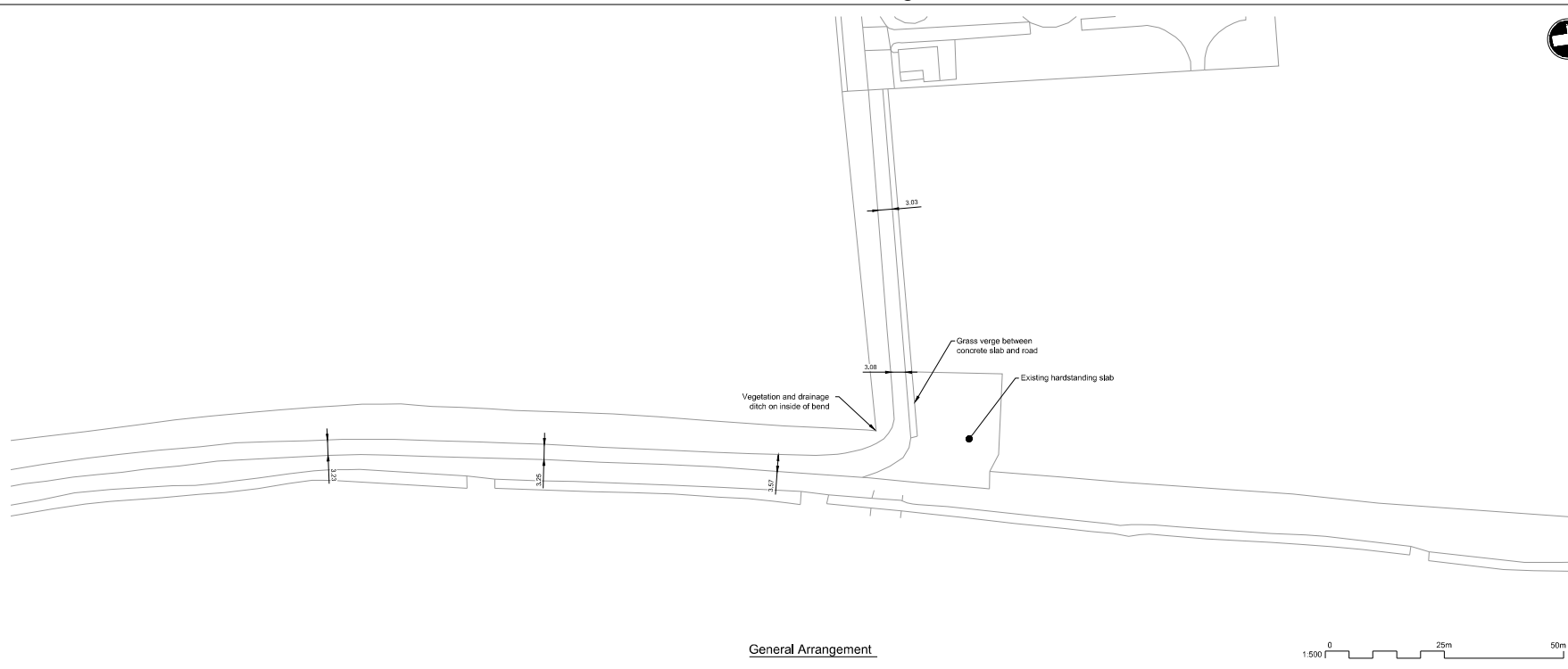


Appendix G: Swept Path Analysis

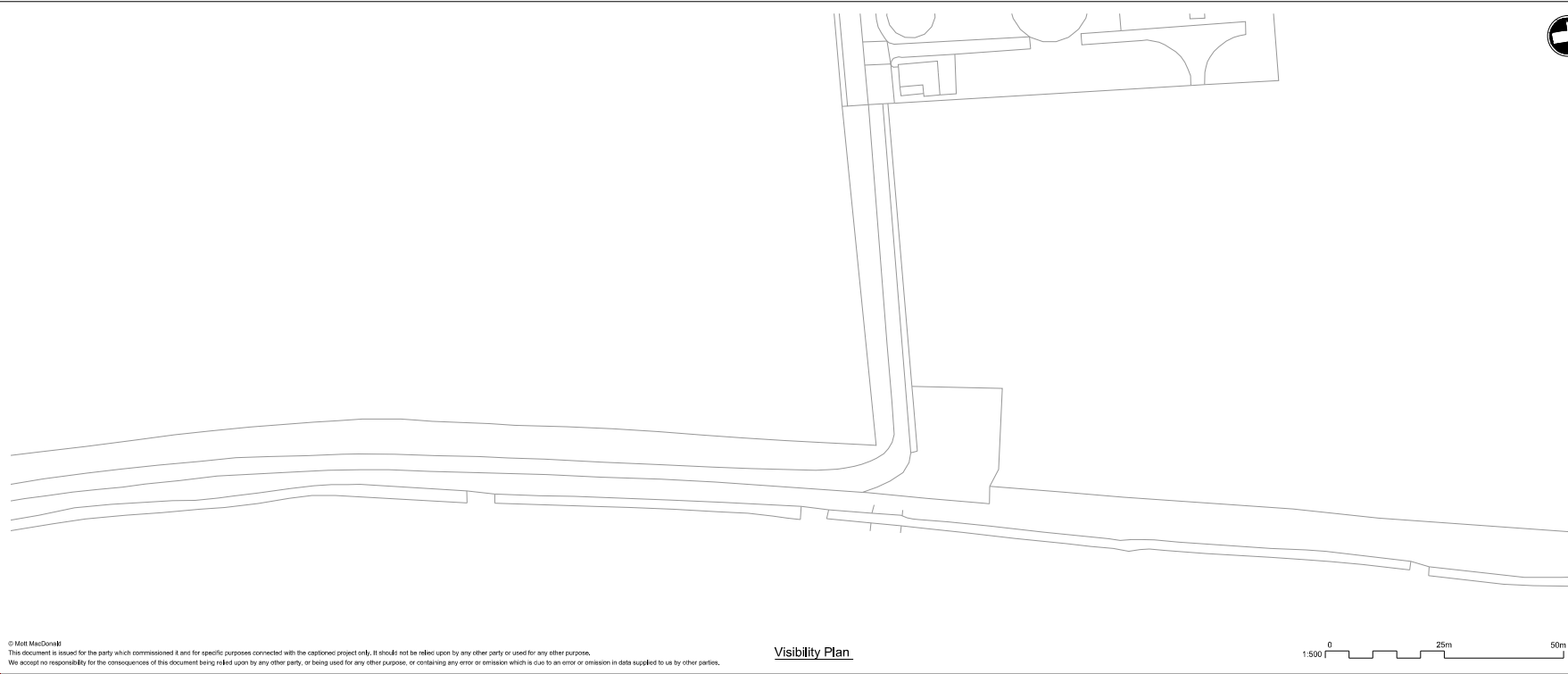


Data Sources
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<p>MOTT MACDONALD</p> <p>22 Station Road Cambridge CB1 2JD United Kingdom</p> <p>T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W mottmac.com</p>	Client 					Title Cambridge Waste Water Treatment Plant Relocation Project Transport Assessment Construction route and access points		Drawn KL
						Drawing Number WW01003-CAMEST-MOT-05-XX-DR-X-0697		Checked WT
								Approved CS
							Scale at A3 1:20,000	Security STD
							Status PRE	Rev P3
Rev P1	Date 31/10/22	Drawn KL	Description First Draft	Ch'k'd WT	App'd CS			
Rev P2	Date 18/12/23	Drawn CC	Description Revision 01	Ch'k'd WT	App'd GW			
Rev P3	Date 22/01/24	Drawn CC	Description Revision 02	Ch'k'd WT	App'd GW			



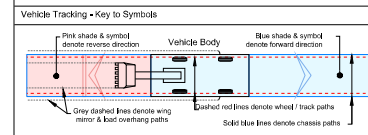
General Arrangement



Visibility Plan



- Notes
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 - The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is based on a preliminary design and is subject to change during future stages of the design development of this option.
 - DRAWINGS TO BE READ IN CONJUNCTION** with the Technical Memo.



Vehicle Tracking - Vehicle Details

Low Loader	
Overall Length	16,633m
Overall Width	2,500m
Overall Body Height	3,300m
Max Track Width	2,500m
Kerb to Kerb Turning Radius	6,700m
Large Mobile Crane	
Overall Length	12,200m
Overall Width	2,450m
Overall Body Height	3,400m
Track Width	2,450m
Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk,

Vehicle Tracking - Notes

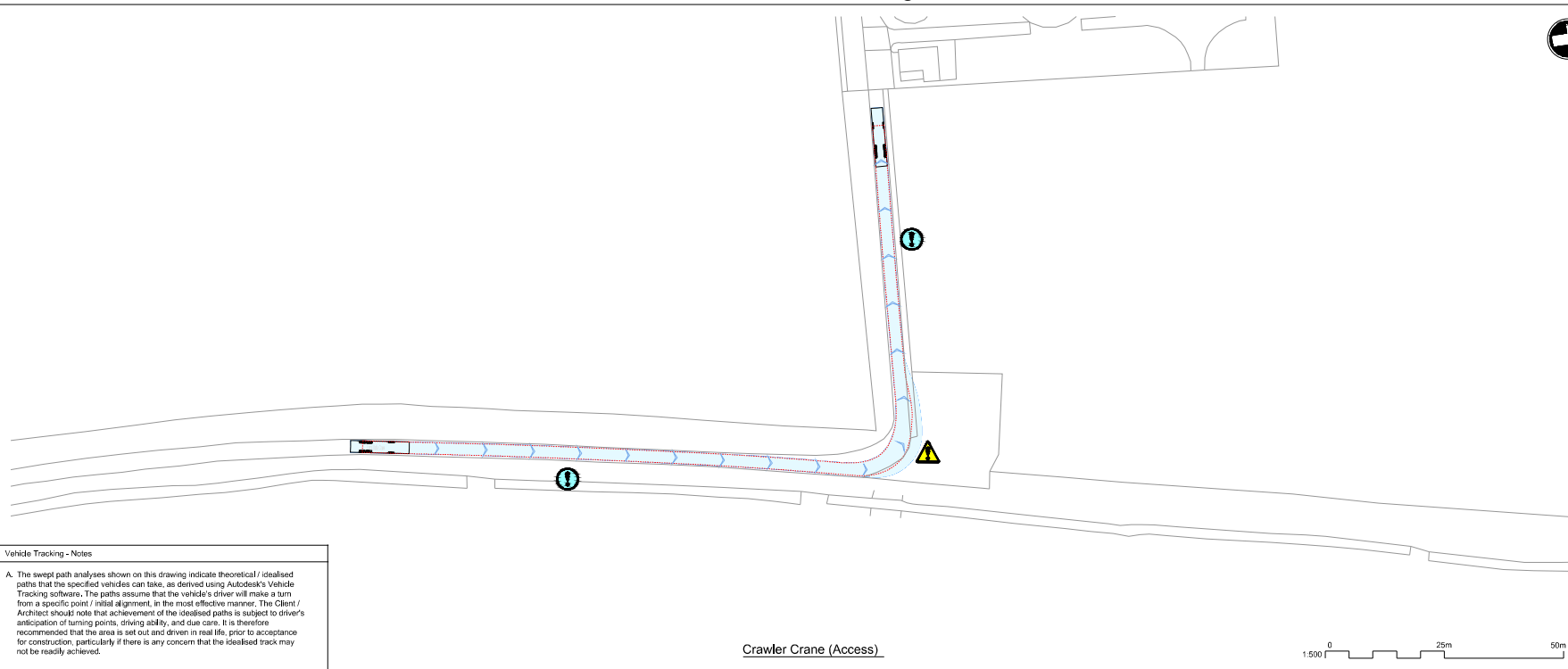
A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.

P1	10/23/25	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Drawn	Checked



The Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 COA17 – COA18
 Highways GA, Visibility Splay and
 Vehicle Tracking

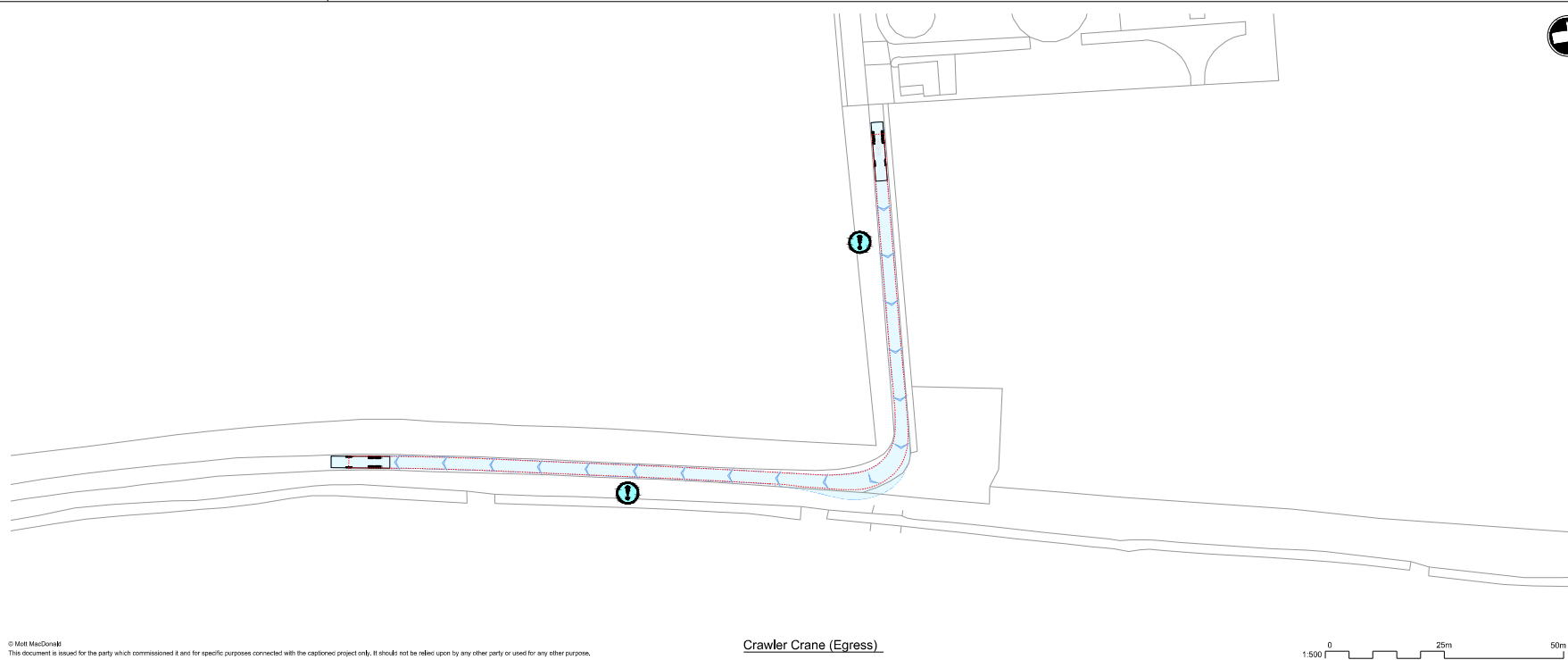
Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	A.D.Castles	ADC	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-
Scale	1:500	Status	PRE	Rev	P1
			Section	STD	
Drawing 102375-MMD-01-XX-DR-C-DRAFT					



Vehicle Tracking - Notes

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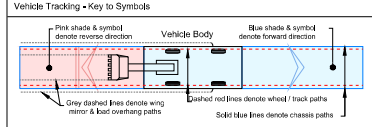
Crawler Crane (Access)



Crawler Crane (Egress)



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 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is based on a 10% or 15% slope. The design is subject to further detailed design.
 - 15. DRAWINGS TO BE READ IN CONJUNCTION with the Technical Memo.**



Vehicle Tracking - Vehicle Details

Low Loader	
Overall Length	16,633m
Overall Width	2,500m
Overall Body Height	3,300m
Max Track Width	2,500m
Kerb to Kerb Turning Radius	16,700m

Large Mobile Crane	
Overall Length	12,200m
Overall Width	2,450m
Overall Body Height	3,400m
Track Width	2,450m
Kerb to Kerb Turning Radius	10,000m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- ⚠ Kerb overrun
 - i Restrictive road width

P1	10/23/25	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Drawn	Checked

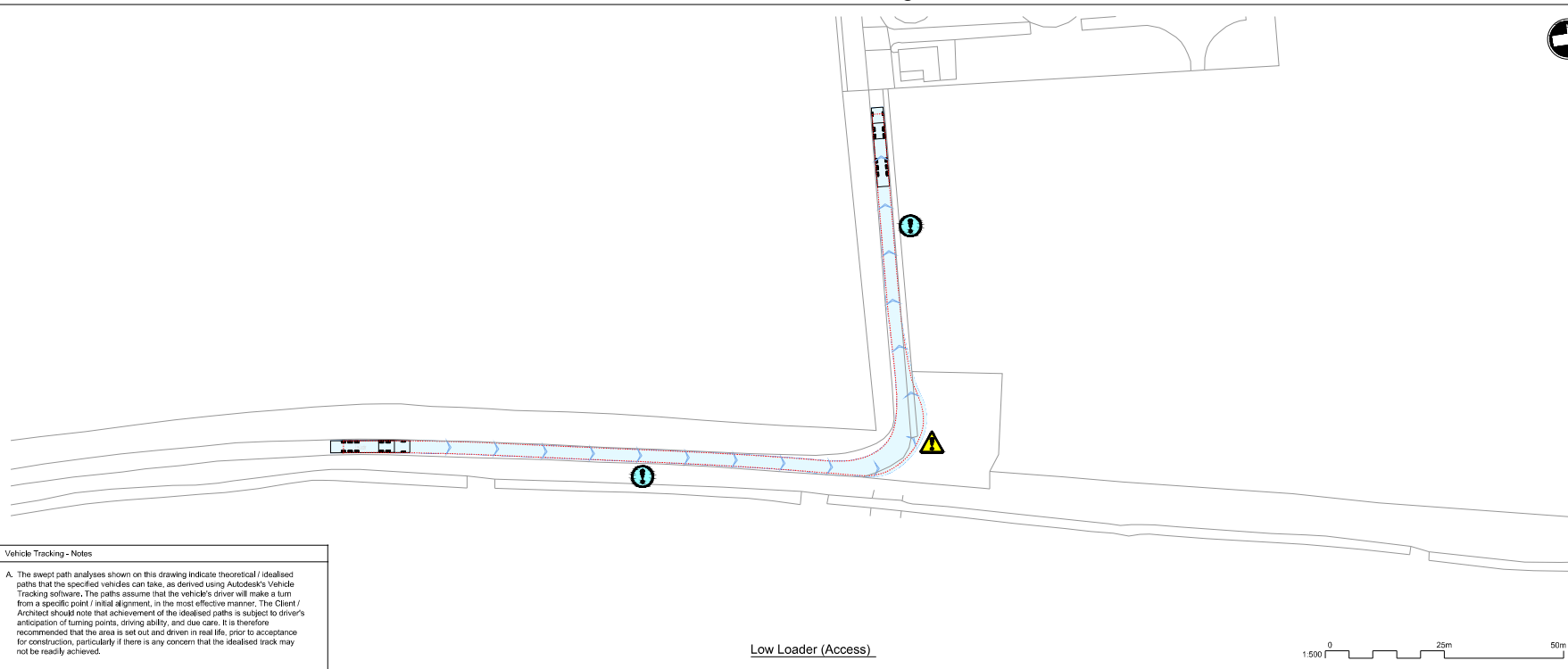


Title
Cambridge Waste Water Treatment Works Relocation
COA17 – COA18
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

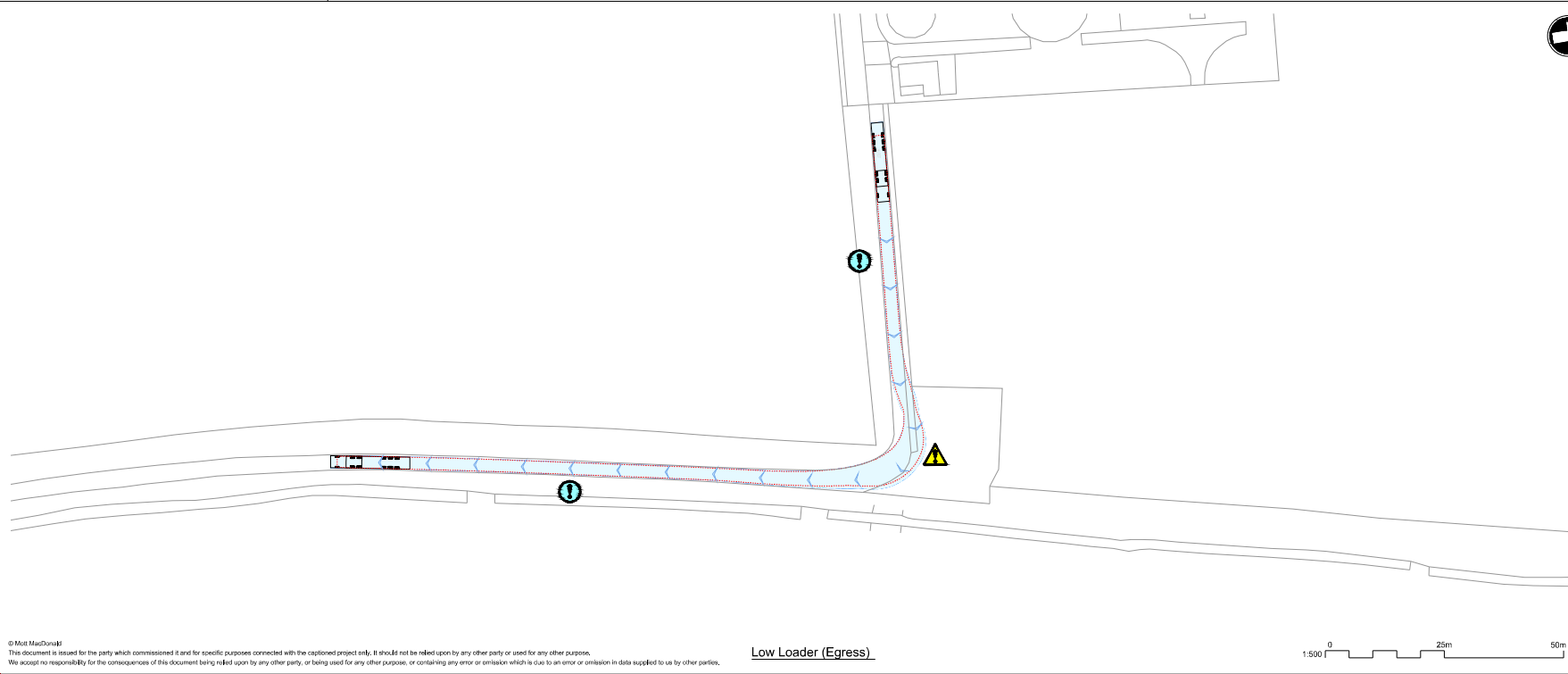
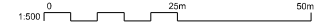
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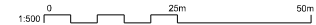
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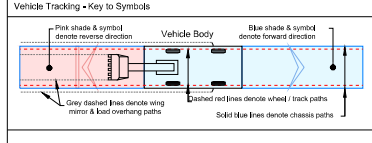
Low Loader (Access)



Low Loader (Egress)



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 - DRAWINGS PREPARED IN COORDINATION** with the Technical Memo.



Vehicle Ta

Low Loader	
Overall Length	16,633m
Overall Width	2,500m
Overall Body Height	3,300m
Max Track Width	2,500m
Kerb to Kerb Turning Radius	16,700m

Large Mobile Crane	
Overall Length	12,100m
Overall Width	2,430m
Overall Body Height	3,460m
Track Width	2,430m
Kerb to Kerb Turning Radius	10,000m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

Rev	Date	Drawn	Description	AWK	ARR
P1		ADC	Draft for Discussion / Review.		

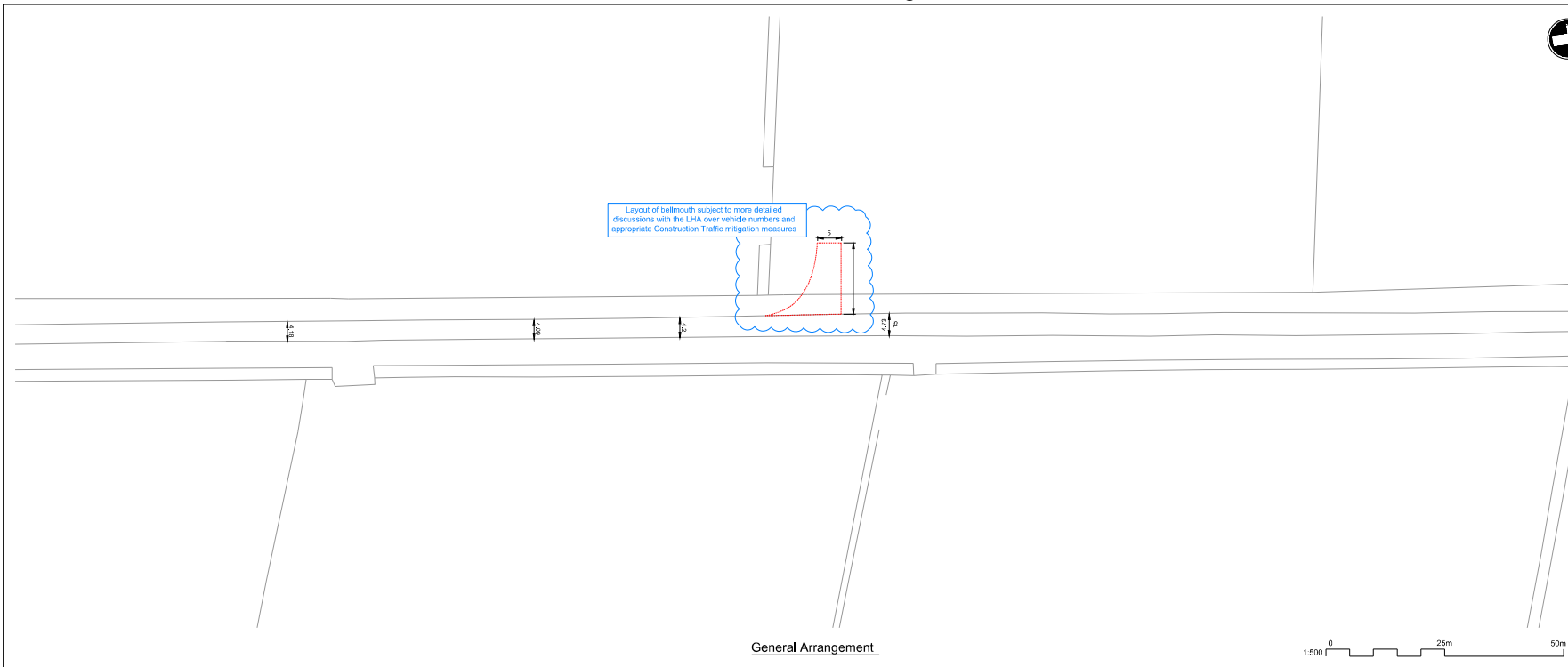


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA17 – COA18
Highways GA, Visibility Splay and
Vehicle Tracking

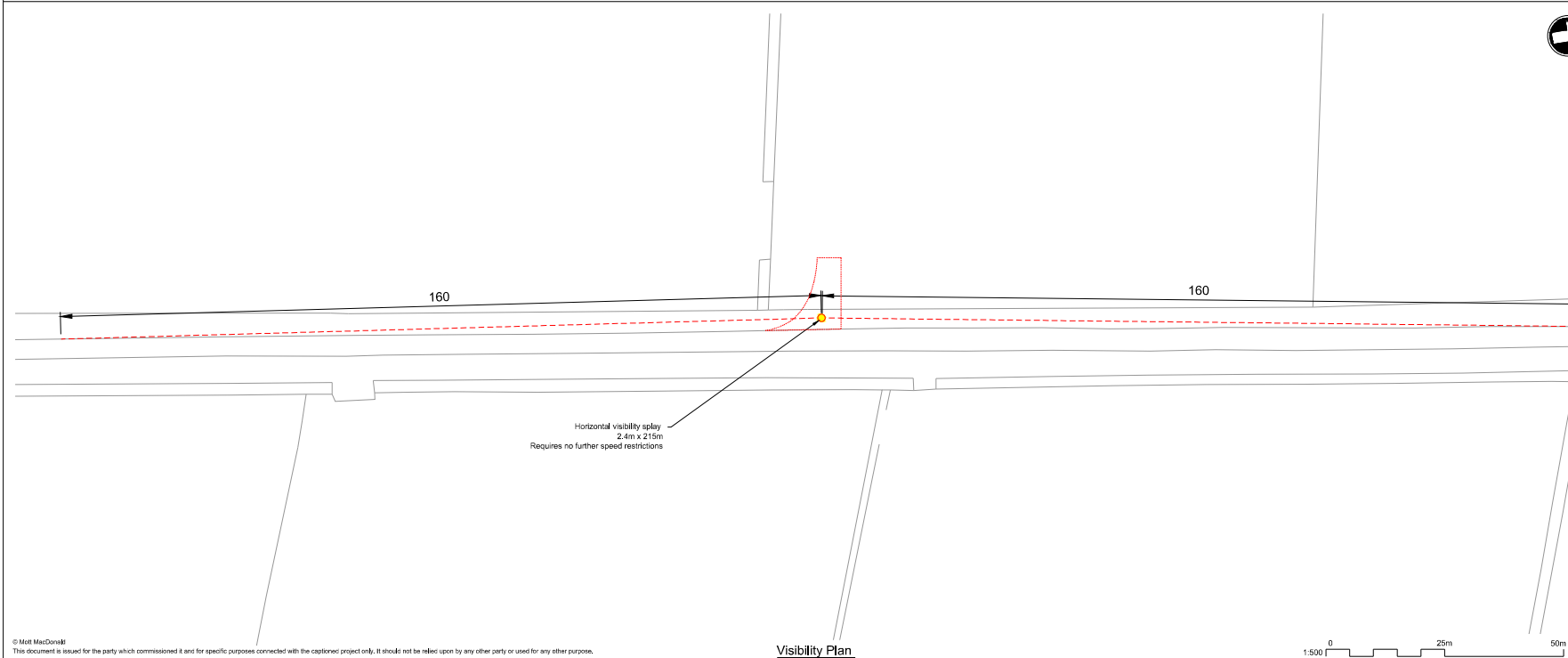
Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				

Scale: 1:500 Status: PRE Rev: P1 Section: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT



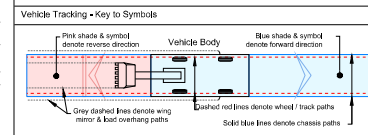
General Arrangement



Visibility Plan



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Vehicle Tracking - Vehicle Details

Low Loader	
Overall Length	16,633m
Overall Width	2,500m
Overall Body Height	3,300m
Max Track Width	2,500m
Kerb to Kerb Turning Radius	10,700m
Large Mobile Crane	
Overall Length	12,200m
Overall Width	2,450m
Overall Body Height	2,450m
Track Width	2,450m
Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

	High Risks
	H1 Explanation of risk,

Vehicle Tracking - Notes

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Rev	Date	Drawn	Description		Checked by

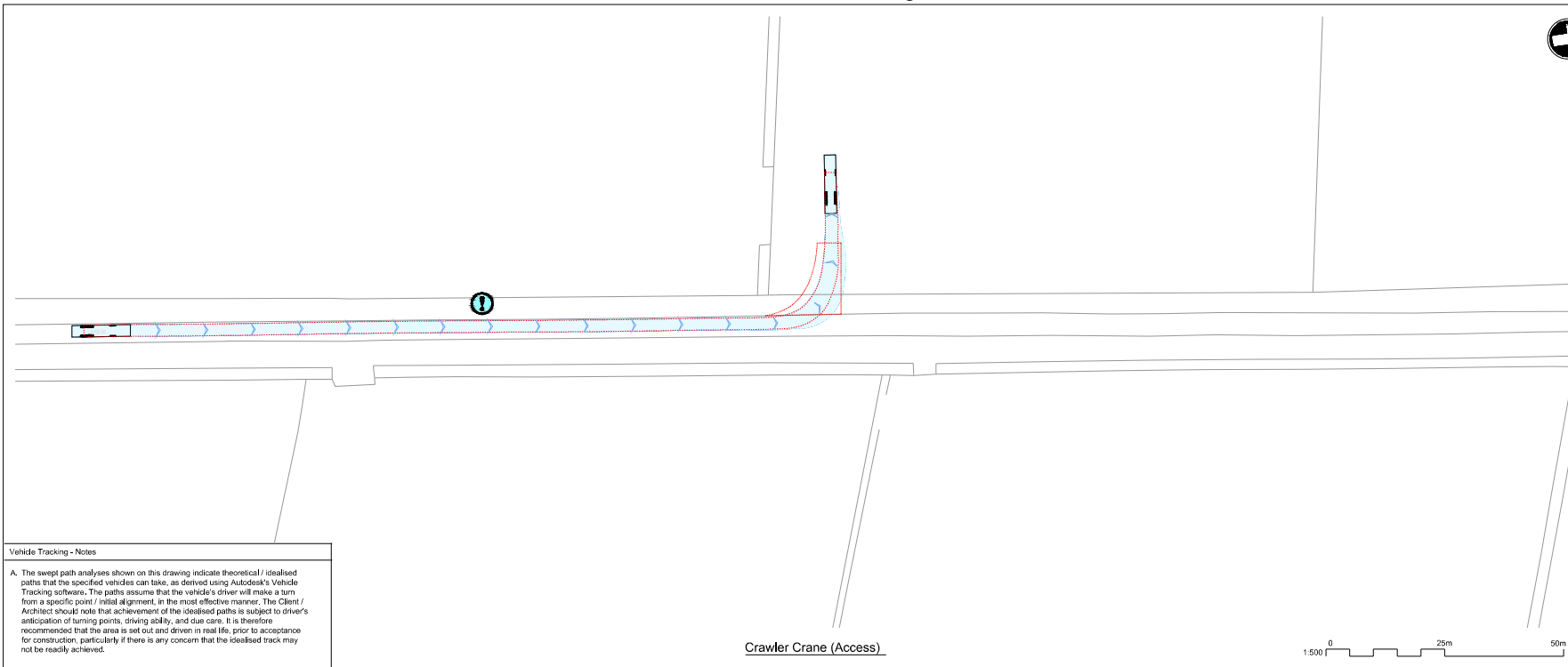


The Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 CA29
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Castles	EC
Drawn	A.D.Castles	ADC	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

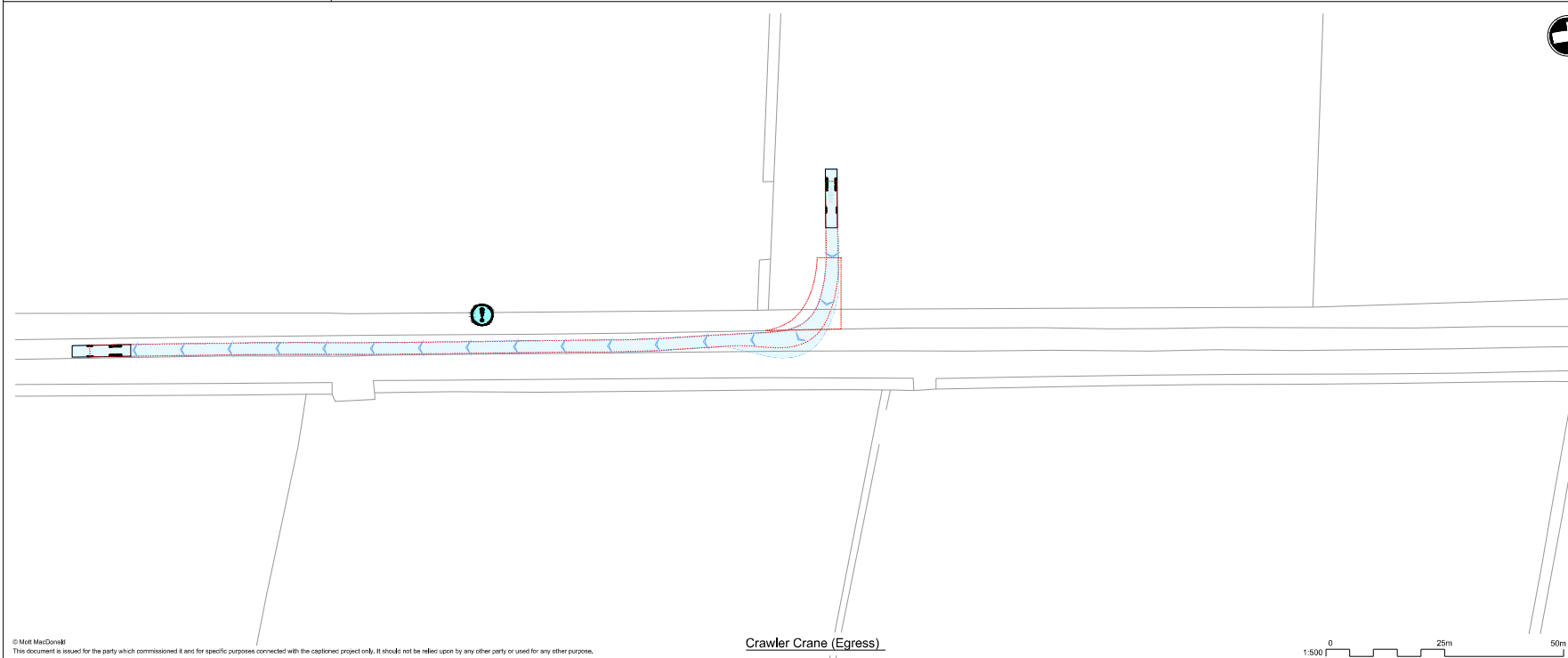
Drawing: 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

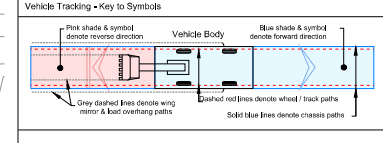
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Crawler Crane (Access)



Crawler Crane (Egress)

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Vehicle Tracking - Vehicle Details

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	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	10,700m
	Large Mobile Crane	
	Overall Length	12,200m
	Overall Width	2,450m
	Overall Body Height	3,400m
	Track Width	2,450m
	Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

Risks

	Kerb overrun
	Restrictive road width

P1	AD/C	Draft for Discussion / Review.	AWK	AWK
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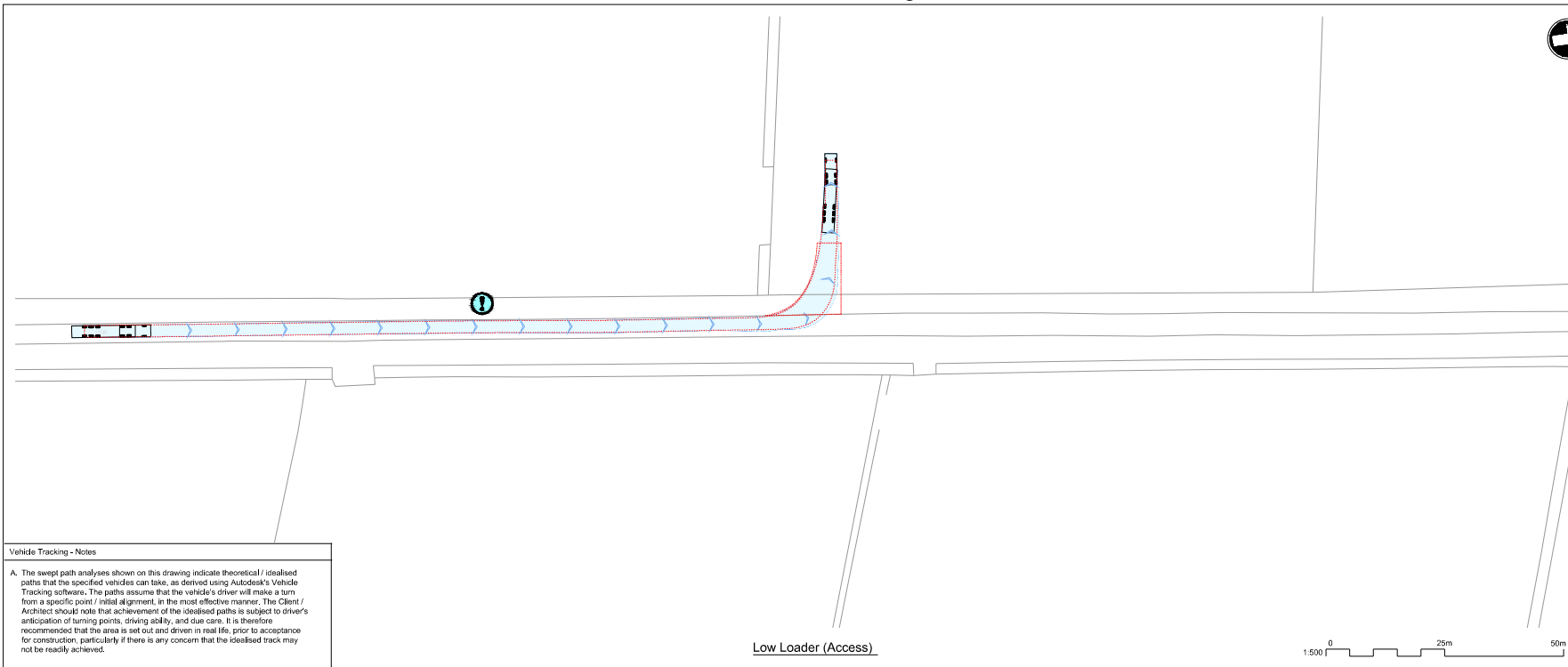


Title
Cambridge Waste Water Treatment Works Relocation
CA29
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	AD/C	Eng check	E.Castles	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				

Scale: 1:500 Status: PRE Rev: P1 Section: STD

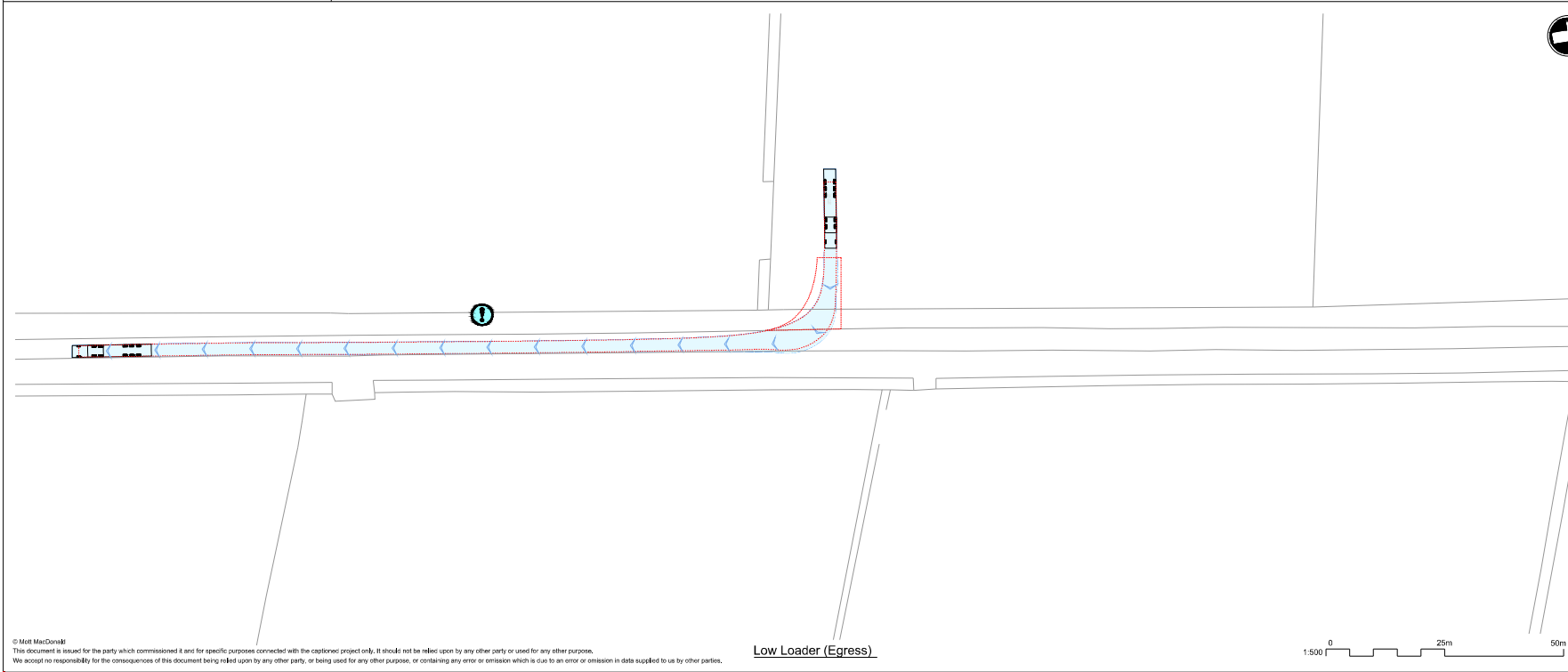
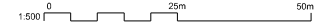
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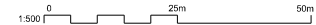
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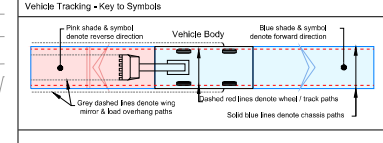
Low Loader (Access)



Low Loader (Egress)



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 - NO DRAWINGS TO BE READ IN OCCURRENCE WITH THE TECHNICAL MEMO.**



Vehicle Data

	Low Loader	
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	Overall Width	2,500m
	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	16,700m
	Large Mobile Crane	
	Overall Length	32,200m
	Overall Width	2,450m
	Overall Body Height	3,400m
	Track Width	2,450m
	Kerb to Kerb Turning Radius	16,000m

Vehicle Tracking - Risks & Compliance

Risks

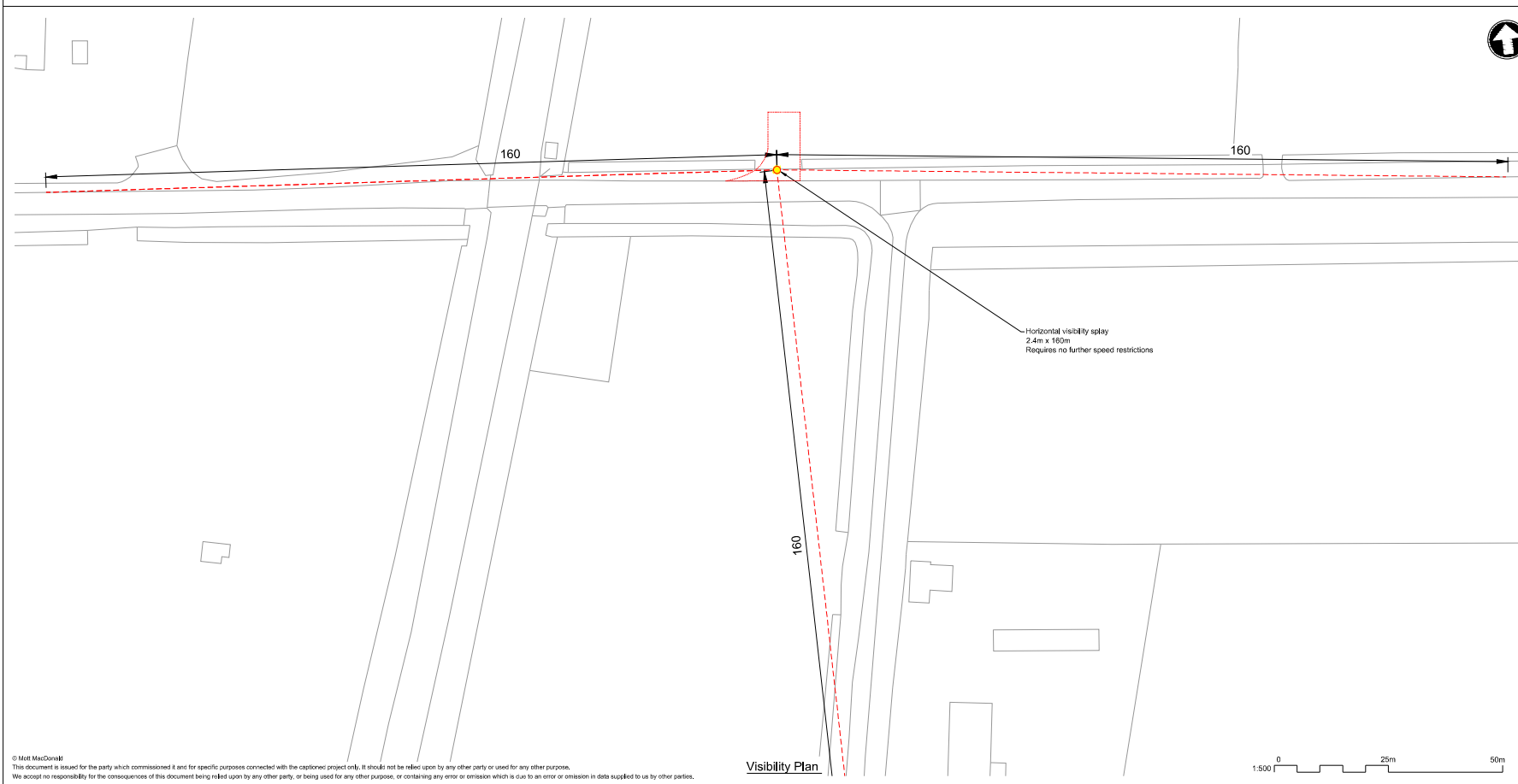
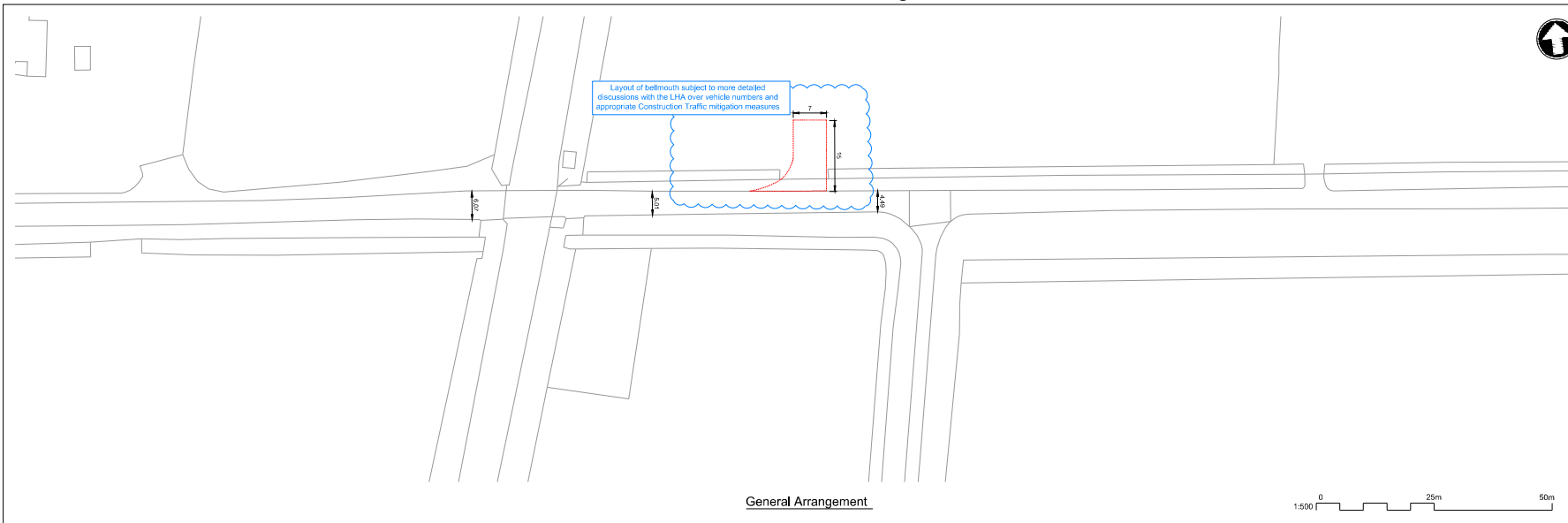
	Kerb overrun
	Restrictive road width

P1	ADG	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked by

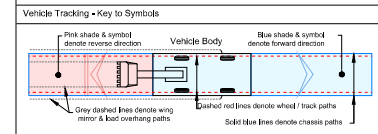


Title
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CA29
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Designed	A.D.Castles	ADG	Eng check	E.Castles	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				
Scale	1:500	Stat	PRE	Rev	P1
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 12. The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is based on a preliminary design and the final design is to be determined during future stages of the design development of this option.
 15. DRAWINGS TO BE READ IN OCCURRENCE with the Technical Memo.



Vehicle Tracking - Vehicle Details

	Low Loader	Overall Length: 16,633m Overall Width: 2,500m Overall Body Height: 3,300m Max Track Width: 2,500m Kerb to Kerb Turning Radius: 10,700m
	Large Mobile Crane	Overall Length: 12,200m Overall Width: 2,450m Overall Body Height: 2,460m Track Width: 2,450m Kerb to Kerb Turning Radius: 10,000m

Vehicle Tracking - Risks & Compliance

	High Risks	H1 Explanation of risk,
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Vehicle Tracking - Notes

A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.

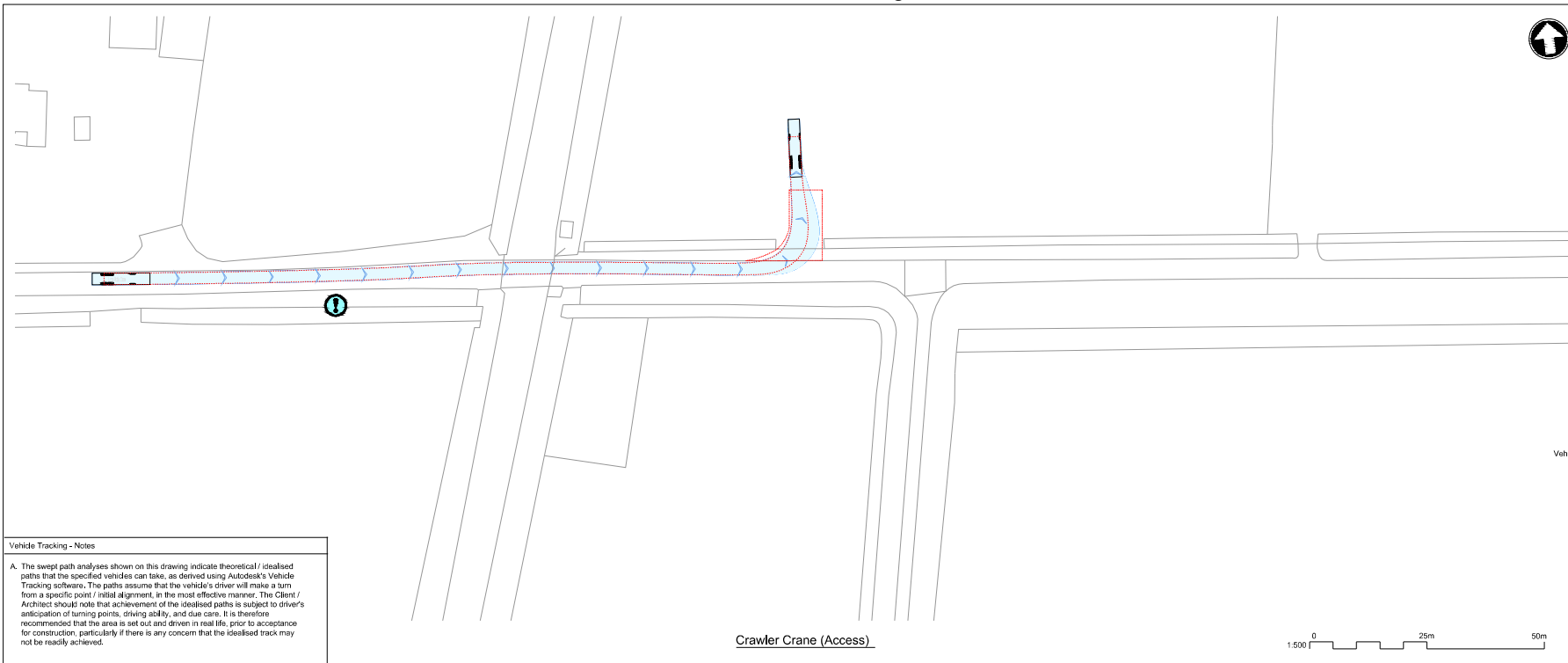
P1	17/05/2022	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Drawn	Checked



The Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA14
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				

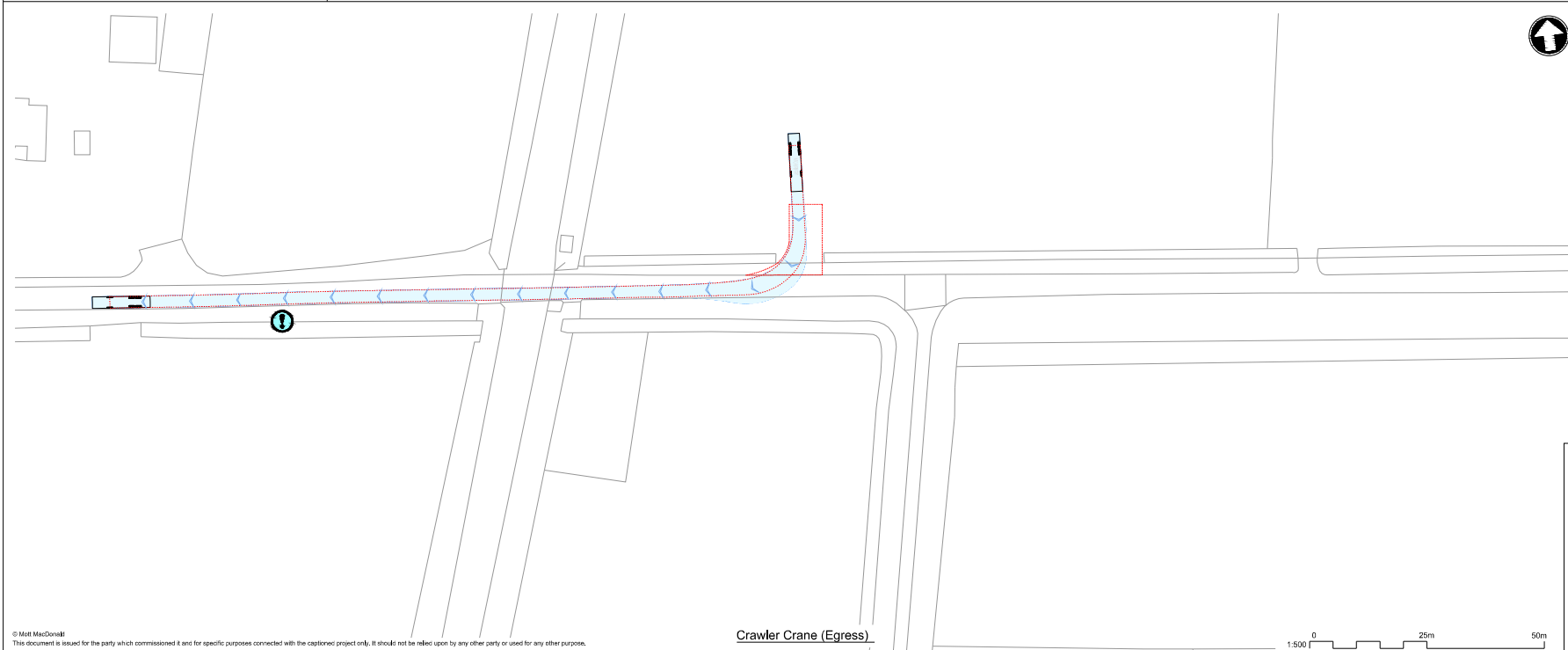
Scale: 1:500 Stat: PRE Rev: P1 Sec: STD
Drawing: 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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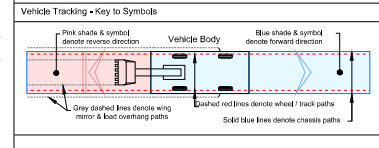
Crawler Crane (Access)



Crawler Crane (Egress)



- Notes**
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 - DRAWINGS TO BE READ IN OCCURRENCE with the Technical Memo.**



Vehicle Tracking - Vehicle Details

	Low Loader	
Overall Length	16,633m	
Overall Width	2,500m	
Overall Body Height	3,300m	
Max Track Width	2,500m	
Kerb to Kerb Turning Radius	10,700m	

	Large Mobile Crane	
Overall Length	12,200m	
Overall Width	2,450m	
Overall Body Height	2,450m	
Track Width	2,450m	
Kerb to Kerb Turning Radius	10,000m	

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	10/23/25	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked	Approved

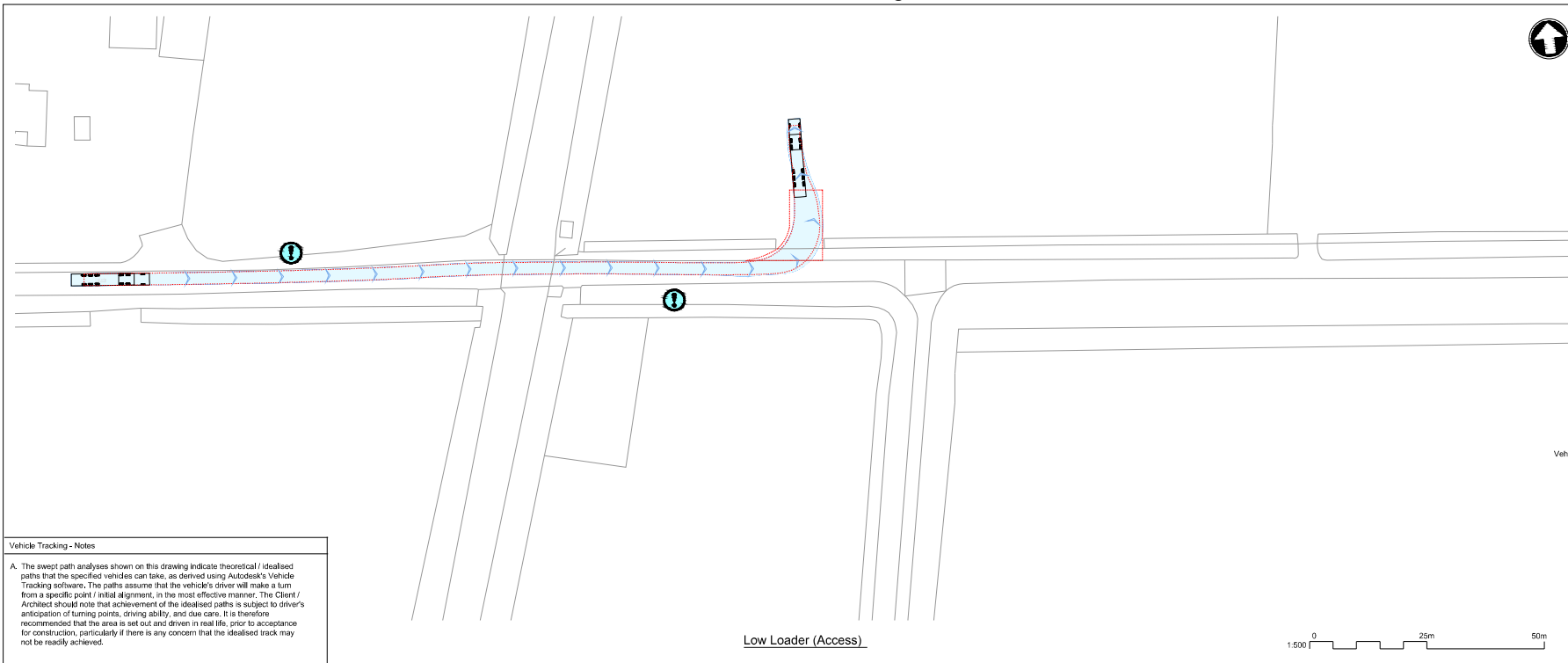


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA14
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Caselles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-

Scale: 1:500 | Status: PRE | Rev: P1 | Section: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT

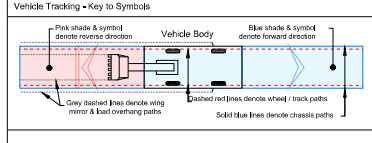


Vehicle Tracking - Notes

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Low Loader (Access)

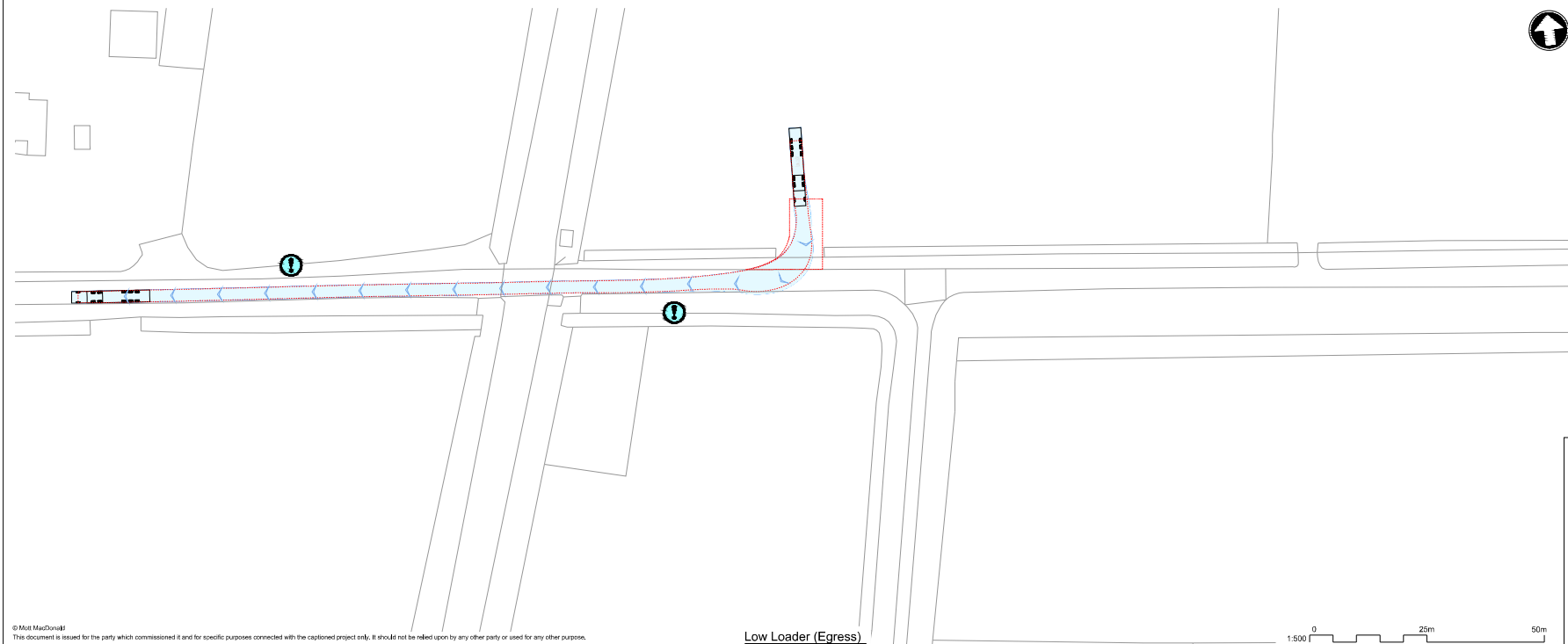
- Noises**
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 - The drawings do not include any street lighting or other highway infrastructure which may be required as part of the overall scheme design.
 - The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is a sensitive area, the proposed access road is subject to assessment during future stages of the design development of this option.
 - ~~DRAWINGS TO BE READ IN CONJUNCTION~~ with the Technical Memo.



Vehicle

	Low Loader	
Overall Length	16,633m	
Overall Width	2,500m	
Overall Body Height	3,300m	
Max Track Width	2,500m	
Kerb to Kerb Turning Radius	67,70m	

	Large Mobile Crane	
Overall Length	12,100m	
Overall Width	2,430m	
Overall Body Height	2,430m	
Track Width	2,430m	
Kerb to Kerb Turning Radius	10,000m	



Low Loader (Egress)

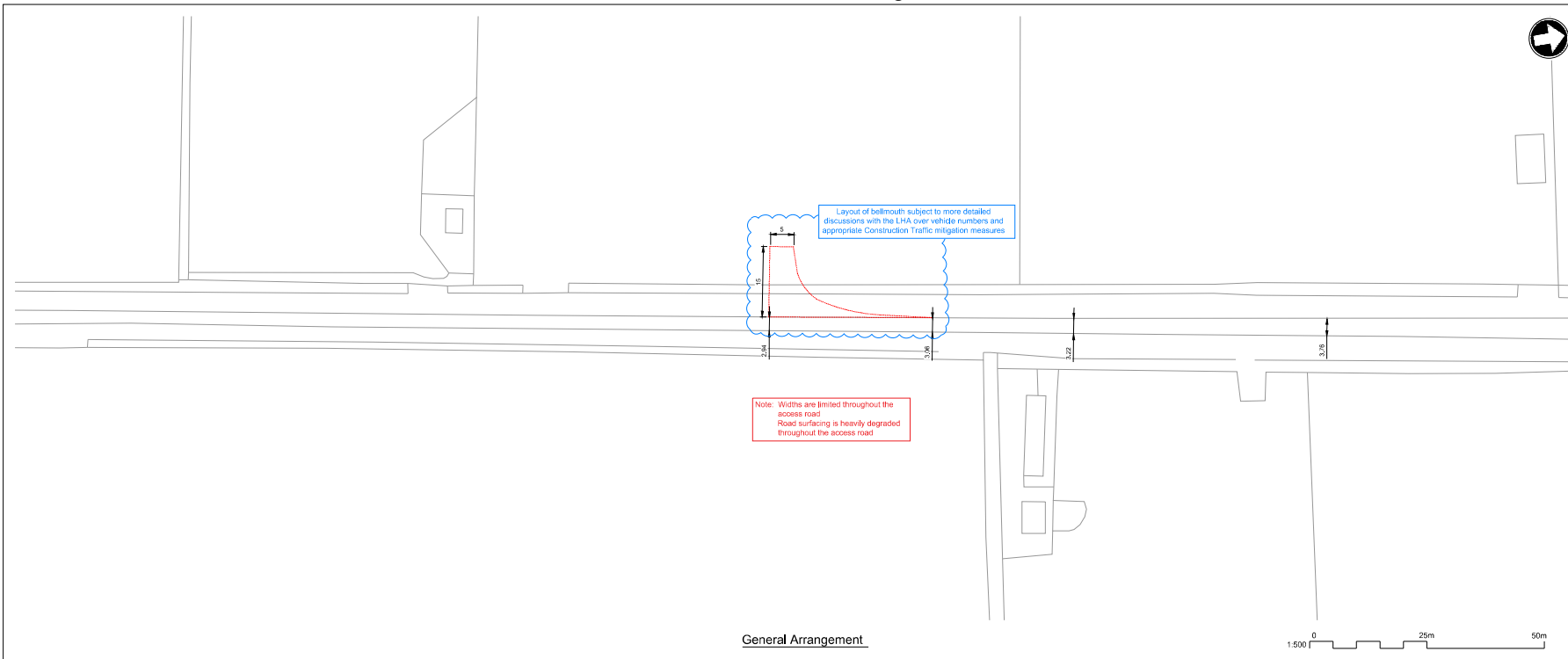
- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADC	Draft for Discussion / Review.	AMK	ARR
Rev	Date	Drawn	Description	Checked by

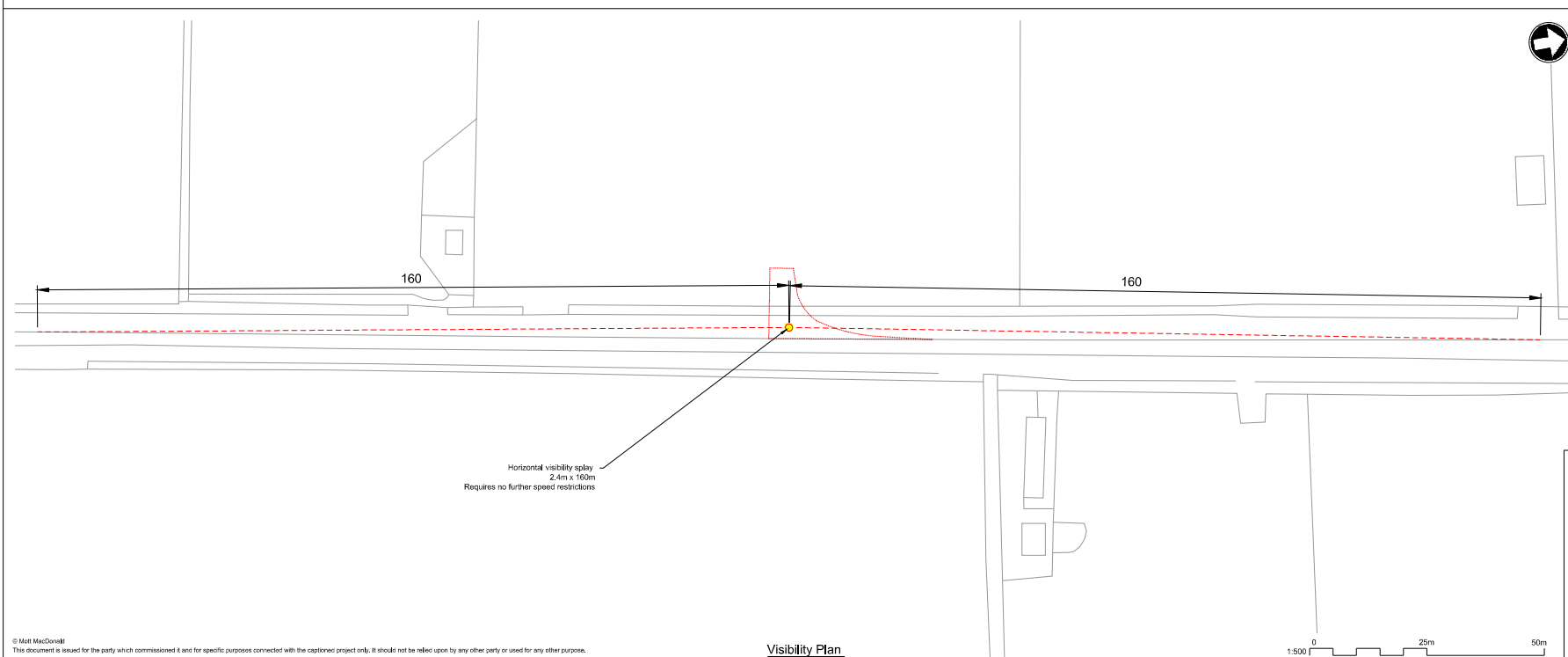


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA14
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Castles	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				
Scale	1:500	Status	PRE	Rev	P1
				Section	STD
Drawing 102375-MMD-01-XX-DR-C-DRAFT					

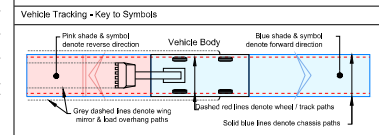


General Arrangement



Visibility Plan

- Notes
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 11. The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 12. The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is a brownfield site, any proposed new land take is acceptable provided during future stages of the design development of this option.
 13. DRAWINGS TO BE READ IN OCCURRENCE with the Technical Memo.



Vehicle Tracking - Vehicle Details

Vehicle Type	Overall Length	Overall Width	Overall Body Height	Max Track Width	Kerb to Kerb Turning Radius
Low Loader	16,633m	2,500m	3,300m	2,500m	6,700m
Large Mobile Crane	12,200m	2,450m	2,450m	2,450m	10,000m

Vehicle Tracking - Risks & Compliance

Risk Level	Explanation of risk
High Risks	H1 Explanation of risk

Vehicle Tracking - Notes

A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.

Rev	Date	Drawn	Description	Checked
P1		ADC	Draft for Discussion / Review	AWK



The Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA26
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Casillas	ADC	Eng check	E.Case	EC
Drawn	A.D.Casillas	ADC	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-
Scale	1:500	Stat	PRE	Rev	P1
Section	-	-	-	-	STD

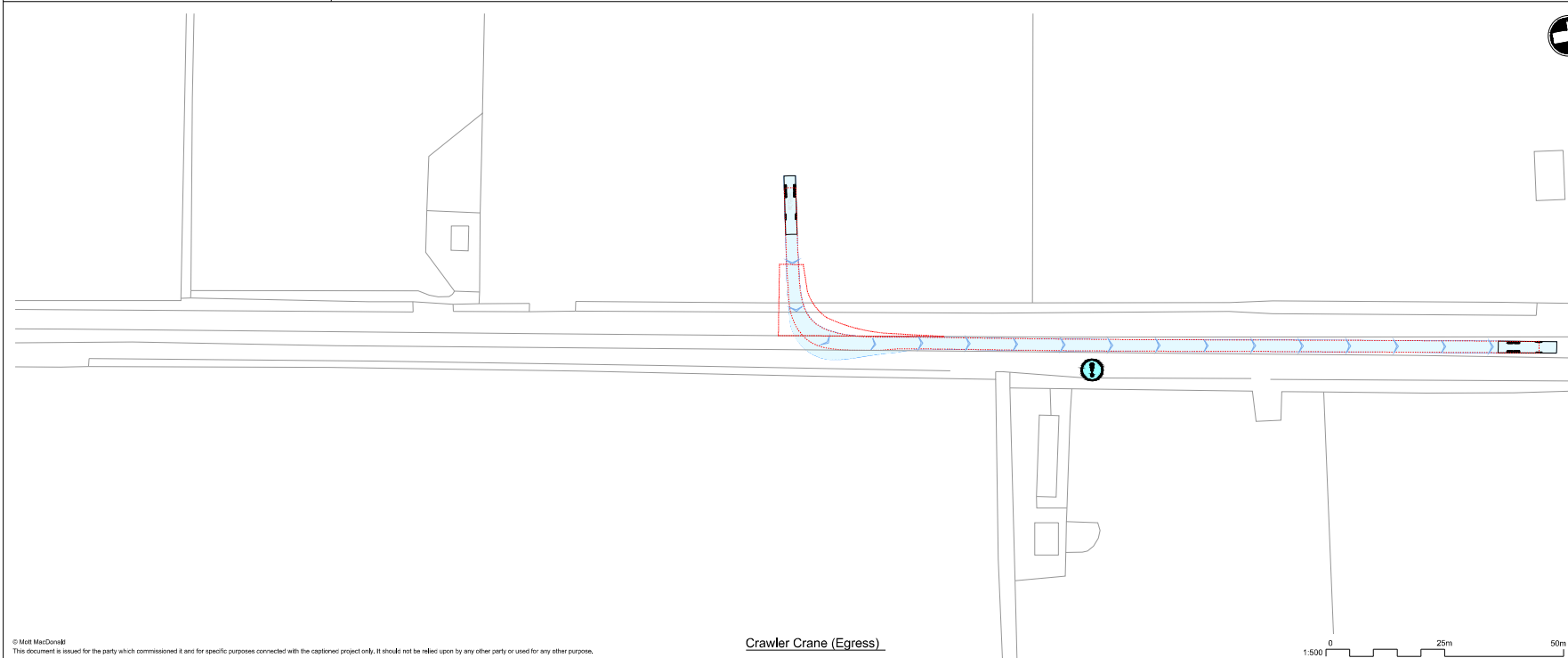
Drawing 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

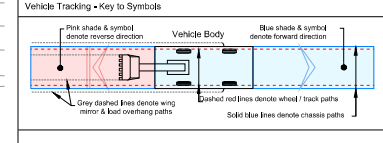
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Crawler Crane (Access)



Crawler Crane (Egress)

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 - DRAWINGS TO BE READ IN OCCURRENCE WITH THE Technical Memo.**



Vehicle Tracking - Vehicle Details

	Low Loader	
	Overall Length	16,633m
	Overall Width	2,500m
	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	16,700m

	Large Mobile Crane	
	Overall Length	12,200m
	Overall Width	2,450m
	Overall Body Height	3,460m
	Track Width	2,450m
	Kerb to Kerb Turning Radius	10,000m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	Date	Drawn	Description	AWK	AWR
Rev					

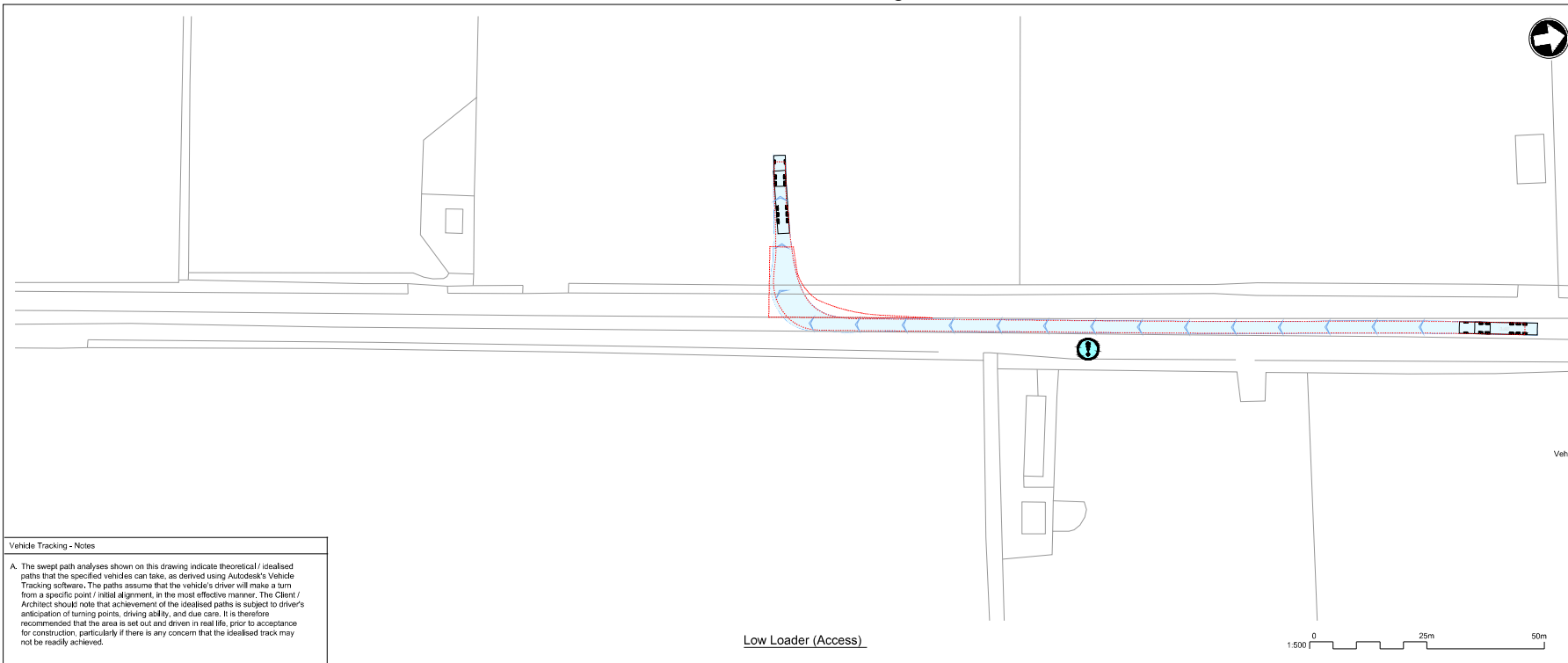


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA26
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Casillas	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check			Approved		

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

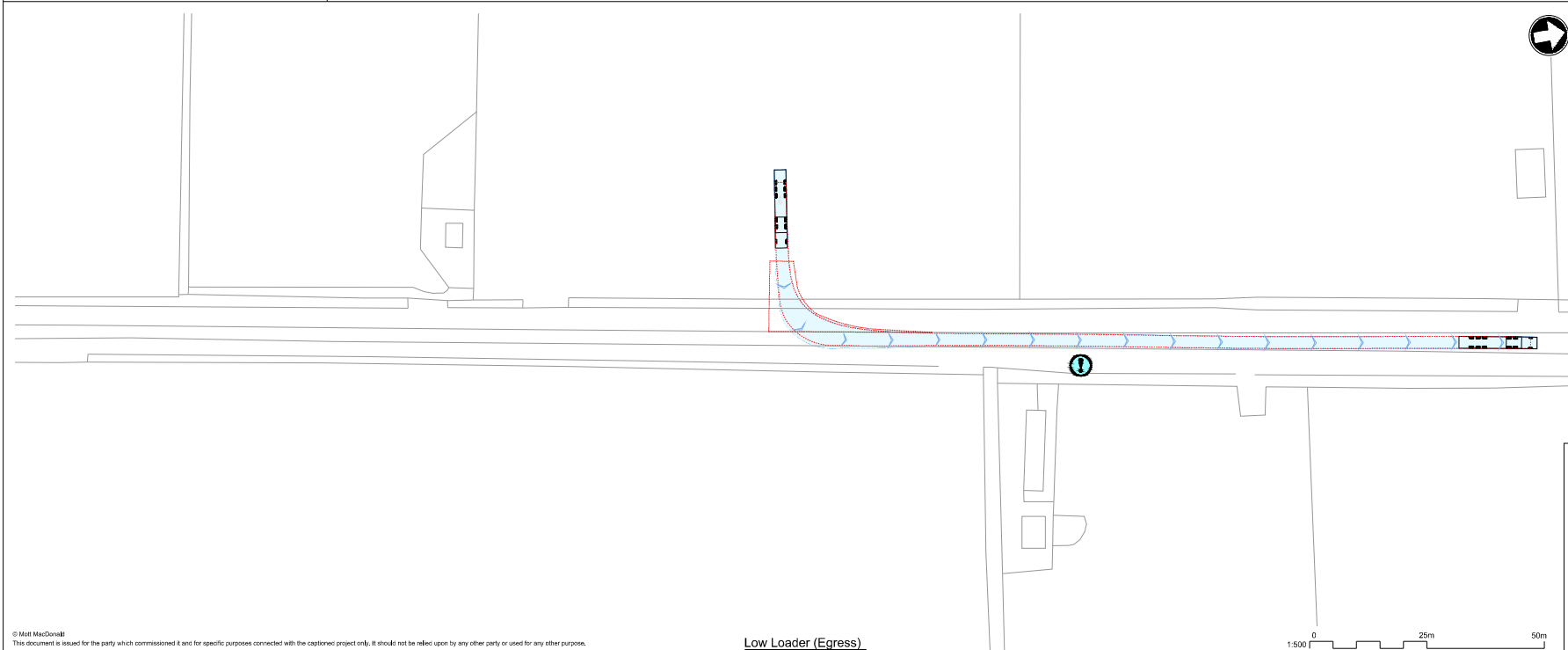
Drawing: 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

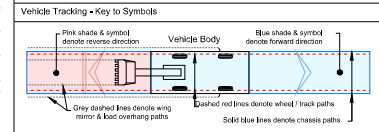
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Low Loader (Access)



Low Loader (Egress)

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Vehicle Data

	Low Loader	
Overall Length	16,633m	
Overall Width	2,500m	
Overall Body Height	3,300m	
Max Track Width	2,500m	
Kerb to Kerb Turning Radius	16,700m	

	Large Mobile Crane	
Overall Length	12,200m	
Overall Width	2,450m	
Overall Body Height	3,360m	
Track Width	2,450m	
Kerb to Kerb Turning Radius	10,000m	

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADG	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked by

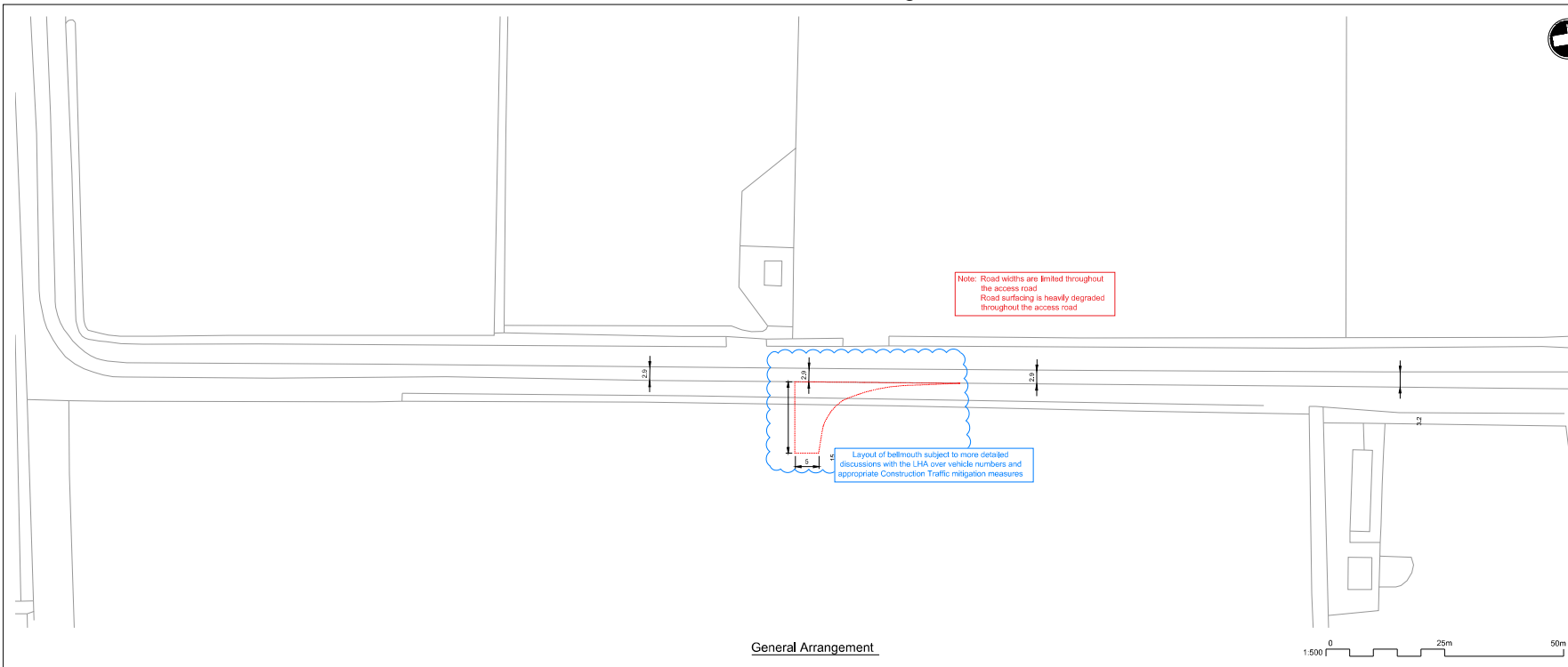


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA26
Highways GA, Visibility Splay and
Vehicle Tracking

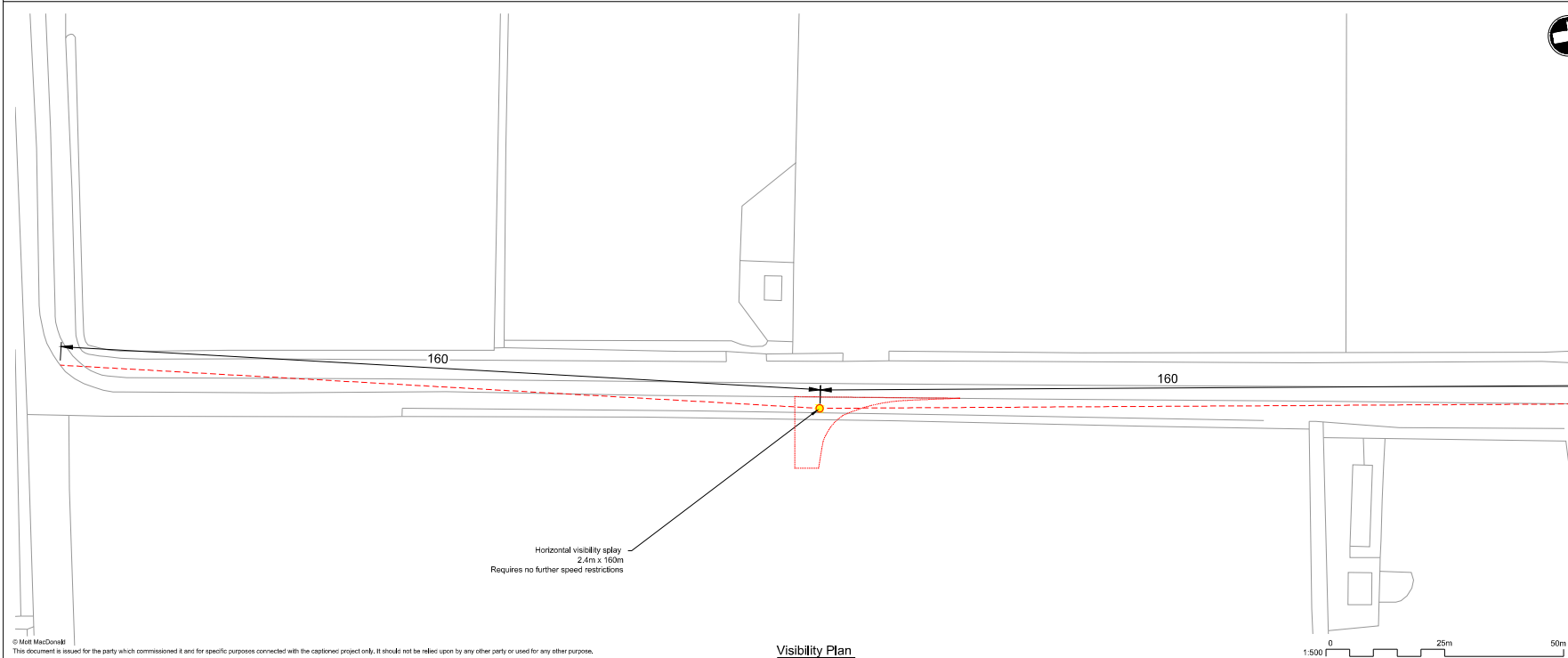
Designed	A.D.Casillas	ADG	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				

Scale: 1:500 Status: PRE Rev: P1 Section: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT



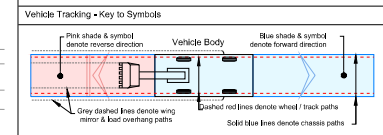
General Arrangement



Visibility Plan



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 15. DRAWINGS TO BE READ IN OCCURRENCE with the Technical Memo.



Vehicle Tracking - Vehicle Details

	<p>Low Loader</p> <p>Overall Length 16,630m</p> <p>Overall Width 2,500m</p> <p>Overall Body Height 3,300m</p> <p>Max Track Width 2,500m</p> <p>Kerb to Kerb Turning Radius 16,700m</p>
	<p>Large Mobile Crane</p> <p>Overall Length 12,200m</p> <p>Overall Width 2,450m</p> <p>Overall Body Height 2,460m</p> <p>Track Width 2,450m</p> <p>Kerb to Kerb Turning Radius 10,000m</p>

Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk,

Vehicle Tracking - Notes

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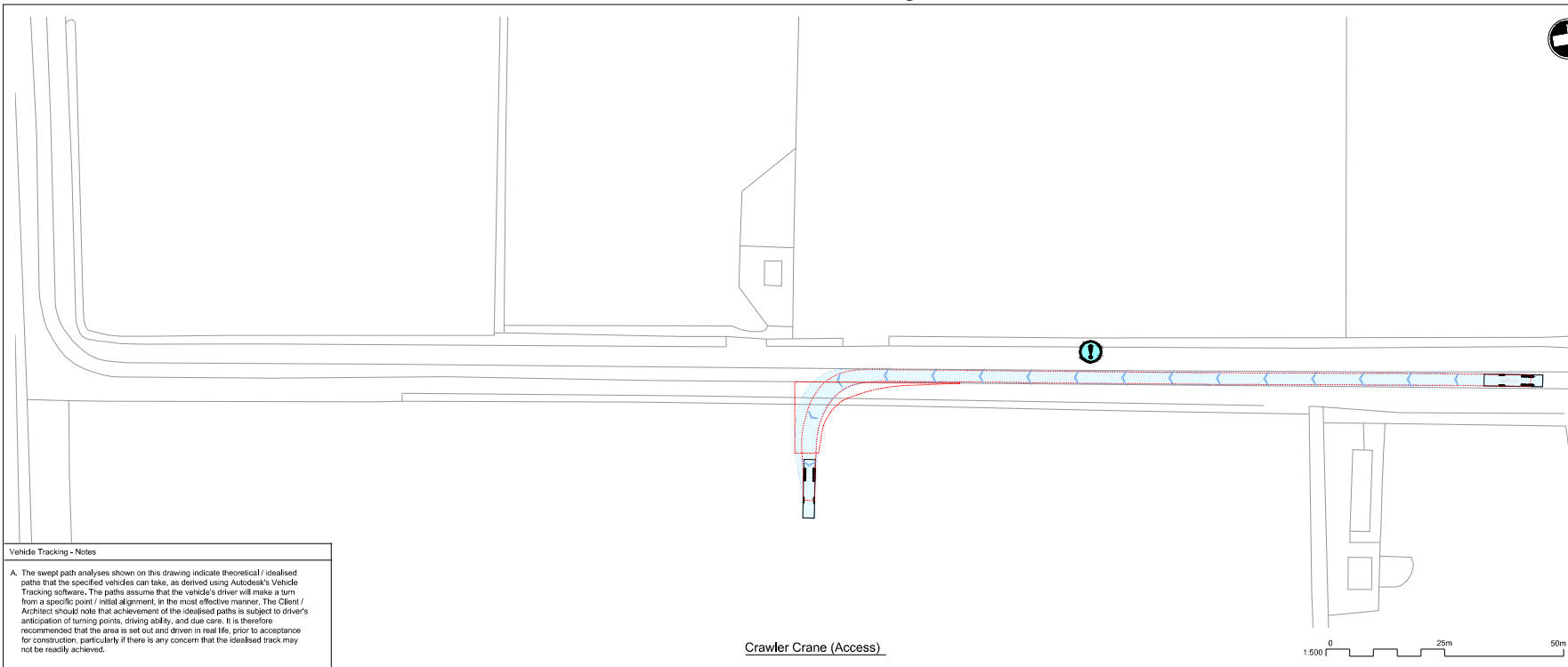
P1	13/05/22	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	By	Check



Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 COA13
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	A.D.Castles	ADC	Coordination	E.Case	EC
Dwg check	-	-	Approved	A.M.Rawlings	AMR

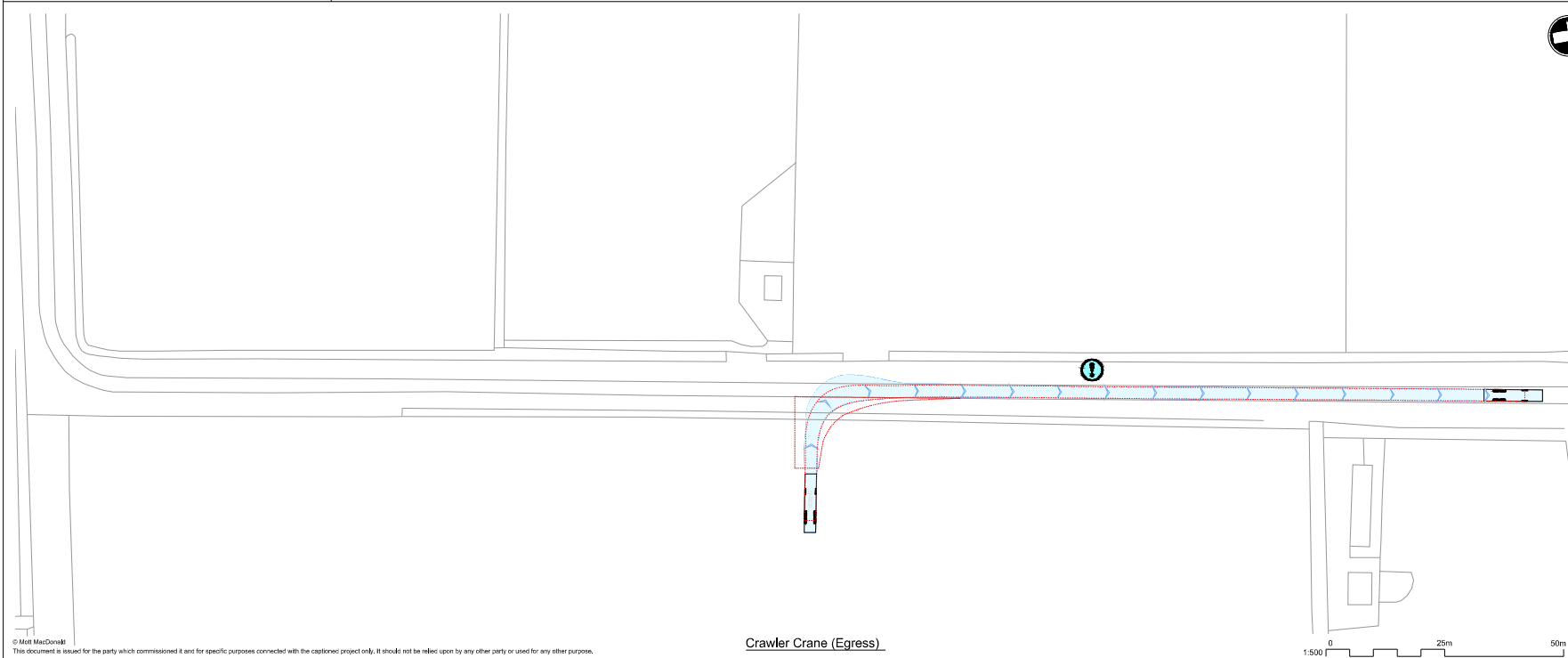
Scale: 1:500 Stat: PRE Rev: P1 Sec: STD
 Drawing: 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

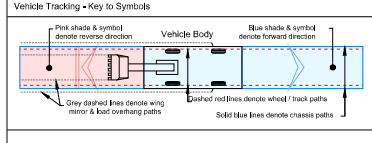
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Crawler Crane (Access)



Crawler Crane (Egress)

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 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is a brownfield site and the proposed layout is subject to detailed design during future stages of the design development of this option.
 - Drawings to be read in conjunction with the Technical Memo.**



Vehicle Tracking - Vehicle Details

	Low Loader	
	Overall Length	16,633m
	Overall Width	2,500m
	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	16,700m
	Large Mobile Crane	
	Overall Length	12,200m
	Overall Width	2,450m
	Overall Body Height	2,450m
	Track Width	2,450m
	Kerb to Kerb Turning Radius	10,000m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	13/05/2022	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked	Approved

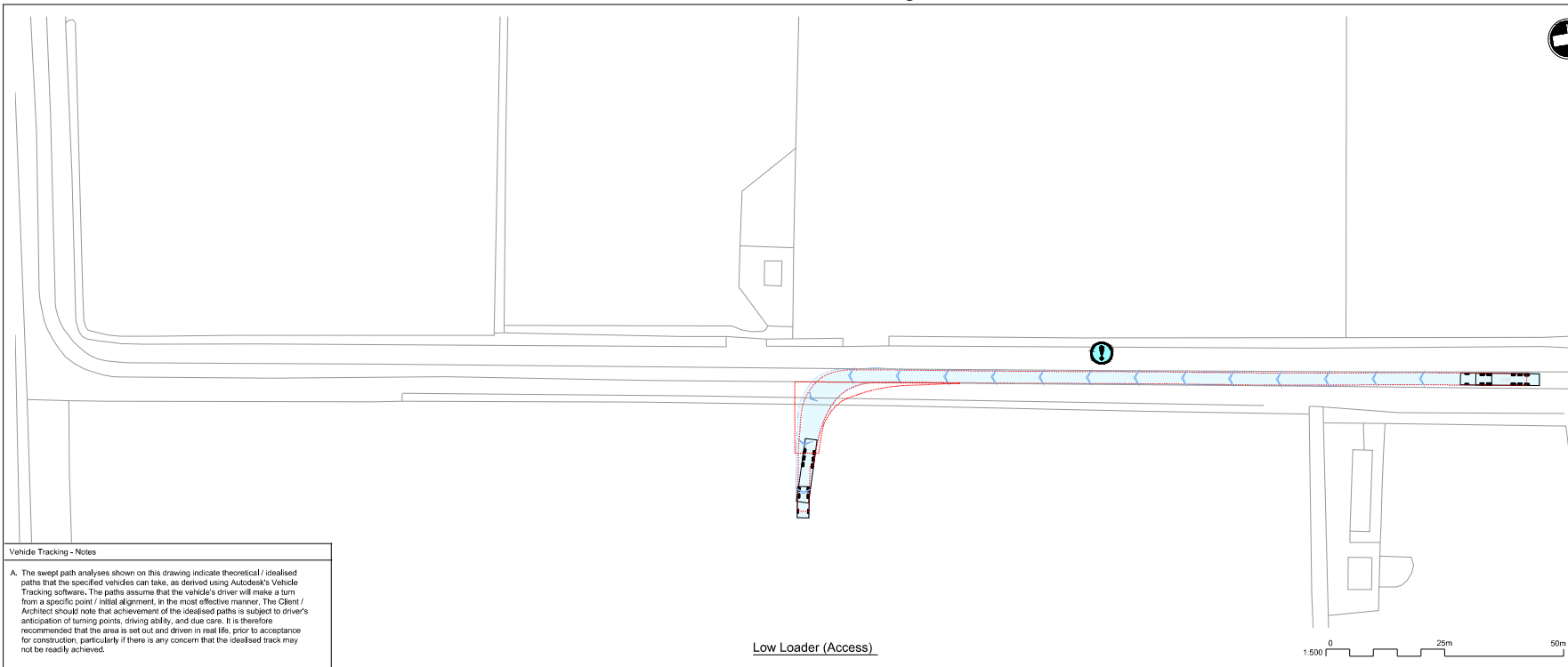


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA13
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT

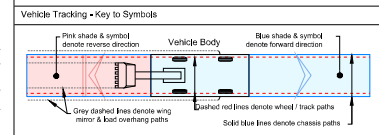


Vehicle Tracking - Notes

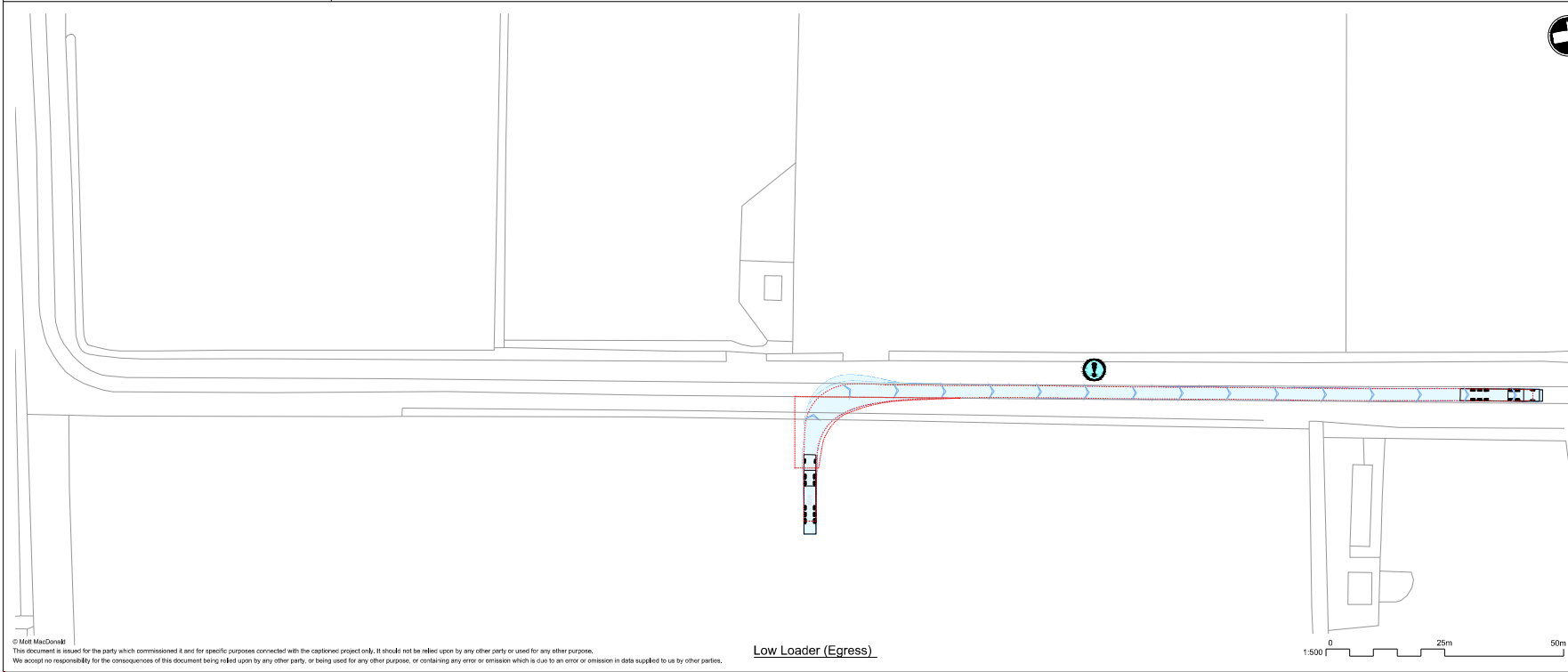
A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.

Low Loader (Access)

- Notes**
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 - Drawings to be read in conjunction with the Technical Memo.**



	Low Loader	
	Overall Length	16,633m
	Overall Width	2,500m
	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	16,700m
	Large Mobile Crane	
	Overall Length	32,200m
	Overall Width	2,450m
	Overall Body Height	2,450m
	Track Width	2,450m
	Kerb to Kerb Turning Radius	16,000m



Low Loader (Egress)

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADG	Draft for Discussion / Review.	ARK	ARK
Rev	Date	Drawn	Description	Checked

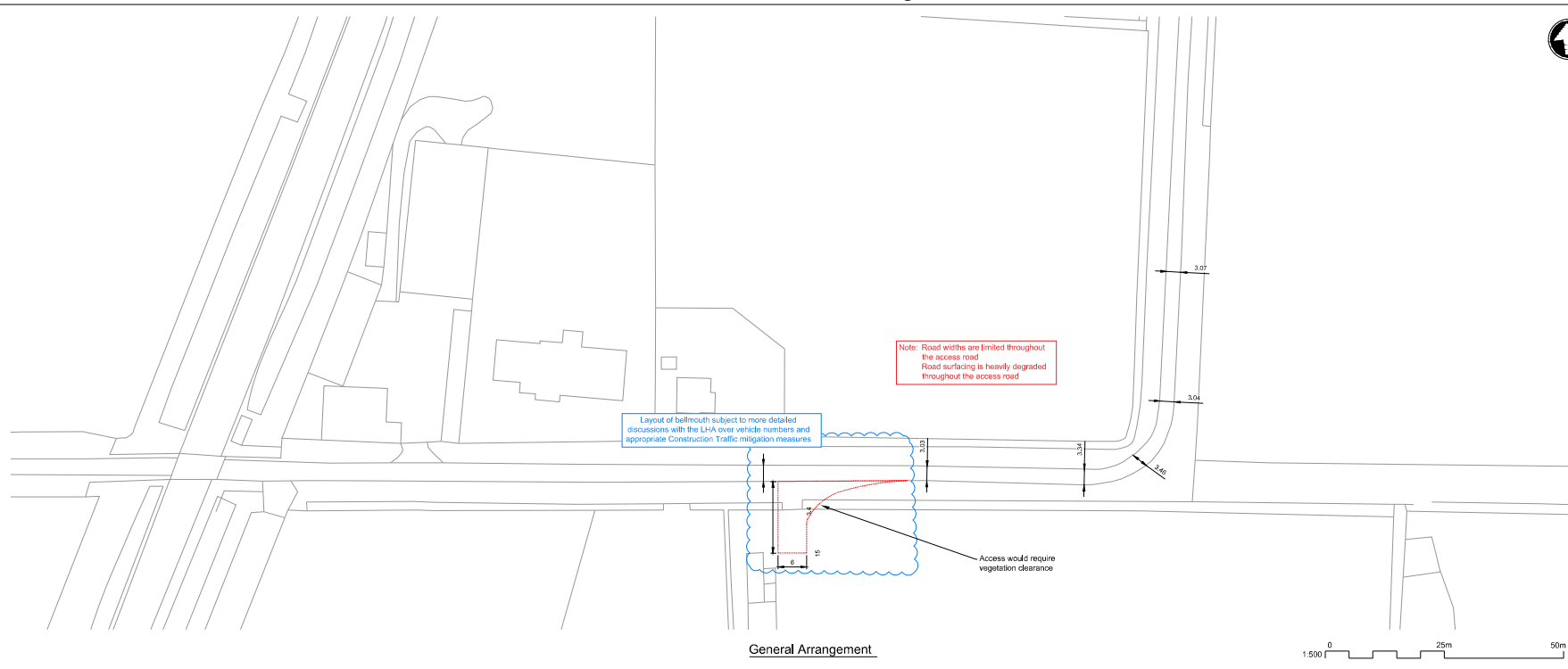


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA13
Highways GA, Visibility Splay and
Vehicle Tracking

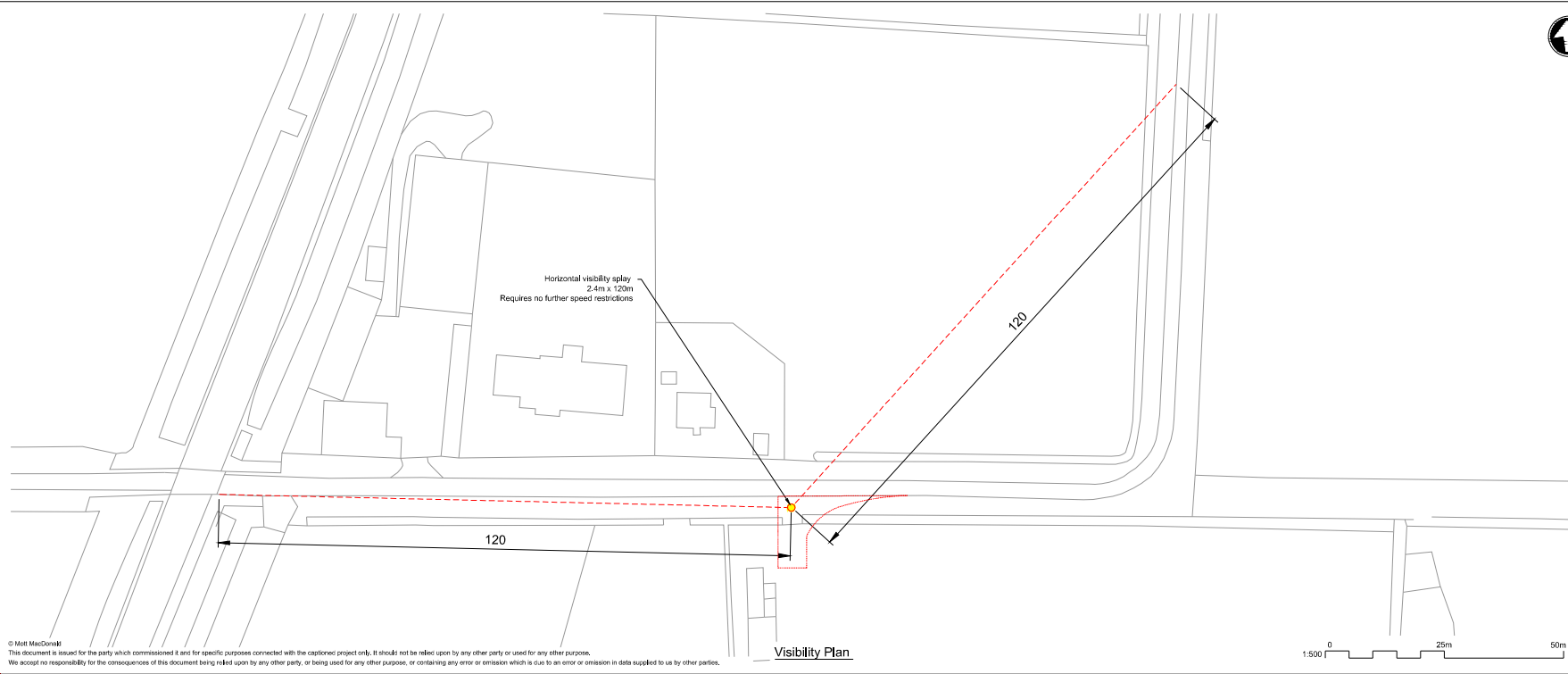
Designed	A.D.Caselles	ADG	Eng check	E.Case	EC
Drawn	-	-	Coordination	-	EC
Dwg check	-	-	Approved	A.M.Rawlings	AMR

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT



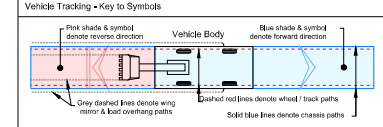
General Arrangement



Visibility Plan



- Notes
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 - DRAWINGS TO BE READ IN CONJUNCTION with the Technical Memo.**



Vehicle Tracking - Vehicle Details

Low Loader	
Overall Length	16,633m
Overall Width	2,500m
Overall Body Height	3,390m
Max Track Width	2,500m
Kerb to Kerb Turning Radius	6,700m
Large Mobile Crane	
Overall Length	12,200m
Overall Width	2,450m
Overall Body Height	2,450m
Track Width	2,450m
Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk,

Vehicle Tracking - Notes

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P1	13/05/2022	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Drawn	Checked



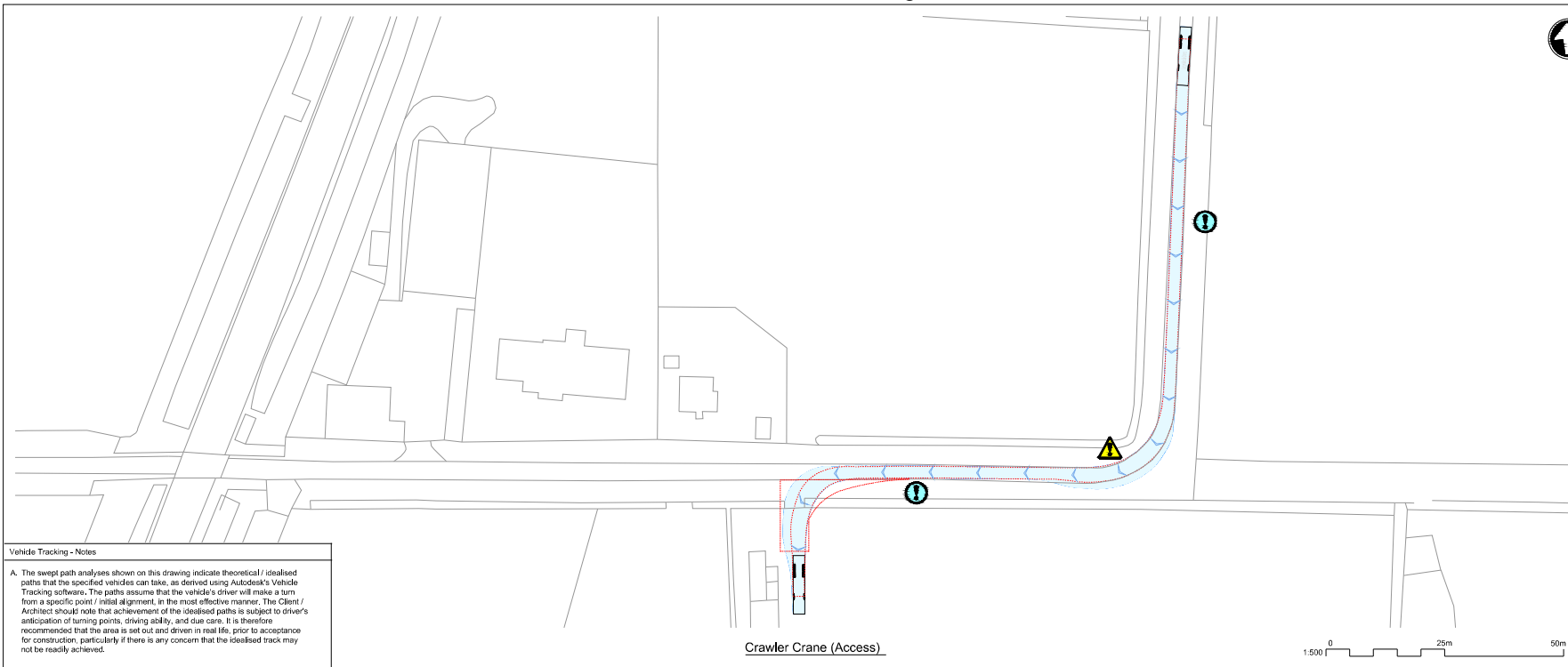
The Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA12
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Castles	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD
Drawing: 102375-MMD-01-XX-DR-C-DRAFT

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We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

P:\Cambridge\Roads\EST\PROJECTS\CWWTWR - Civil Eng\01-1.0 Live Drawings\01-XX-DR-C-DRAFT (Temp Access Junction 6)dwg May 13, 2022 - 8:47AM CAS89725

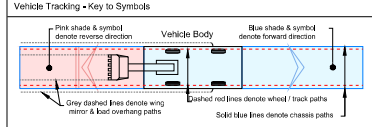


Vehicle Tracking - Notes

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Crawler Crane (Access)

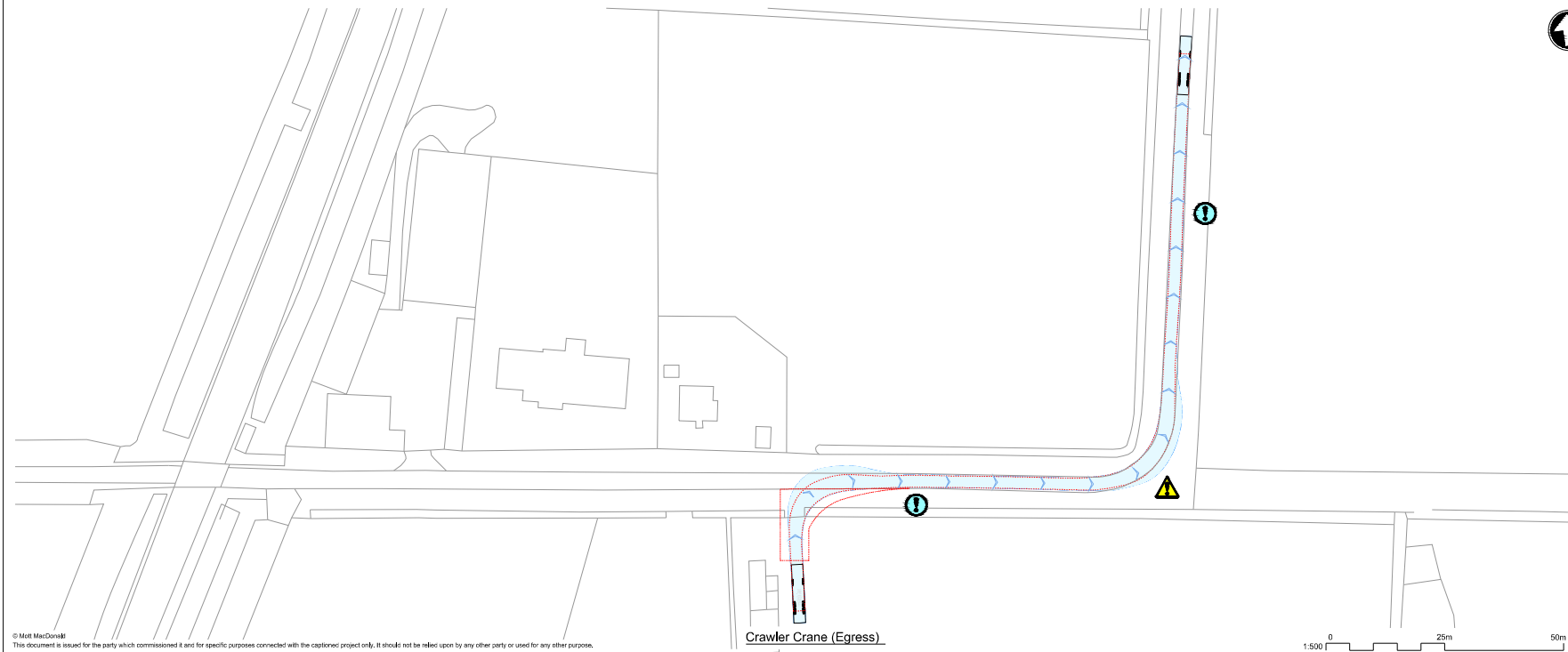
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 - The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is a brownfield site and any proposed access route is subject to detailed design during future stages of the design development of this option.



Vehicle Tracking - Vehicle Details

	Low Loader	
Overall Length	16,633m	
Overall Width	2,500m	
Overall Body Height	3,300m	
Max Track Width	2,500m	
Kerb to Kerb Turning Radius	16,700m	

	Large Mobile Crane	
Overall Length	12,200m	
Overall Width	2,400m	
Overall Body Height	3,400m	
Track Width	2,400m	
Kerb to Kerb Turning Radius	10,000m	



Crawler Crane (Egress)

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked by

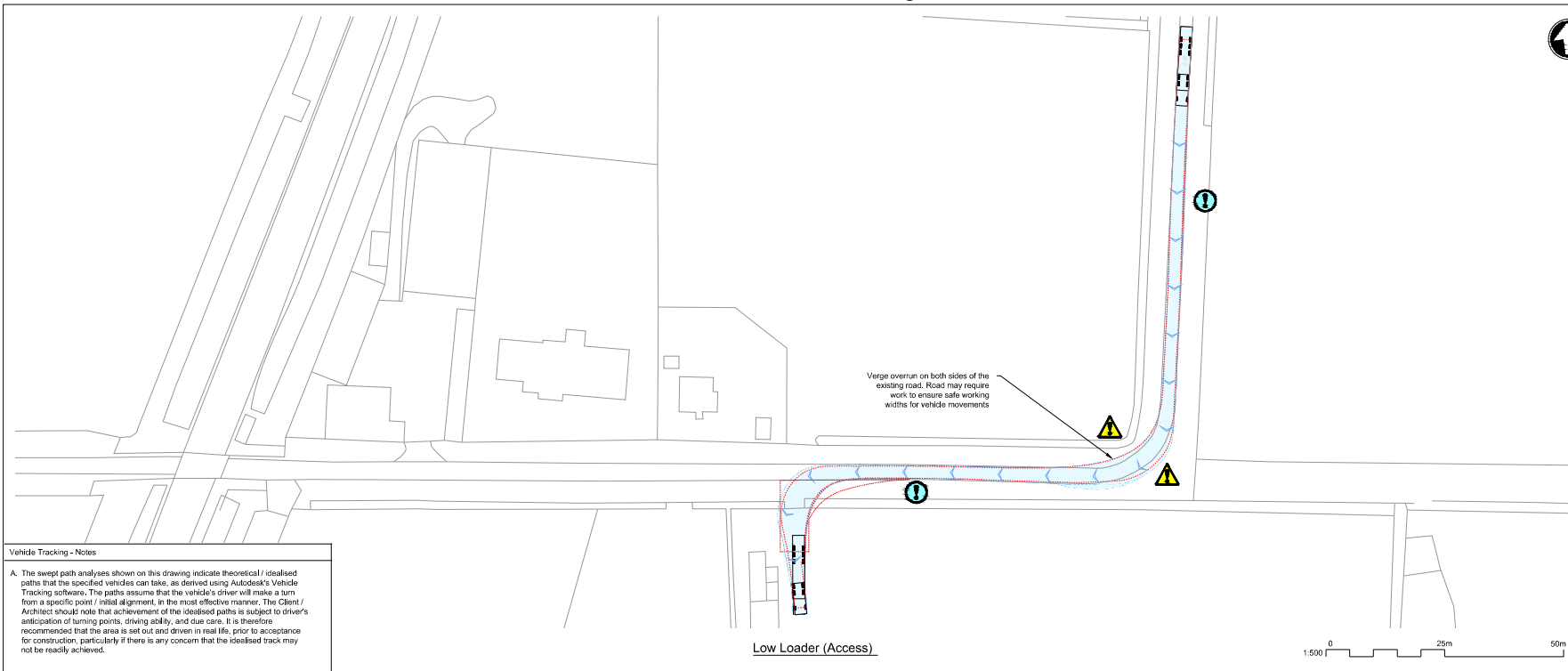


Title
Cambridge Waste Water Treatment Works Relocation
COA12
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	E.Case	EC
Dwg check	-	-	Approved	A.M.Rawlings	AMR

Scale: 1:500 Status: PRE Rev: P1 Set: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT

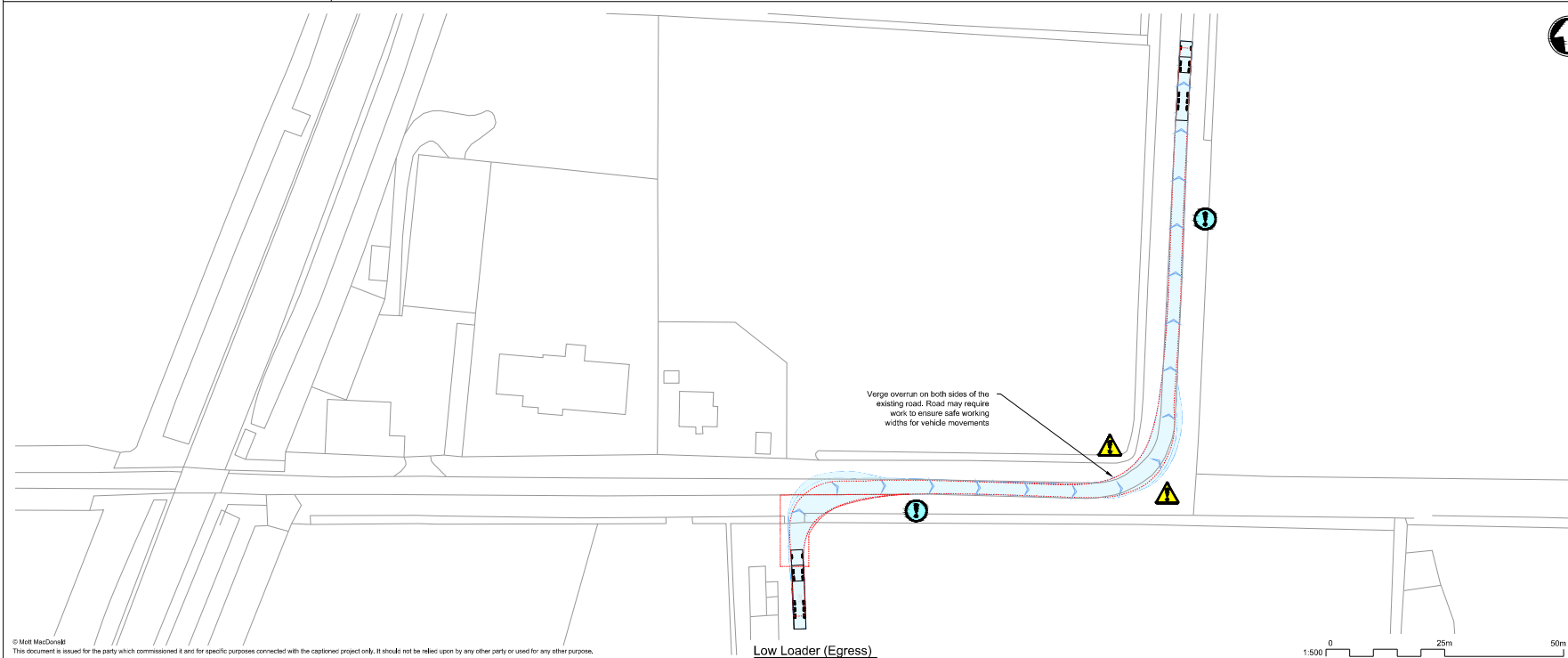
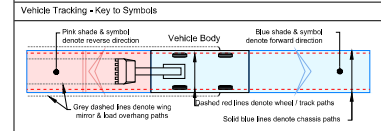


Vehicle Tracking - Notes

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Low Loader (Access)

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 - The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is a brownfield site and the proposed access road is a new road. The design is subject to change and additional land take is possible during future stages of the design development of this option.
 - DRAWINGS TO BE READ IN CONJUNCTION with the Technical Memo.**



Low Loader (Egress)

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

Rev	Date	Drawn	Description	AWK	AWR
P1		ADC	Draft for Discussion / Review.		

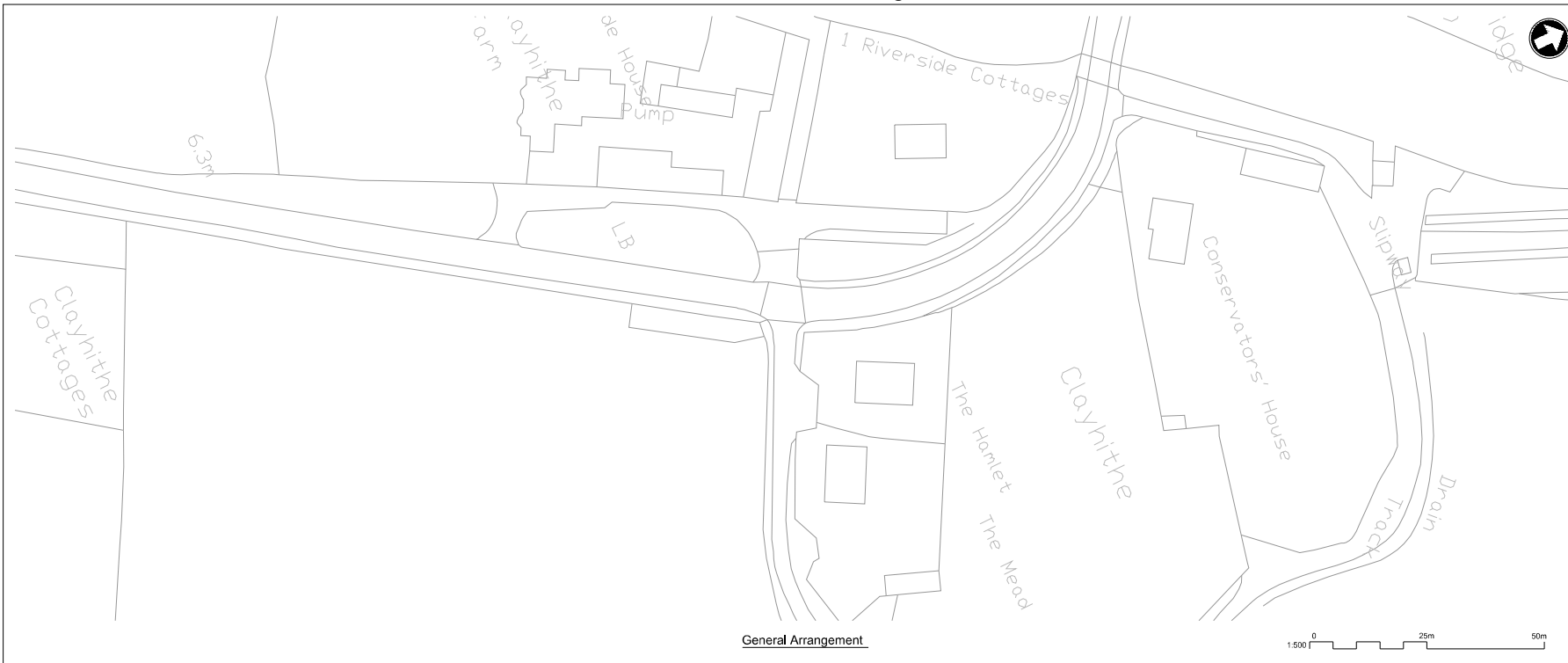


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA12
Highways GA, Visibility Splay and
Vehicle Tracking

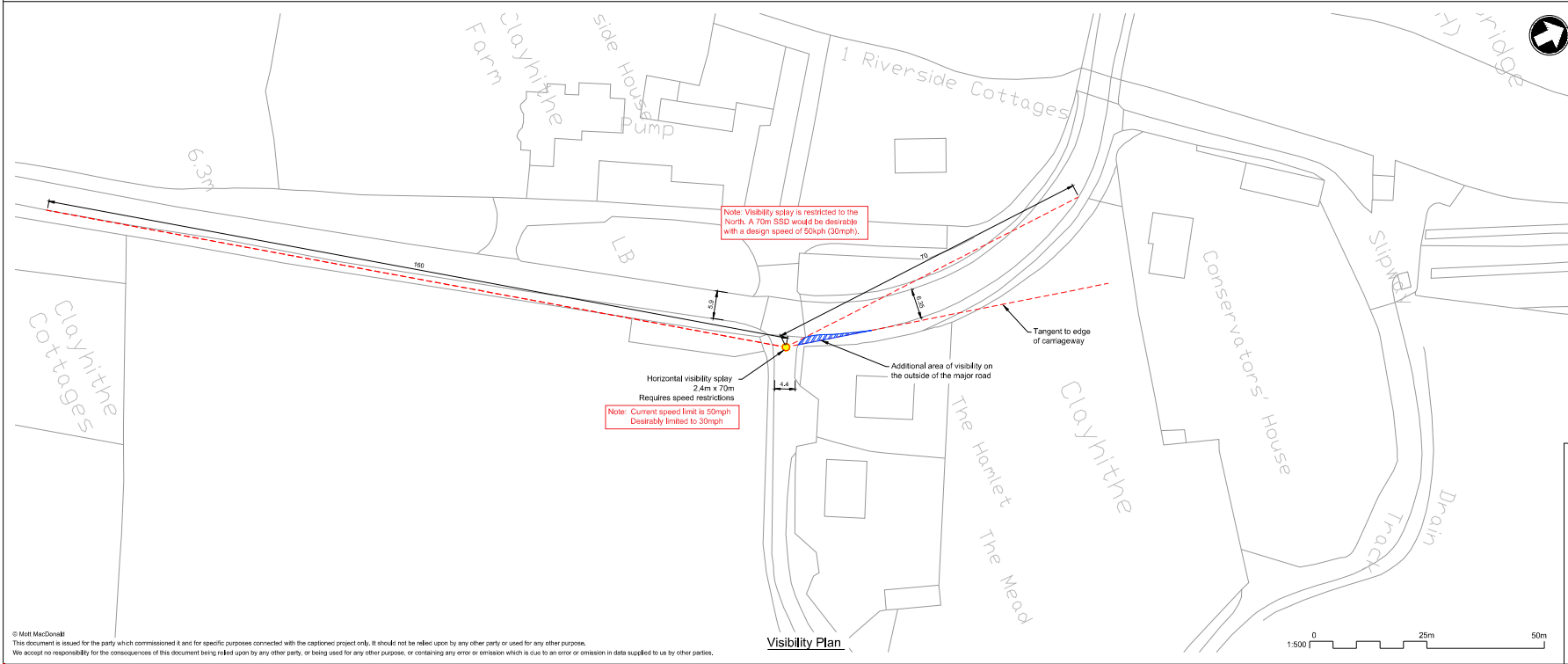
Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check			Approved		

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT

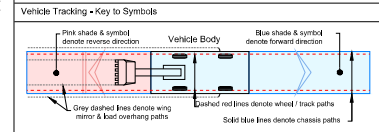


General Arrangement



Visibility Plan

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 - THIS DRAWING HAS BEEN PREPARED IN OCCURRENCE WITH THE TECHNICAL MEMO.**



Vehicle Tracking - Vehicle Details

	Low Loader	Overall Length	16,633m
		Overall Width	2,500m
		Overall Body Height	3,300m
		Max Track Width	2,500m
		Kerb to Kerb Turning Radius	10,700m
	Large Mobile Crane	Overall Length	32,300m
		Overall Width	2,800m
		Overall Body Height	2,400m
		Track Width	2,400m
		Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk,

Vehicle Tracking - Notes

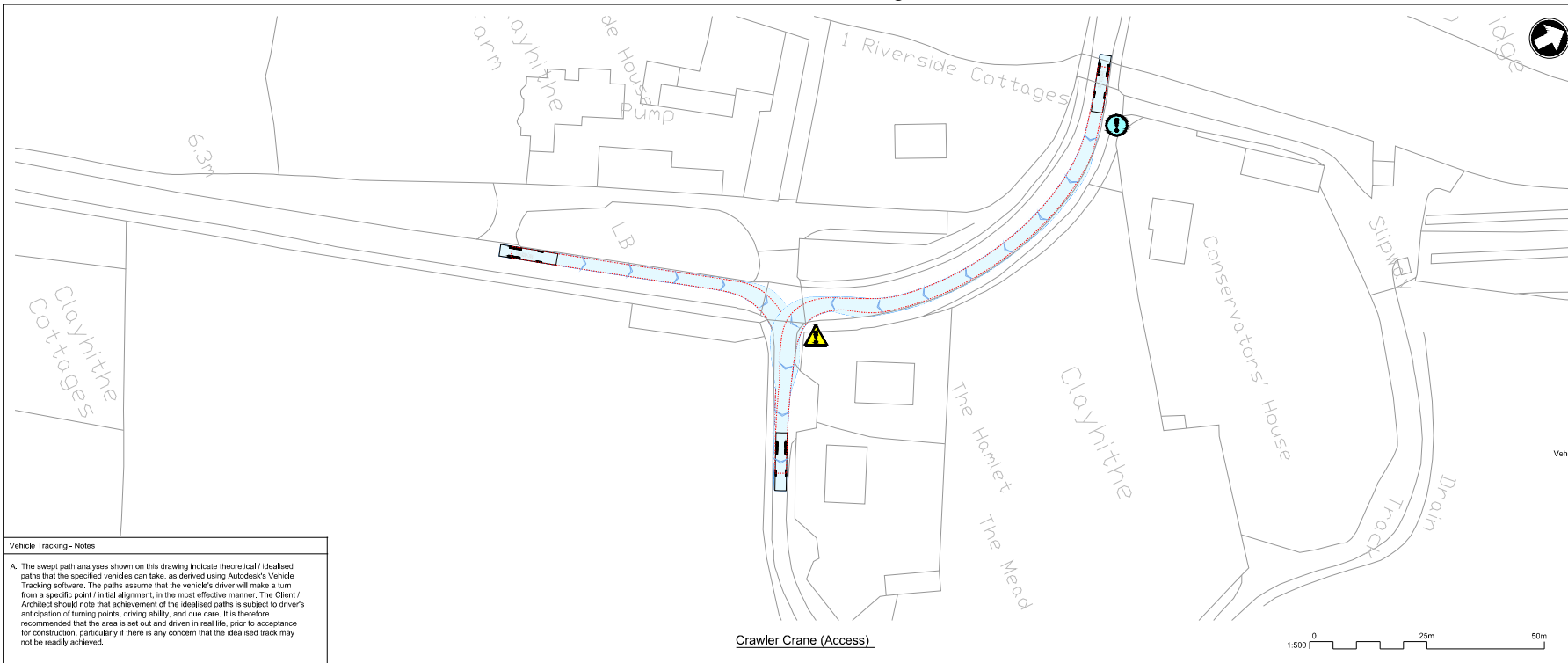
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P1	ABC	ABC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description		CWWTW



The Cambridge Waste Water Treatment Works Relocation
 COA20
 Highways GA, Visibility Splay and Vehicle Tracking

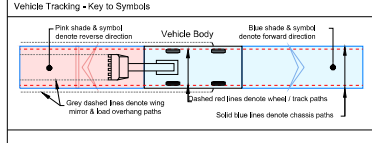
Designed	A.D.Castles	ABC	Eng check	E.Case	EC
Drawn	A.D.Castles	ABC	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-
Scale	1:500	Status	PRE	Rev	P1
			Sec	STD	
Drawing 102375-MMD-01-XX-DR-C-DRAFT					



Vehicle Tracking - Notes

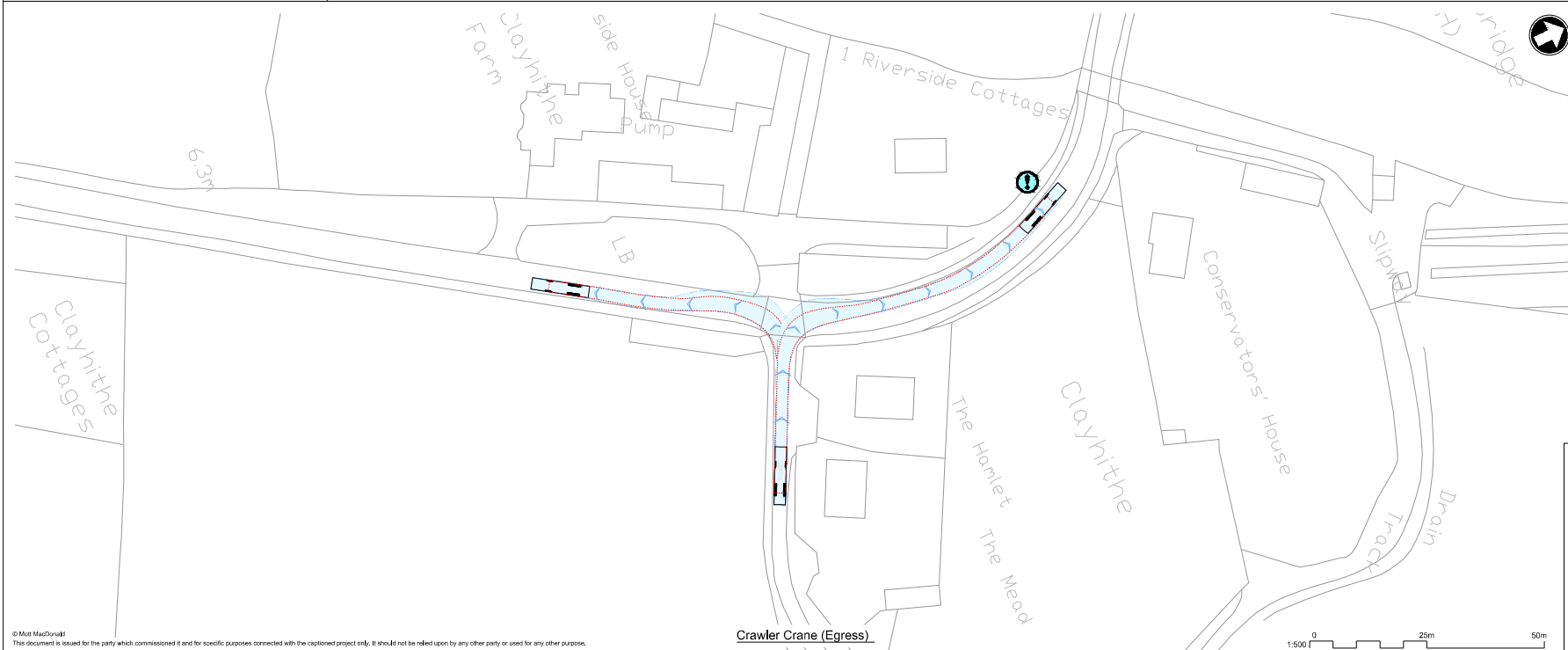
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 - 15. DRAWINGS PREPARED IN COORDINATION with the Technical Memo.**



Vehicle Tracking - Vehicle Details

Low Loader	Large Mobile Crane
Overall Length	16.633m
Overall Width	2.500m
Overall Body Height	3.300m
Max Track Width	2.500m
Kerb to Kerb Turning Radius	10.700m



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

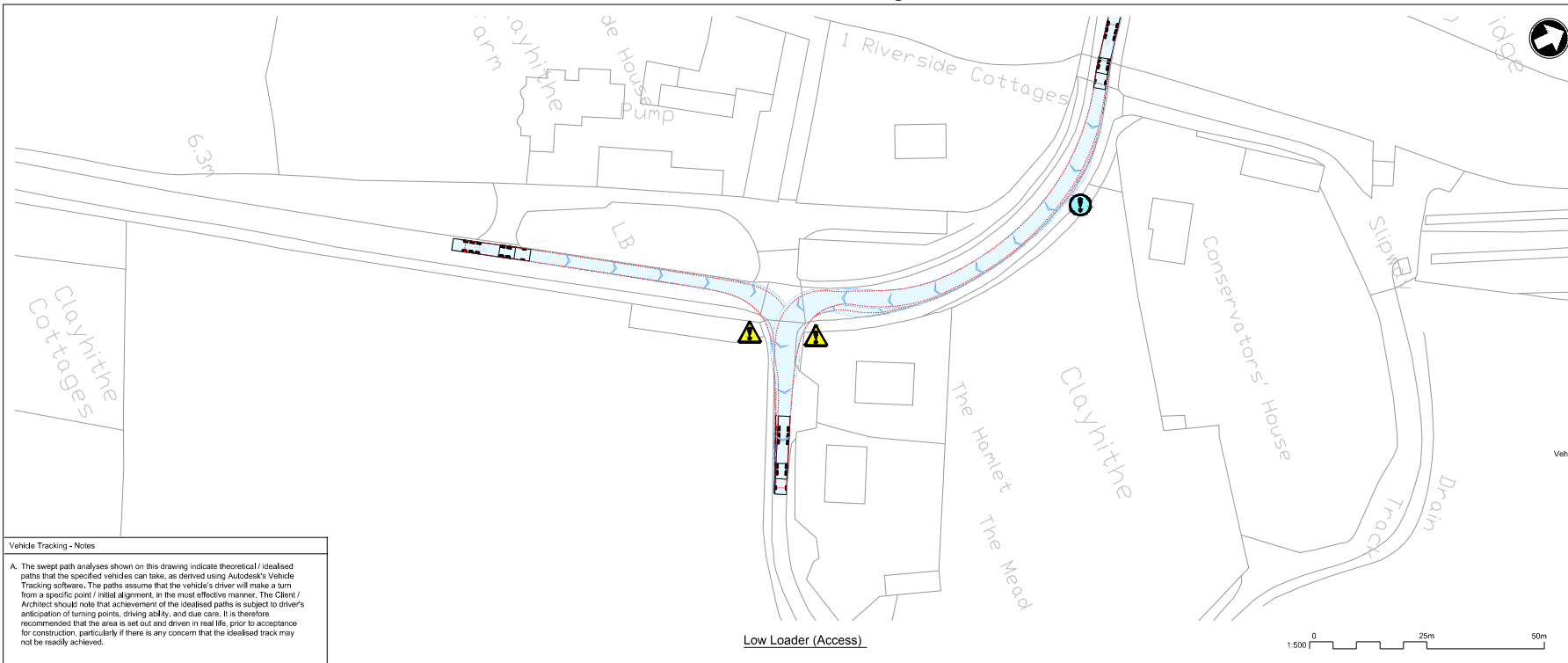
Rev	Date	Drawn	Description	Rev	Rev
P1		ADC	Draft for Discussion / Review.		ARR



Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA20
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Castle	EC
Drawn	A.D.Castles	ADC	Coordination	A.M.Rawlings	AMR
Dwg check			Approved		

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD
 Drawing: 102375-MMD-01-XX-DR-C-DRAFT

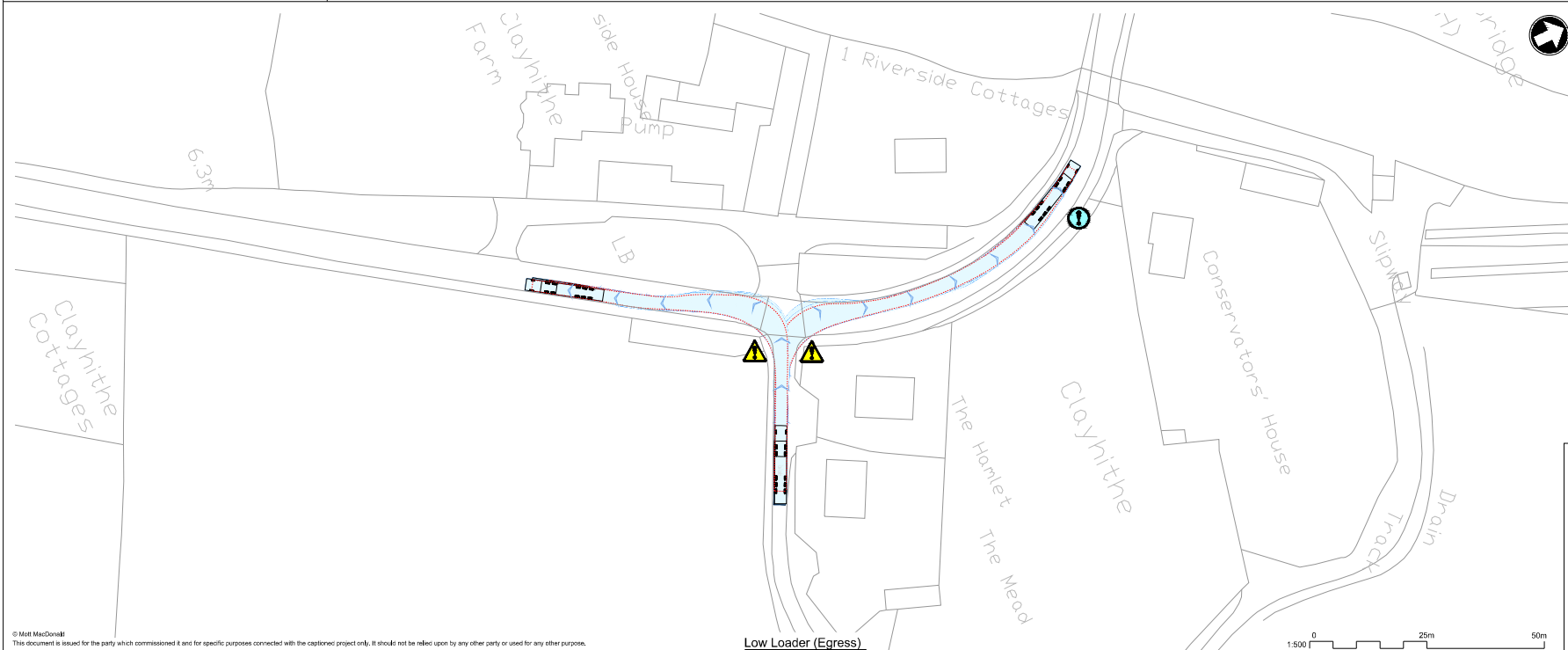
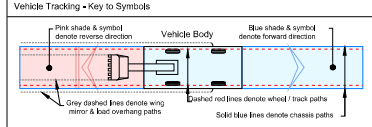


Vehicle Tracking - Notes

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Low Loader (Access)

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 - 15. DRAWINGS TO BE READ IN OCCURRENCE with the Technical Memo.**



Low Loader (Egress)

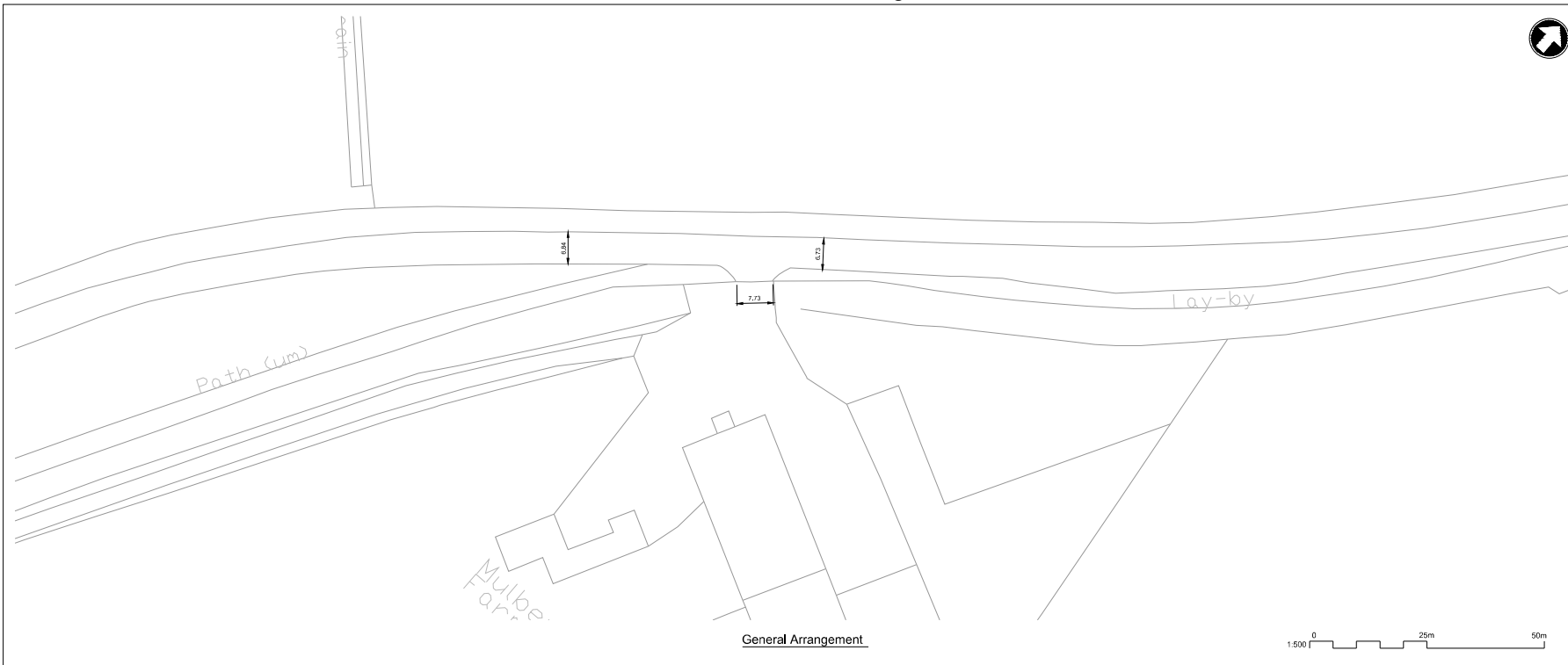
- Vehicle Tracking - Risks & Compliance**
- Risks**
- ⚠️ Kerb overrun
 - 🚫 Restrictive road width

P1	ADG	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked

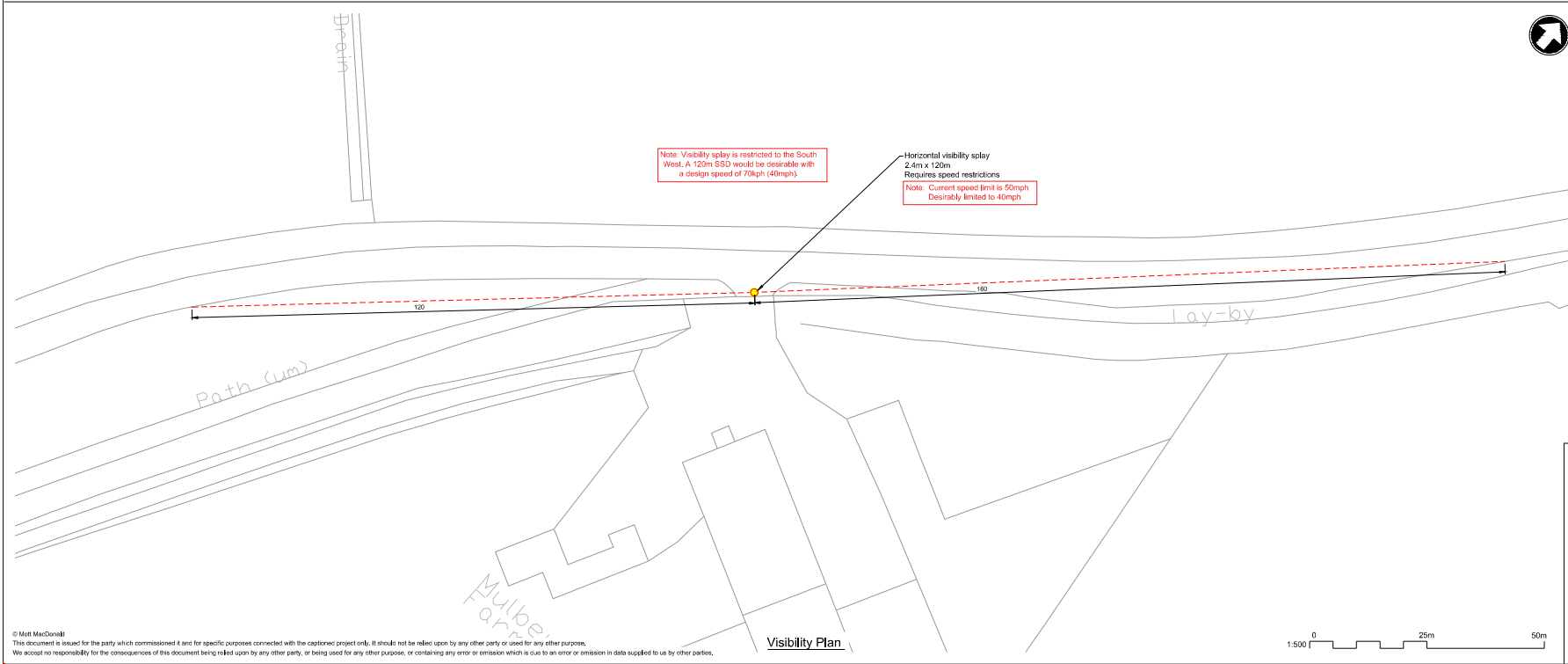


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA20
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D. Casillas	ADG	Eng check	E. Case	EC
Drawn	-	-	Coordination	-	EC
Dwg check	-	-	Approved	A.M. Rawlings	AMR
Scale	1:500	Stat	PRE	Rev	P1
Scale	1:500	Stat	PRE	Rev	P1
Scale	1:500	Stat	PRE	Rev	P1

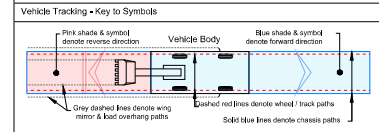


General Arrangement



Visibility Plan

- Notes
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 - The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is a business activity, and any proposed layout take is subject to approval during future stages of the design development of this option.
 - DRAWINGS TO BE READ IN OCCURRENCE** with the Technical Memo.



Vehicle Tracking - Vehicle Details

	Low Loader	
	Overall Length	16,633m
	Overall Width	2,500m
	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	10,000m
	Large Mobile Crane	
	Overall Length	12,200m
	Overall Width	2,450m
	Overall Body Height	2,450m
	Track Width	2,450m
	Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk,

Vehicle Tracking - Notes

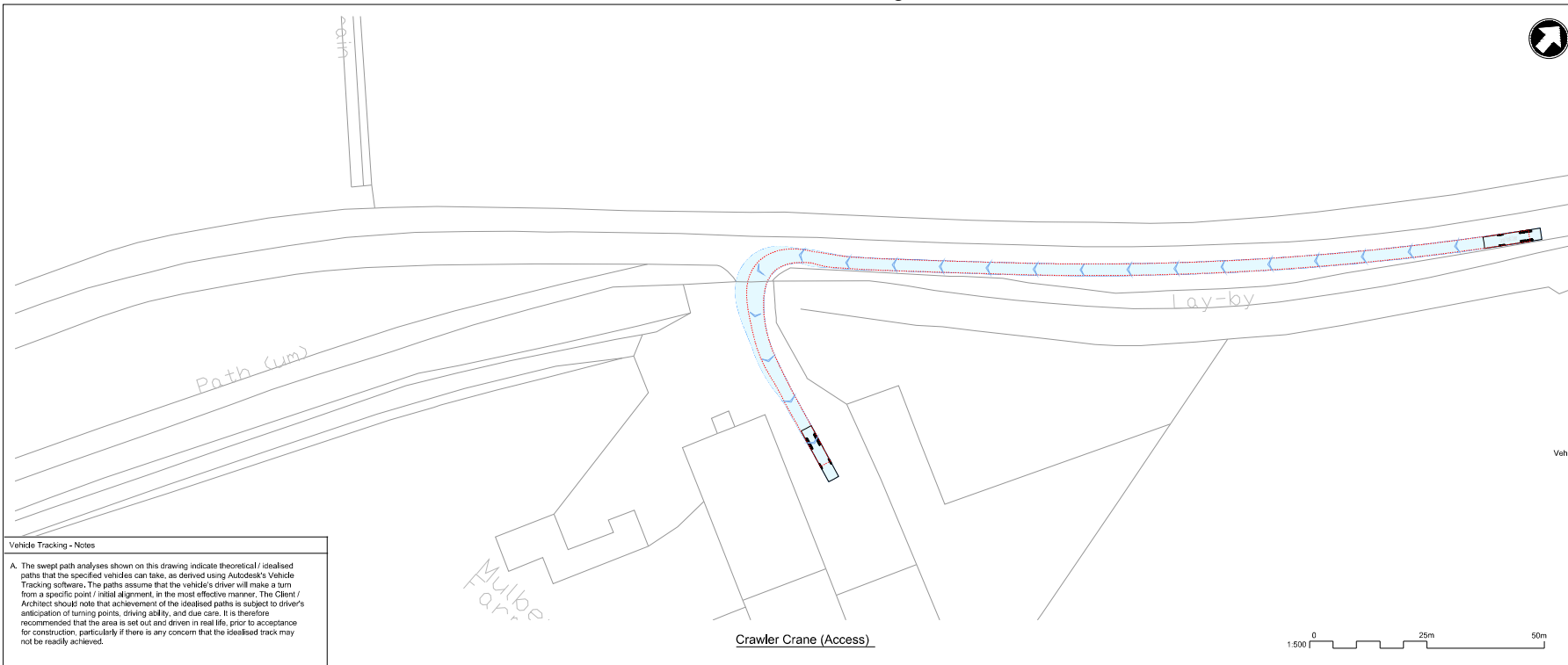
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P1	ADP	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked by



Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 COA9
 Highways GA, Visibility Splay and
 Vehicle Tracking

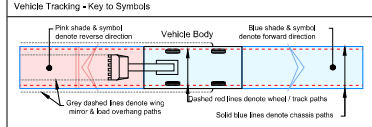
Designed	A.D.Castles	ADP	Eng check	E.Case	EC
Drawn	A.D.Castles	ADP	Coordination	A.M.Rawlings	AMR
Dwg check			Approved		
Scale	1:500	Stat	PRE	Rev	P1
Section					STD
Drawing 102375-MMD-01-XX-DR-C-DRAFT					



Vehicle Tracking - Notes

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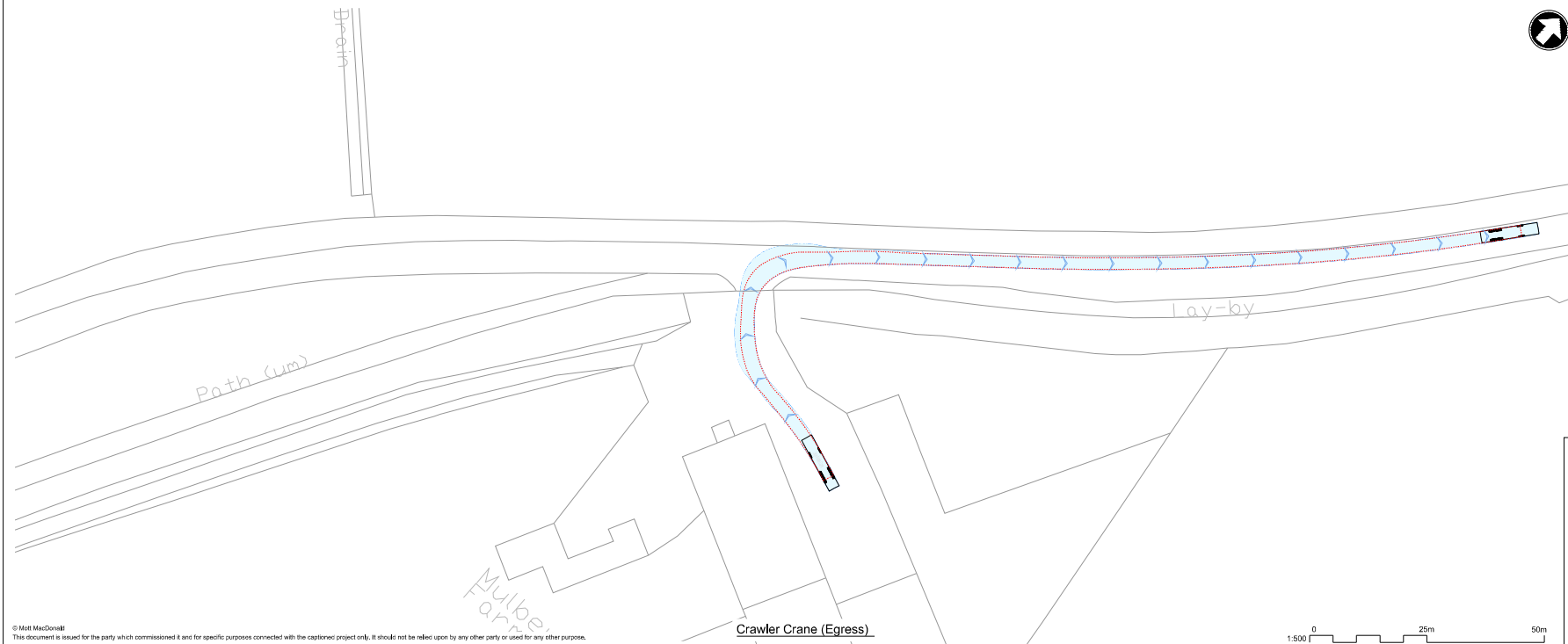
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Vehicle Tracking - Vehicle Details

Low Loader	
Overall Length	16,633m
Overall Width	2,500m
Overall Body Height	3,300m
Max Track Width	2,500m
Kerb to Kerb Turning Radius	10,700m

Large Mobile Crane	
Overall Length	12,200m
Overall Width	2,450m
Overall Body Height	3,460m
Track Width	2,450m
Kerb to Kerb Turning Radius	10,000m



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 We accept no responsibility for the consequences of this document being relied upon by any other party, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADG	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked by

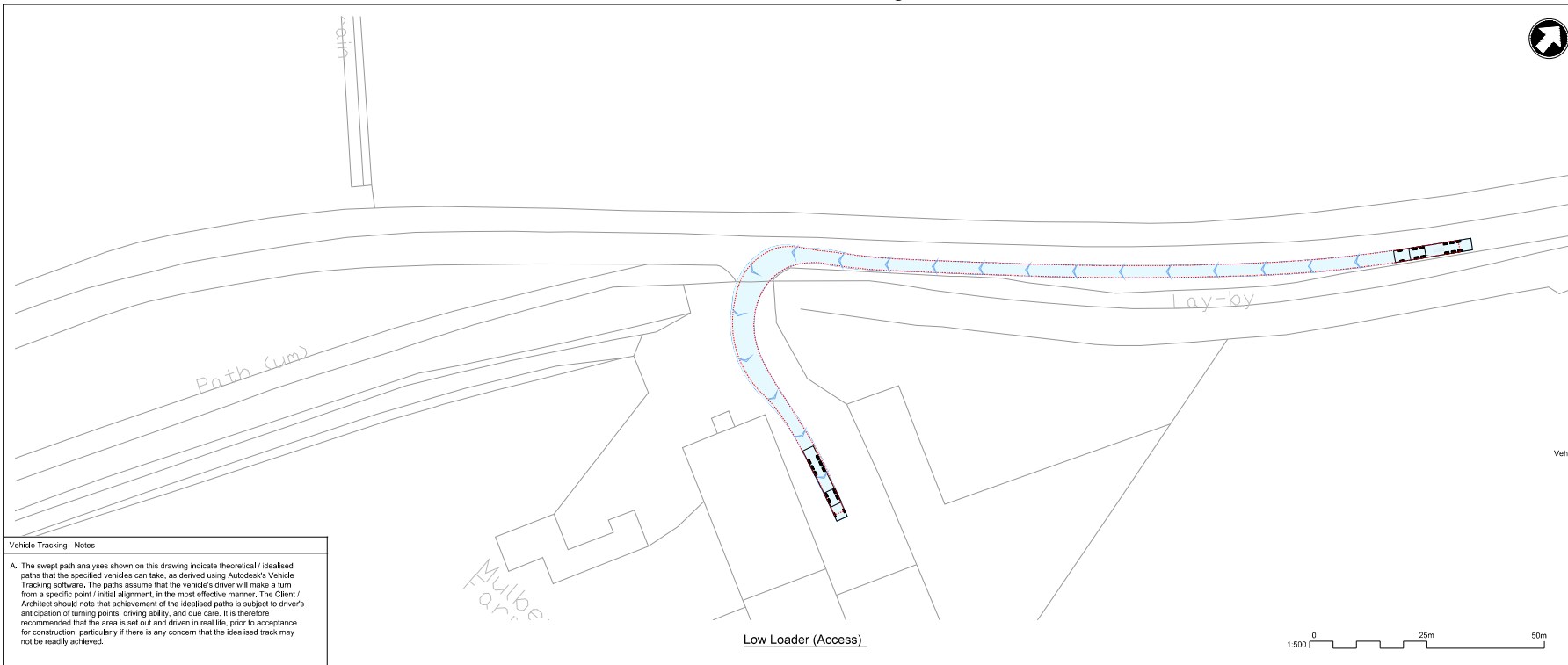


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 COA9
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	A.D. Caselles	ADG	Eng check	E. Case	EC
Drawn	-	-	Coordination	E. Case	EC
Dwg check	-	-	Approved	A.M. Rawlings	AMR

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

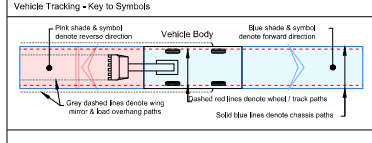
Drawing: 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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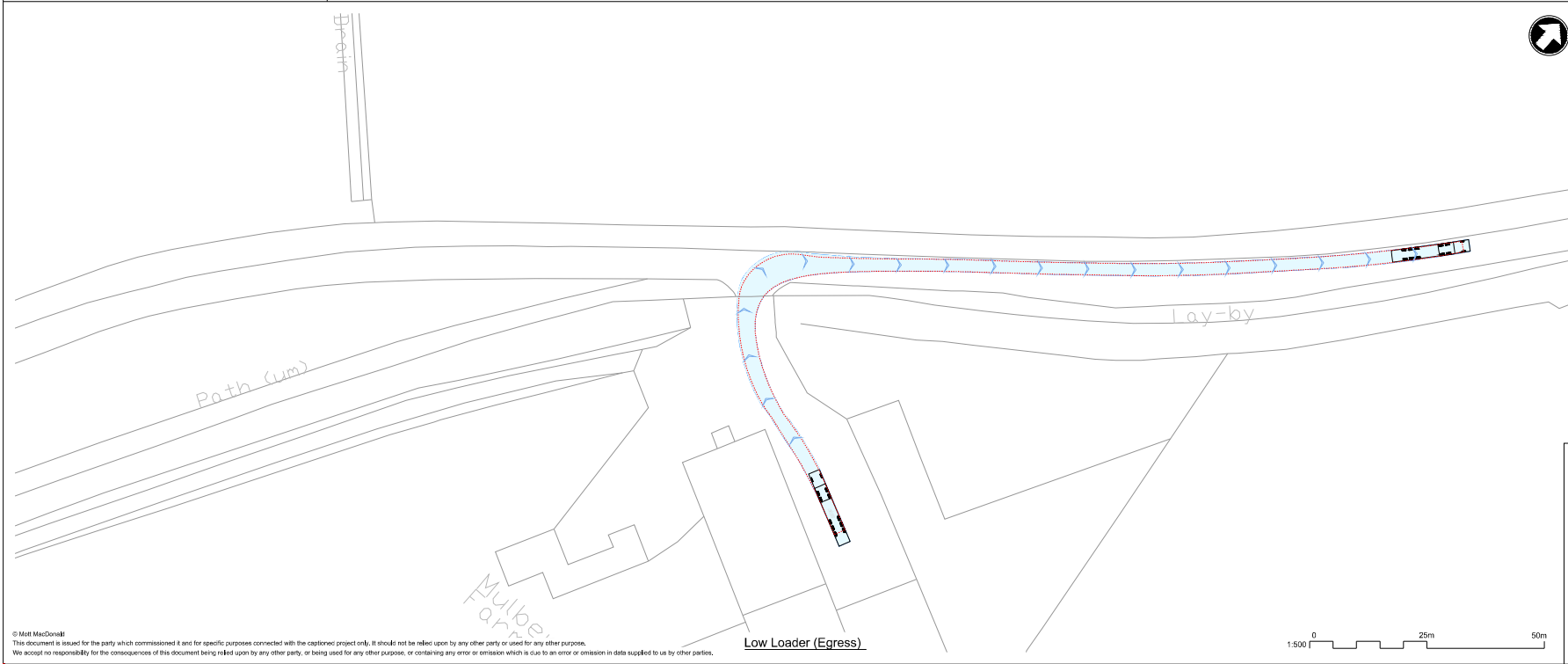
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 - NO DRAWINGS TO BE READ IN OCCURRENCE WITH THE TECHNICAL MEMO.**



Vehicle Data

	Low Loader	
Overall Length	16,633m	
Overall Width	2,500m	
Overall Body Height	3,300m	
Max Track Width	2,500m	
Kerb to Kerb Turning Radius	10,700m	

	Large Mobile Crane	
Overall Length	12,200m	
Overall Width	2,450m	
Overall Body Height	2,450m	
Track Width	2,450m	
Kerb to Kerb Turning Radius	10,000m	



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADG	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked by

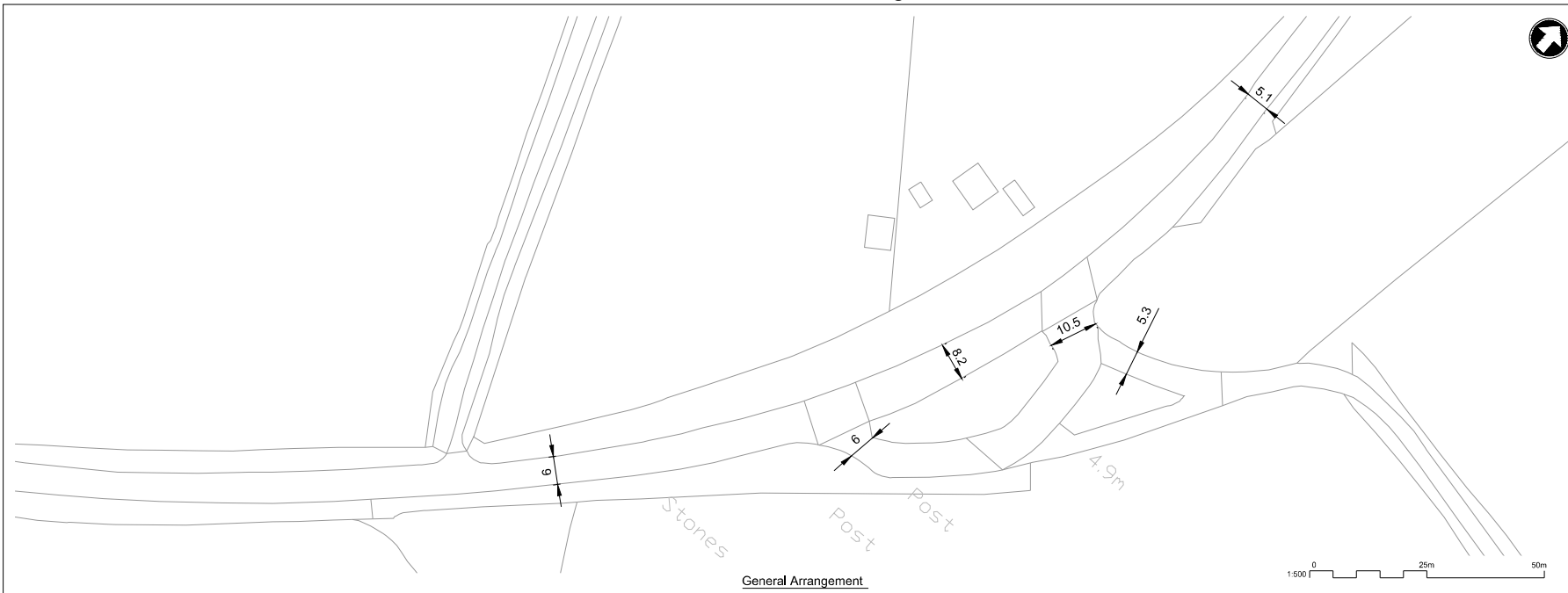


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
COA9
Highways GA, Visibility Splay and
Vehicle Tracking

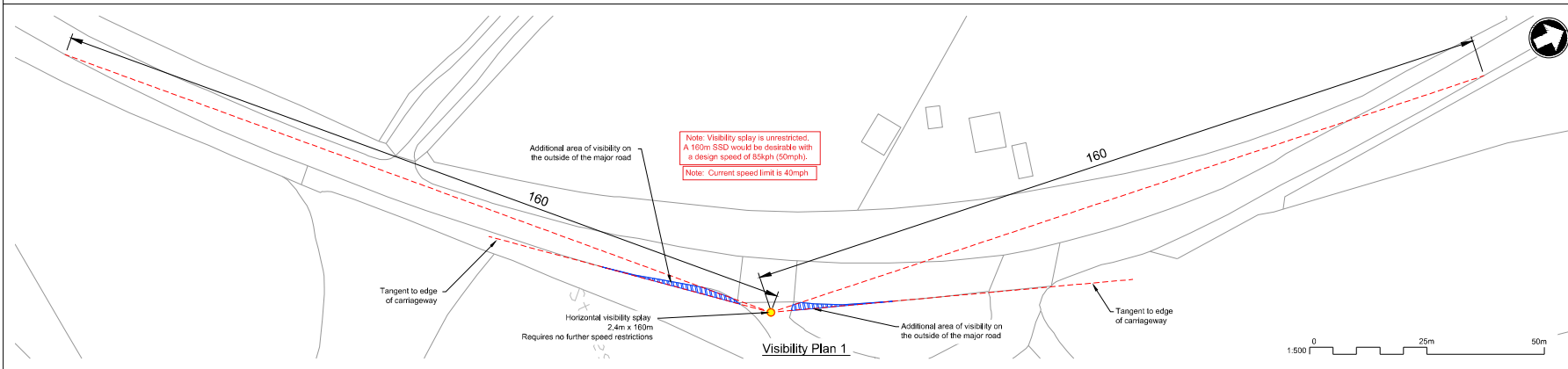
Designed	A.D. Casillas	ADG	Eng check	E. Case	EC
Drawn	-	-	Coordination	E. Case	EC
Dwg check	-	-	Approved	A.M. Rawlings	AMR

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

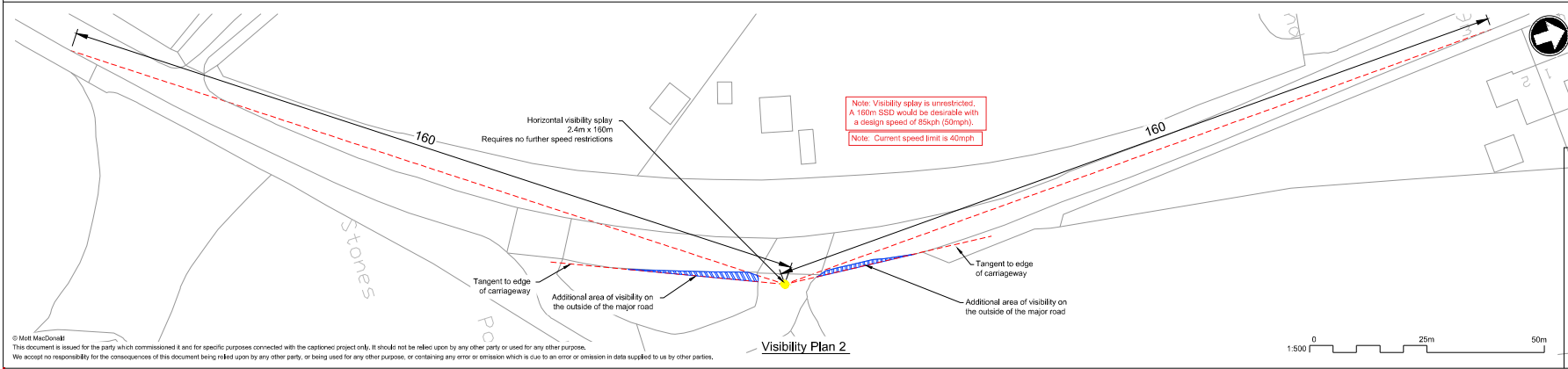
Drawing: 102375-MMD-01-XX-DR-C-DRAFT



General Arrangement

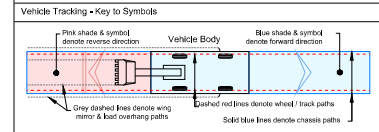


Visibility Plan 1



Visibility Plan 2

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 - Cambridge Waste Water Treatment Works Relocation is a brownfield site, any on-site infrastructure take is to be determined during future stages of the design development of this option.
 - Drawings to be read in conjunction with the Technical Memo.



Vehicle Tracking - Vehicle Details



Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk,

Vehicle Tracking - Notes

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Rev	Date	Drawn	Description	AWR	AWR
P1		ADC	Draft for Discussion / Review.		
					CWWTW

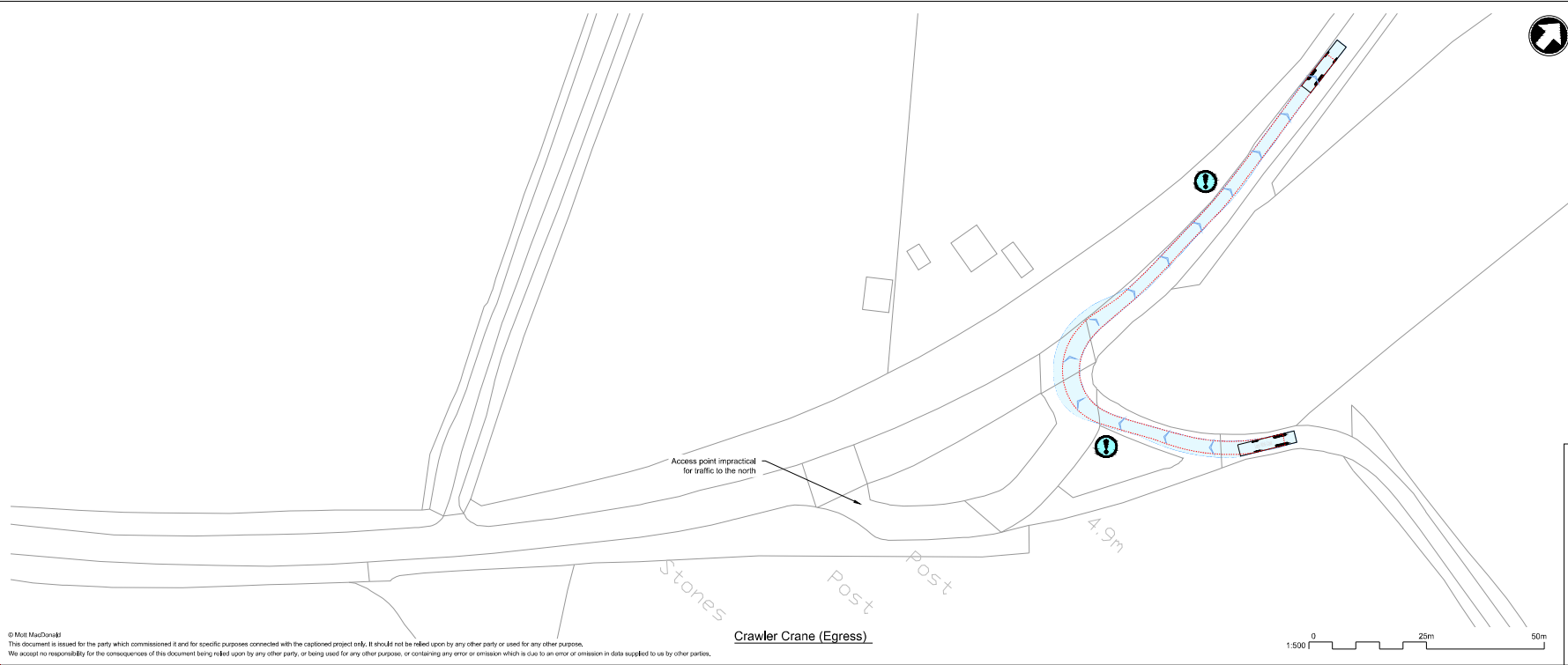
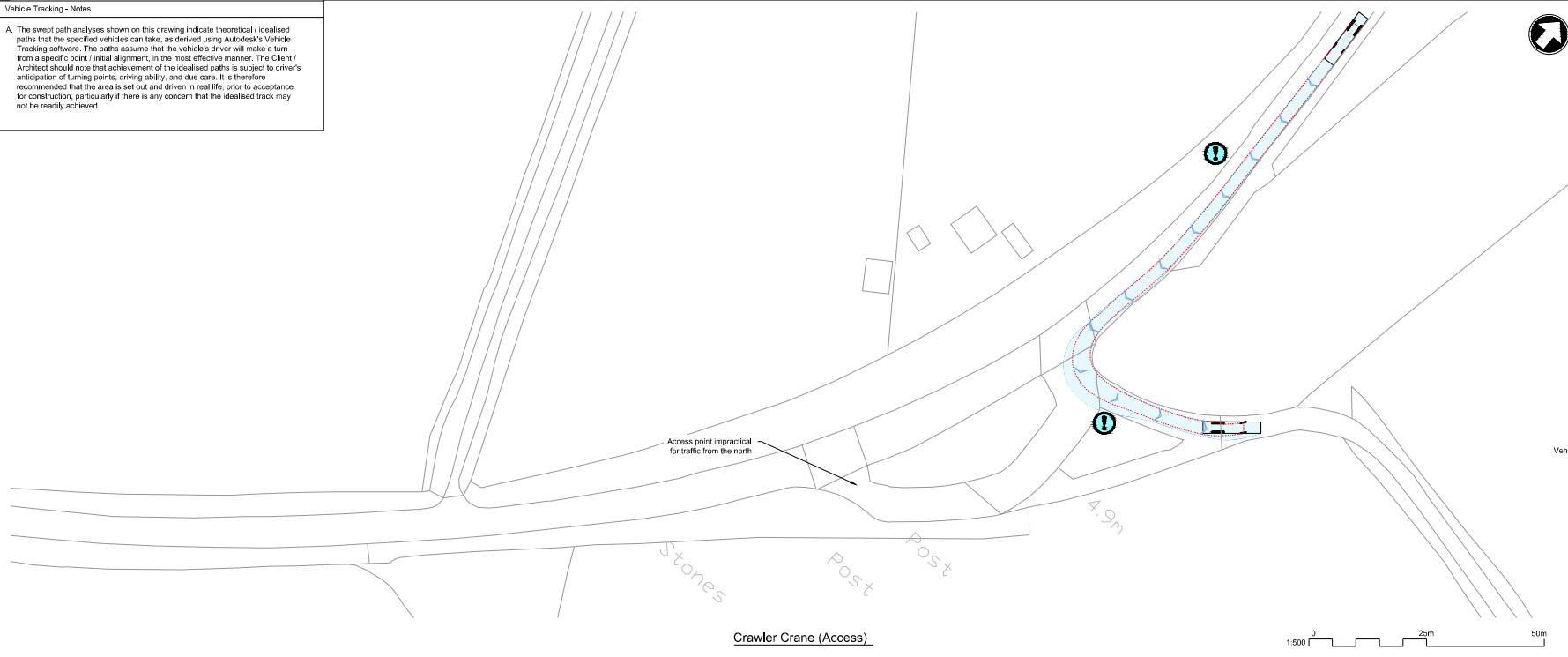


The Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA16
Highways GA, Visibility Splay and
Vehicle Tracking

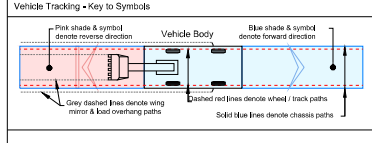
Designed	A.D. Casillas	ADC	Eng check	E. Case	EC
Drawn	A.D. Casillas	ADC	-	E. Case	EC
Dwg check	-	-	Coordination	A.M. Rawlings	AMR
Approved					
Scale	1:500	Stat. PRE	Rev P1	Sec STD	
Drawing 102375-MMD-01-XX-DR-C-DRAFT					

Vehicle Tracking - Notes

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 - DRAWINGS PREPARED IN COORDINATION** with the Technical Memo.



Vehicle Tracking - Vehicle Details

Low Loader

Overall Length	16.633m
Overall Width	2.500m
Overall Body Height	3.300m
Max Track Width	2.500m
Kerb to Kerb Turning Radius	6.700m

Large Mobile Crane

Overall Length	12.100m
Overall Width	2.430m
Overall Body Height	3.360m
Track Width	2.430m
Kerb to Kerb Turning Radius	10.000m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADC	Draft for Discussion / Review.	AMC	ARR
Rev	Date	Drawn	Description	Checked by



Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA16
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Castles	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	-	-	Approved	-	-
Scale	1:500	Status	PRE	Rev	P1
Drawings	102375-MMD-01-XX-DR-C-DRAFT	Section	STD	-	-

Vehicle Tracking - Notes

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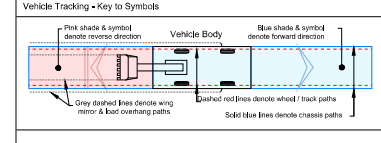


Low Loader (Access)



Low Loader (Egress)

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Vehicle

Low Loader

Overall Length	16,633m
Overall Width	2,500m
Overall Body Height	3,300m
Max Track Width	2,500m
Kerb to Kerb Turning Radius	10,700m

Large Mobile Crane

Overall Length	12,200m
Overall Width	2,450m
Overall Body Height	3,400m
Track Width	2,450m
Kerb to Kerb Turning Radius	10,000m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	10/23/25	ADC	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Checked	Approved

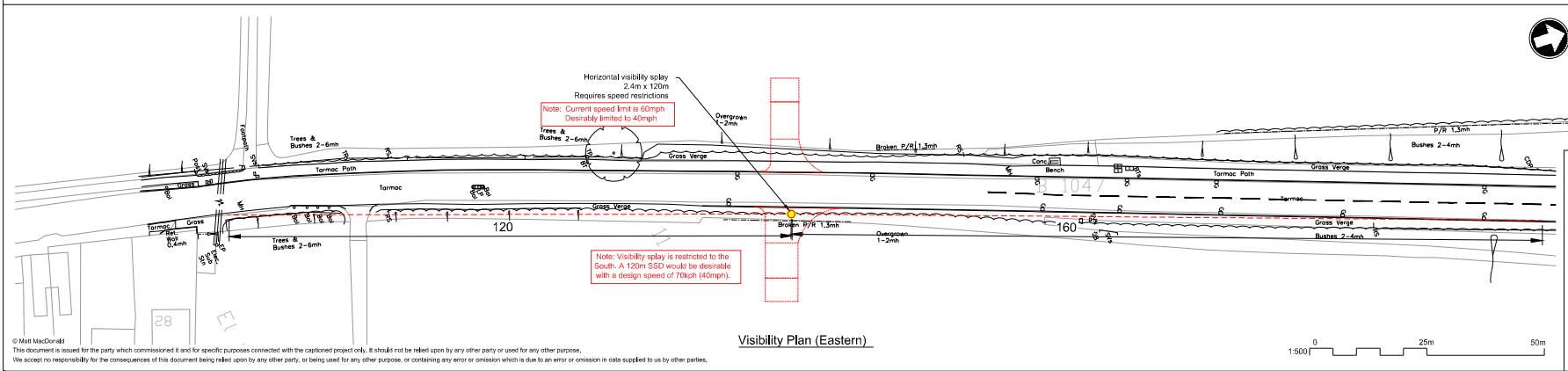
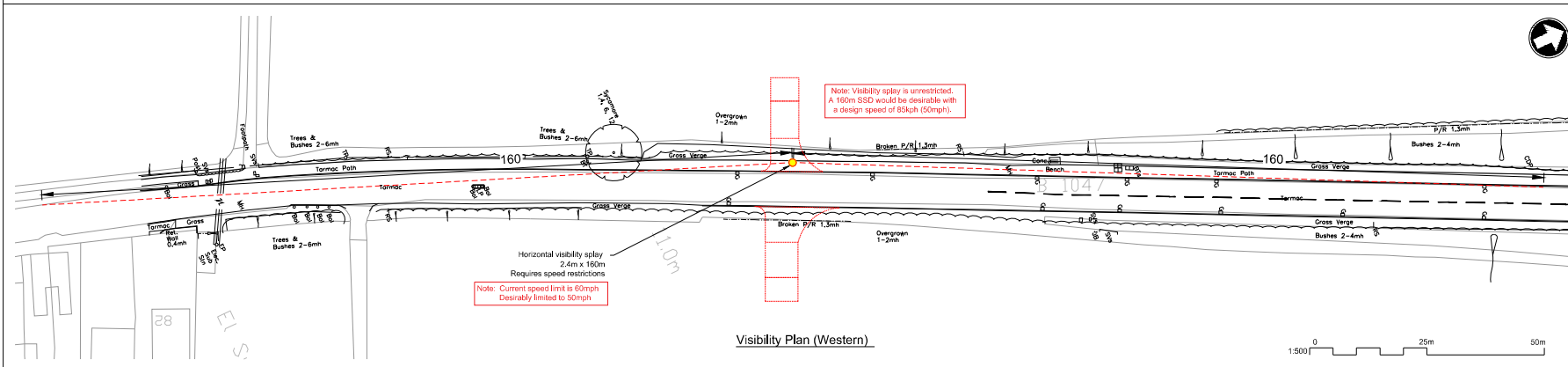
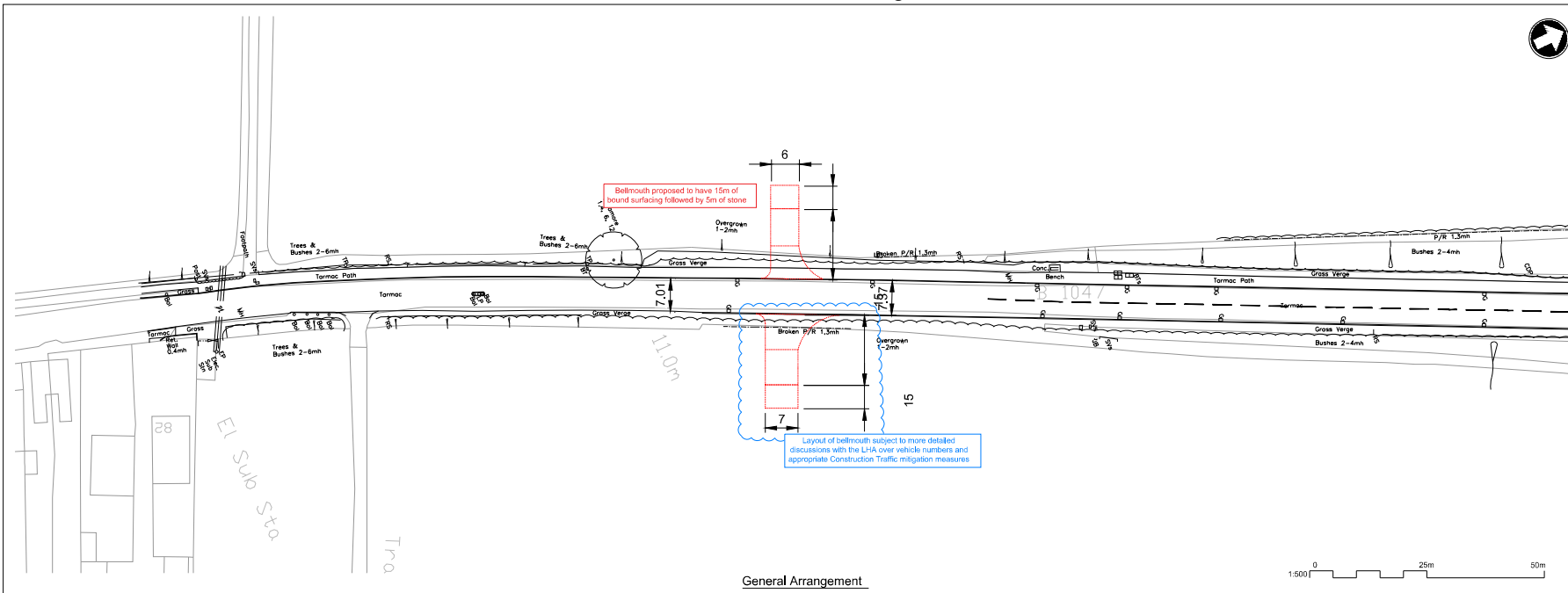


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA16
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D. Casillas	ADC	Eng check	E. Case	EC
Drawn	-	-	Coordination	E. Case	EC
Dwg check	-	-	Approved	A.M. Rawlings	AMR

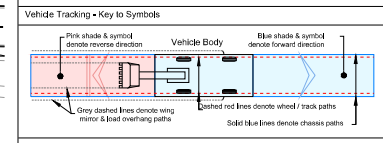
Scale: 1:500 Status: PRE Rev: P1 Section: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT



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 - The proposal requires third party land to be constructed, the extent of the land take is to be determined during future stages of the design development of this option.
 - This drawing should be read in conjunction with the Technical Memo.

Water Treatment Works Relocation Early assessment and siting of proposed site access options
15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

Add relevant vehicle profile details to your legend under the above title 'Vehicle Swept Paths - Vehicle Details'

Vehicle Tracking - Risks & Compliance

High Risks
 H1 Explanation of risk.

Vehicle Tracking - Notes

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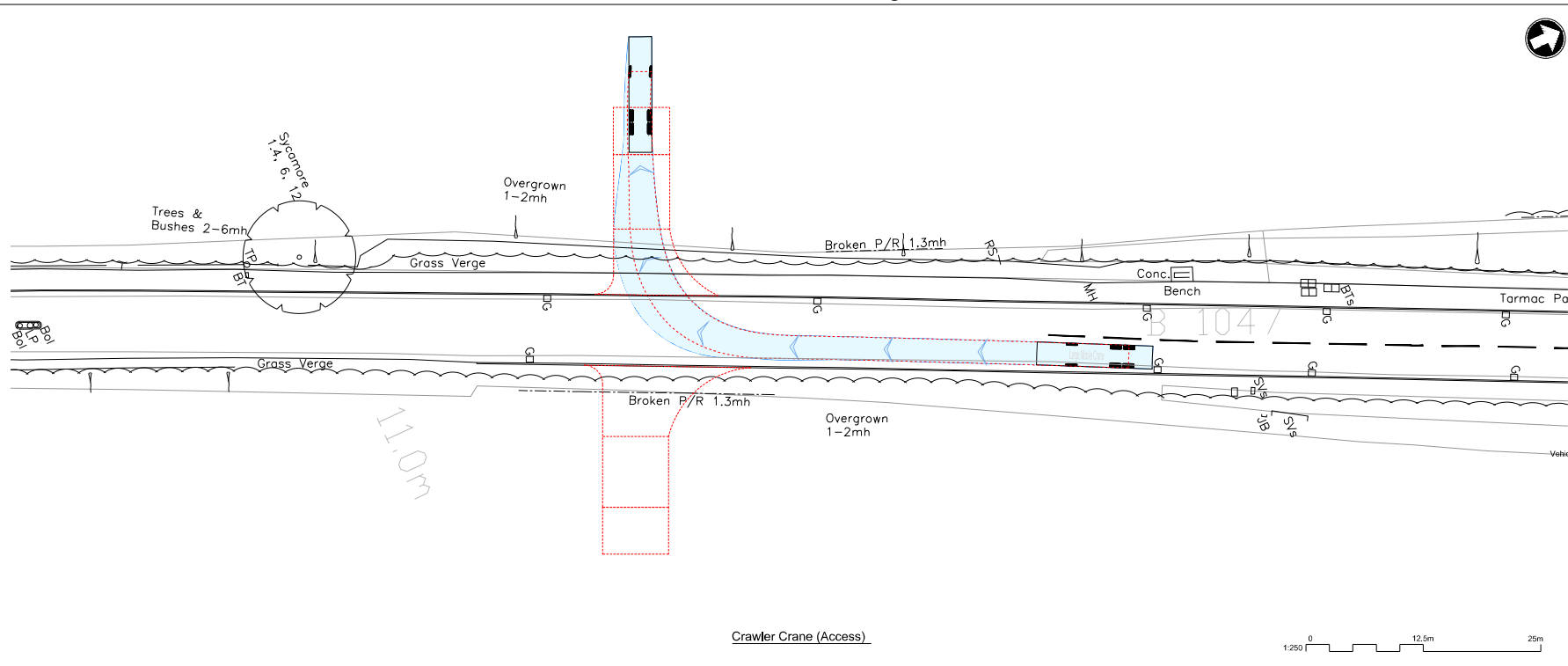
Reference drawings

P1	ADC	Draft for Discussion / Review.	AWR	AWR
Rev	Date	Drawn	Description	Drawn by

Designed	A.D.Castles	ADC	Eng check	E.Castle	EC
Drawn	-	-	Coordination	A.M.Rawlings	A/R
Dwg check	-	-	Approved	-	-
Scale	1:500	Status	PRE	Rev	P1
Section	-	Section	-	Section	STD



Title Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 CA2 / CA3
 Highways GA, Visibility Splay and
 Vehicle Tracking



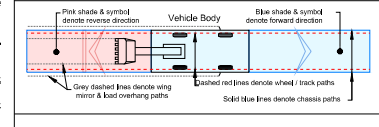
Crawler Crane (Access)

- Noise
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 10. The drawings do not include any street lighting or other highway infrastructure which may be required as part of the overall scheme design.
 11. The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 12. The design is based on the requirements of DMRB, Manual for Streets has been adopted for some elements of the proposed access roads.
 13. This proposal requires third party land to be constructed. The extent of the land take is to be determined during future stages of the design development of this option.
 14. This drawing should be read in conjunction with the Technical Memo.

Water Treatment Works Relocation Early assessment and siting of proposed site
Cambridge Waste

15. DRAWING MUST BE READ IN COLOUR

Vehicle Tracking - Key to Symbols



Large Mobile Crane

Overall Length	12,300m
Overall Width	2,400m
Overall Body Height	3,385m
Track Width	2,400m
Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk.

Vehicle Tracking - Notes

A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.

Reference drawings

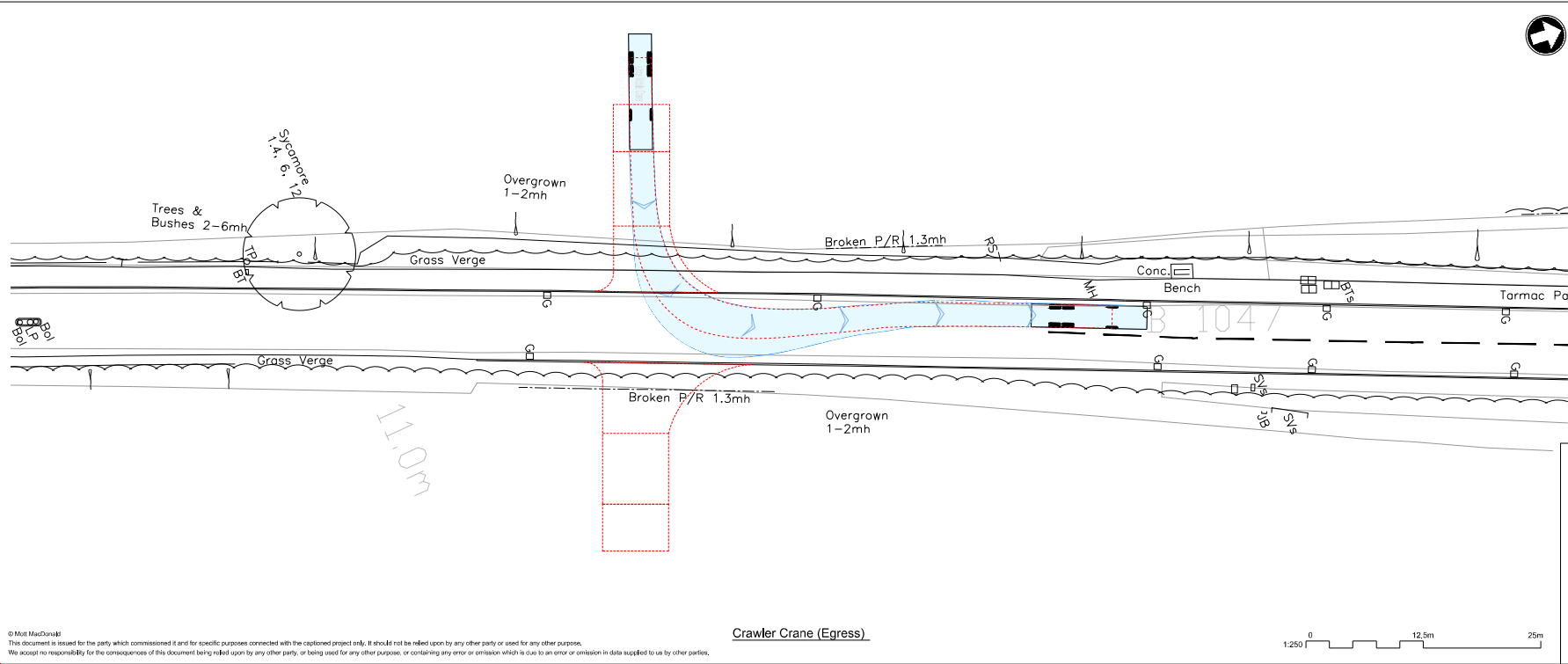
Rev	Date	Drawn	Description	AWK	ARR
P1		ADC	Draft for Discussion / Review.		



Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA2 / CA3
Highways GA, Visibility Splay and
Vehicle Tracking

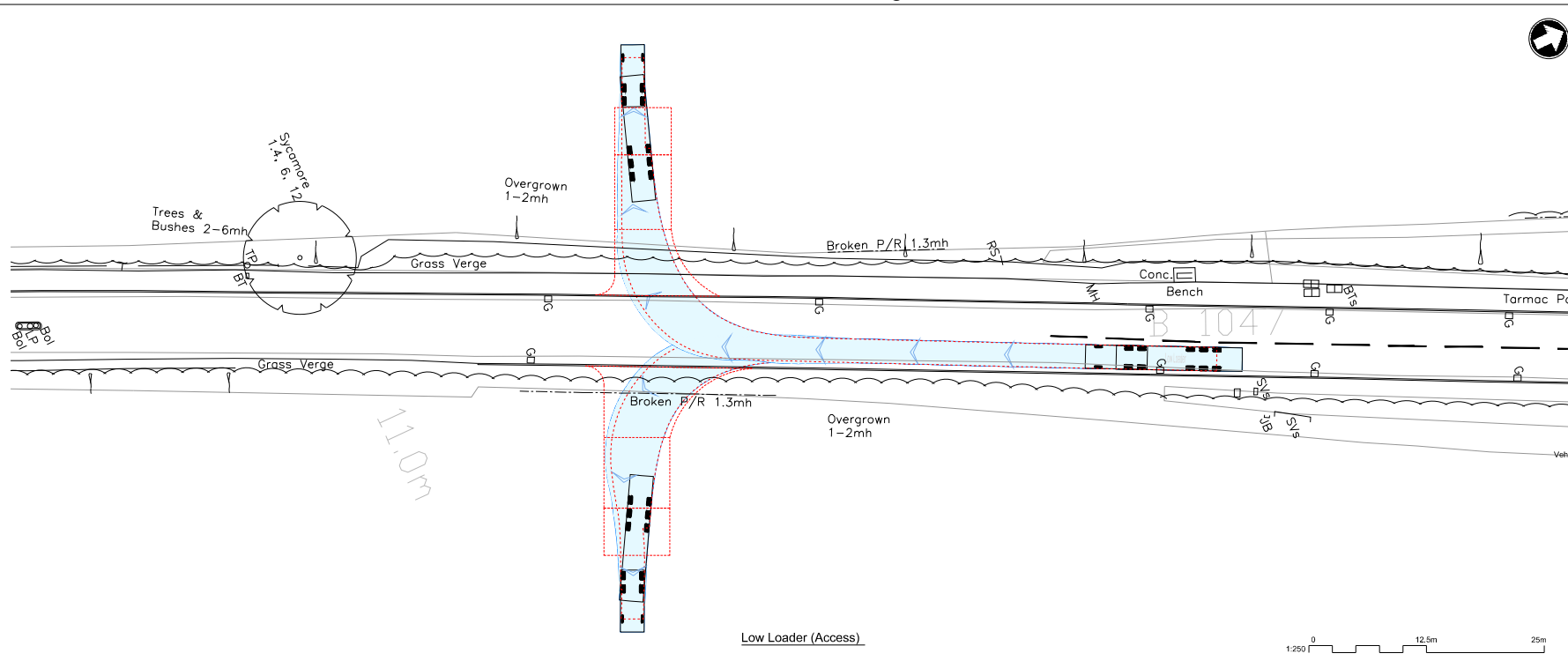
Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	A.D.Castles	ADC	Coordination	A.M.Rawlings	AMR
Dwg check			Approved		

Scale: 1:250 Stat: PRE Rev: P1 Sec: STD
Drawing: 102375-MMD-01-XX-DR-C-DRAFT

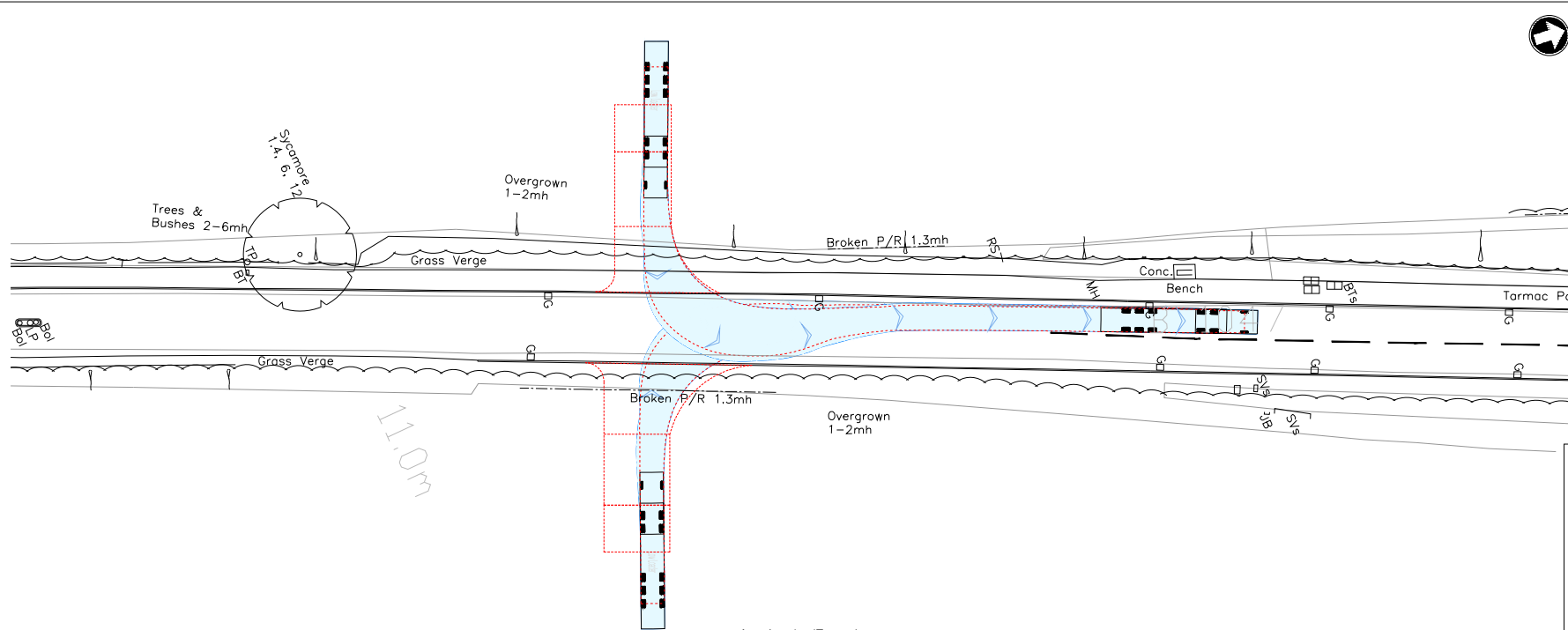
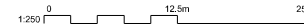


Crawler Crane (Egress)

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Low Loader (Access)



Low Loader (Egress)

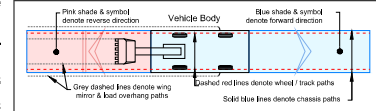


- Notes
1. Do not scale from this drawing.
 2. All dimensions are in metres unless otherwise shown. All levels are in metres above Ordnance Datum (AOD). All dimensions & levels should be checked on site.
 3. Any drawing errors or discrepancies should be brought to the attention of Mott MacDonald at the address shown in the title block.
 4. This drawing has been prepared for the final high level optioning study for the CWWTW project.
 5. The drawing is based on OS mapping information and LIDAR data.
 6. The information is preliminary and subject to further detailed design.
 7. The design has not been submitted to the Highway Authority or Highways England for their technical review.
 8. The drawing does not include any information on proposed highway drainage and associated SUDS, existing or proposed utilities or other existing assets that may need to be protected or diverted as part of the works.
 9. The design requires works to the public highway and would require further discussions with the relevant stakeholders. The design is subject to change and additional land take.
 10. The drawings do not include any street lighting or other highway infrastructure which may be required as part of the overall scheme design.
 11. The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 12. The design is based on the requirements of DMRB, Manual for Streets has been adopted for some elements of the proposed access roads.
 13. The proposal requires third party land to be constructed, the extent of the land take is to be determined during future stages of the design development of this option.
 14. This drawing should be read in conjunction with the Technical Memo.

Water Treatment Works Relocation Early assessment and siting of proposed site access options. Cambridge Waste

15. DRAWING MUST BE READ IN COLOUR

Vehicle Tracking - Key to Symbols



Low Loader	
Overall Length	16.63m
Overall Width	2.92m
Overall Body Height	2.92m
Max Travo Width	2.92m
Kerb to Kerb Turning Radius	6.79m

Vehicle Tracking - Risks & Compliance

High Risks
H1 Explanation of risk.

Vehicle Tracking - Notes

A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.

Reference drawings

P1	ADG	Draft for Discussion / Review.	AWK	AWK
Rev	Date	Drawn	Description	Drawn By

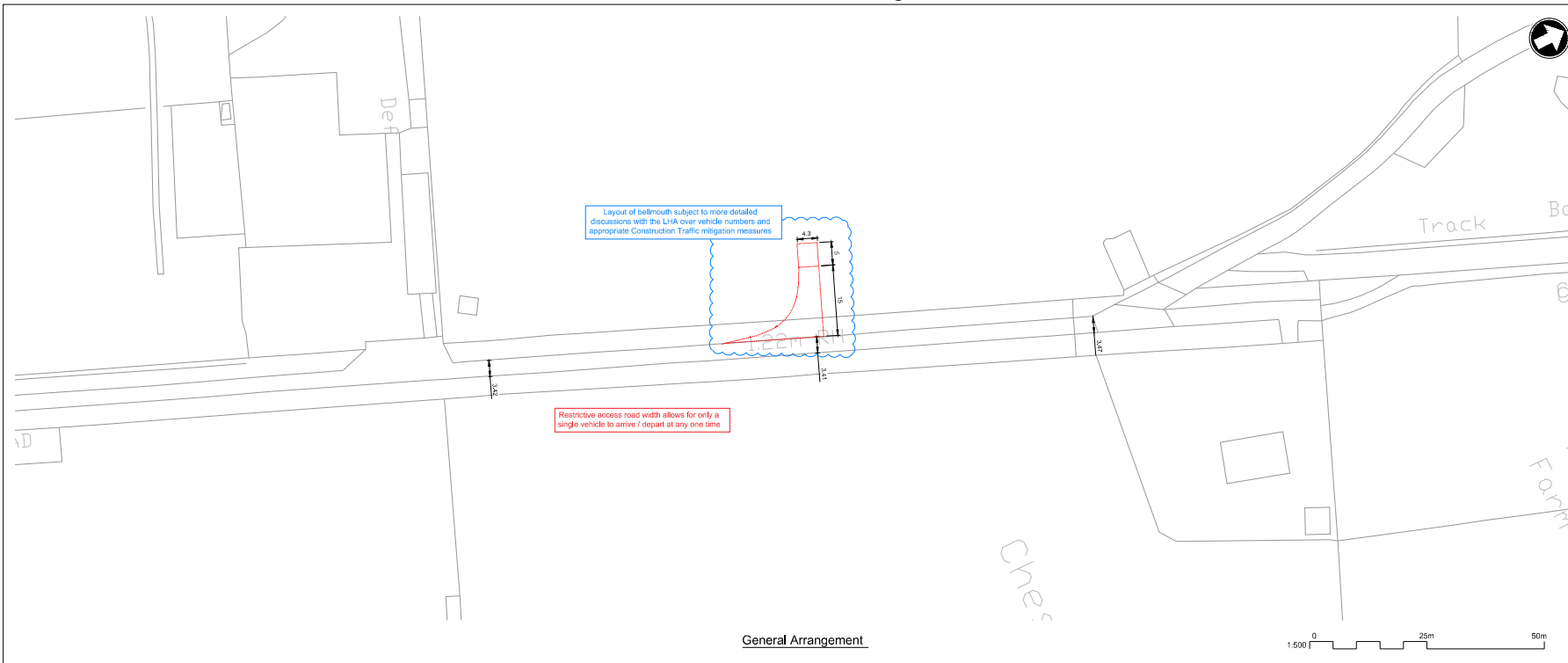


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 CA2 / CA3
 Highways GA, Visibility Splay and
 Vehicle Tracking

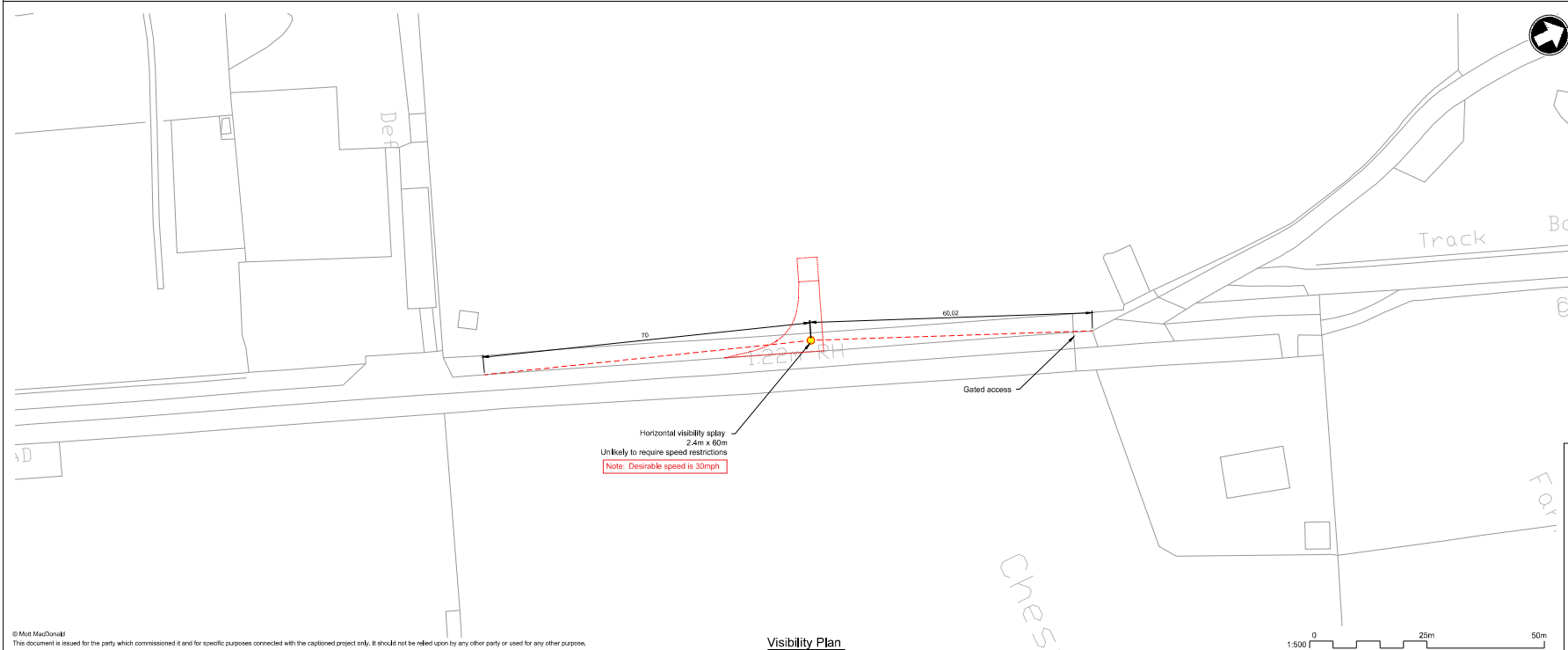
Designed	A.D.Castles	ADG	Eng check	E.Case	EC
Drawn	-	-	Coordination	E.Case	EC
Dwg check	-	-	Approved	A.M.Rawlings	AMR

Scale: 1:250 Stat: PRE Rev: P1 Sec: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT

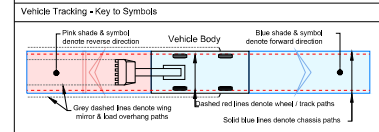


General Arrangement



Visibility Plan

- Notes
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 - The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is based on the design option that is acceptable during future stages of the design development of this option.
 - Drawings are prepared in coordination with the Technical Memo.



Vehicle Tracking - Vehicle Details

	Low Loader	16,633m
	Overall Length	16,633m
	Overall Width	2,500m
	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	6,700m

	Large Mobile Crane	12,100m
	Overall Length	12,100m
	Overall Width	2,430m
	Overall Body Height	2,430m
	Track Width	2,430m
	Kerb to Kerb Turning Radius	10,000m

Vehicle Tracking - Risks & Compliance

	High Risks
	H1 Explanation of risk,

Vehicle Tracking - Notes

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Rev	Date	Drawn	Description	AWK	AWK
P1		ADC	Draft for Discussion / Review.		CHW

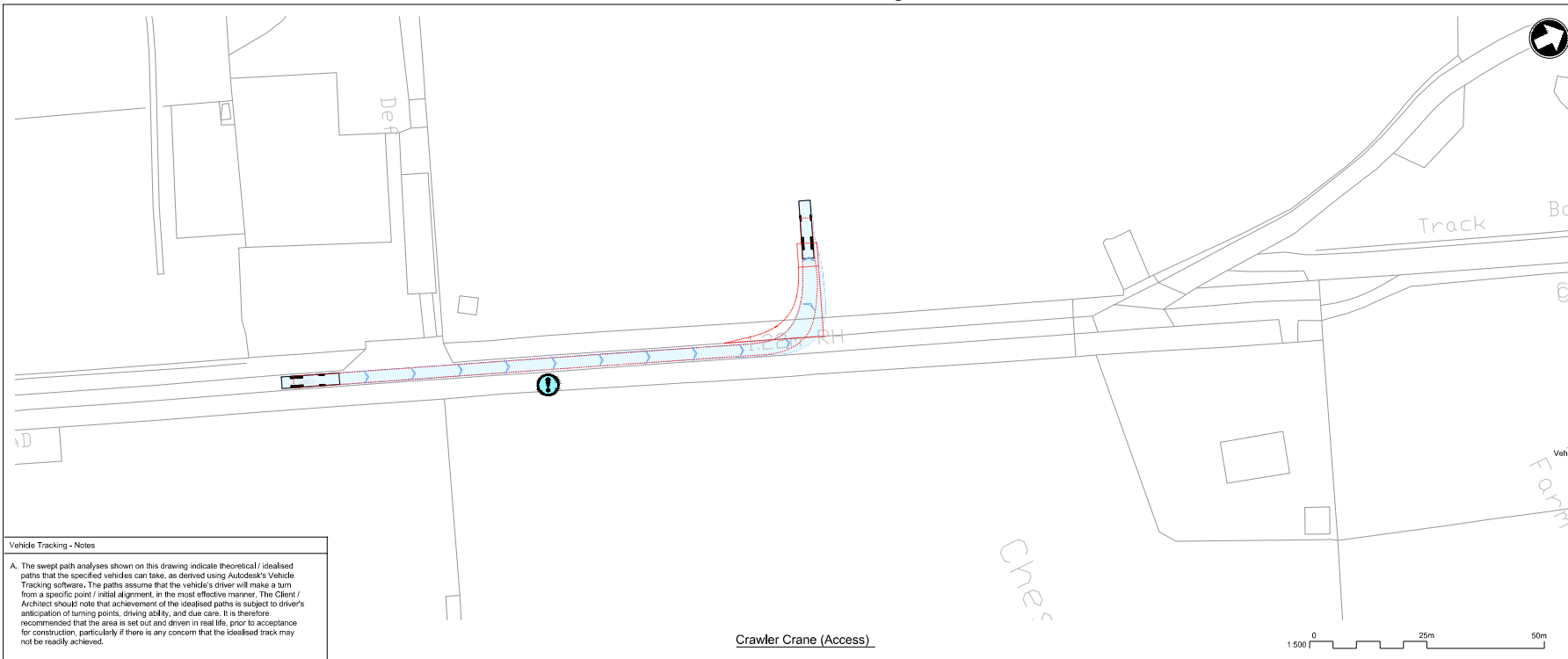


The Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 CA1
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	A.D.Castles	ADC	Coordination	A.M.Rawlings	AMR
Dwg check			Approved		

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD
 Drawing: 102375-MMD-01-XX-DR-C-DRAFT

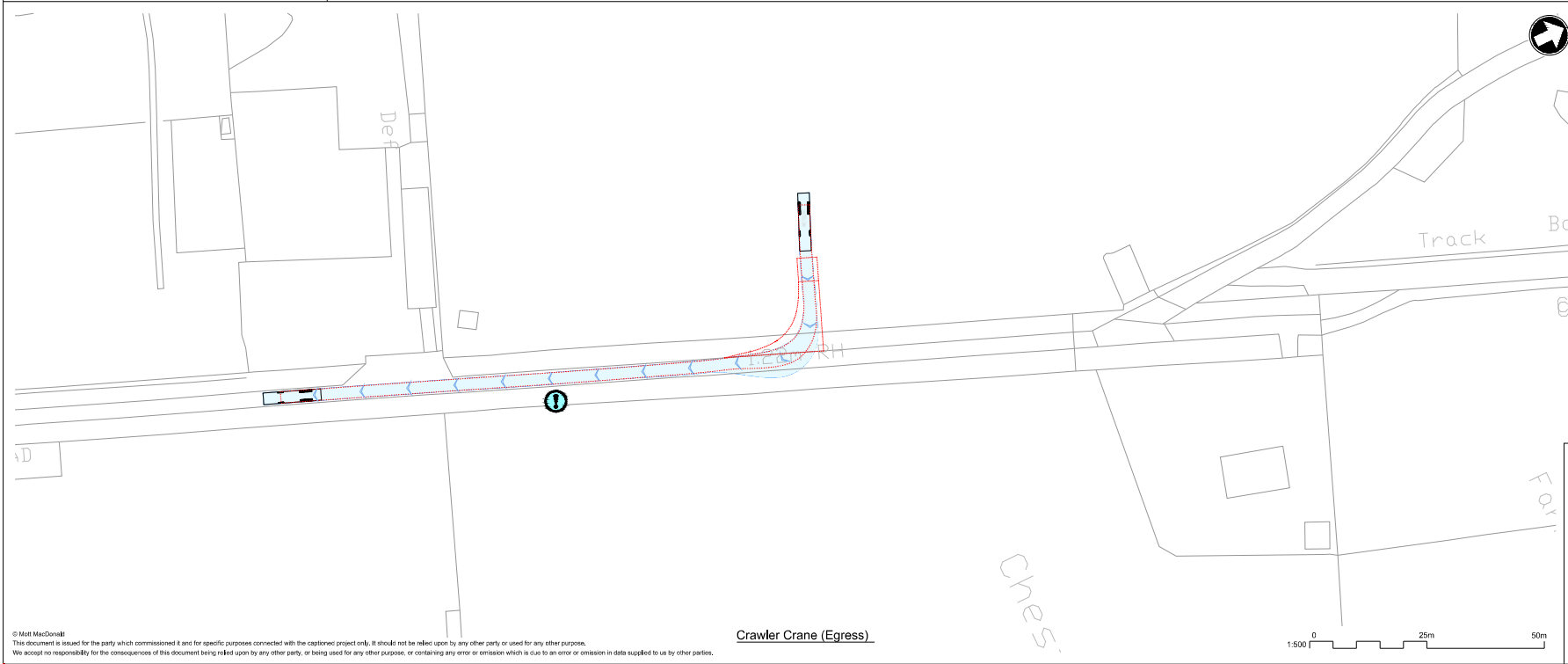
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 P:\Cambridge\Wardrobe\EST\PROJECTS\CWWTWR - Civil\Eng\CA1\1.0 Live Drawings\DW\Temp Access Junction
 Audit\102375-MMD-01-XX-DR-C-DRAFT (Temp Access Junction) 13/26g May 12, 2022 - 9:38AM CAS89725



Vehicle Tracking - Notes

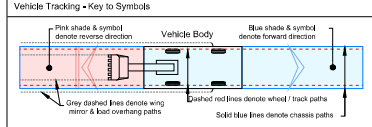
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Crawler Crane (Access)



Crawler Crane (Egress)

- Notes**
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 - The design requires works to the public highway and would require further discussions with the relevant stakeholders. The design is subject to change and additional land take.
 - The drawings do not include any street lighting or other highway infrastructure which may be required as part of the overall scheme design.
 - The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is a business activity, and any proposed changes to the site are subject to approval during future stages of the design development of this option.
 - DRAWINGS TO BE READ IN CONJUNCTION with the Technical Memo.**



Vehicle Tracking - Vehicle Details

Vehicle Type	Overall Length	Overall Width	Overall Body Height	Max Track Width	Kerb to Kerb Turning Radius
Low Loader	16,633m	2,500m	3,300m	2,500m	16,700m
Large Mobile Crane	12,200m	2,450m	2,450m	2,450m	10,000m

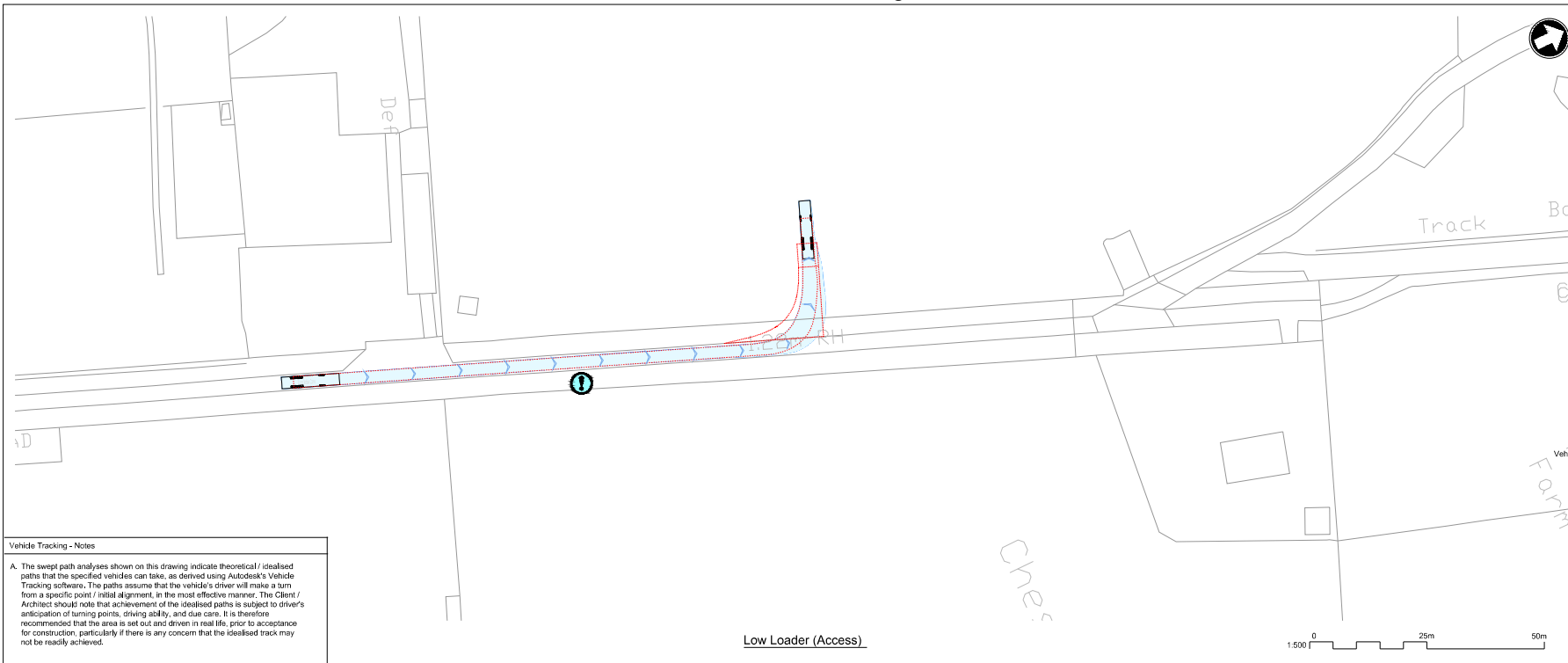
- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

Rev	Date	Drawn	Description	CHK	APP
P1		ADC	Draft for Discussion / Review.		ARK
Rev	Date	Drawn	Description	CHK	APP



Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA1
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D. Casillas	ADC	Eng check	E. Case	EC
Drawn	A.D. Casillas	ADC	Coordination	A.M. Rawlings	AMR
Dwg check	Approved				
Scale	1:500	Stat	PRE	Rev	P1
				Sec	STD
Drawing 102375-MMD-01-XX-DR-C-DRAFT					



Vehicle Tracking - Notes

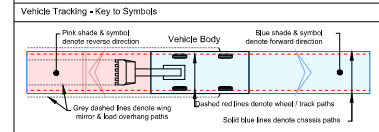
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Low Loader (Access)



Low Loader (Egress)

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 - The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads. Cambridge Waste Water Treatment Works Relocation is based on a 10% probability of exceedance lake is acceptable during future stages of the design development of this option.
 - DRAWINGS PREPARED IN OCCURRENCE** with the Technical Memo.



	Low Loader	
	Overall Length	16,633m
	Overall Width	2,500m
	Overall Body Height	3,300m
	Max Track Width	2,500m
	Kerb to Kerb Turning Radius	16,700m
	Large Mobile Crane	
	Overall Length	12,200m
	Overall Width	2,450m
	Overall Body Height	3,360m
	Track Width	2,450m
	Kerb to Kerb Turning Radius	10,000m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	ADC	Draft for Discussion / Review.	ARK	ARK
Rev	Date	Drawn	Description	Checked



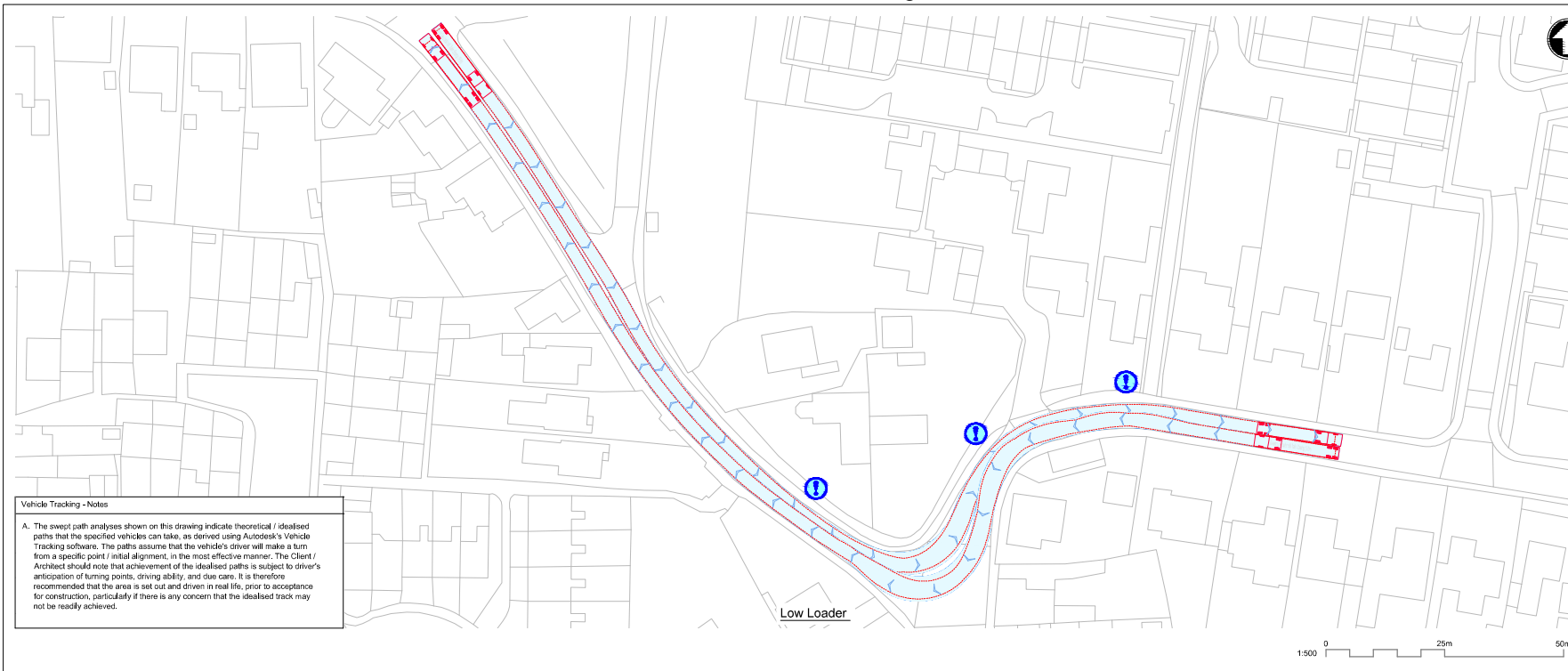
Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
CA1
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	A.D.Castles	ADC	Eng check	E.Case	EC
Drawn	-	-	Coordination	A.M.Rawlings	AMR
Dwg check	Approved				

Scale: 1:500 Stat: PRE Rev: P1 Sec: STD

Drawing: 102375-MMD-01-XX-DR-C-DRAFT

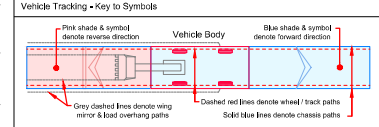
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Vehicle Tracking - Notes

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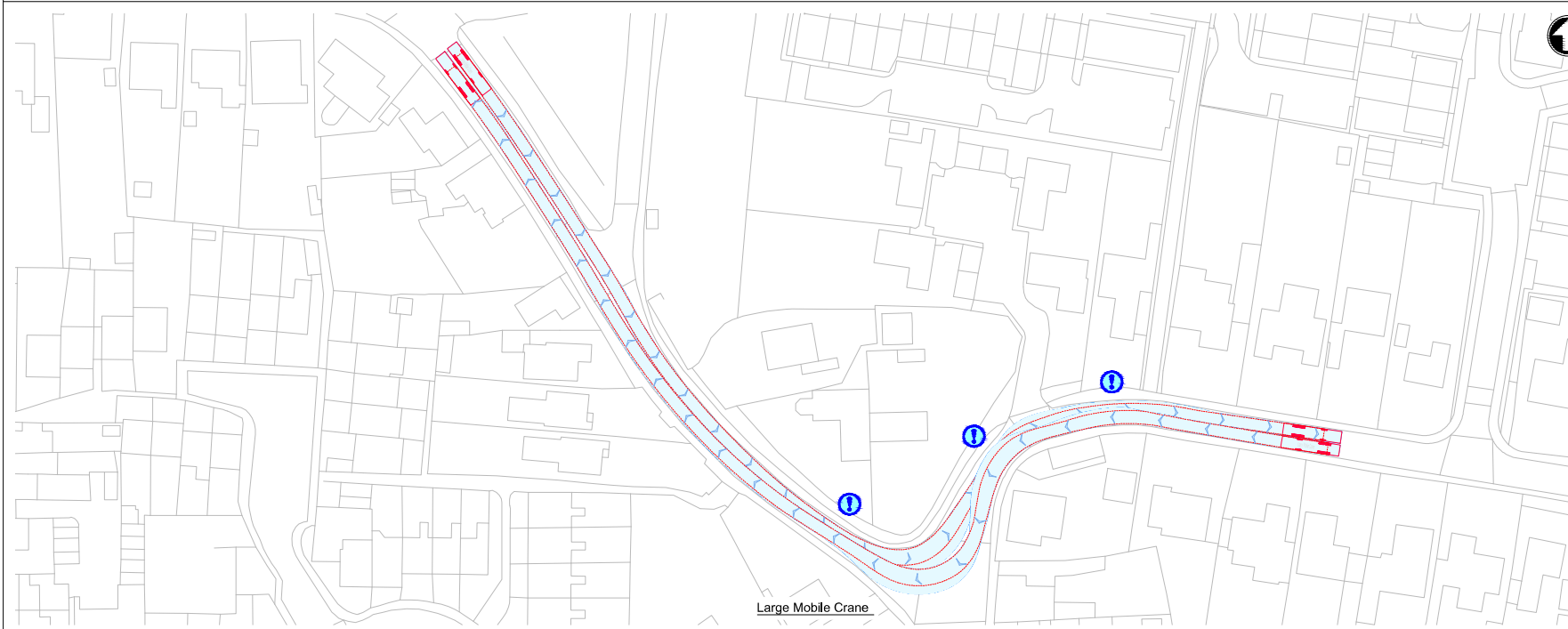
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 14. This drawing should be read in conjunction with the Technical Memo - Cambridge Waste Water Treatment Works Relocation Early assessment and siting of proposed site access options.
 15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

<p>General Low loader with Trailer (Steering 1820m)</p> <p>Overall Length 24.60m Overall Width 2.40m Overall Body Height 2.40m Max Body Ground Clearance 2.00m Max. track time 6.00m Kerb to Kerb Turning Radius 6.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.00m Overall Width 2.40m Overall Body Height 3.30m Max Body Ground Clearance 2.00m Max. track time 6.00m Kerb to Kerb Turning Radius 10.00m</p>
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<p>Large Tipper</p> <p>Overall Length 16.00m Overall Width 2.85m Overall Body Height 2.85m Max Body Ground Clearance 2.00m Max. track time 11.50m Kerb to Kerb Turning Radius</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.60m Overall Width 1.90m Overall Body Height 1.90m Max Body Ground Clearance 1.90m Max. track time 4.00m Kerb to Kerb Turning Radius</p>
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- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd

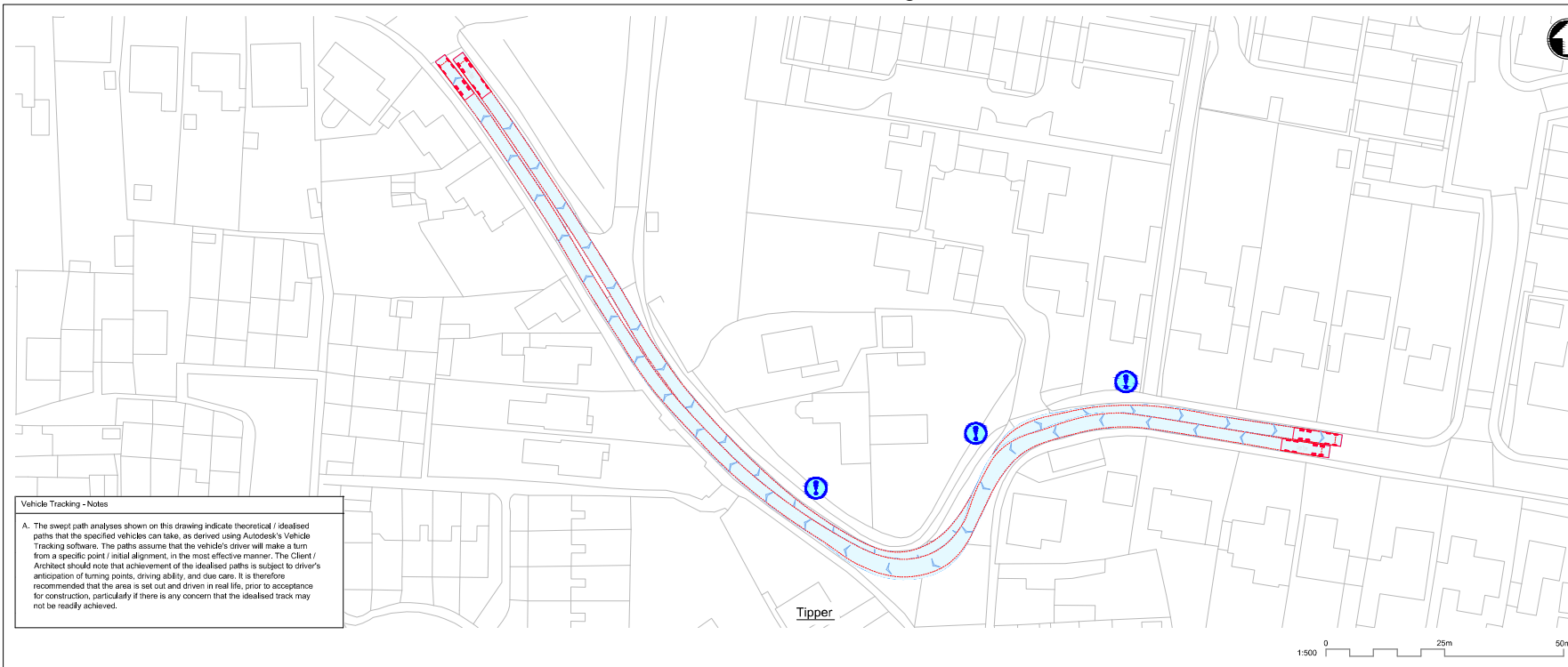


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Denny End Rd - Bannold Rd
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

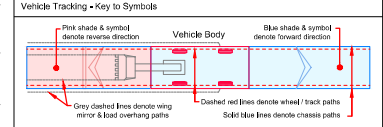
Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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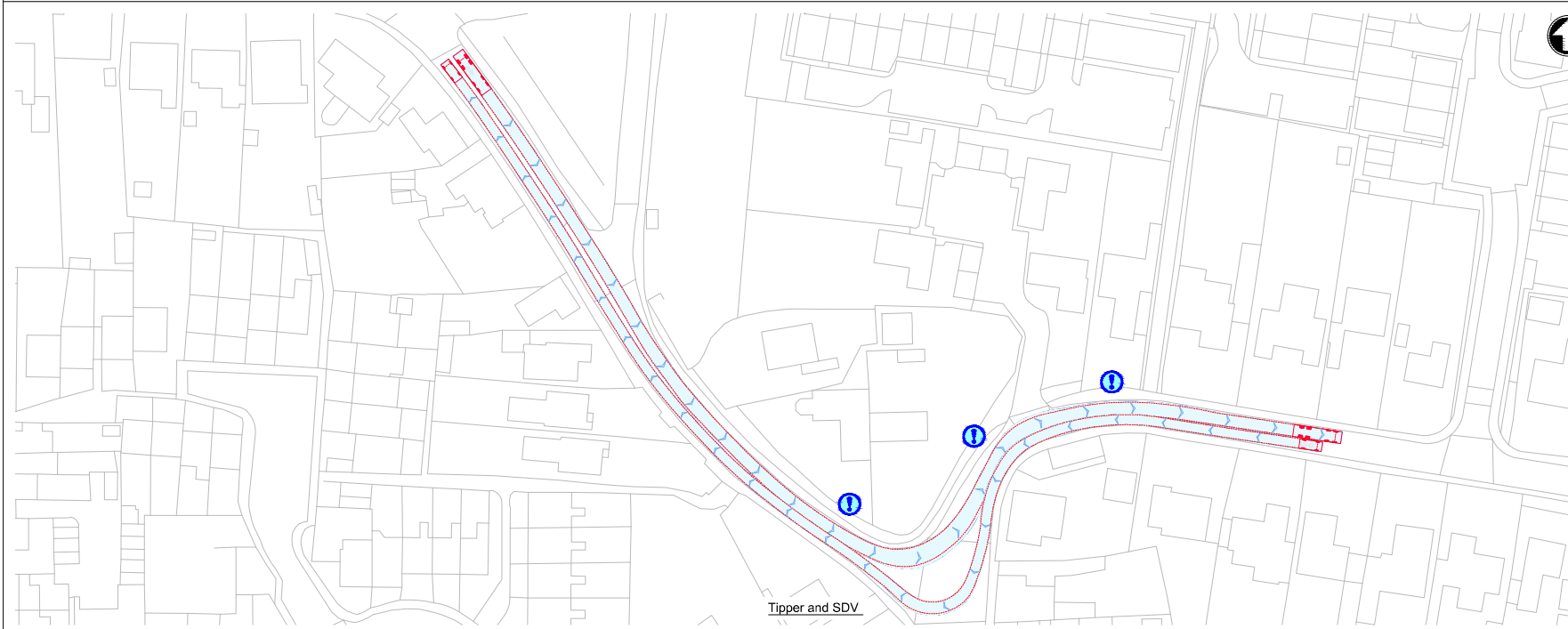
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- 15. DRAWING MUST BE READ IN COLOUR**



Vehicle Tracking - Vehicle Details

Overall Low loader with Trailer (Steering 1820m)	2460m	Overall Length	12.300m
Overall Width	2.970m	Overall Width	2.970m
Overall Body Height	3.470m	Overall Body Height	3.300m
Max Body Ground Clearance	2.020m	Max Body Ground Clearance	2.020m
Max. Trail Over	6.07m	Trail Over	2.570m
Lock to Lock Time	6.07m	Lock to Lock Time	6.07m
Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	10.000m

Overall Length	10.070m	Standard Design Vehicle (SDV)	4.600m
Overall Width	2.950m	Overall Width	2.950m
Overall Body Height	2.950m	Overall Body Height	2.950m
Max Body Ground Clearance	2.020m	Max Body Ground Clearance	2.020m
Trail Over	2.570m	Trail Over	2.570m
Lock to Lock Time	6.07m	Lock to Lock Time	6.07m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	6.070m



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd

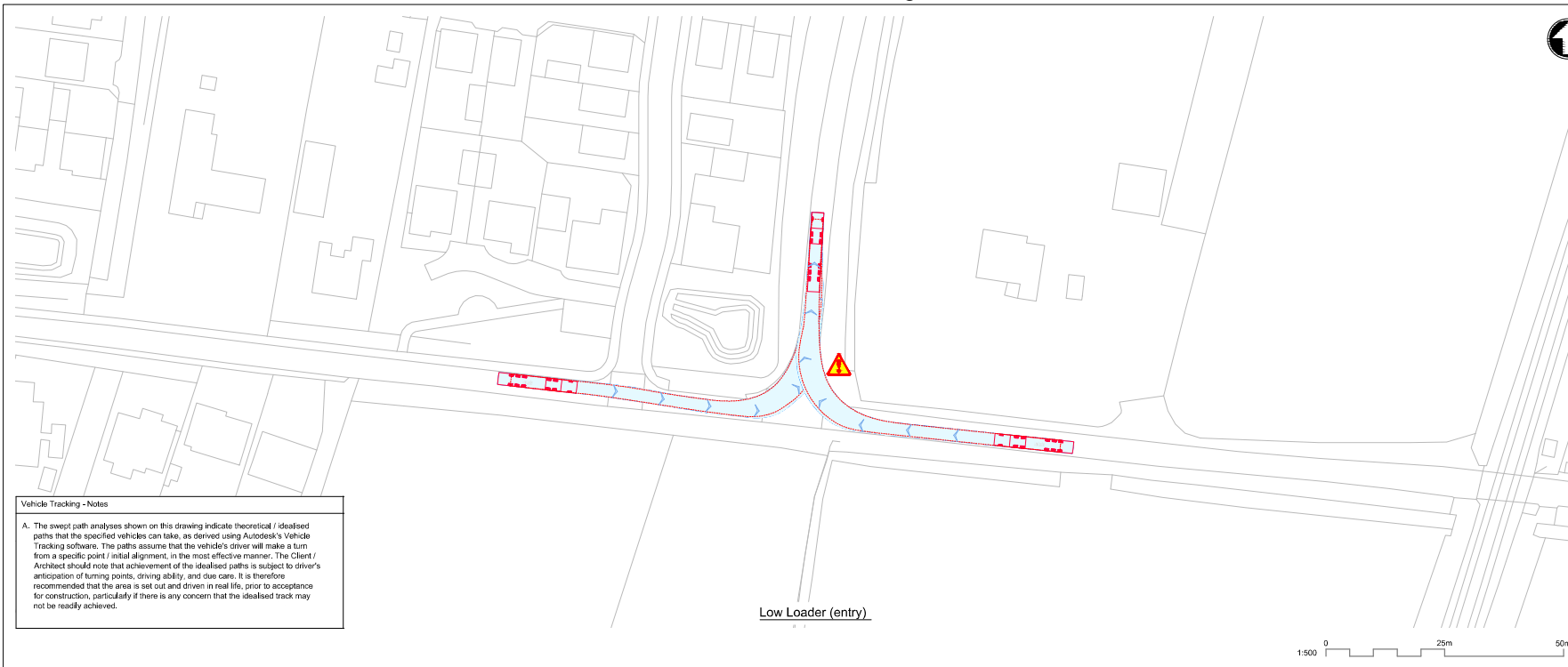


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
Denny End Rd - Bannold Rd
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT



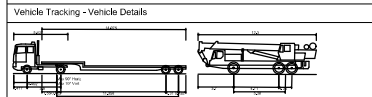
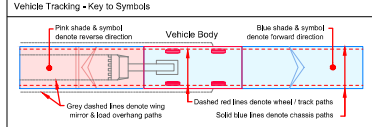
Vehicle Tracking - Notes

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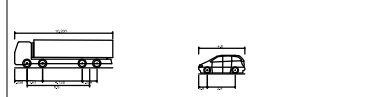
Low Loader (entry)

- Notes**
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15. DRAWING MUST BE READ IN COLOUR



Overall Low Loader with Trailer (Steering 1820m)	2460m	Overall Length	7.97m	Overall Width	2.46m	Overall Height	12.20m
Overall Width	2.46m	Overall Body Height	2.49m	Overall Body Height	2.49m	Overall Body Height	2.49m
Max Body Ground Clearance	2320m	Max Body Ground Clearance	2320m	Max Body Ground Clearance	2320m	Max Body Ground Clearance	2320m
Max. Trail from	6.07m	Trail from	6.07m	Trail from	6.07m	Trail from	6.07m
Lock to Lock time	6.07m	Lock to Lock time	6.07m	Lock to Lock time	6.07m	Lock to Lock time	6.07m
Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	6.07m



Overall Low Loader with Trailer (Steering 1820m)	2460m	Overall Length	7.97m	Overall Width	2.46m	Overall Height	12.20m
Overall Width	2.46m	Overall Body Height	2.49m	Overall Body Height	2.49m	Overall Body Height	2.49m
Max Body Ground Clearance	2320m	Max Body Ground Clearance	2320m	Max Body Ground Clearance	2320m	Max Body Ground Clearance	2320m
Max. Trail from	6.07m	Trail from	6.07m	Trail from	6.07m	Trail from	6.07m
Lock to Lock time	6.07m	Lock to Lock time	6.07m	Lock to Lock time	6.07m	Lock to Lock time	6.07m
Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	6.07m



Low Loader (egress)

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Appr



Title
 Cambridge Waste Water Treatment Works Relocation
 Bannold Rd - Bannold Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

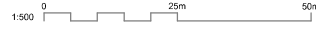
Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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Crane (entry)

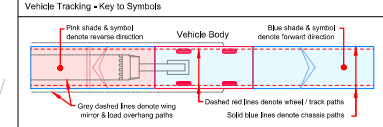


Crane (egress)



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15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

Control Line Loader with Trailer Steering (1620m)	Large Mobile Crane	
Overall Length	7.97m	Overall Length
Overall Width	2.66m	Overall Width
Overall Body Height	3.49m	Overall Body Height
Min Body Ground Clearance	0.30m	Min Body Ground Clearance
Max. Rear Overhang	6.07m	Max. Rear Overhang
Lock to Lock Time	6.07m	Lock to Lock Time
Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius
		10.00m

Large Tipper	Standard Design Vehicle (SDV)	
Overall Length	10.07m	Overall Length
Overall Width	2.85m	Overall Width
Overall Body Height	2.66m	Overall Body Height
Min Body Ground Clearance	0.30m	Min Body Ground Clearance
Max. Rear Overhang	5.27m	Max. Rear Overhang
Lock to Lock Time	5.27m	Lock to Lock Time
Kerb to Kerb Turning Radius	11.55m	Kerb to Kerb Turning Radius
		4.02m
		6.07m

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Approved

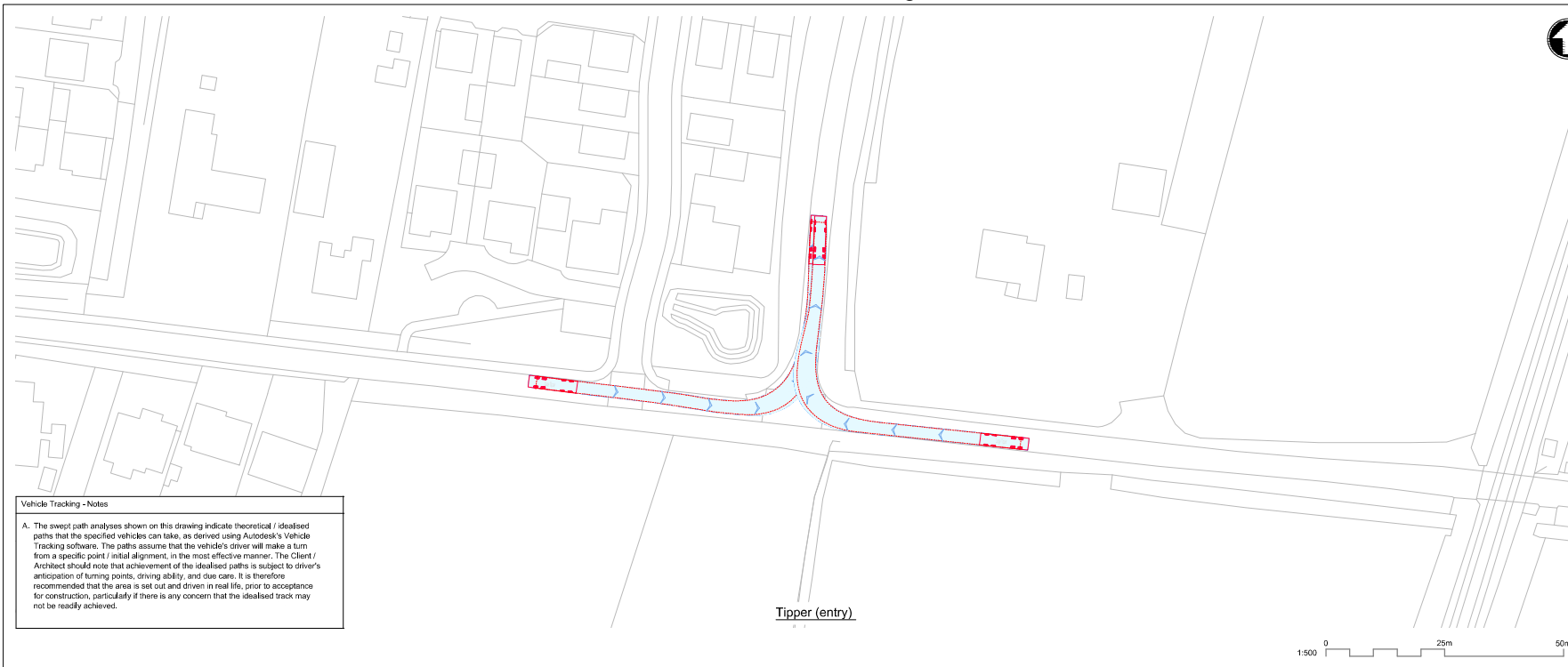


Title
 Cambridge Waste Water Treatment Works Relocation
 Bannold Rd - Bannold Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

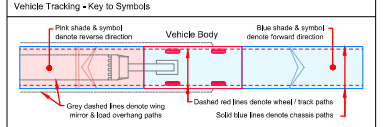
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Tipper (entry)



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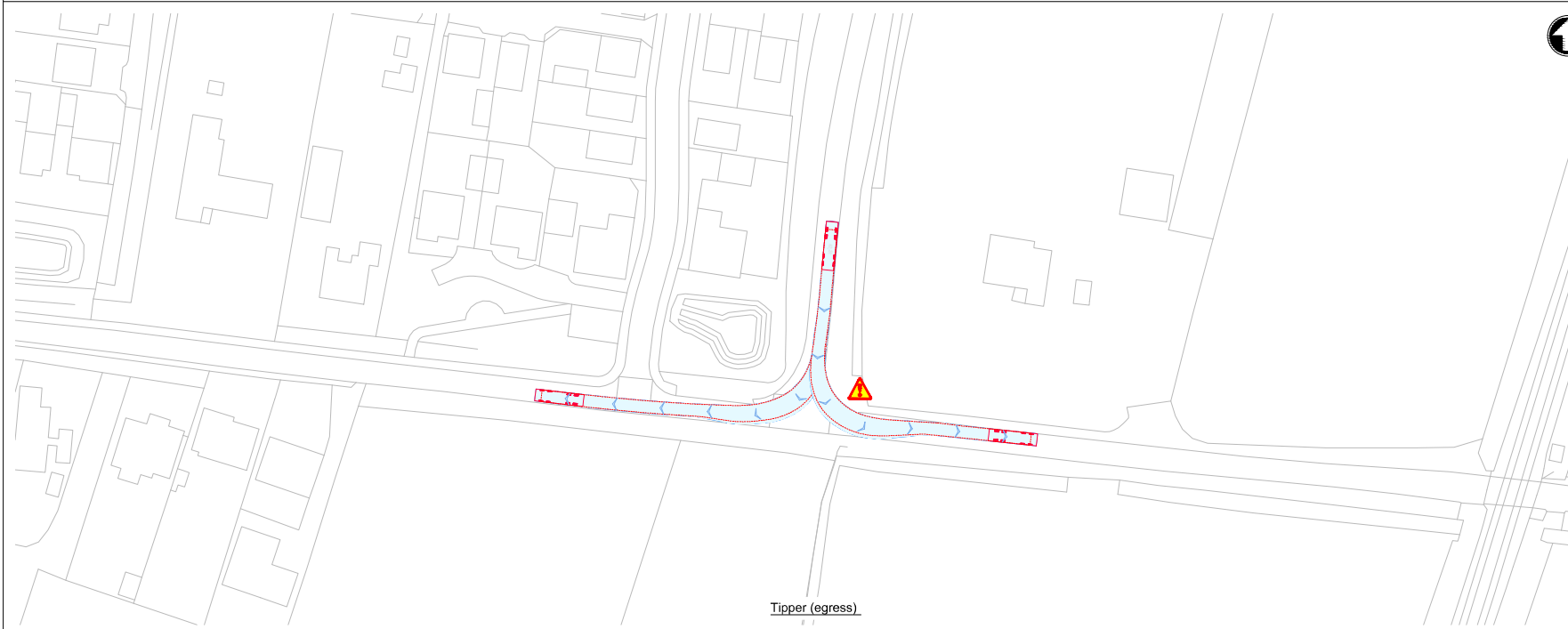
15. DRAWING MUST BE READ IN COLOUR



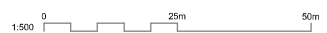
Vehicle Tracking - Vehicle Details

Overall Length with Trailer (Steering 1820m)	7.97m	Overall Length
Overall Width	2.66m	Overall Width
Overall Body Height	3.49m	Overall Body Height
Min Body Ground Clearance	0.30m	Min Body Ground Clearance
Max. Overhang	6.07m	Max. Overhang
Lock to Lock time	6.07m	Lock to Lock time
Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius
		Overall Height
		Overall Width
		Overall Body Height
		Min Body Ground Clearance
		Max. Overhang
		Lock to Lock time
		Kerb to Kerb Turning Radius

Overall Length	10.07m	Overall Length
Overall Width	2.85m	Overall Width
Overall Body Height	3.57m	Overall Body Height
Min Body Ground Clearance	0.27m	Min Body Ground Clearance
Max. Overhang	11.55m	Max. Overhang
Lock to Lock time	11.55m	Lock to Lock time
Kerb to Kerb Turning Radius	11.55m	Kerb to Kerb Turning Radius
		Overall Height
		Overall Width
		Overall Body Height
		Min Body Ground Clearance
		Max. Overhang
		Lock to Lock time
		Kerb to Kerb Turning Radius



Tipper (egress)



Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Approved

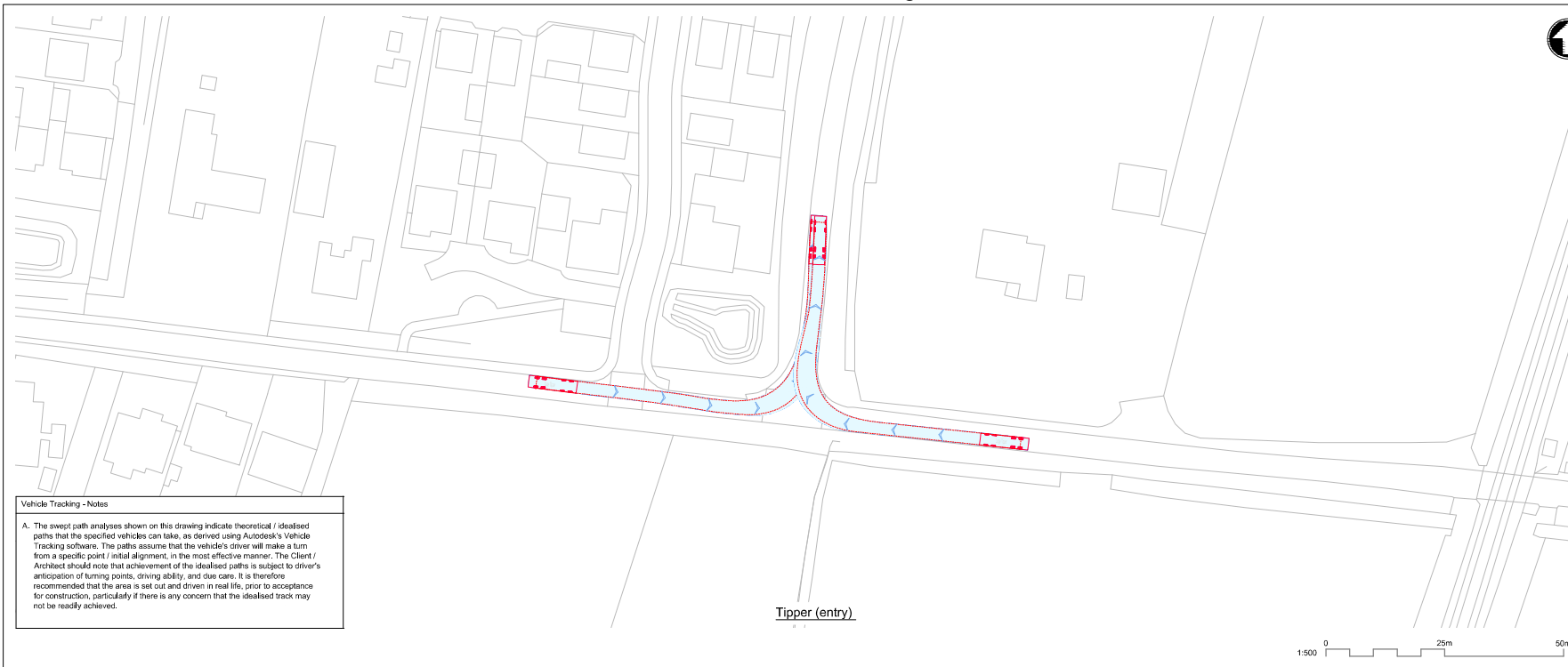


Title
**Cambridge Waste Water Treatment Works Relocation
 Bannold Rd - Bannold Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking**

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT

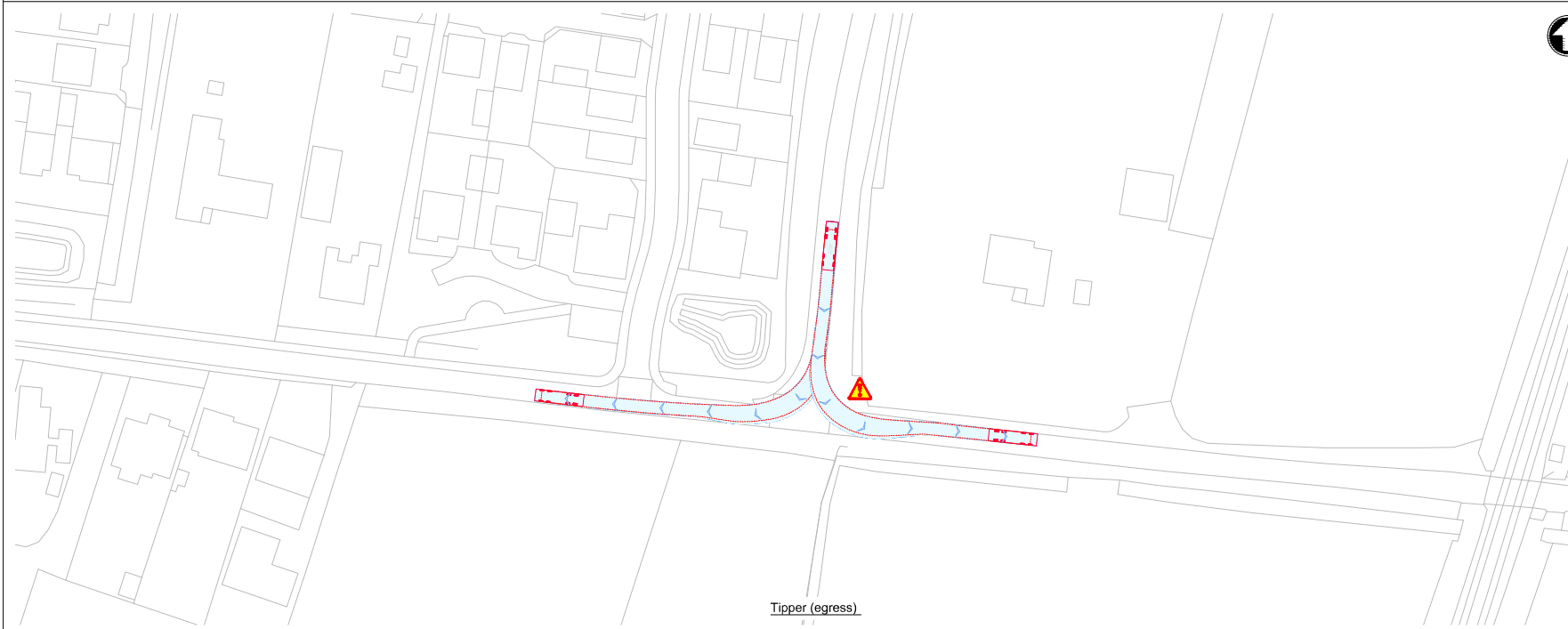
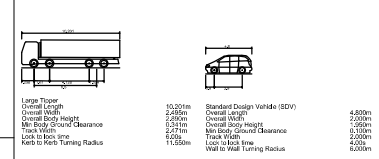
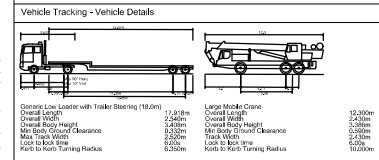
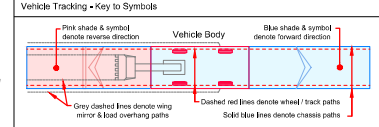


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15. DRAWING MUST BE READ IN COLOUR



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Approved

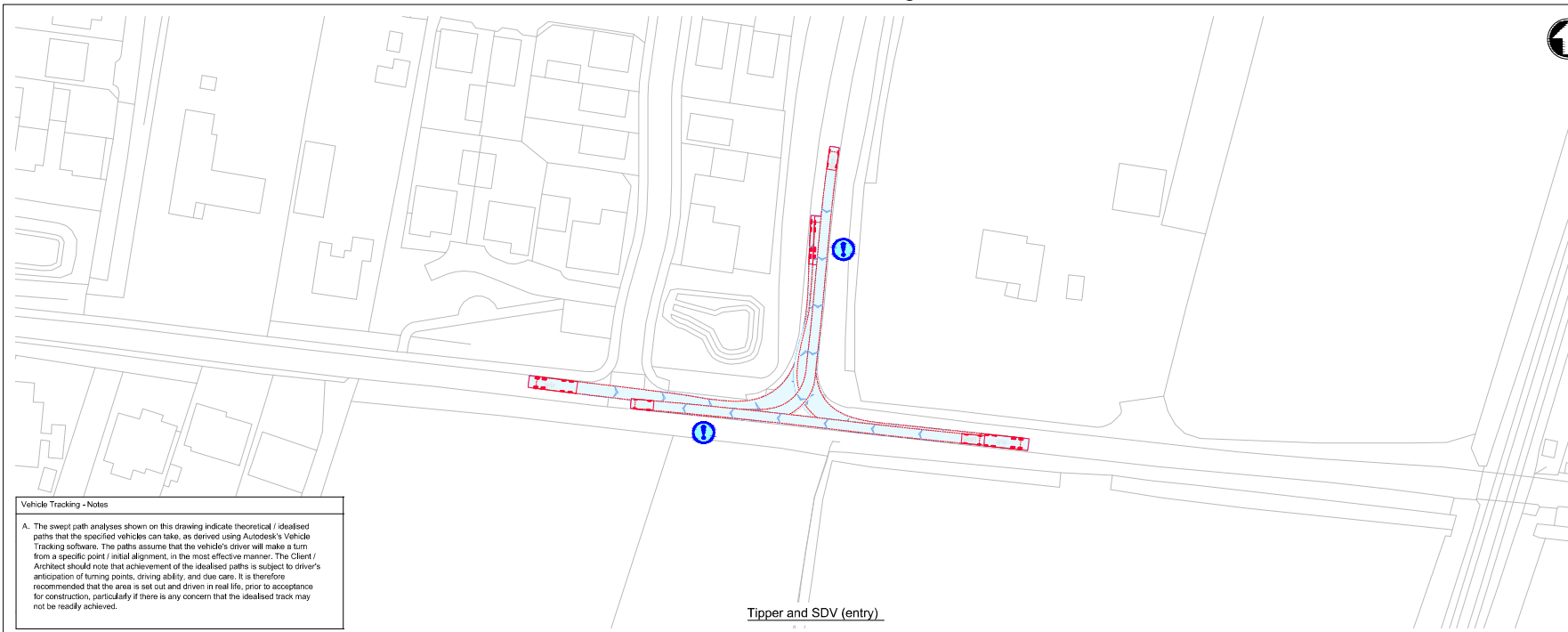


Title
 Cambridge Waste Water Treatment Works Relocation
 Bannold Rd - Bannold Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
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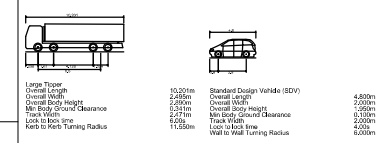
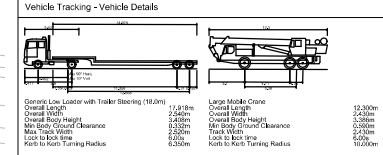
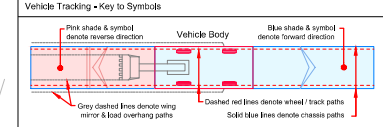


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Tipper and SDV (entry)

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Tipper and SDV (egress)

- Vehicle Tracking - Risks & Compliance**
- Risks**
- ⚠️ Kerb overrun
 - ⓘ Restrictive road width

P1	2022-10-12	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Appr'd



Title
Cambridge Waste Water Treatment Works Relocation
Bannold Rd - Bannold Drove
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

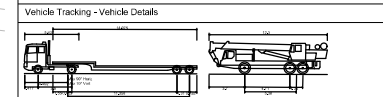
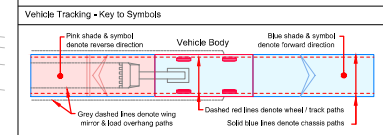
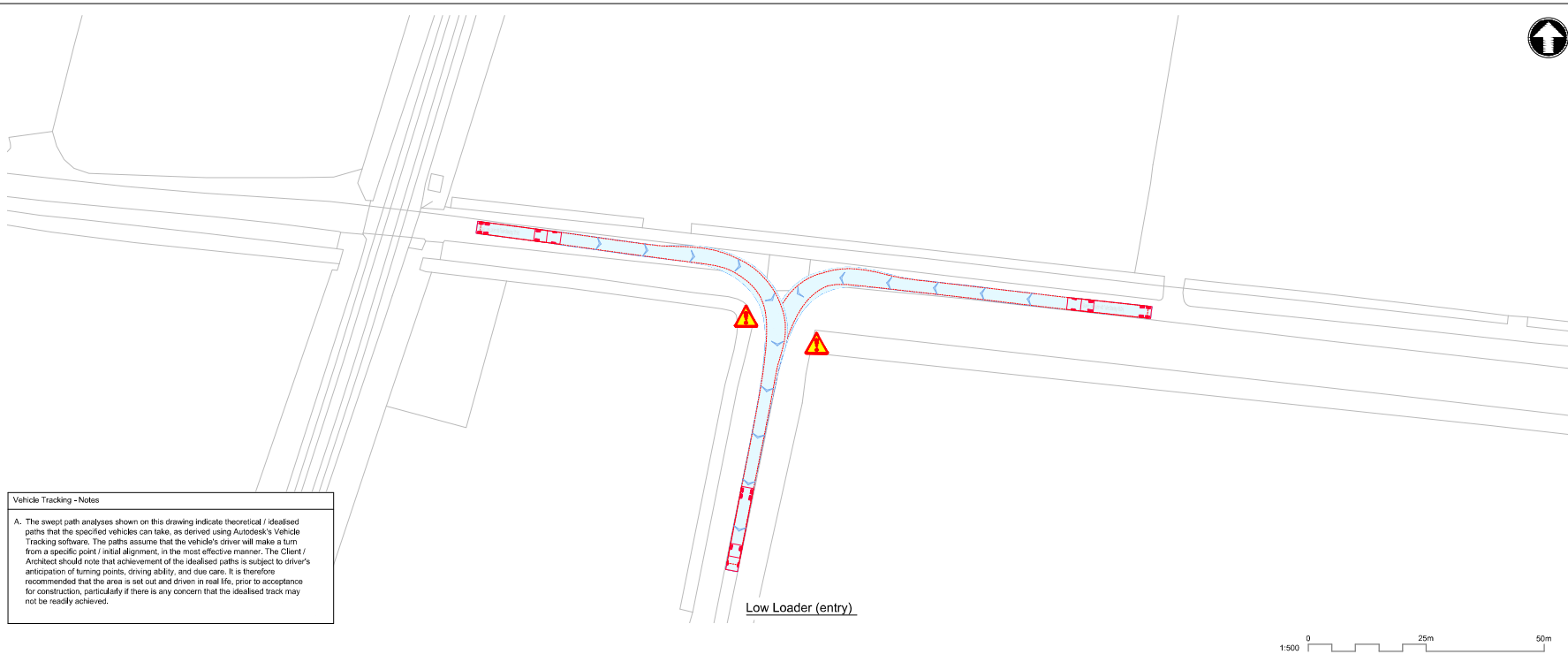
Drawing Number
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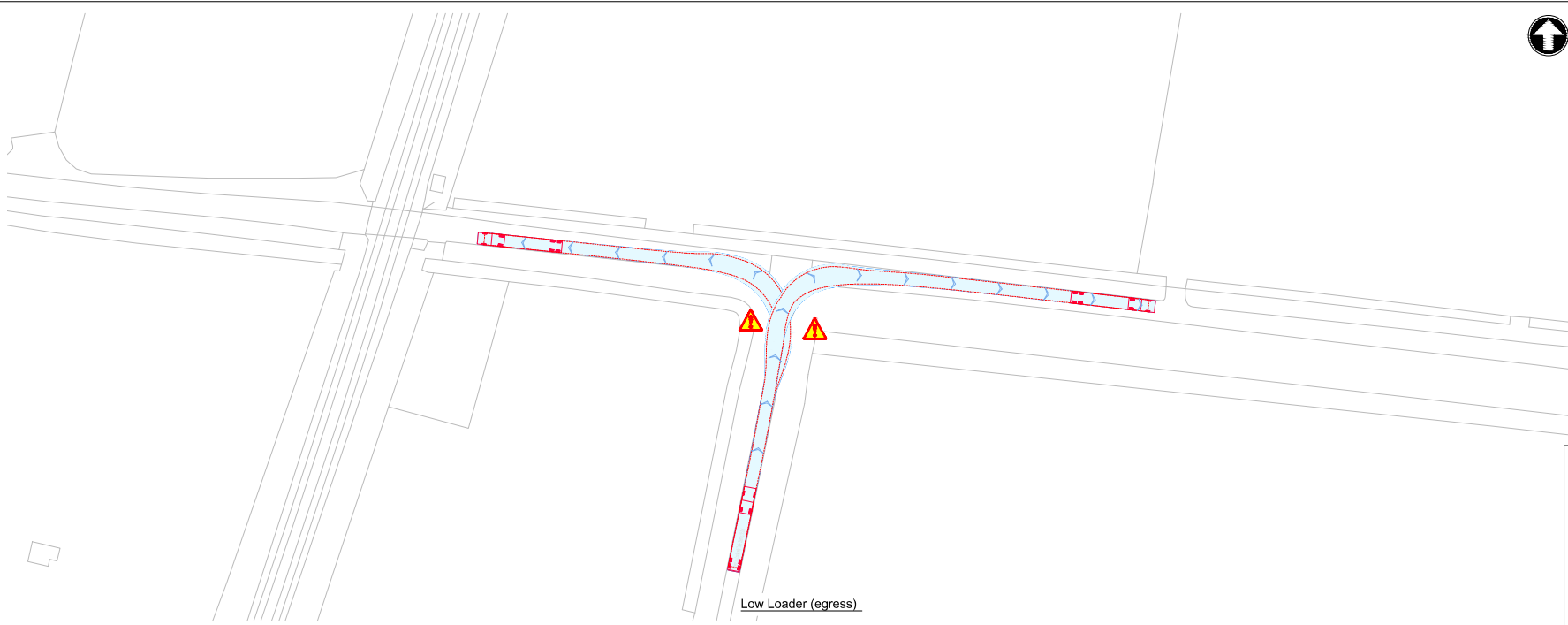
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Overall Low Loader with Trailer (Steering 1820m)	2460m	Overall Length	12.300m
Overall Width	2.910m	Overall Width	2.910m
Overall Body Height	2.400m	Overall Body Height	2.400m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max Body Height	4.000m	Max Body Height	4.000m
Lock to Lock Time	6.00m	Lock to Lock Time	6.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	11.500m

Large Tipper	10.00m	Standard Design Vehicle (SDV)	4.600m
Overall Width	2.850m	Overall Width	2.850m
Overall Body Height	2.600m	Overall Body Height	2.600m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max Body Height	4.000m	Max Body Height	4.000m
Lock to Lock Time	6.00m	Lock to Lock Time	6.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	11.500m



Vehicle Tracking - Risks & Compliance

Risks

- Kerb overrun
- Restrictive road width

P1	01/07/2022	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	Checked	Approved



Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Burgess's Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

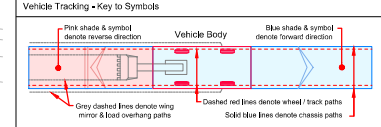
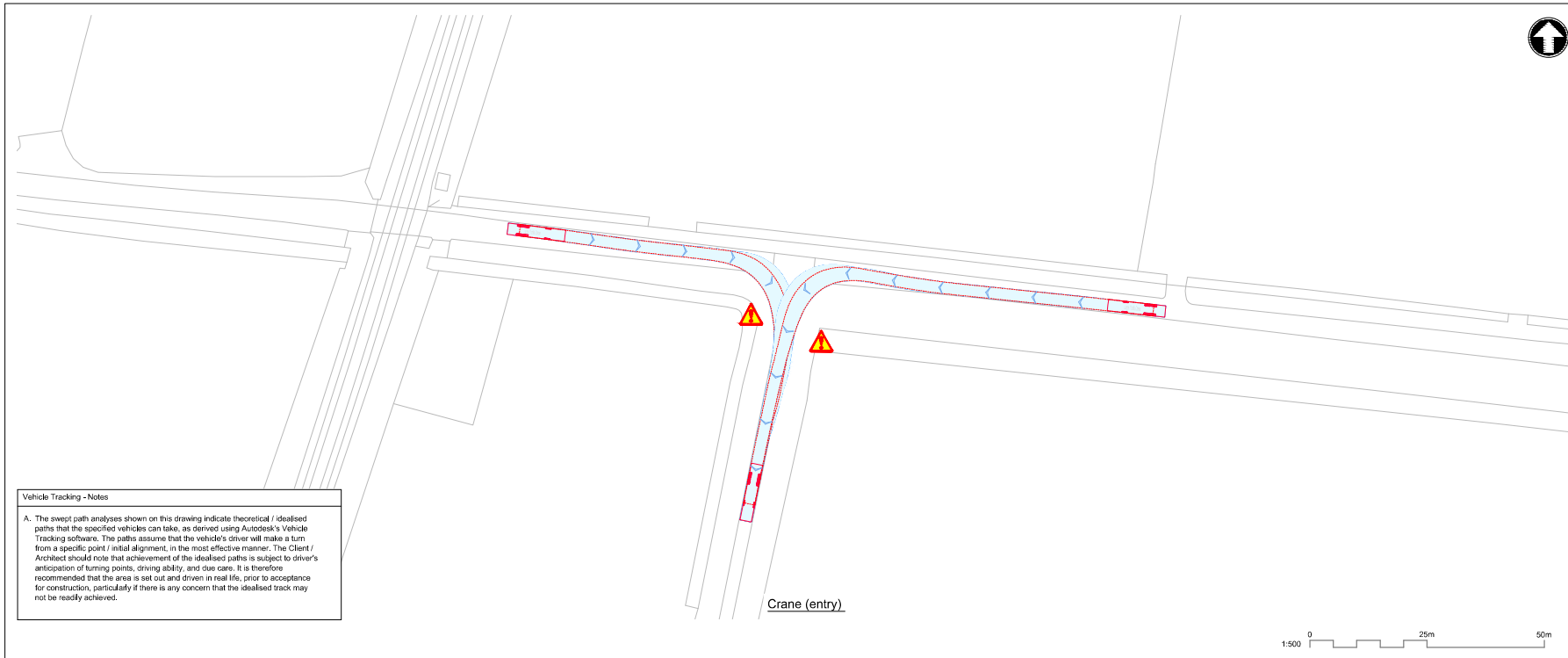
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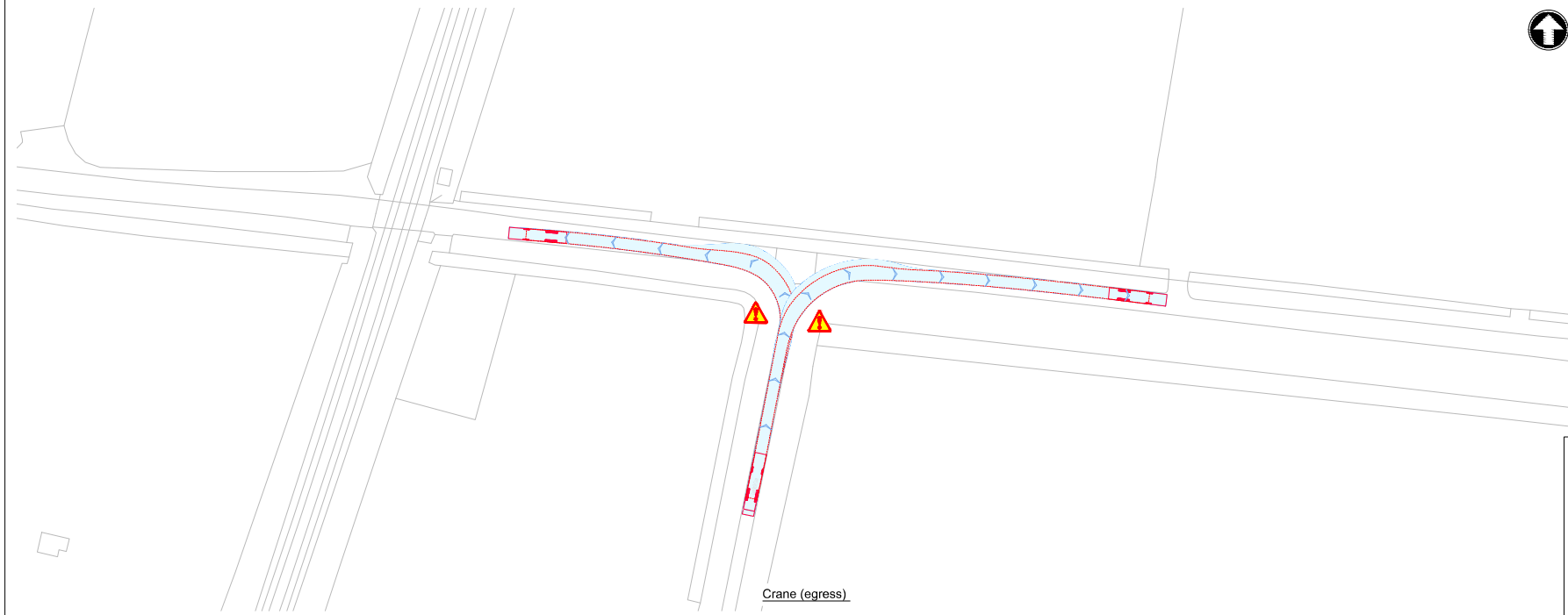
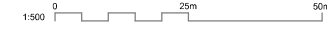
Vehicle Tracking - Notes

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Vehicle Tracking - Vehicle Details

Crane	Large Tipper	Standard Design Vehicle (SDV)
Overall Length	10.07m	Overall Length
Overall Width	2.85m	Overall Width
Overall Body Height	2.95m	Overall Body Height
Min Body Ground Clearance	0.27m	Min Body Ground Clearance
Max Wheel Overhang	4.07m	Max Wheel Overhang
Lock to Lock Time	11.50m	Lock to Lock Time
Kerb to Kerb Turning Radius	11.50m	Kerb to Kerb Turning Radius



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Approved



Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Burgess's Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

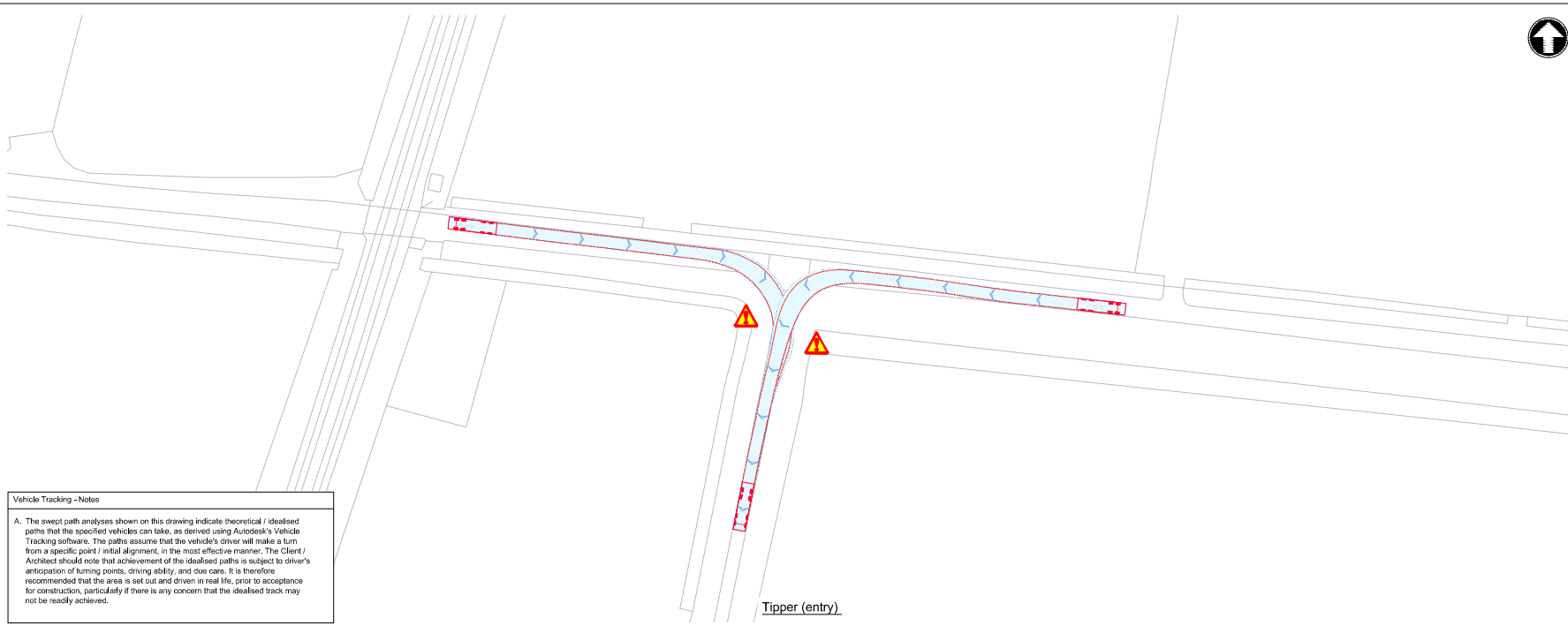
Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



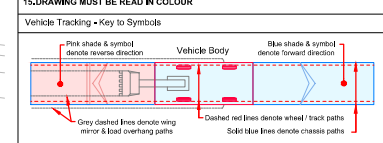


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Vehicle Tracking - Notes

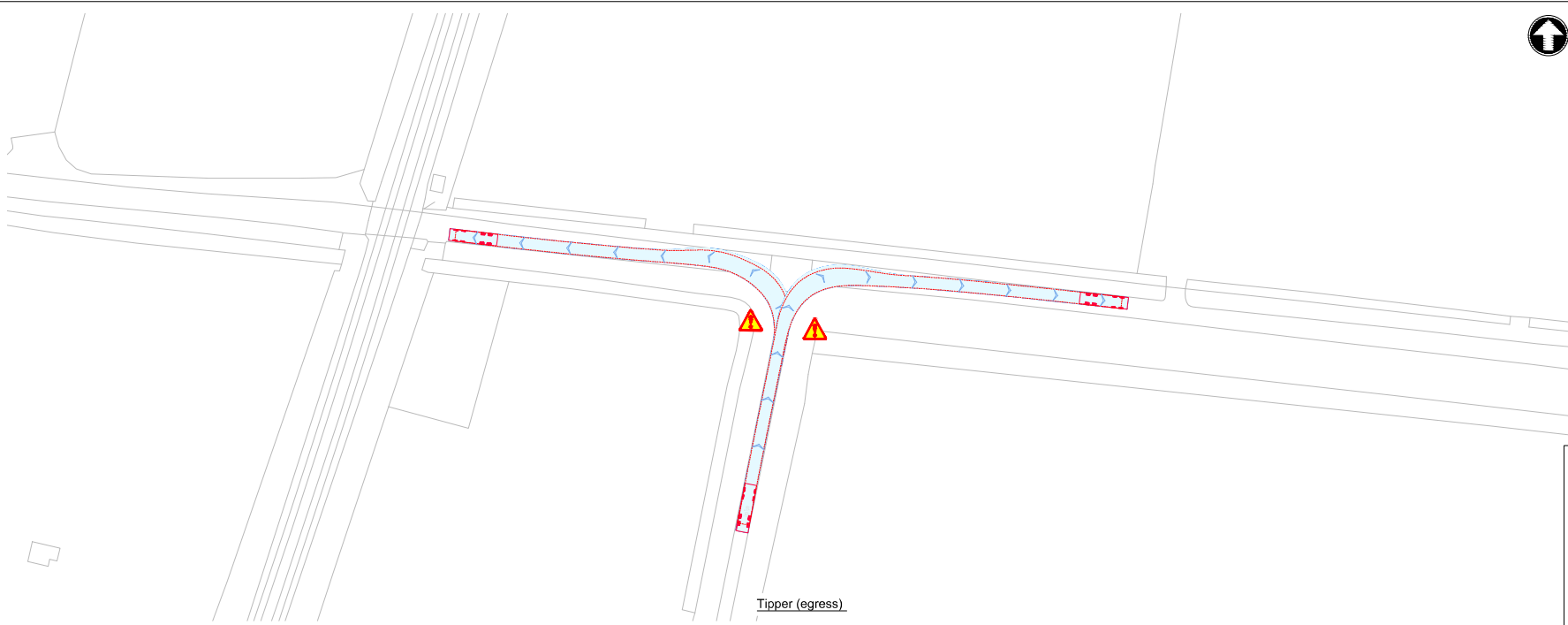
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Vehicle Tracking - Vehicle Details

Container Low Loader with Trailer (Steering 1820m)	Overall Length	24.60m	Overall Width	2.40m	Overall Height	12.300m
	Overall Width	2.40m	Overall Height	2.40m	Overall Depth	2.40m
	Overall Body Height	2.40m	Overall Body Height	2.40m	Overall Body Height	2.40m
	Min Body Ground Clearance	0.30m	Min Body Ground Clearance	0.30m	Min Body Ground Clearance	0.30m
	Max Body Height	4.00m	Max Body Height	4.00m	Max Body Height	4.00m
	Lock to Lock time	6.00m	Lock to Lock time	6.00m	Lock to Lock time	6.00m
	Kerb to Kerb Turning Radius	11.50m	Kerb to Kerb Turning Radius	11.50m	Kerb to Kerb Turning Radius	11.50m

Large Tipper	Overall Length	10.00m	Standard Design Vehicle (SDV)	Overall Length	4.60m
	Overall Width	2.40m		Overall Width	2.40m
	Overall Body Height	2.40m		Overall Body Height	2.40m
	Min Body Ground Clearance	0.30m		Min Body Ground Clearance	0.30m
	Max Body Height	4.00m		Max Body Height	4.00m
	Lock to Lock time	6.00m		Lock to Lock time	6.00m
	Kerb to Kerb Turning Radius	11.50m		Kerb to Kerb Turning Radius	11.50m



Vehicle Tracking - Risks & Compliance

Risks

- Kerb overrun
- Restrictive road width

P1	Rev	Date	Drawn	Description	Rev	Appr

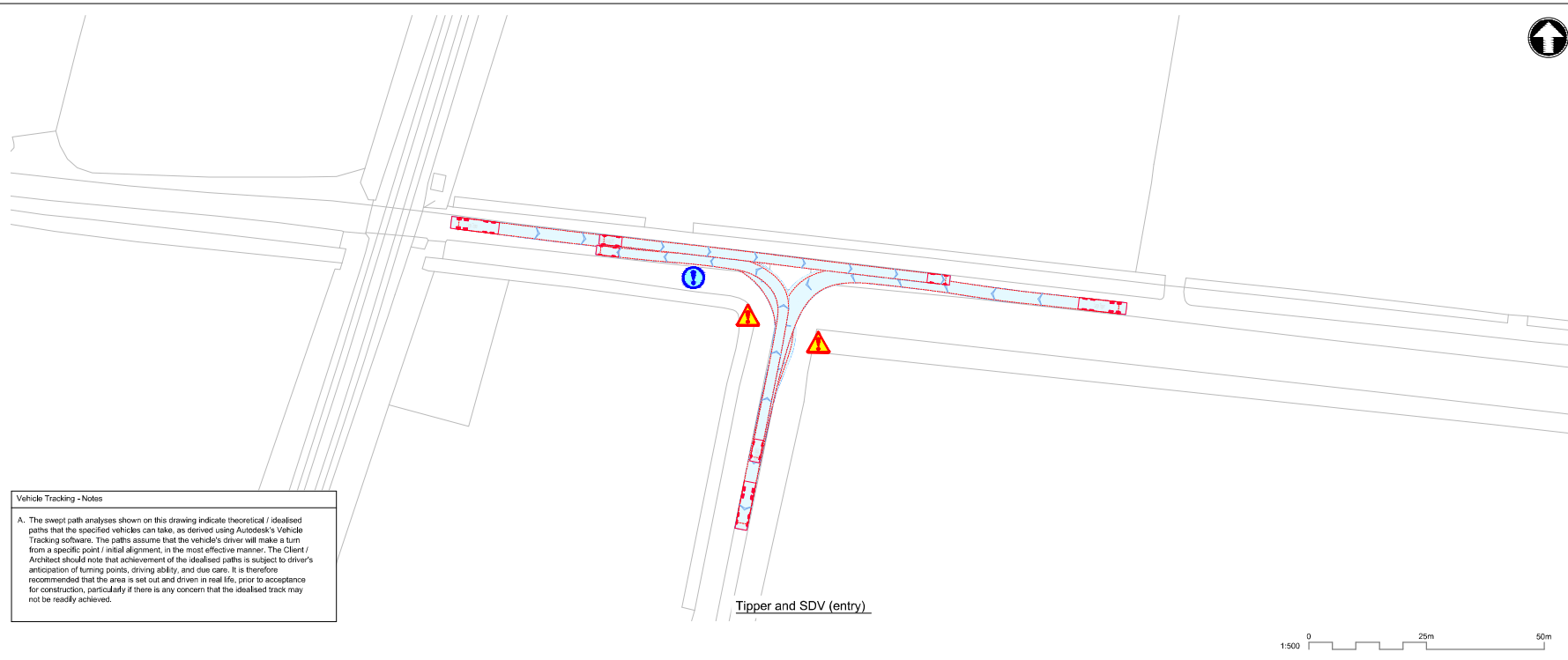


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Burgess's Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

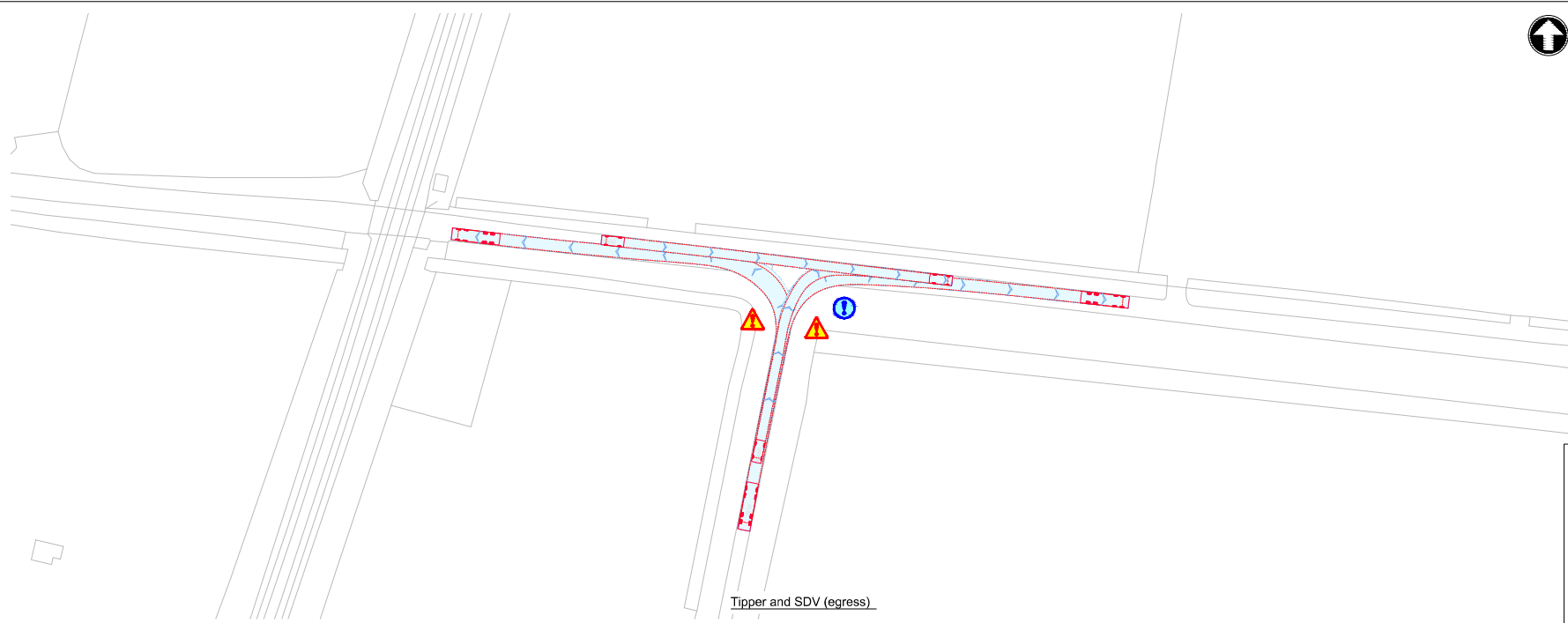
Drawing Number
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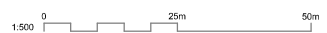
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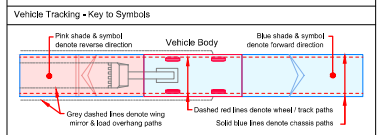
Tipper and SDV (entry)



Tipper and SDV (egress)



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Vehicle Tracking - Vehicle Details

Vehicle Type	Overall Length	Overall Width	Overall Height	Max Body Ground Clearance	Max Body Ground Clearance	Max Wheel	Lock to Lock	Kerb to Kerb Turning Radius
Standard Low Loader with Trailer (Steering 1800m)	24.60m	2.40m	3.40m	2.00m	2.00m	2.5m	6.00m	10.00m
Large Mobile Crane	12.00m	2.40m	3.40m	2.00m	2.00m	2.5m	6.00m	10.00m
Standard Design Vehicle (SDV)	4.80m	2.00m	2.00m	2.00m	2.00m	2.00m	4.00m	6.00m

Vehicle Type	Overall Length	Overall Width	Overall Height	Max Body Ground Clearance	Max Body Ground Clearance	Max Wheel	Lock to Lock	Kerb to Kerb Turning Radius
Large Tipper	10.00m	2.40m	3.40m	2.00m	2.00m	2.5m	6.00m	10.00m
Standard Design Vehicle (SDV)	4.80m	2.00m	2.00m	2.00m	2.00m	2.00m	4.00m	6.00m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- ⚠️ Kerb overrun
 - ⓘ Restrictive road width

Rev	Date	Drawn	Description	CHK'd	APP'd
P1		MF	Draft for Discussion / Review.	MF	MF

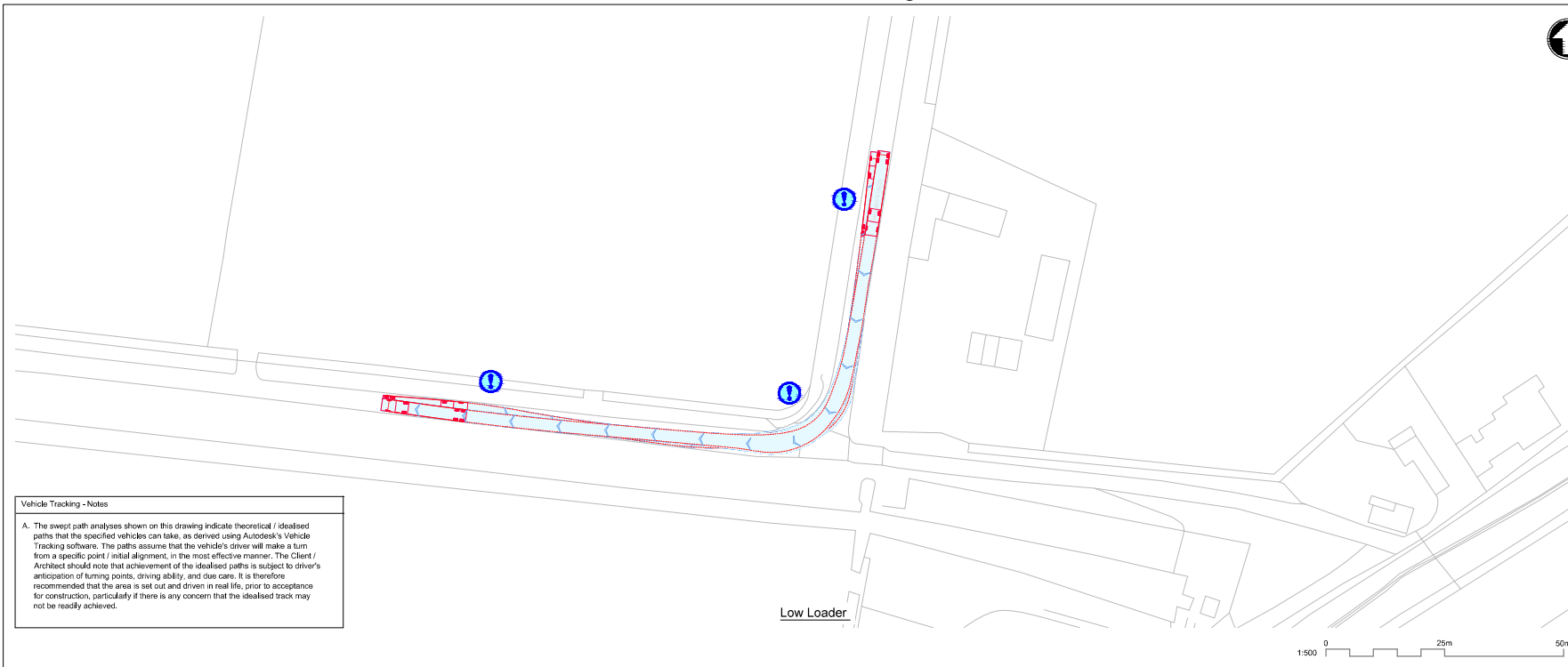


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Burgess's Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-	
Drawn	M Fonseca	MF	Coordination	-	
Dwg check	-		Approved	-	

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

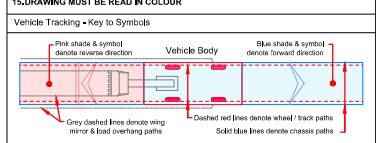
Drawing Number
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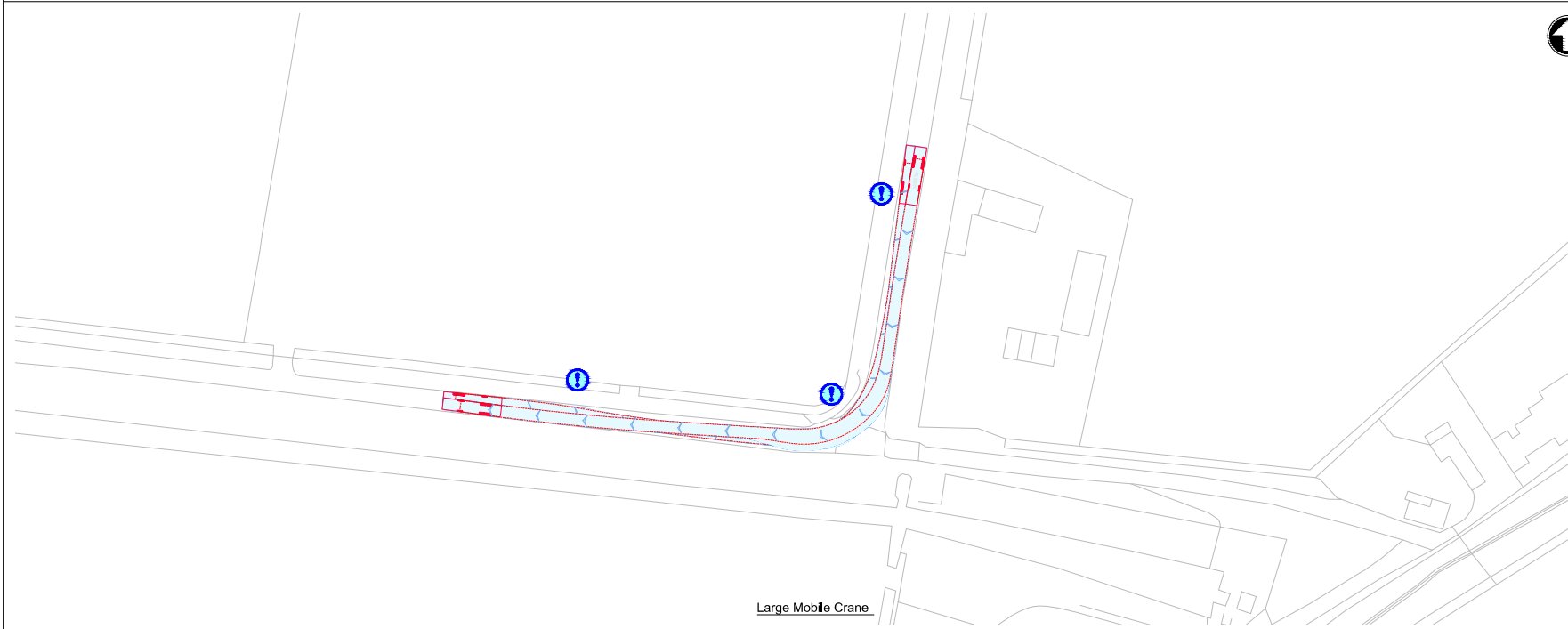
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Vehicle Tracking - Vehicle Details

Overall Length with Trailer Steering (180°)	24.60m	Overall Length	12.300m
Overall Width	2.460m	Overall Width	2.430m
Overall Body Height	3.430m	Overall Body Height	3.300m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	6.07m	Max. Rear Overhang	6.07m
Lock to Lock time	6.07m	Lock to Lock time	6.07m
Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	10.00m

Overall Length	10.07m	Overall Length	4.600m
Overall Width	2.850m	Overall Width	2.930m
Overall Body Height	2.850m	Overall Body Height	2.850m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	11.550m	Max. Rear Overhang	11.550m
Lock to Lock time	11.550m	Lock to Lock time	4.200m
Kerb to Kerb Turning Radius	11.550m	Kerb to Kerb Turning Radius	6.000m



Vehicle Tracking - Risks & Compliance

Risks

- ⚠️ Kerb overrun
- ⚠️ Restrictive road width

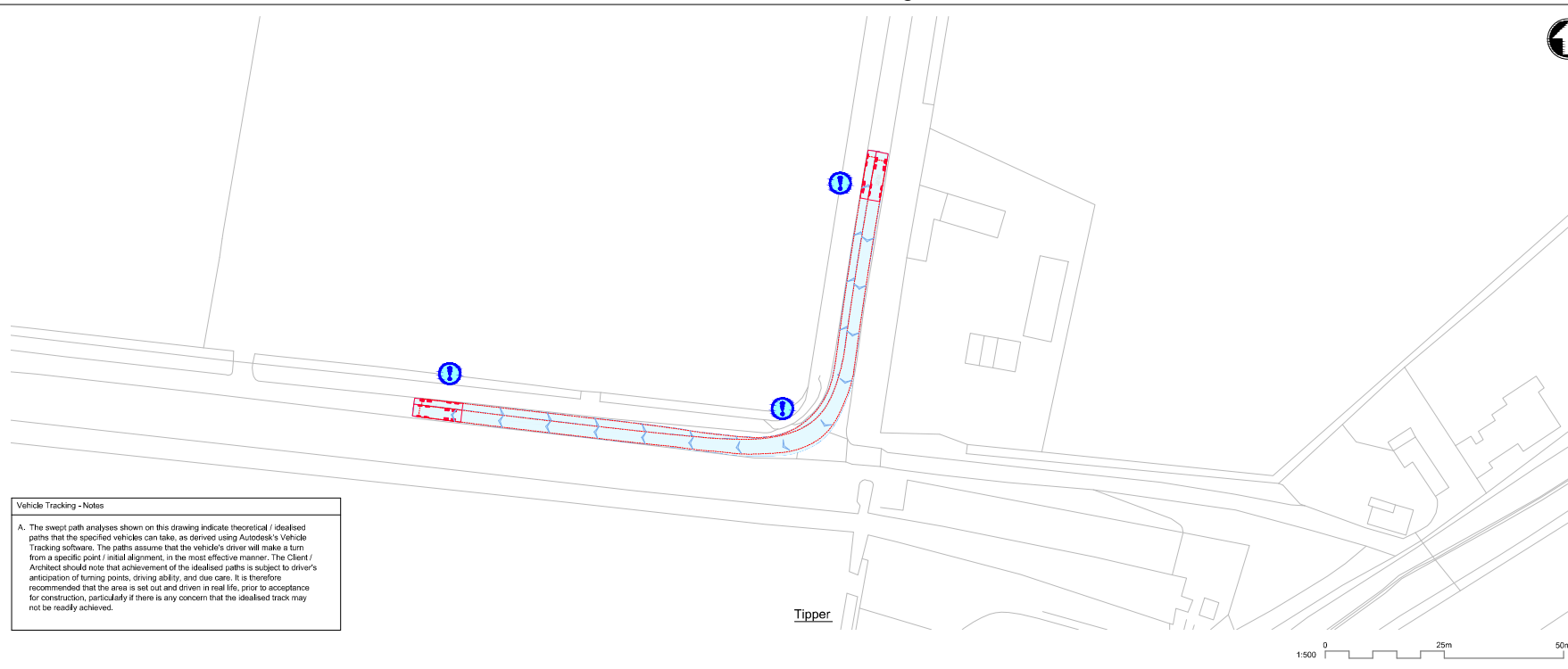
P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd



Title
 Cambridge Waste Water Treatment Works Relocation
 Bannold Rd - Long Drive
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

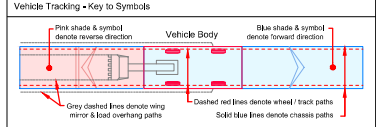
Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD



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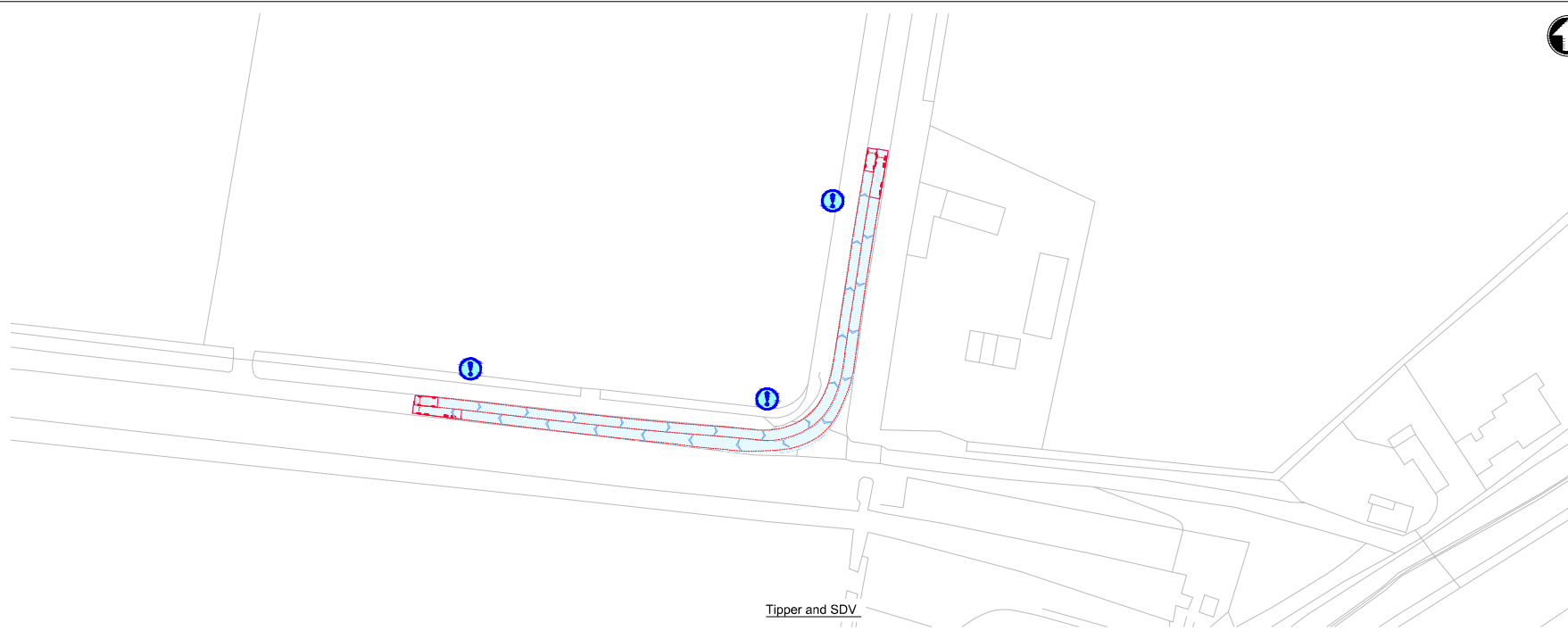
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Vehicle Tracking - Vehicle Details

Overall Length with Trailer (Steering 180°)	24.60m	Overall Length	12.200m
Overall Width	2.400m	Overall Width	2.400m
Overall Body Height	3.400m	Overall Body Height	3.200m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	6.00m	Max. Rear Overhang	6.00m
Lock to Lock time	6.00m	Lock to Lock time	6.00m
Kerb to Kerb Turning Radius	6.00m	Kerb to Kerb Turning Radius	10.000m

Overall Length	10.00m	Standard Design Vehicle (SDV)	4.800m
Overall Width	2.850m	Overall Width	2.000m
Overall Body Height	2.850m	Overall Body Height	2.000m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	4.50m	Max. Rear Overhang	4.50m
Lock to Lock time	11.500m	Lock to Lock time	4.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	6.000m



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

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Rev	Date	Drawn	Description	Checked	Approved

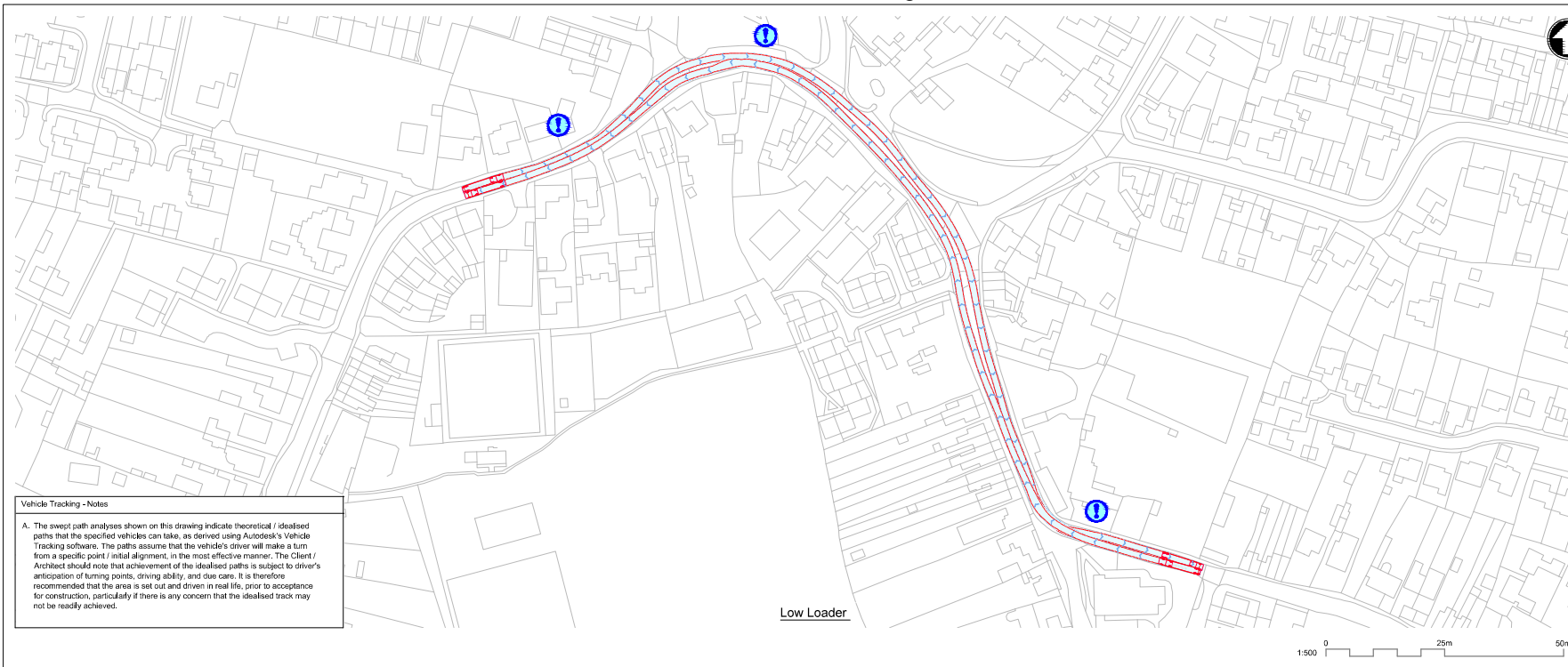


Title
 Cambridge Waste Water Treatment Works Relocation
 Bannold Rd - Long Drive
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

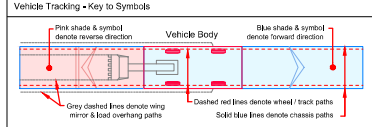
Drawing Number
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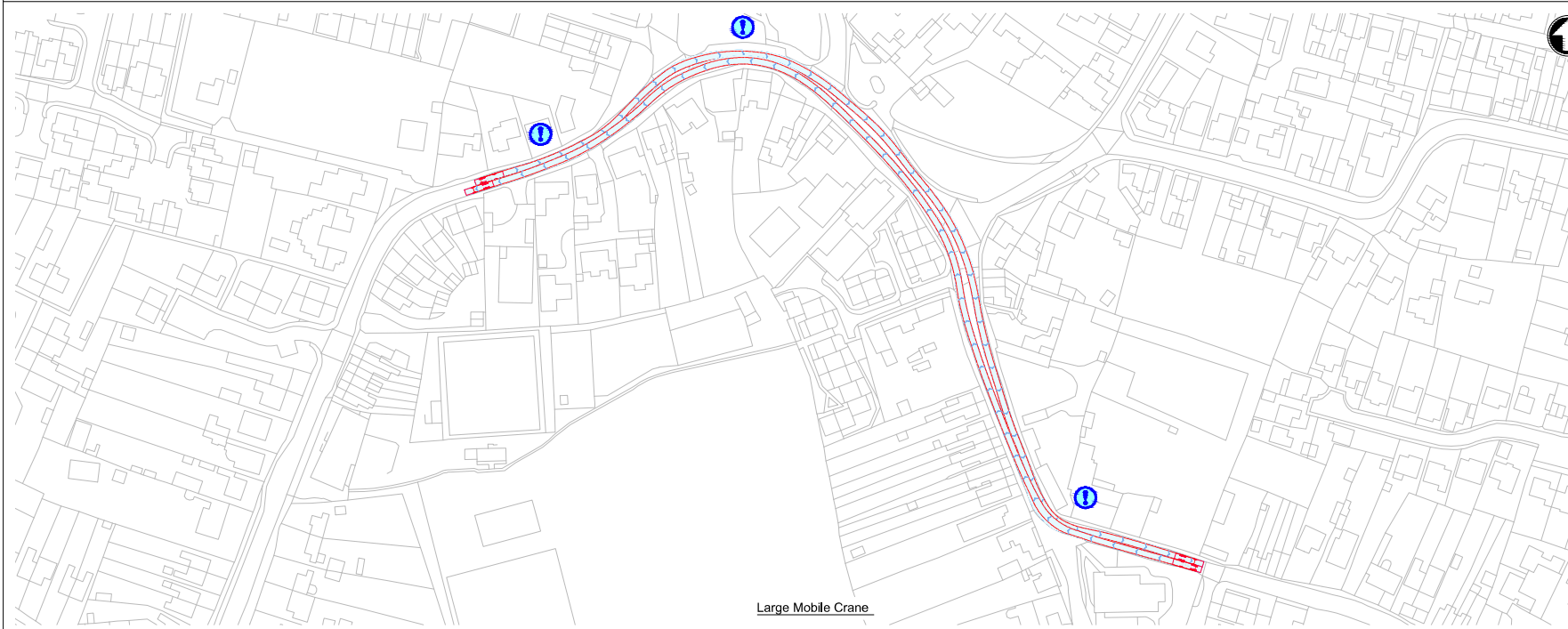
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Vehicle Tracking - Vehicle Details

<p>Standard Low Loader with Trailer (Steering 1820mm)</p> <p>Overall Length: 21.915m Overall Width: 2.940m Overall Body Height: 2.410m Max Body Ground Clearance: 0.320m Max Wheel: 6.07m Lock to Lock time: 6.03sec Kerb to Kerb Turning Radius: 6.03m</p>	<p>Large Mobile Crane</p> <p>Overall Length: 12.200m Overall Width: 2.410m Overall Body Height: 3.350m Max Body Ground Clearance: 0.210m Max Wheel: 6.07m Lock to Lock time: 6.03sec Kerb to Kerb Turning Radius: 6.03m</p>

<p>Large Tipper</p> <p>Overall Length: 16.070m Overall Width: 2.850m Overall Body Height: 3.570m Max Body Ground Clearance: 0.270m Max Wheel: 6.07m Lock to Lock time: 11.550m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length: 4.600m Overall Width: 1.930m Overall Body Height: 1.980m Max Body Ground Clearance: 0.120m Max Wheel: 4.025m Lock to Lock time: 4.025m Kerb to Kerb Turning Radius: 4.025m</p>



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd

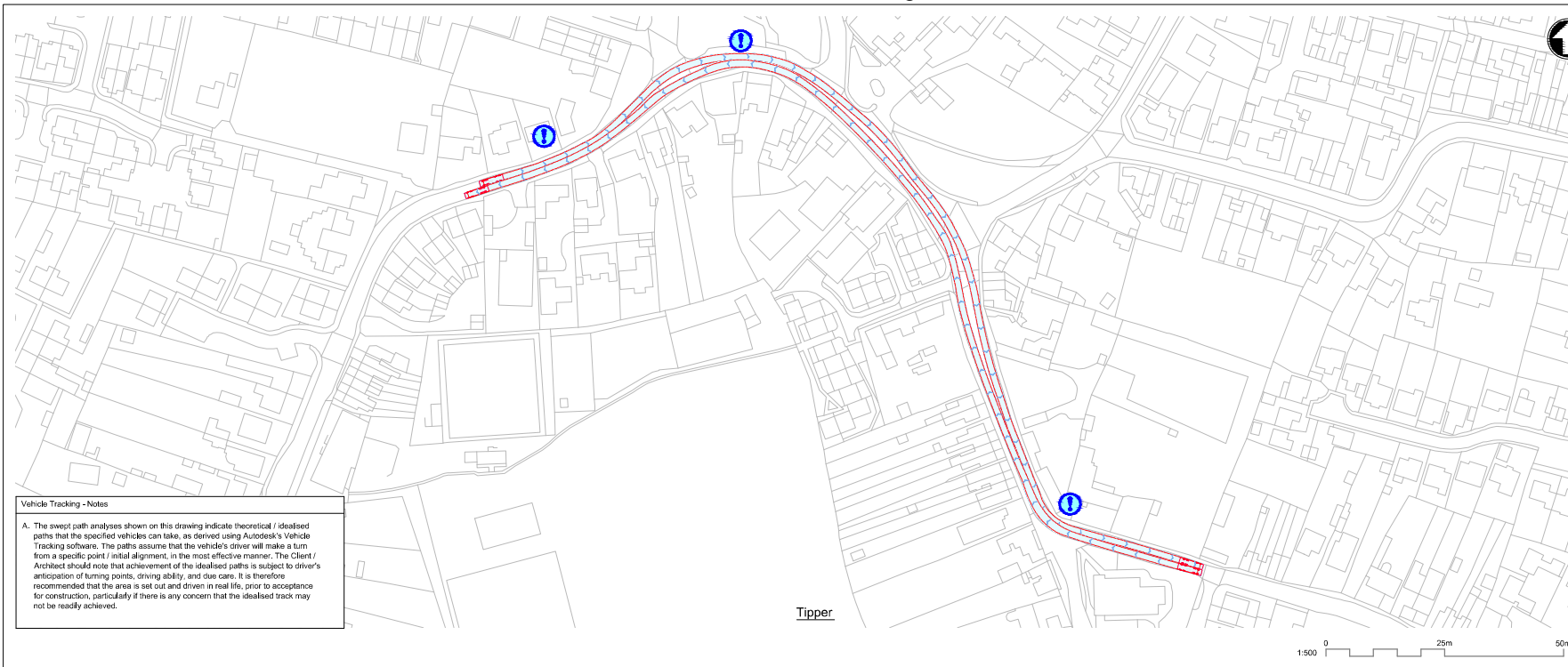


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Cambridge Rd - Chapel St - Station Rd
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1: 1:500
 Status: PRE
 Rev: P1
 Security: STD

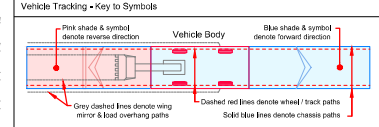
Drawing Number: 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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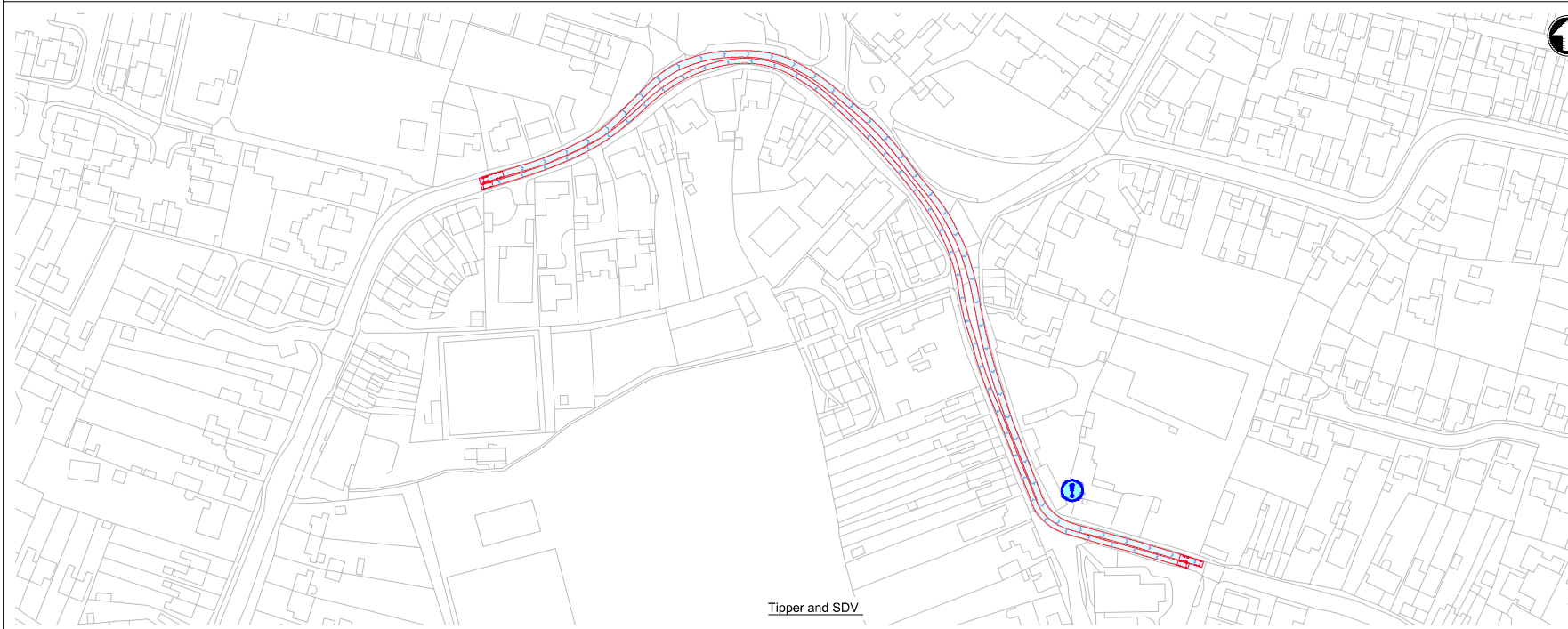
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 15. **DRAWING MUST BE READ IN COLOUR**



Vehicle Tracking - Vehicle Details

<p>Standard Line Loader with Trailer (Steering 1820m)</p> <p>Overall Length 21.91m Overall Width 2.94m Overall Body Height 2.41m Max Body Ground Clearance 0.32m Lock to Lock time 6.07m Kerb to Kerb Turning Radius 6.63m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.20m Overall Width 2.41m Overall Body Height 2.35m Max Body Ground Clearance 0.27m Lock to Lock time 6.07m Kerb to Kerb Turning Radius 10.00m</p>
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<p>Large Tipper</p> <p>Overall Length 16.07m Overall Width 2.95m Overall Body Height 2.51m Max Body Ground Clearance 0.27m Lock to Lock time 11.55m Kerb to Kerb Turning Radius</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.60m Overall Width 1.93m Overall Body Height 1.98m Max Body Ground Clearance 0.20m Lock to Lock time 4.02m Kerb to Kerb Turning Radius 6.00m</p>
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- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	10/10/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Approved

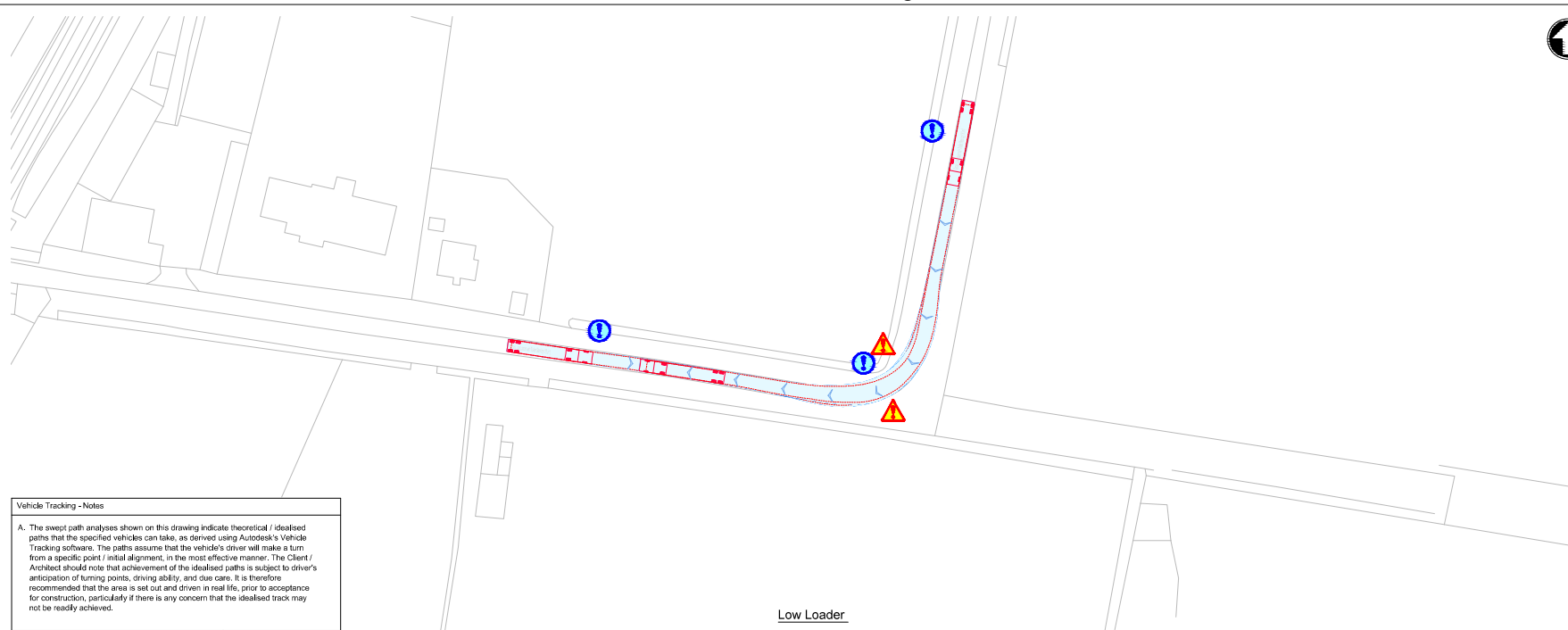


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
Cambridge Rd - Chapel St - Station Rd
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

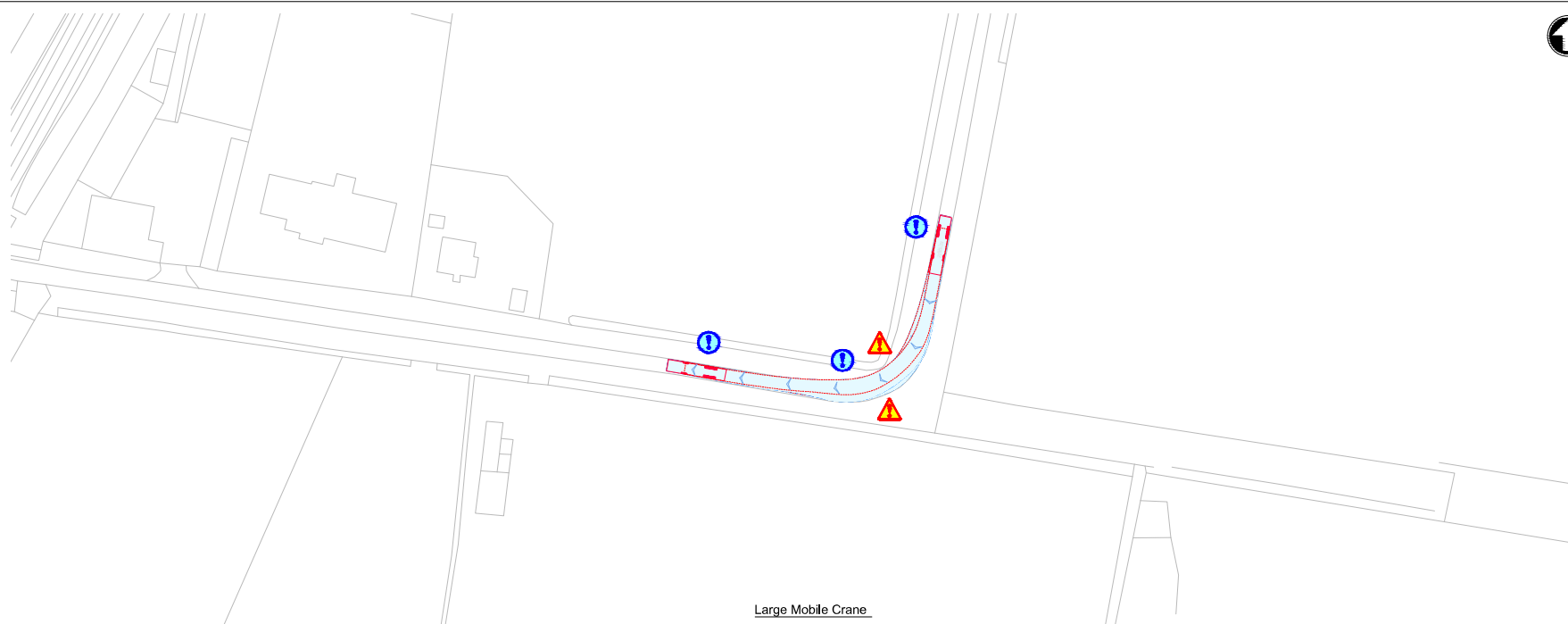
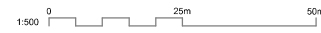
Drawing Number
102375-MMD-01-XX-DR-C-DRAFT



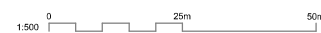
Vehicle Tracking - Notes

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Low Loader

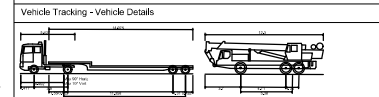
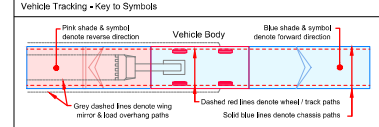


Large Mobile Crane



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15. DRAWING MUST BE READ IN COLOUR



Overall Low Loader with Trailer (Steering 1820m)	24.60m	Overall Length	12.300m
Overall Width	2.400m	Overall Width	2.400m
Overall Body Height	3.400m	Overall Body Height	3.300m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	6.00m	Max. Rear Overhang	6.00m
Lock to Lock Line	6.00m	Lock to Lock Line	6.00m
Kerb to Kerb Turning Radius	6.00m	Kerb to Kerb Turning Radius	10.000m

Overall Length	10.00m	Overall Length	4.600m
Overall Width	2.850m	Overall Width	2.850m
Overall Body Height	3.500m	Overall Body Height	3.500m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	11.500m	Max. Rear Overhang	11.500m
Lock to Lock Line	6.00m	Lock to Lock Line	6.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	6.000m

Overall Length	10.00m	Overall Length	4.600m
Overall Width	2.850m	Overall Width	2.850m
Overall Body Height	3.500m	Overall Body Height	3.500m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	11.500m	Max. Rear Overhang	11.500m
Lock to Lock Line	6.00m	Lock to Lock Line	6.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	6.000m

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	10/23	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	Checked	Approved

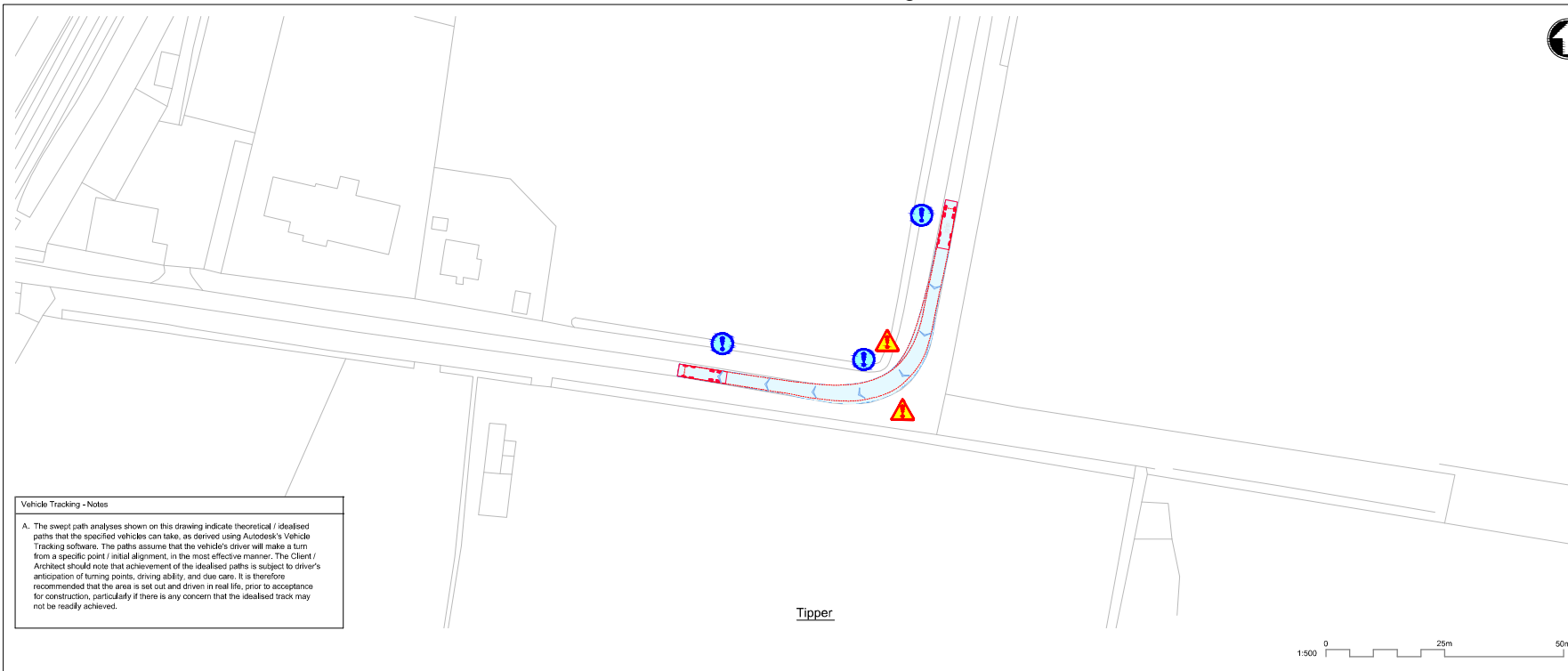


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
Burgess's Drove
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

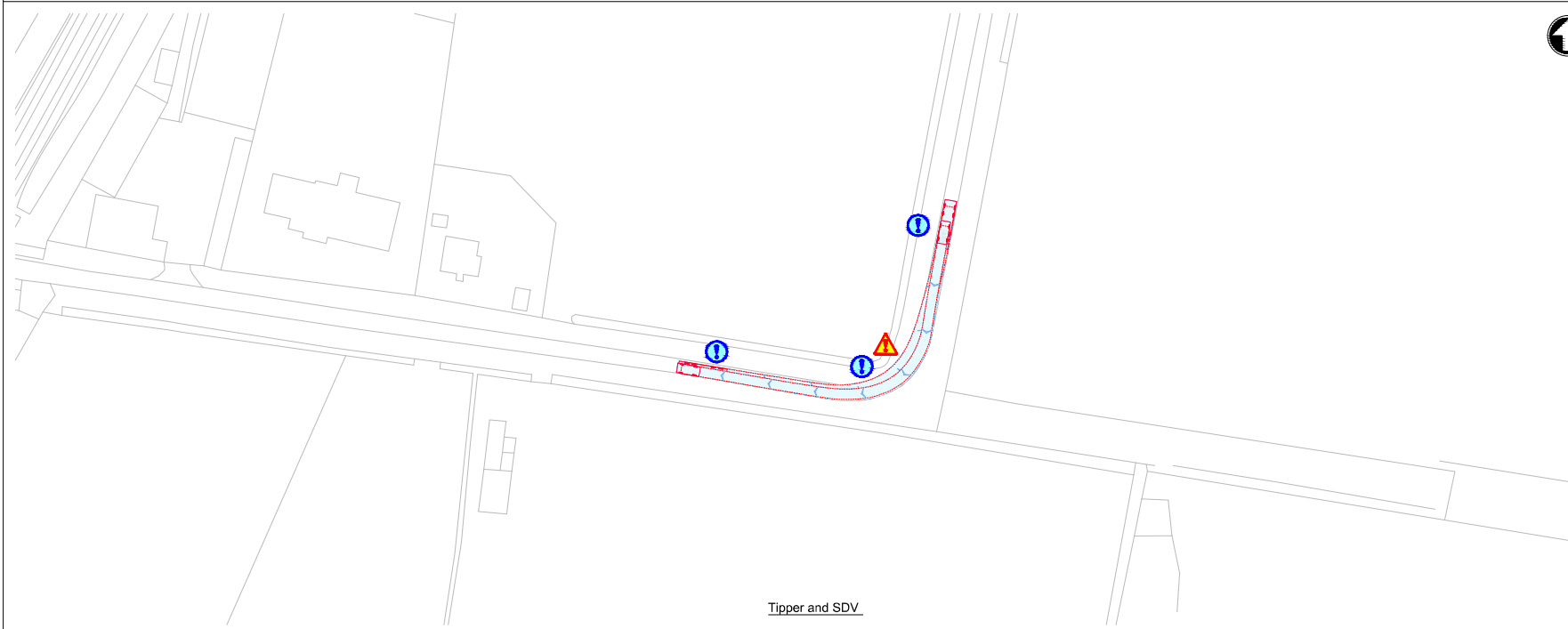
Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT

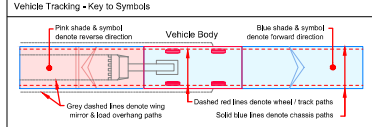


Vehicle Tracking - Notes

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Vehicle Tracking - Vehicle Details

Overall Load Limit with Trailer Steering (1620m)	2460m	Large Mobile Crane	Overall Length	12.300m
Overall Length	7.910m	Overall Height	Overall Width	2.430m
Overall Width	2.460m	Overall Body Height	Max Body Overall Clearance	0.400m
Overall Body Height	3.430m	Max Body Overall Clearance	Overall Body Height	3.930m
Max Body Overall Clearance	0.320m	Max Body Overall Clearance	Overall Body Height	3.130m
Max. Track Time	6.07m	Max. Track Time	Max. Track Time	0.120m
Lock to Lock Time	6.07m	Lock to Lock Time	Lock to Kerb Turning Radius	4.02m
Kerb to Kerb Turning Radius	6.07m	Kerb to Kerb Turning Radius	Wheeled Vehicle Turning Radius	6.07m

Overall Length	10.070m	Standard Design Vehicle (SDV)	Overall Length	4.680m
Overall Width	2.460m	Overall Height	Overall Width	2.030m
Overall Body Height	2.560m	Overall Body Height	Overall Body Height	2.030m
Max Body Overall Clearance	0.320m	Max Body Overall Clearance	Max Body Overall Clearance	0.120m
Max. Track Time	6.07m	Max. Track Time	Max. Track Time	0.120m
Lock to Lock Time	6.07m	Lock to Lock Time	Lock to Kerb Turning Radius	4.02m
Kerb to Kerb Turning Radius	11.550m	Kerb to Kerb Turning Radius	Wheeled Vehicle Turning Radius	6.07m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	10/23	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	CHK'd	App'd

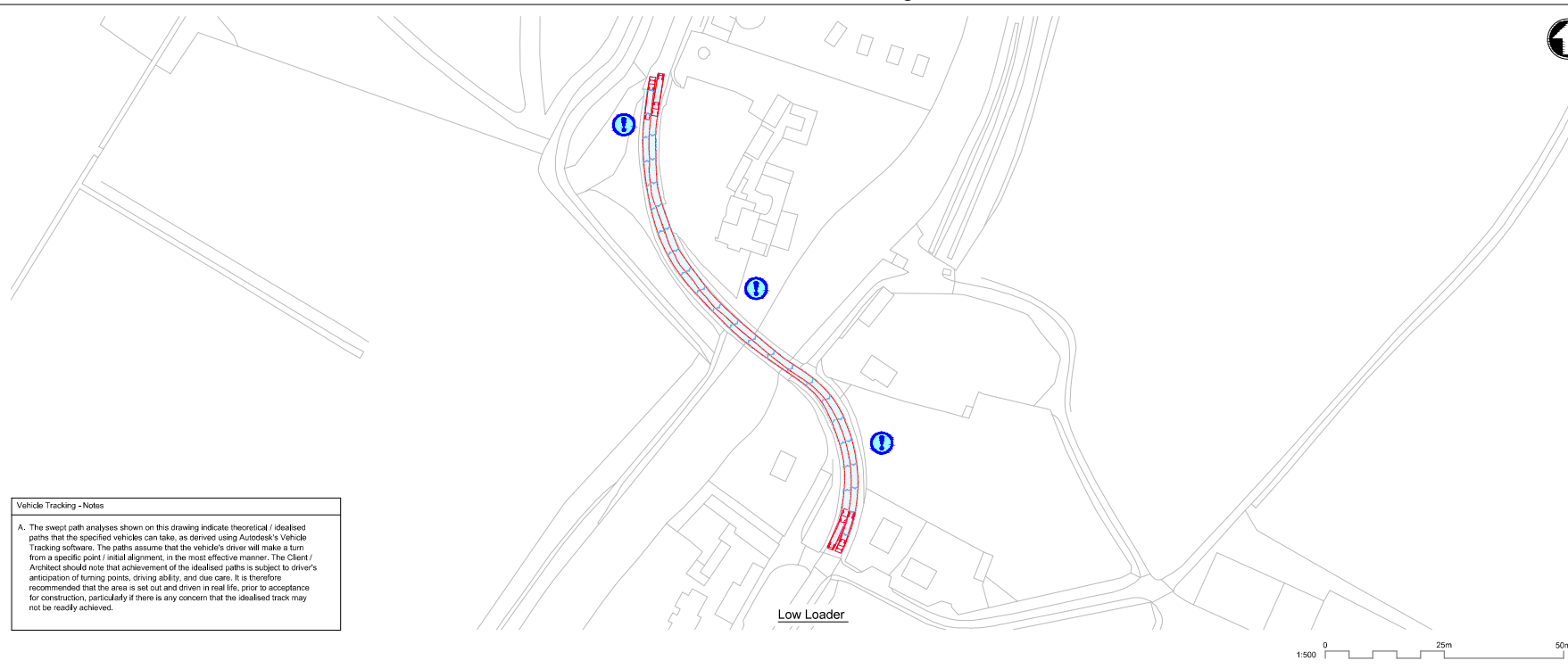


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
Burgess's Drove
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT

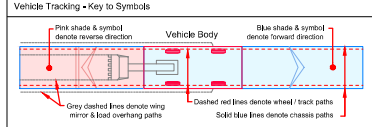


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Low Loader

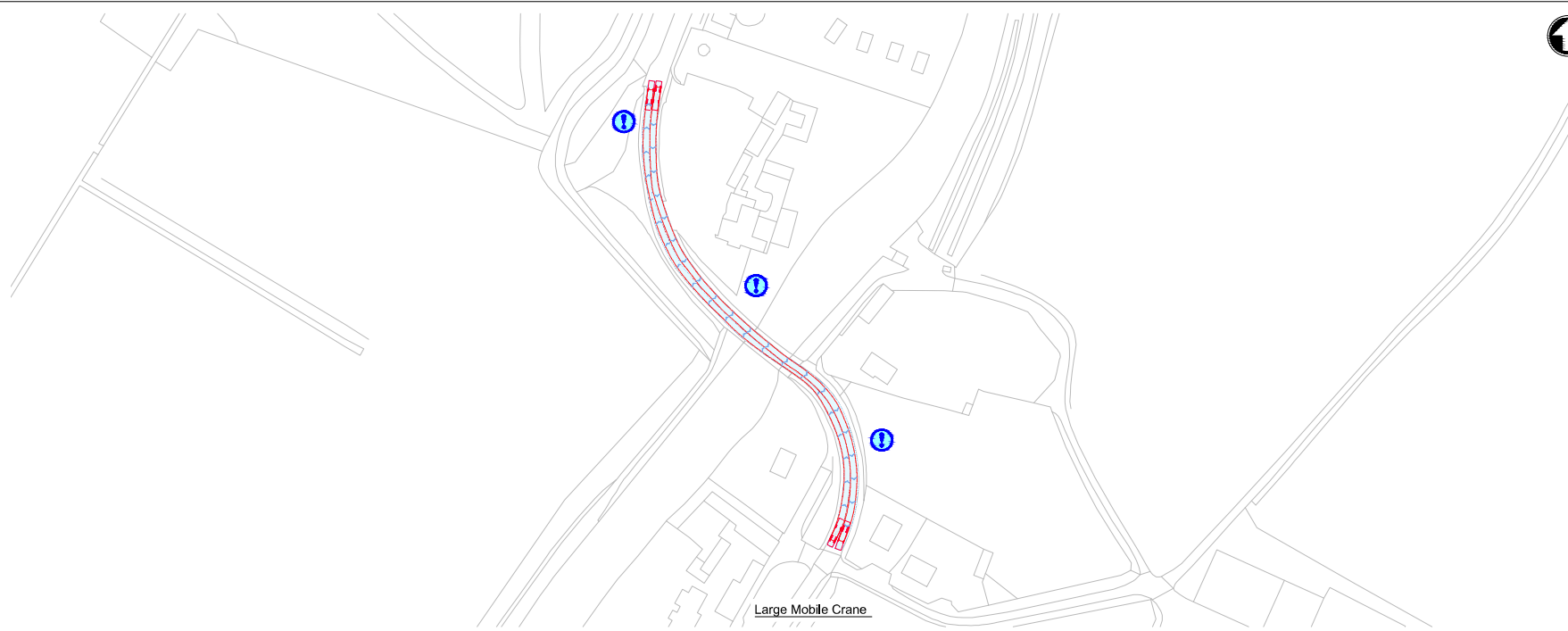
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Vehicle Tracking - Vehicle Details

<p>General Low Loader with Trailer (Steering 1820m)</p> <p>Overall Length 24.60m Overall Width 2.40m Overall Body Height 3.40m Min Body Ground Clearance 0.30m Max. Trail Over 0.20m Lock to Lock time 6.00m Kerb to Kerb Turning Radius 10.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.30m Overall Width 2.40m Overall Body Height 3.30m Min Body Ground Clearance 0.30m Max. Trail Over 0.20m Lock to Lock time 6.00m Kerb to Kerb Turning Radius 10.00m</p>

<p>Large Tipper</p> <p>Overall Length 10.00m Overall Width 2.85m Overall Body Height 3.50m Min Body Ground Clearance 0.30m Max. Trail Over 0.20m Kerb to Kerb Turning Radius 11.50m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.80m Overall Width 1.95m Overall Body Height 2.00m Min Body Ground Clearance 0.30m Max. Trail Over 0.20m Lock to Lock time 4.00m Kerb to Kerb Turning Radius 6.00m</p>



Large Mobile Crane

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	1/1	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	CHK'd	App'd

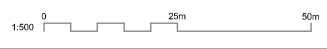


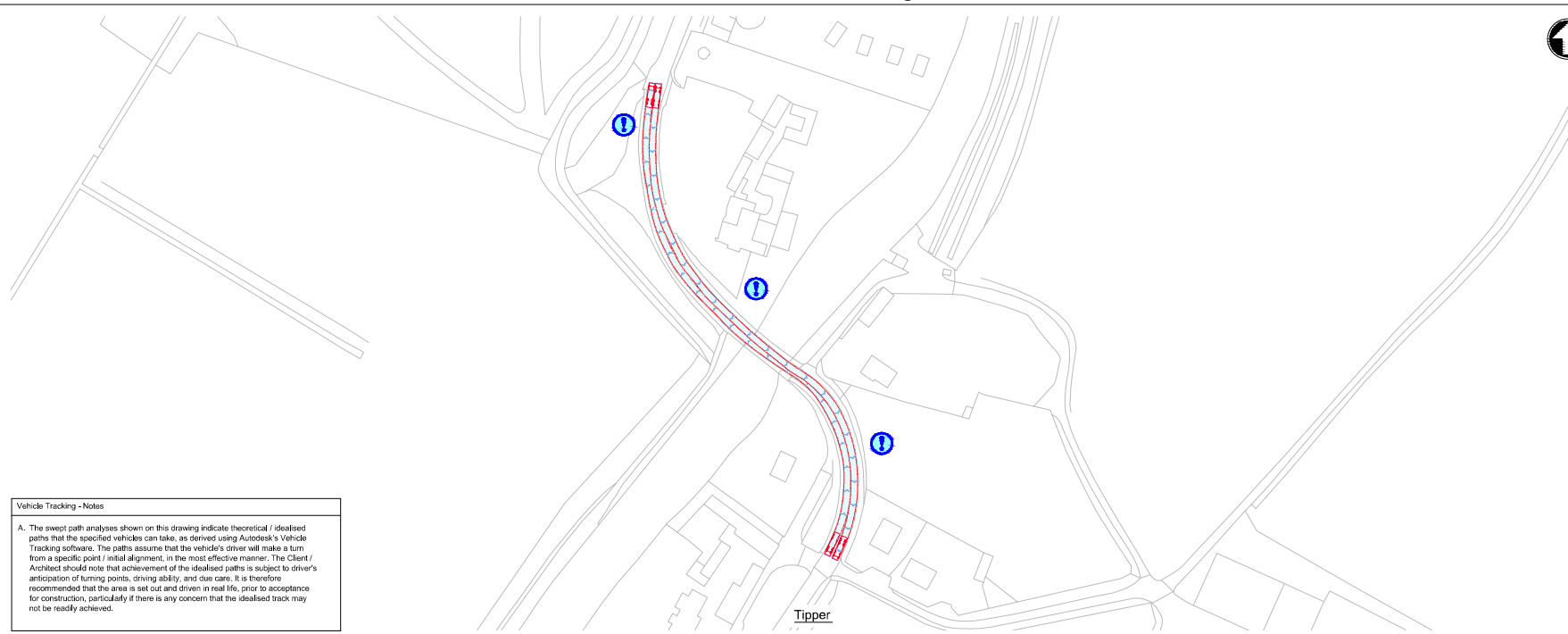
Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
Claythite Bridge
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

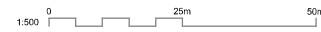
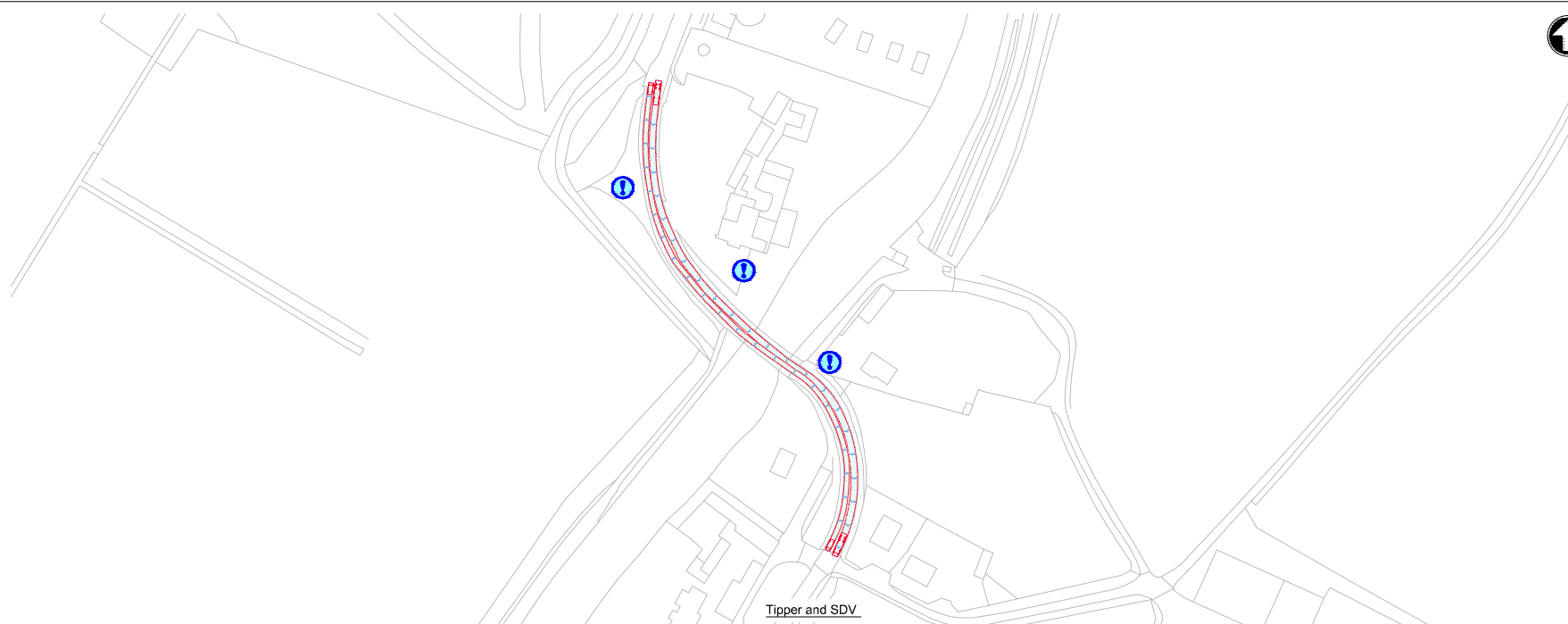
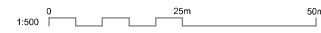
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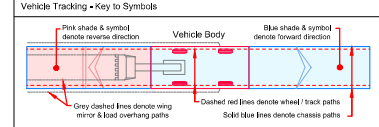


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Vehicle Tracking - Vehicle Details

Container Lorry Loader with Trailer (Steering 1820m) Overall Length 24.60m Overall Width 2.40m Overall Body Height 3.40m Max Body Overall Clearance 2.00m Max. Wheel Overlap 0.20m Lock to Lock time 6.00m Kerb to Kerb Turning Radius 10.00m	Large Mobile Crane Overall Length 12.00m Overall Width 2.40m Overall Body Height 3.50m Max Body Overall Clearance 2.00m Lock to Lock time 6.00m Kerb to Kerb Turning Radius 10.00m

Large Tipper Overall Length 10.00m Overall Width 2.40m Overall Body Height 3.50m Max Body Overall Clearance 2.00m Lock to Lock time 6.00m Kerb to Kerb Turning Radius 11.50m	Standard Design Vehicle (SDV) Overall Length 4.80m Overall Width 1.90m Overall Body Height 2.00m Max Body Overall Clearance 1.50m Lock to Lock time 4.00m Kerb to Kerb Turning Radius 6.00m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	10/20/20	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	CHK'd	App'd

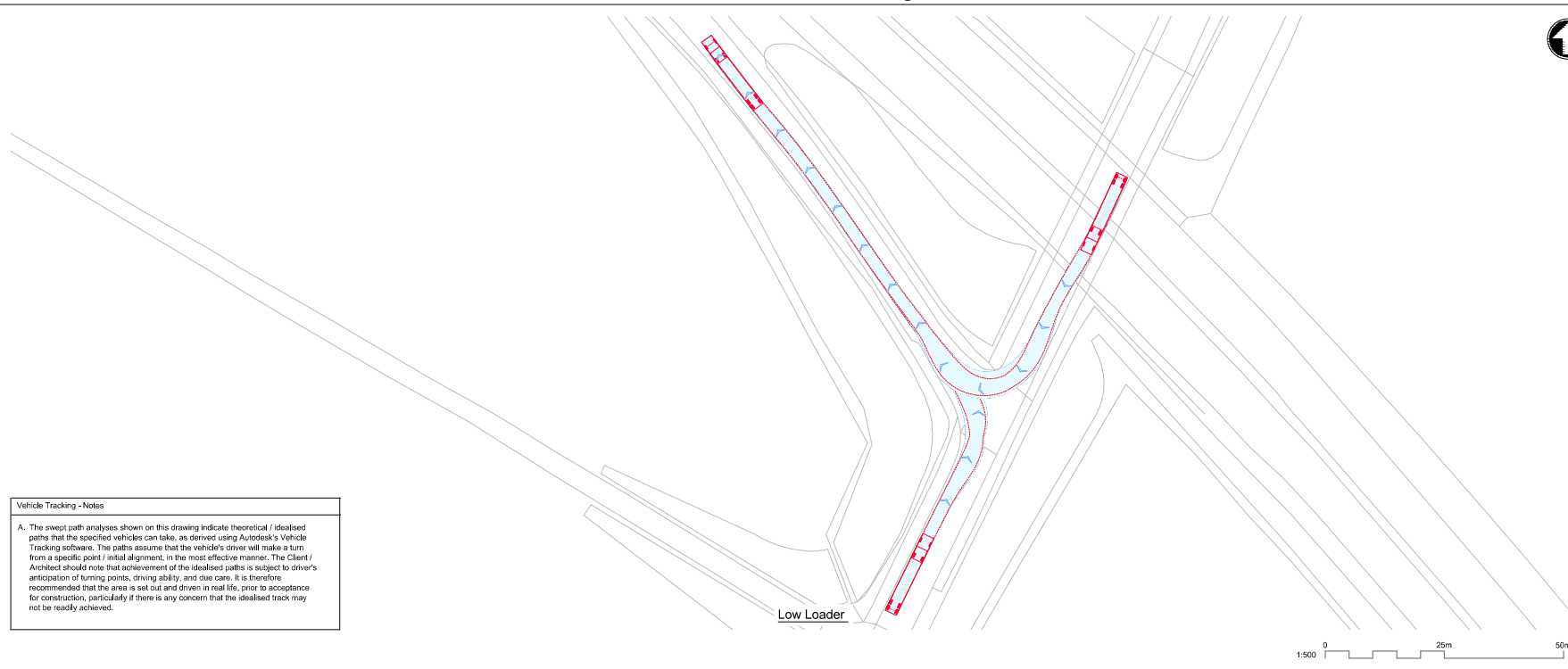


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Clayhithe Bridge
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

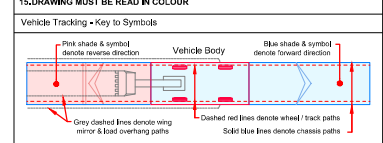
Drawing Number
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Vehicle Tracking - Vehicle Details

<p>Low Loader</p> <p>Overall Length 12.00m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 2.40m</p> <p>Min Body Ground Clearance 0.20m</p> <p>Max. Wheel Overlap 0.20m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.00m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 2.40m</p> <p>Min Body Ground Clearance 0.20m</p> <p>Max. Wheel Overlap 0.20m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>
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<p>Large Tipper</p> <p>Overall Length 10.00m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 2.40m</p> <p>Min Body Ground Clearance 0.20m</p> <p>Max. Wheel Overlap 0.20m</p> <p>Kerb to Kerb Turning Radius 11.50m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.50m</p> <p>Overall Width 1.90m</p> <p>Overall Body Height 1.90m</p> <p>Min Body Ground Clearance 0.20m</p> <p>Max. Wheel Overlap 0.20m</p> <p>Lock to Lock time 4.00m</p> <p>Kerb to Kerb Turning Radius 6.00m</p>
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- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd



Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
B1047 - A14 Junction 34
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

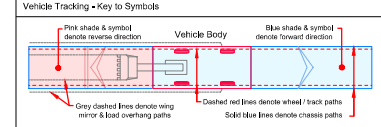
Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT



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15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

<p>General Low Loader with Trailer (Steering 1820m)</p> <p>Overall Length 24.60m</p> <p>Overall Width 2.90m</p> <p>Overall Body Height 3.40m</p> <p>Min Body Ground Clearance 0.30m</p> <p>Max. Rear Overhang 6.00m</p> <p>Lock to Lock Time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.30m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 3.30m</p> <p>Min Body Ground Clearance 0.30m</p> <p>Max. Rear Overhang 2.50m</p> <p>Lock to Lock Time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>
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<p>Large Tipper</p> <p>Overall Length 10.00m</p> <p>Overall Width 2.85m</p> <p>Overall Body Height 2.95m</p> <p>Min Body Ground Clearance 0.30m</p> <p>Max. Rear Overhang 2.50m</p> <p>Lock to Lock Time 11.50m</p> <p>Kerb to Kerb Turning Radius 11.50m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.80m</p> <p>Overall Width 1.90m</p> <p>Overall Body Height 1.90m</p> <p>Min Body Ground Clearance 0.30m</p> <p>Max. Rear Overhang 2.50m</p> <p>Lock to Lock Time 4.00m</p> <p>Kerb to Kerb Turning Radius 6.00m</p>
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Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	مراجعة	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	CHK'd	App'd

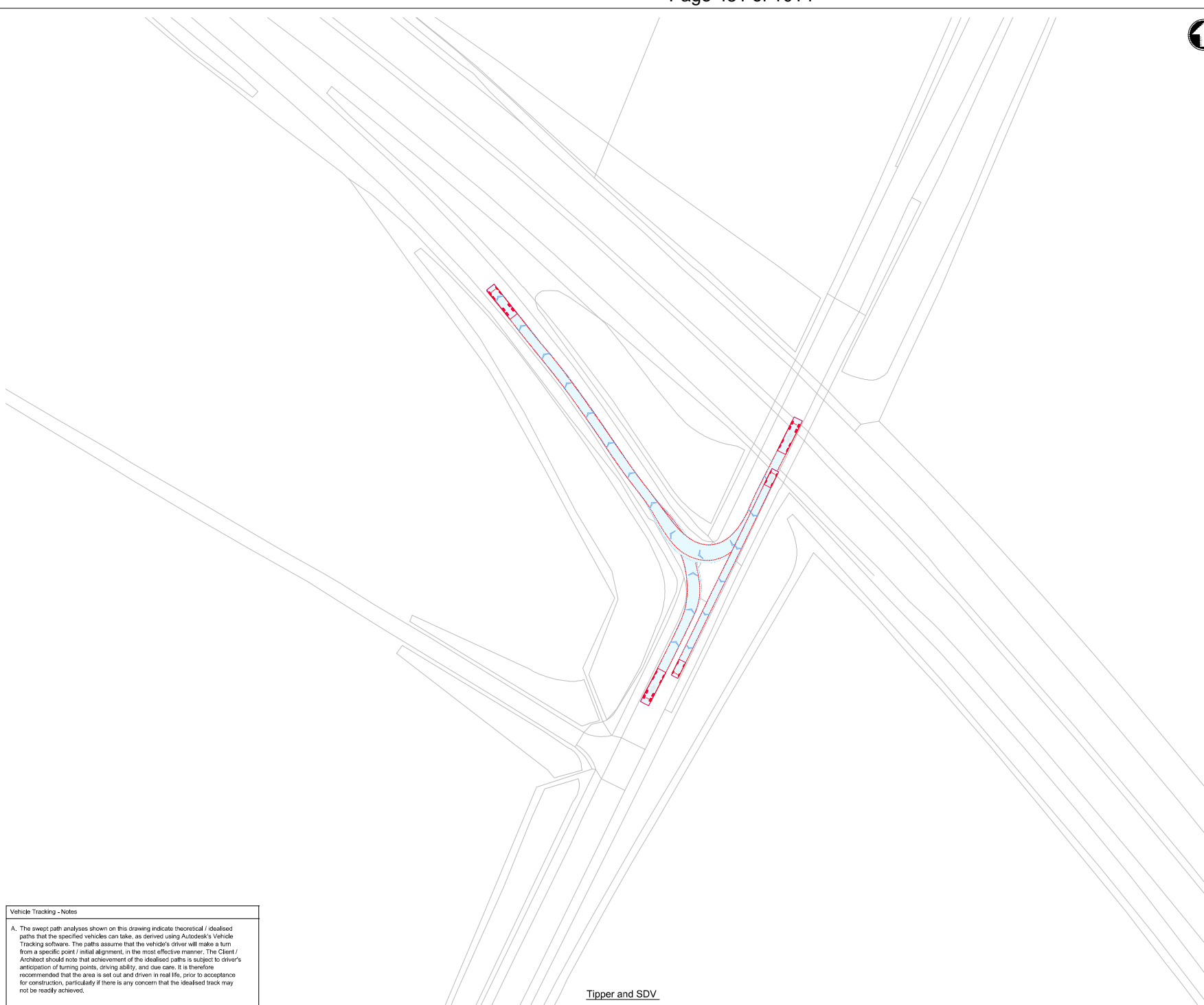


Title
**Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 B1047 - A14 Junction 34
 Highways GA, Visibility Splay and
 Vehicle Tracking**

Designed	M Fonseca	MF	Eng check	-	
Drawn	M Fonseca	MF	Coordination	-	
Dwg check	-		Approved	-	

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT

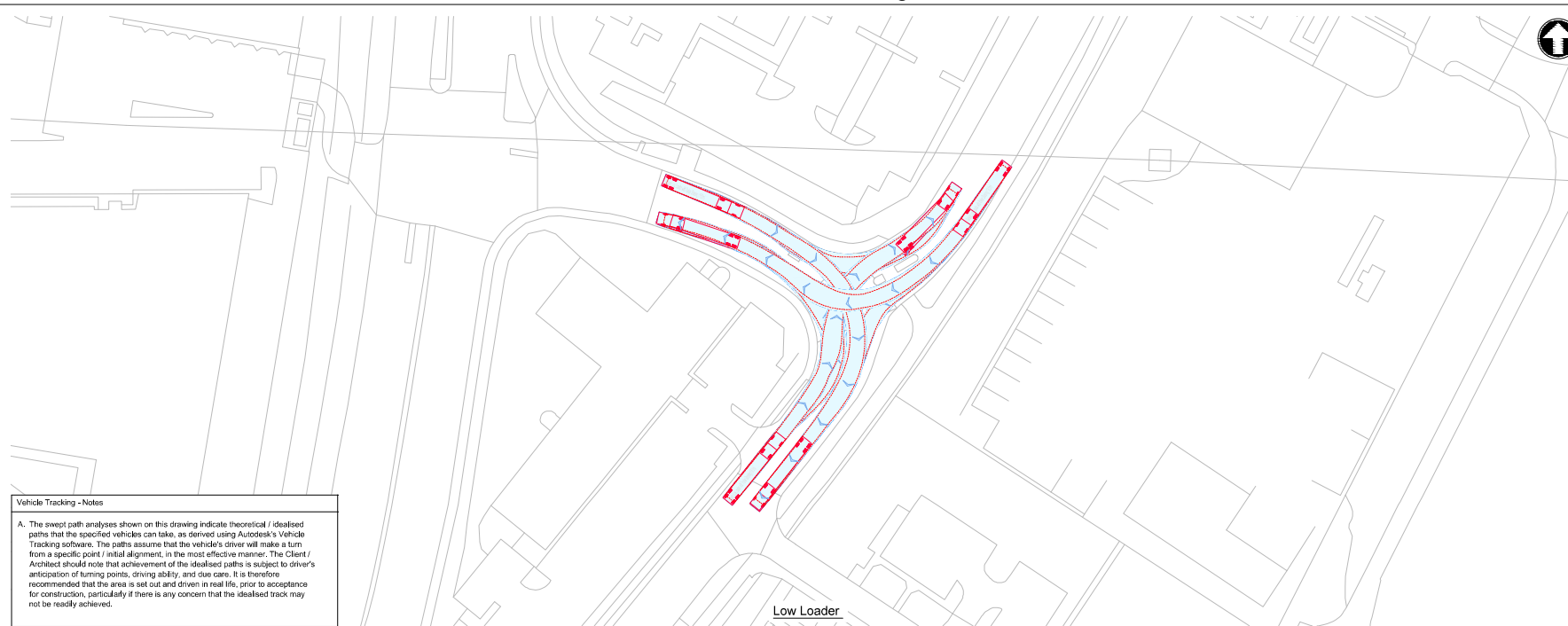


Vehicle Tracking - Notes

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Tipper and SDV





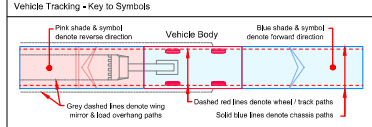
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Low Loader



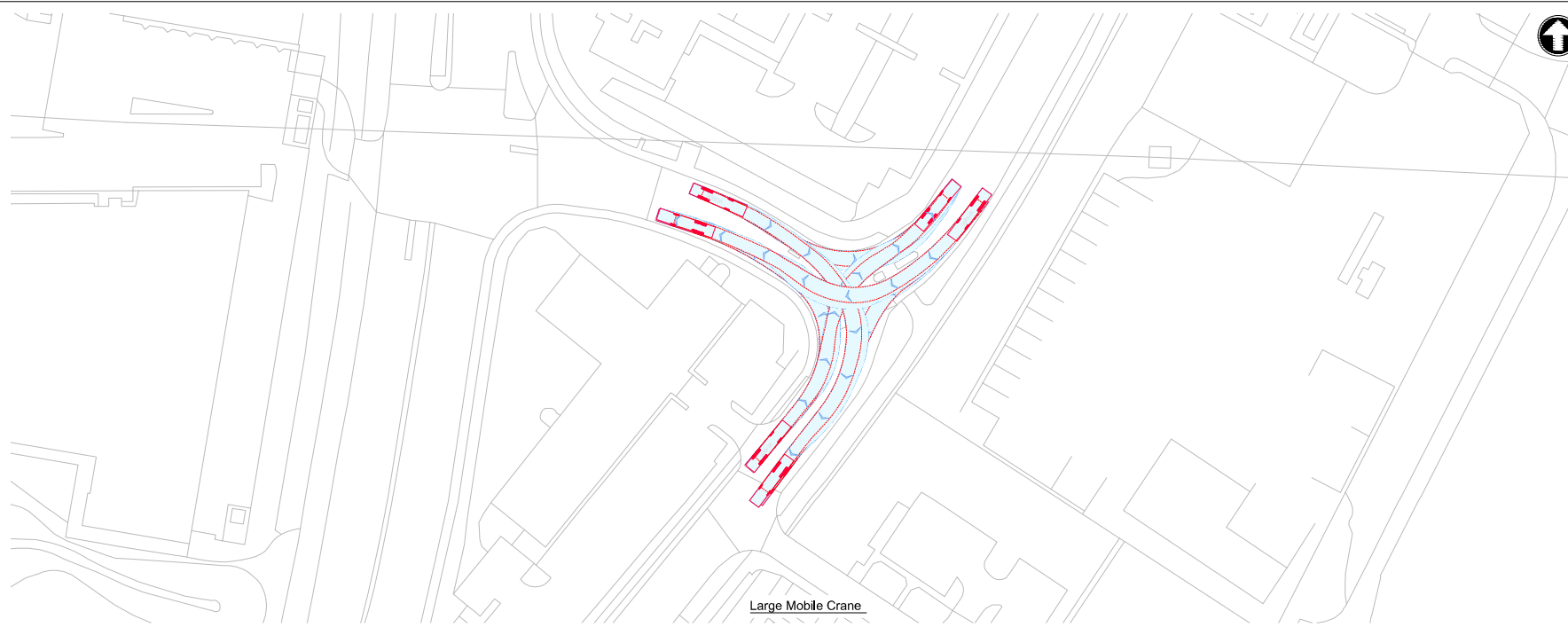
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 15. DRAWING MUST BE READ IN COLOUR



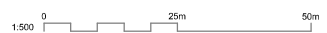
Vehicle Tracking - Vehicle Details

Overall Low Loader with Trailer (1620m)	2460m	Overall Length	12.300m
Overall Width	2.400m	Overall Width	2.400m
Overall Body Height	2.400m	Overall Body Height	3.300m
Max Body Ground Clearance	0.300m	Max Body Ground Clearance	0.300m
Max. Wheel Spacing	6.00m	Max. Wheel Spacing	6.00m
Lock to Lock Time	6.00m	Lock to Lock Time	6.00m
Kerb to Kerb Turning Radius	6.00m	Kerb to Kerb Turning Radius	10.000m

Overall Low Loader with Trailer (1620m)	2460m	Overall Length	12.300m
Overall Width	2.400m	Overall Width	2.400m
Overall Body Height	2.400m	Overall Body Height	3.300m
Max Body Ground Clearance	0.300m	Max Body Ground Clearance	0.300m
Max. Wheel Spacing	6.00m	Max. Wheel Spacing	6.00m
Lock to Lock Time	6.00m	Lock to Lock Time	6.00m
Kerb to Kerb Turning Radius	6.00m	Kerb to Kerb Turning Radius	10.000m



Large Mobile Crane



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd

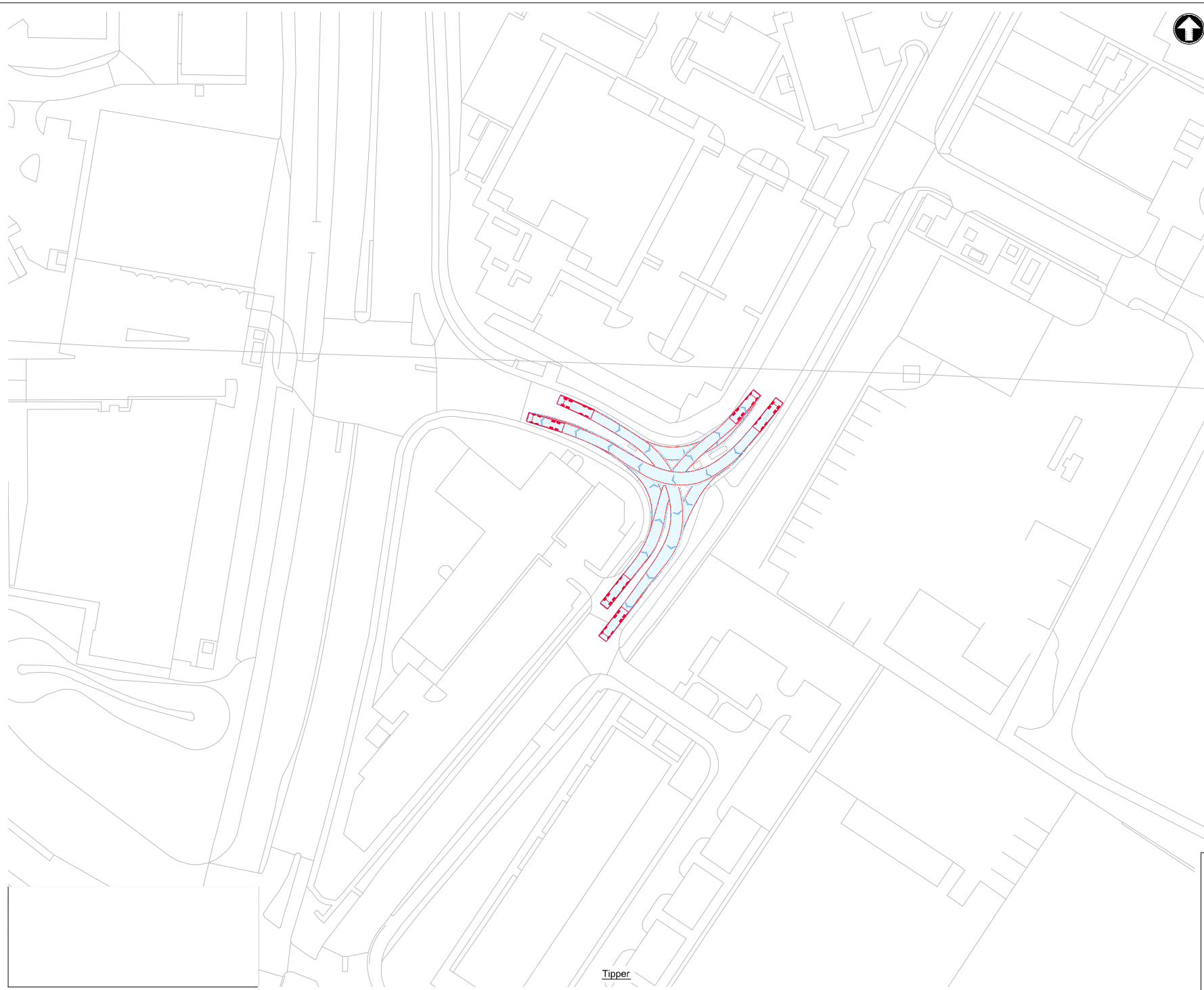


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Cowley Rd Junction
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

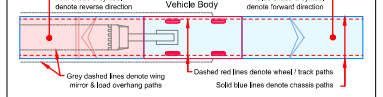
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1:500	PRE	P1	STD

Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



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15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

<p>Overall Length with Trailer (Steering 1820m)</p> <p>Overall Length 24.60m</p> <p>Overall Body Height 3.40m</p> <p>Min Body Ground Clearance 0.30m</p> <p>Max Body Height 4.20m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>	<p>Overall Length 12.300m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 3.30m</p> <p>Min Body Ground Clearance 0.30m</p> <p>Max Body Height 4.20m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.300m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 3.30m</p> <p>Min Body Ground Clearance 0.30m</p> <p>Max Body Height 4.20m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.600m</p> <p>Overall Width 2.000m</p> <p>Overall Body Height 2.000m</p> <p>Min Body Ground Clearance 0.300m</p> <p>Max Body Height 2.000m</p> <p>Lock to Lock time 4.000m</p> <p>Kerb to Kerb Turning Radius 6.000m</p>

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/07/2022	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	Checked	Approved

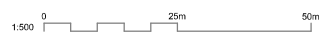


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Cowley Rd Junction
 Highways GA, Visibility Splay and
 Vehicle Tracking

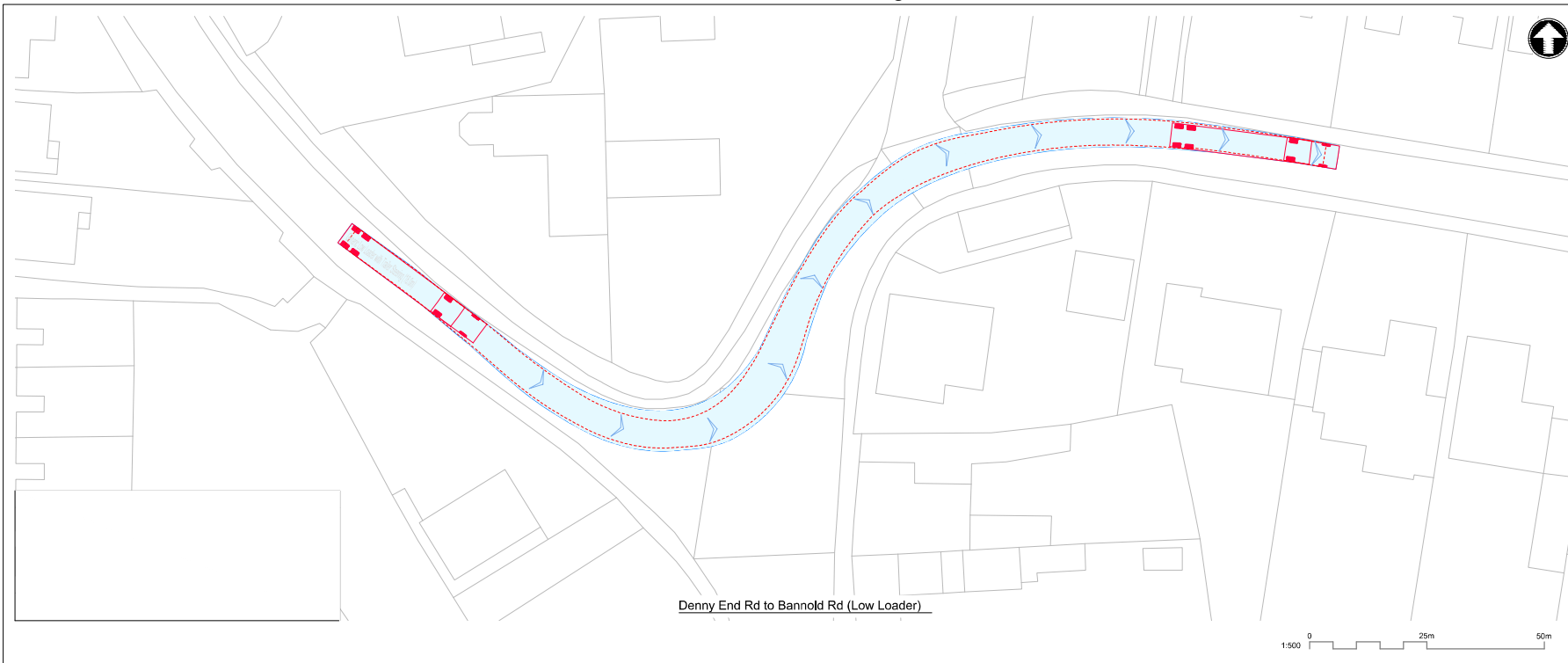
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Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

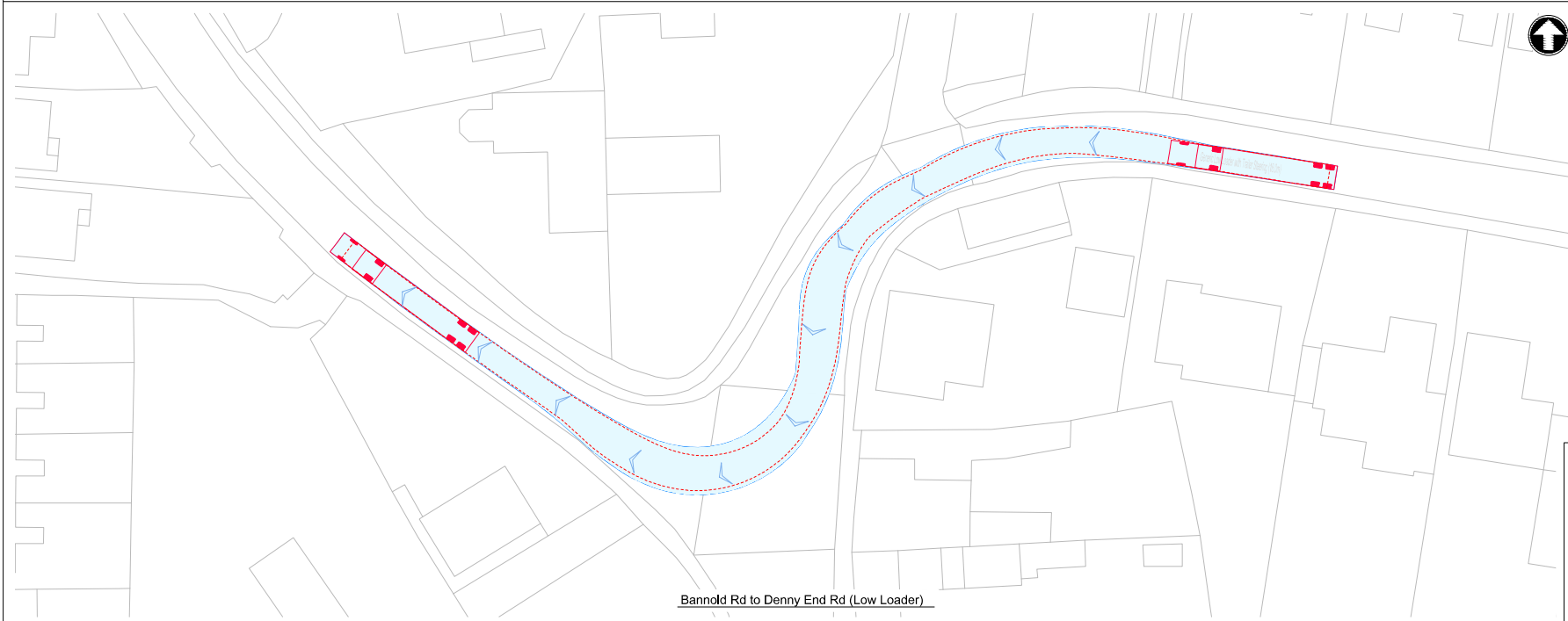
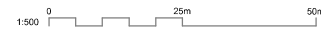
Drawing Number
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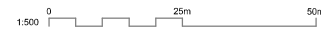
Tipper



Denny End Rd to Bannold Rd (Low Loader)

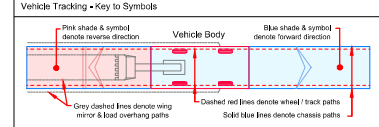


Bannold Rd to Denny End Rd (Low Loader)



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15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

	Low Loader with Trailer (1620m)		Large Mobile Crane
Overall Length	24.60m	Overall Length	12.200m
Overall Width	2.400m	Overall Width	2.240m
Overall Body Height	3.400m	Overall Body Height	3.300m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Max. Rear Overhang	6.00m	Max. Rear Overhang	2.500m
Lock to Lock time	6.00m	Lock to Lock time	6.00m
Kerb to Kerb Turning Radius	10.000m	Kerb to Kerb Turning Radius	10.000m

	Large Tipper		Standard Design Vehicle (SDV)
Overall Length	10.000m	Overall Length	4.600m
Overall Width	2.850m	Overall Width	2.000m
Overall Body Height	3.500m	Overall Body Height	2.000m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Lock to Lock time	4.00m	Lock to Lock time	4.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	6.000m

	Large Tipper		Standard Design Vehicle (SDV)
Overall Length	10.000m	Overall Length	4.600m
Overall Width	2.850m	Overall Width	2.000m
Overall Body Height	3.500m	Overall Body Height	2.000m
Min Body Ground Clearance	0.300m	Min Body Ground Clearance	0.300m
Lock to Lock time	4.00m	Lock to Lock time	4.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	6.000m

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/09/2022	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	Checked	Approved

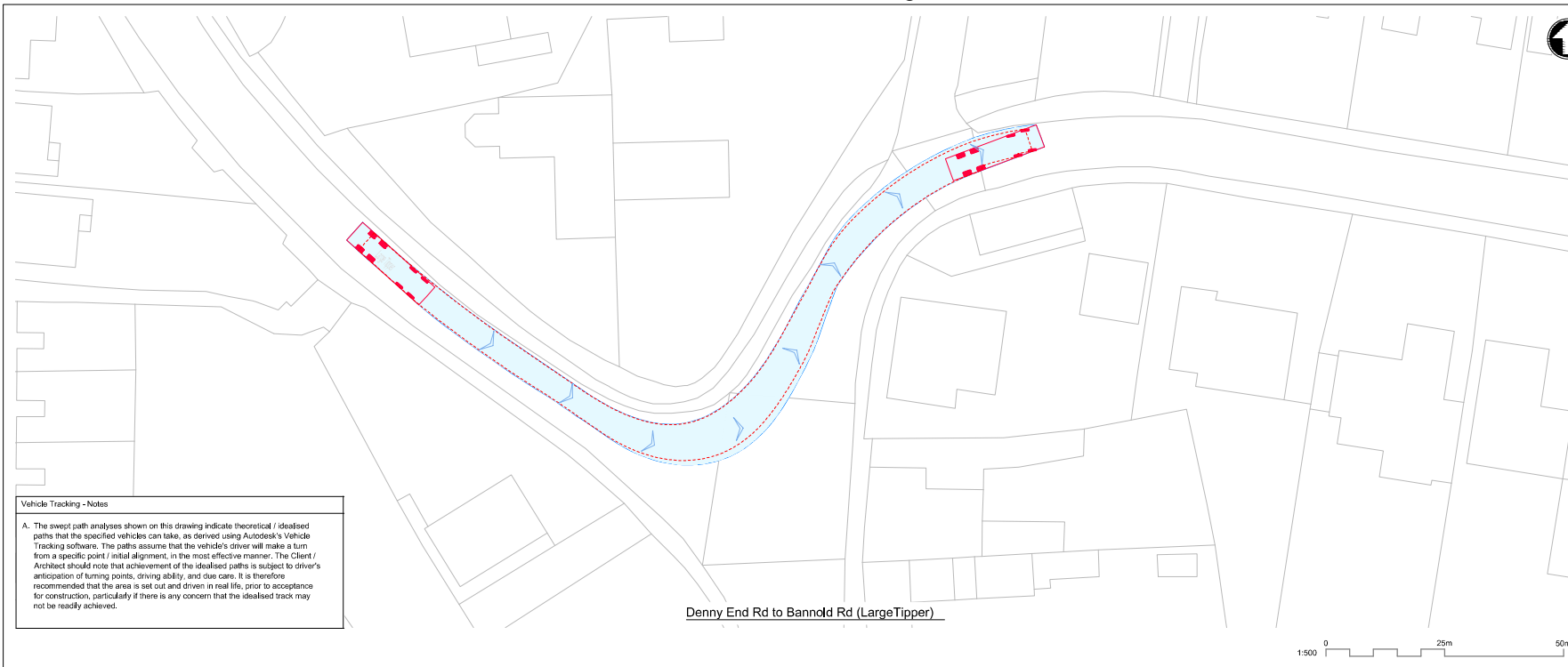


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Denny End Rd - Bannold Rd
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-	
Drawn	M Fonseca	MF	Coordination	-	
Dwg check	-		Approved	-	

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

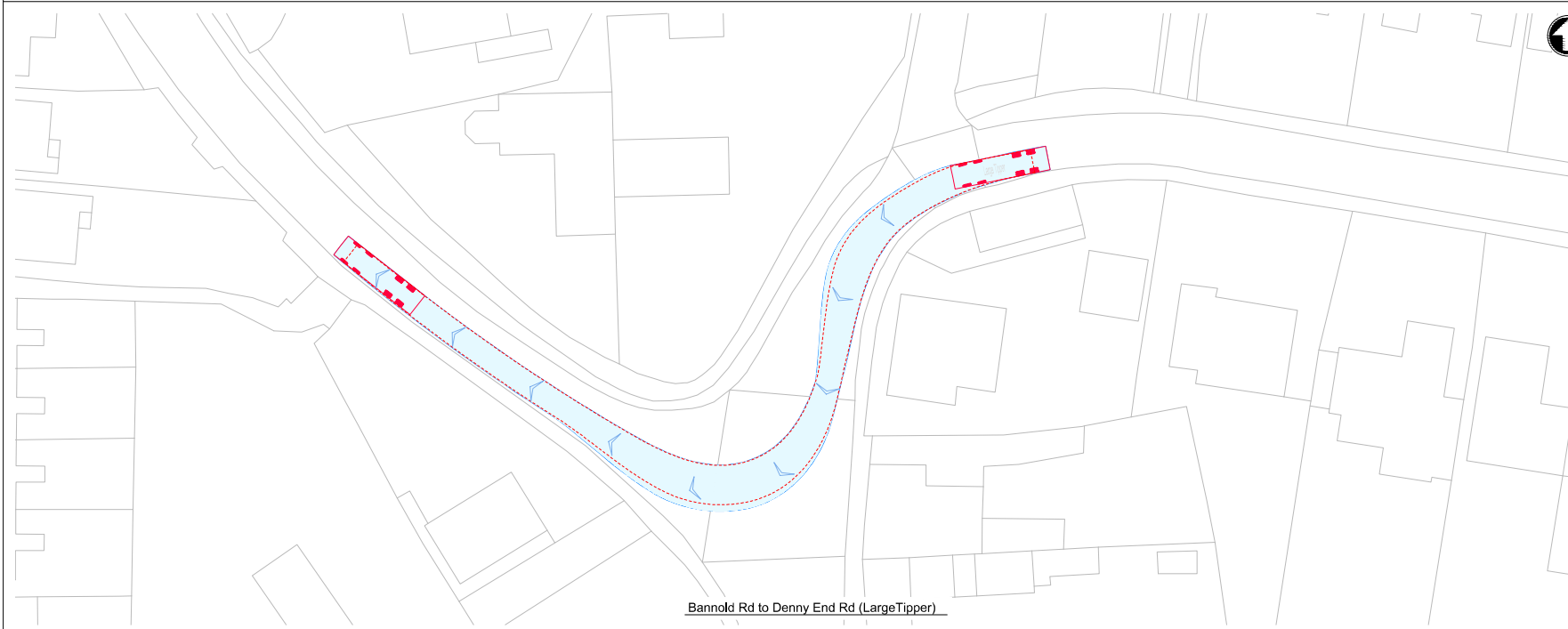
Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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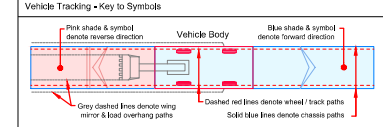
Denny End Rd to Bannold Rd (Large Tipper)



Bannold Rd to Denny End Rd (Large Tipper)



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Vehicle Tracking - Vehicle Details

<p>General Load Lorry with Trailer (1620m)</p> <p>Overall Length 24.60m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 3.40m</p> <p>Max Body Ground Clearance 2.00m</p> <p>Max. Rear Overhang 6.00m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.00m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 3.30m</p> <p>Max Body Ground Clearance 2.00m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 10.00m</p>

<p>Large Tipper</p> <p>Overall Length 24.60m</p> <p>Overall Width 2.40m</p> <p>Overall Body Height 3.40m</p> <p>Max Body Ground Clearance 2.00m</p> <p>Max. Rear Overhang 6.00m</p> <p>Lock to Lock time 6.00m</p> <p>Kerb to Kerb Turning Radius 11.500m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.60m</p> <p>Overall Width 2.00m</p> <p>Overall Body Height 2.00m</p> <p>Max Body Ground Clearance 2.00m</p> <p>Lock to Lock time 4.00m</p> <p>Kerb to Kerb Turning Radius 6.00m</p>

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/09/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd

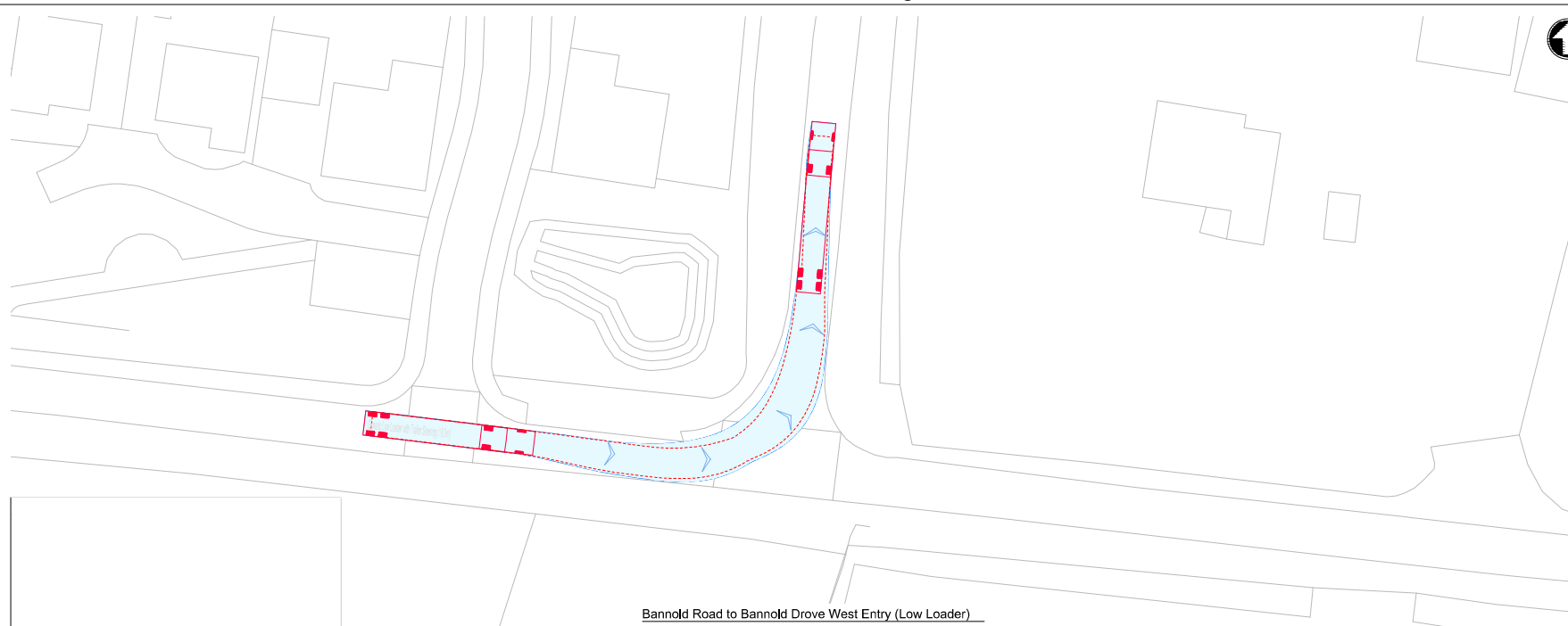


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
Denny End Rd - Bannold Rd
Highways GA, Visibility Splay and
Vehicle Tracking

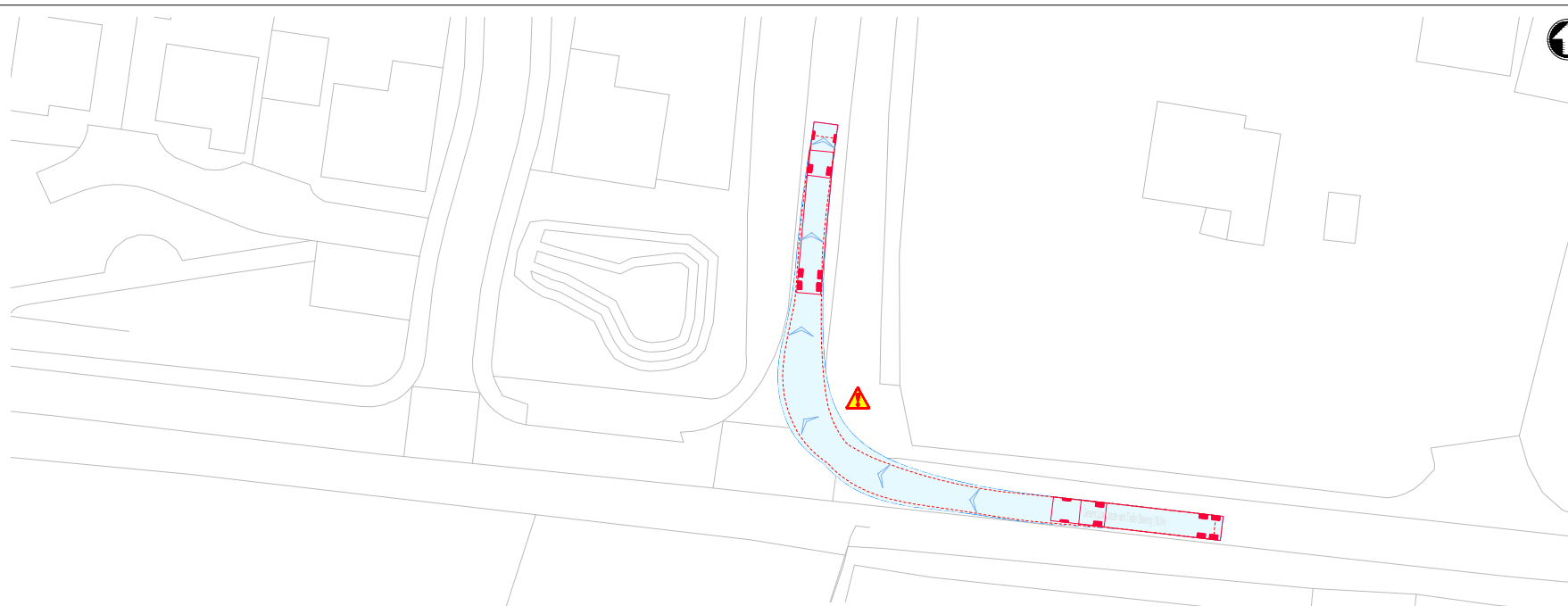
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Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT



Bannold Road to Bannold Drove West Entry (Low Loader)

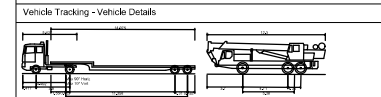
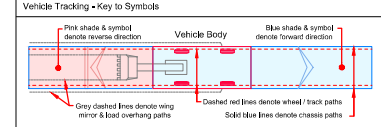


Bannold Road to Bannold Drove East Entry (Low Loader)

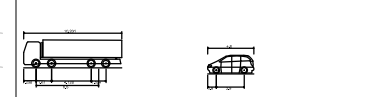


- Notes**
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15. DRAWING MUST BE READ IN COLOUR



Overall Low loader with Trailer (Steering 1820m)	2460m	Overall Length	12.300m
Overall Width	2.90m	Overall Width	2.90m
Overall Body Height	3.40m	Overall Body Height	3.30m
Min Body Ground Clearance	0.30m	Min Body Ground Clearance	0.30m
Max. Rear Overhang	6.00m	Max. Rear Overhang	6.00m
Lock to Lock time	6.00m	Lock to Lock time	6.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	11.500m



Large Tipper	10.00m	Standard Design Vehicle (SDV)	4.60m
Overall Width	2.85m	Overall Width	2.90m
Overall Body Height	3.25m	Overall Body Height	3.30m
Min Body Ground Clearance	0.30m	Min Body Ground Clearance	0.30m
Lock to Lock time	6.00m	Lock to Lock time	6.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	11.500m

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	Rev	Date	Drawn	Description	Rev	Appr

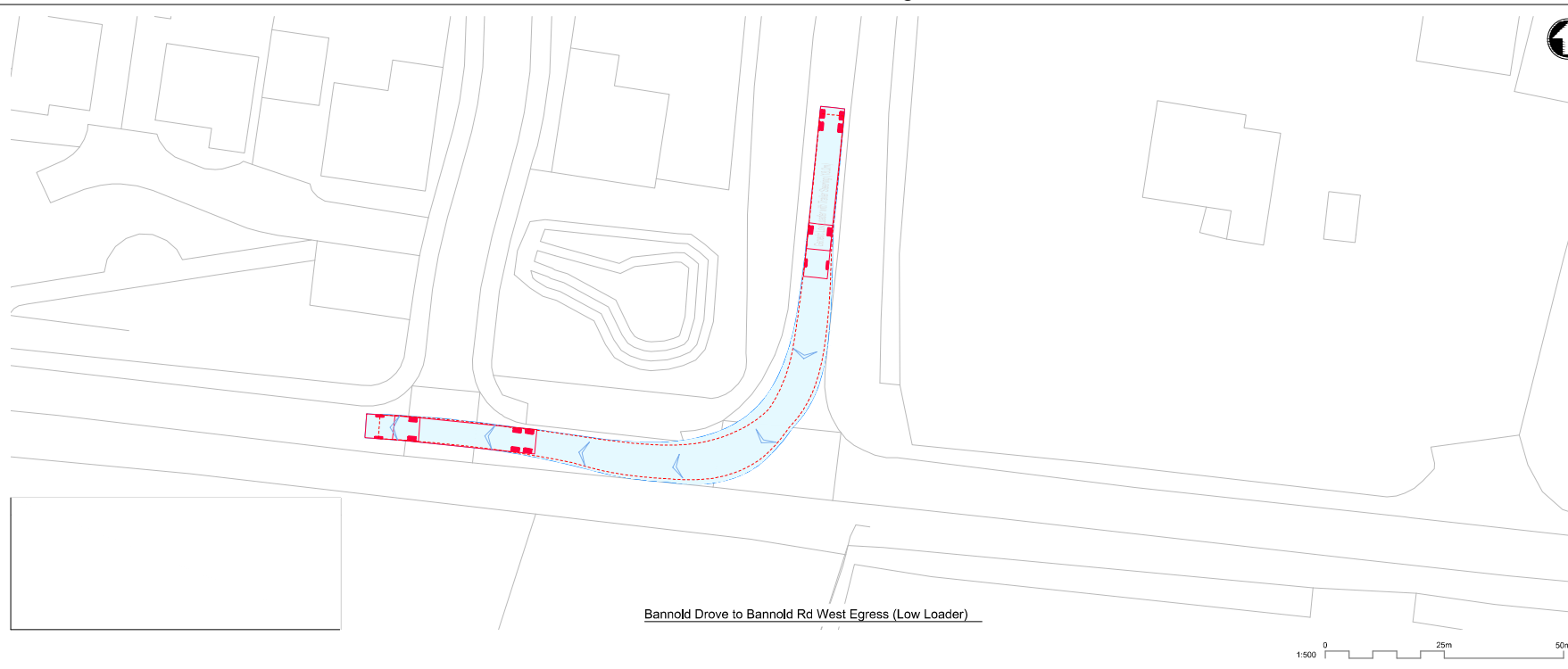


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Bannold Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

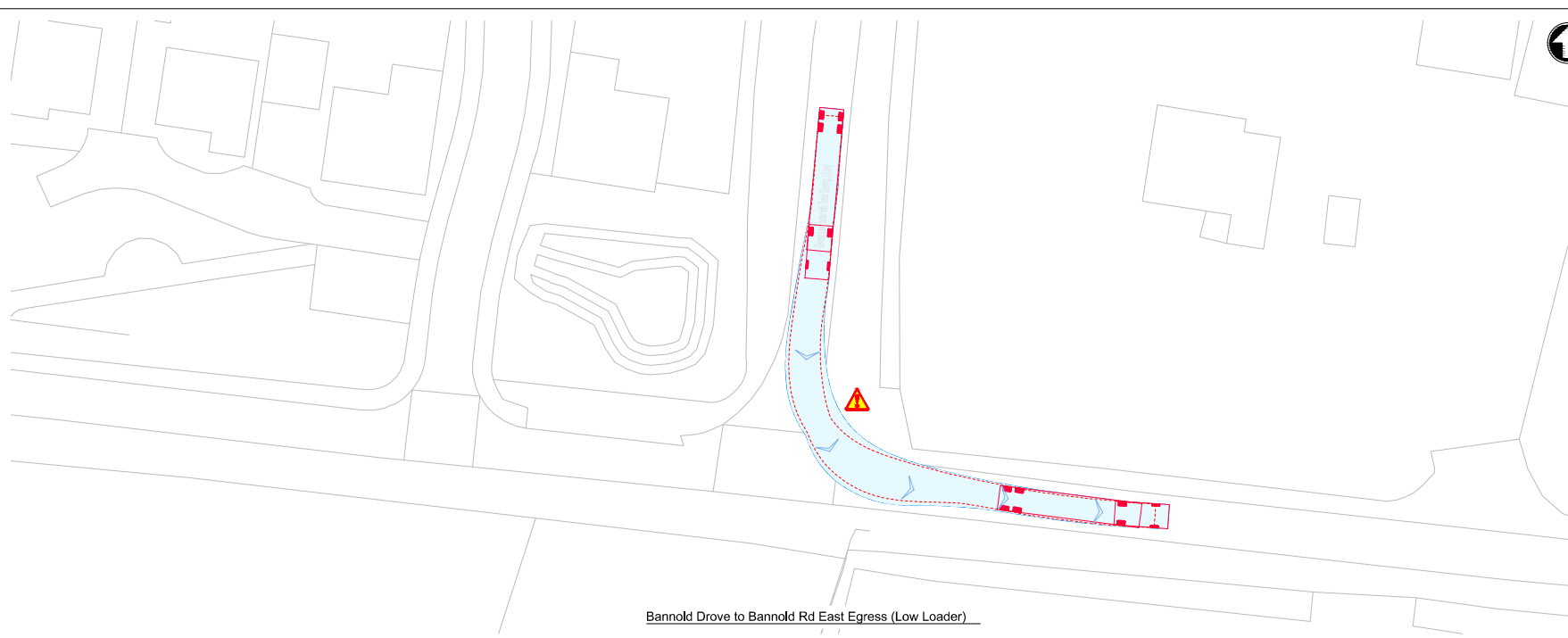
Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



Bannold Drove to Bannold Rd West Egress (Low Loader)

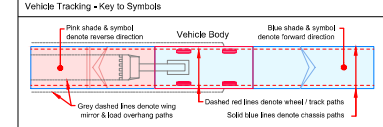


Bannold Drove to Bannold Rd East Egress (Low Loader)



- Notes**
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15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

	General Low Loader with Trailer (Steering 1820m)	2460m	Large Mobile Crane	12,200m
	Overall Length	7,910m	Overall Length	22,400m
	Overall Width	2,660m	Overall Width	2,400m
	Overall Body Height	3,400m	Overall Body Height	3,300m
	Min. Body Ground Clearance	630mm	Min. Body Ground Clearance	600mm
	Max. Body Height	6,000m	Max. Body Height	6,000m
	Lock to Lock Time	6.00m	Lock to Lock Time	6.00m
	Kerb to Kerb Turning Radius	11,550m	Kerb to Kerb Turning Radius	11,550m

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	Rev	Date	Drawn	Description	Rev	Appr



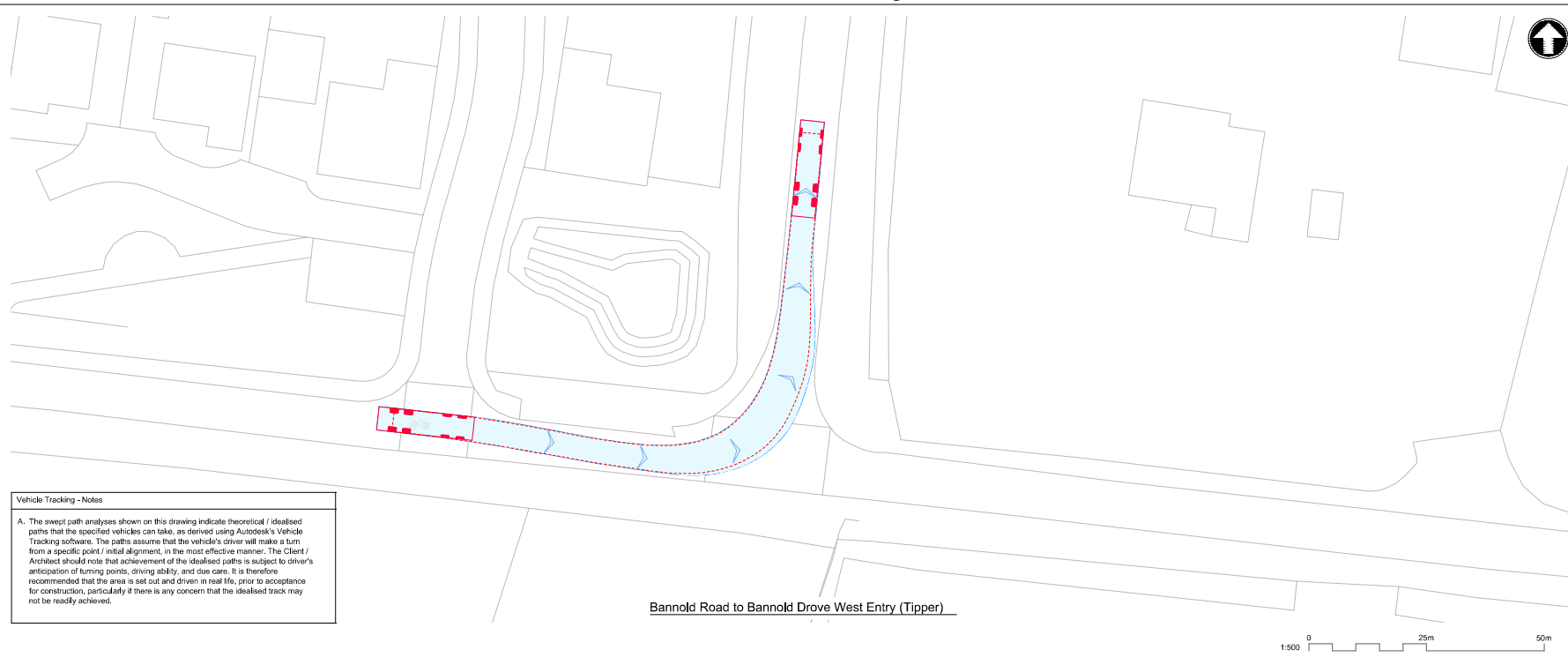
Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Bannold Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT

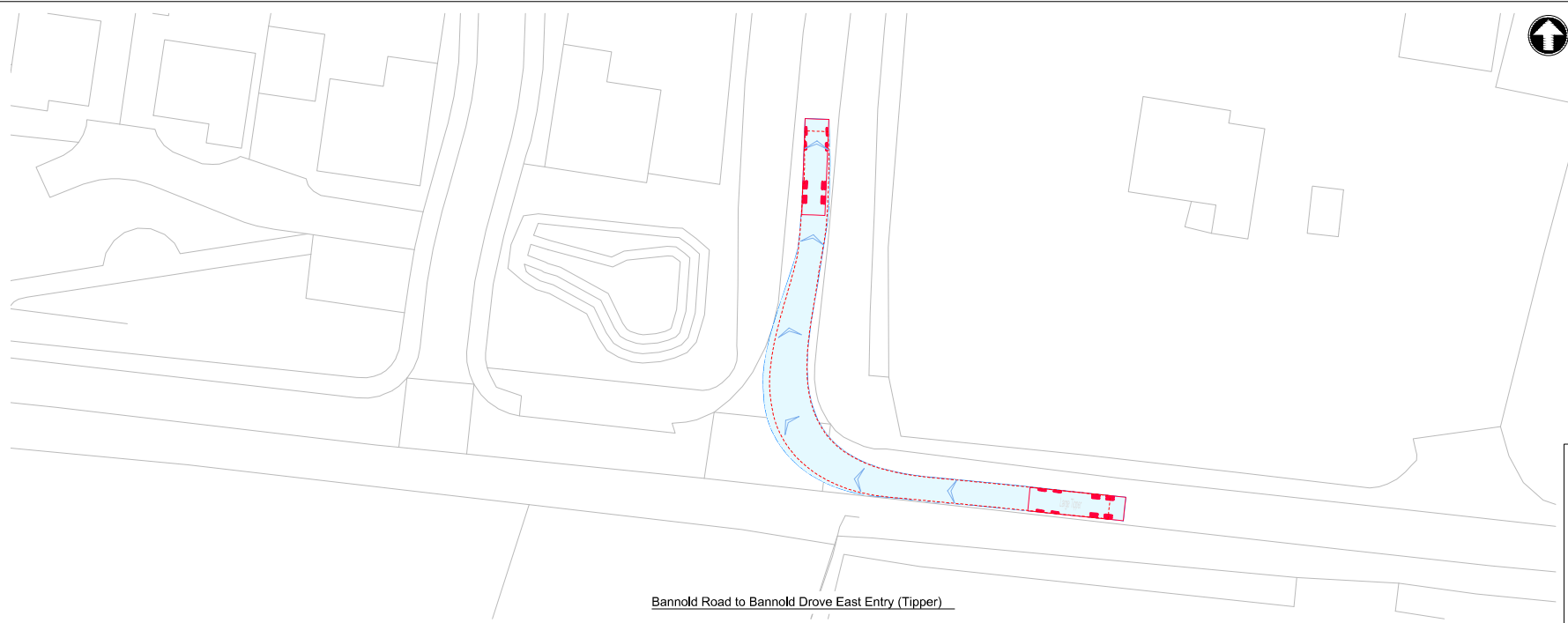
© Mott MacDonald
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 We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.
 C:\user\DEB10076\Mott MacDonald\Cambridge WWTW Relocation Project - 12 - Transport\04 Report\02 TA3 Street path analysis\CAD Files\DR102375-MMD-01-XX-DR-C-DRAFT_3_26over.dwg Sep 13, 2022 - 2:52PM DEB10076



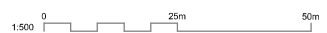
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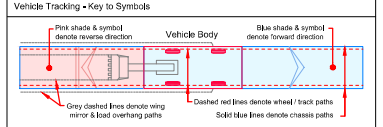
Bannold Road to Bannold Drove West Entry (Tipper)



Bannold Road to Bannold Drove East Entry (Tipper)



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Vehicle Tracking - Vehicle Details

Large Tipper	Standard Design Vehicle (SDV)
Overall Length	10.00m
Overall Width	2.45m
Overall Body Height	2.85m
Max Body Ground Clearance	0.25m
Lock to Lock Line	6.00m
Kerb to Kerb Turning Radius	11.50m
Large Mobile Crane	Overall Length
Overall Width	2.45m
Overall Body Height	3.20m
Max Body Ground Clearance	0.25m
Lock to Lock Line	6.00m
Kerb to Kerb Turning Radius	10.00m

Large Tipper	Standard Design Vehicle (SDV)
Overall Length	10.00m
Overall Width	2.45m
Overall Body Height	2.85m
Max Body Ground Clearance	0.25m
Lock to Lock Line	6.00m
Kerb to Kerb Turning Radius	11.50m
Overall Length	4.80m
Overall Width	1.90m
Overall Body Height	1.90m
Max Body Ground Clearance	0.20m
Lock to Lock Line	4.20m
Kerb to Kerb Turning Radius	6.00m

Vehicle Tracking - Risks & Compliance

Risks

- Kerb overrun
- Restrictive road width

P1	Rev	Date	Drawn	Description	Rev	Appr
				Draft for Discussion / Review.		

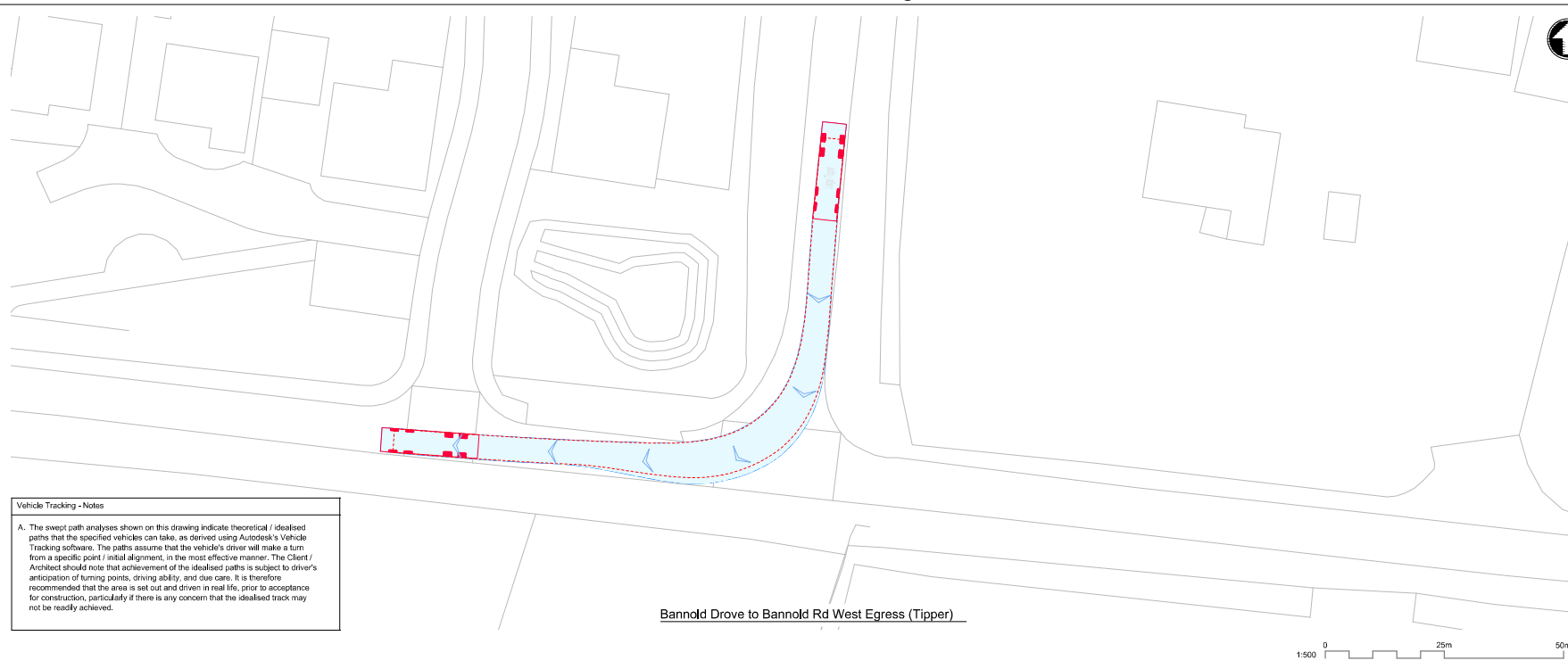


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Bannold Drove
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	<i>M/F</i>	Eng check	-
Drawn	M Fonseca	<i>M/F</i>	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

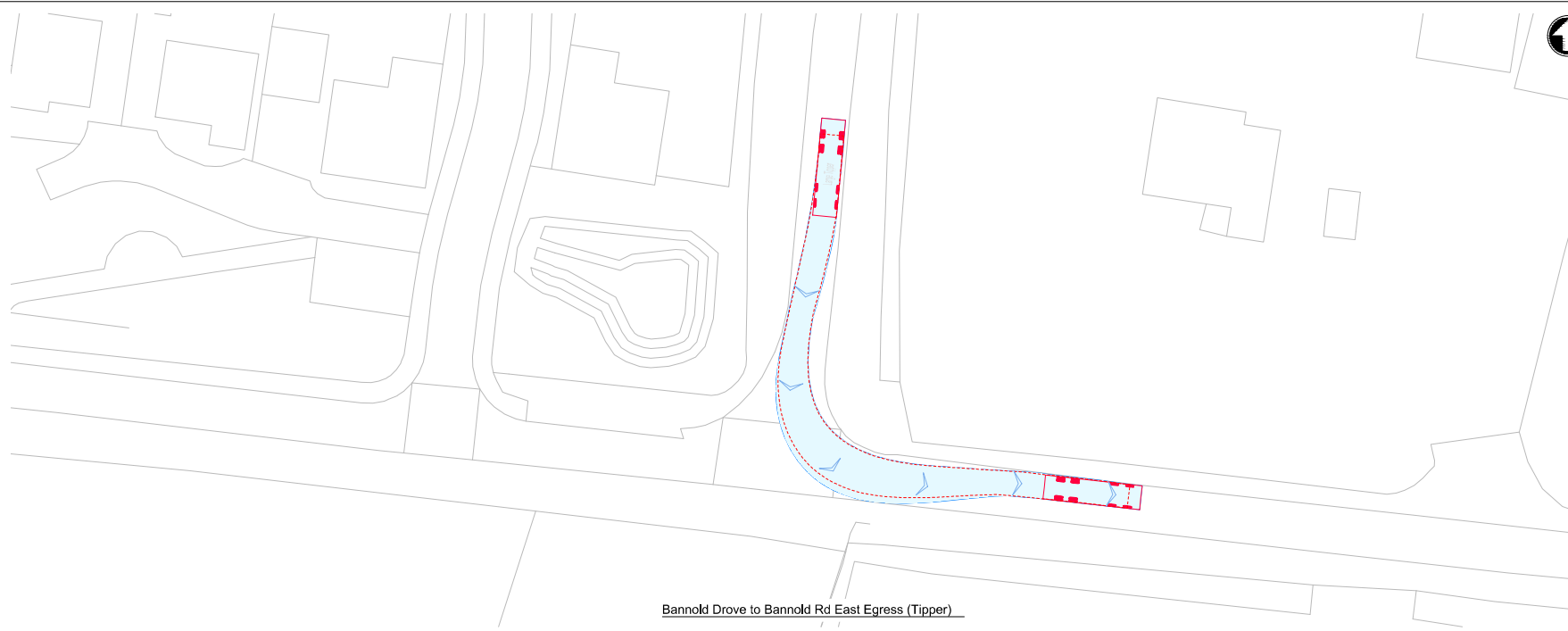
Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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Bannold Drive to Bannold Rd West Egress (Tipper)



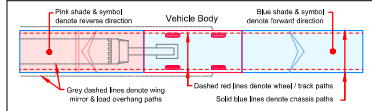
Bannold Drive to Bannold Rd East Egress (Tipper)



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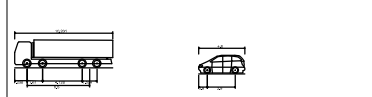
15. DRAWING MUST BE READ IN COLOUR

Vehicle Tracking - Key to Symbols



Vehicle Tracking - Vehicle Details

Overall Length with Trailer Steering (1820m)	2460m	Large Mobile Crane	Overall Length	12.300m
Overall Width	2.90m	Overall Height	Overall Width	2.40m
Overall Body Height	3.40m	Overall Body Height	Overall Body Height	3.300m
Min Body Ground Clearance	0.30m	Min Body Ground Clearance	Min Body Ground Clearance	0.30m
Max. Rear Overhang	6.00m	Max. Rear Overhang	Max. Rear Overhang	6.00m
Lock to Lock Time	6.00m	Lock to Lock Time	Lock to Lock Time	6.00m
Kerb to Kerb Turning Radius	6.00m	Kerb to Kerb Turning Radius	Kerb to Kerb Turning Radius	10.00m



Large Tipper	18.200m	Standard Design Vehicle (SDV)	4.600m
Overall Length	2.90m	Overall Width	2.00m
Overall Body Height	3.40m	Overall Body Height	2.00m
Min Body Ground Clearance	0.30m	Min Body Ground Clearance	0.30m
Max. Rear Overhang	6.00m	Max. Rear Overhang	2.00m
Lock to Lock Time	6.00m	Lock to Lock Time	4.00m
Kerb to Kerb Turning Radius	11.500m	Kerb to Kerb Turning Radius	6.00m

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/09/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	CHK'd	App'd

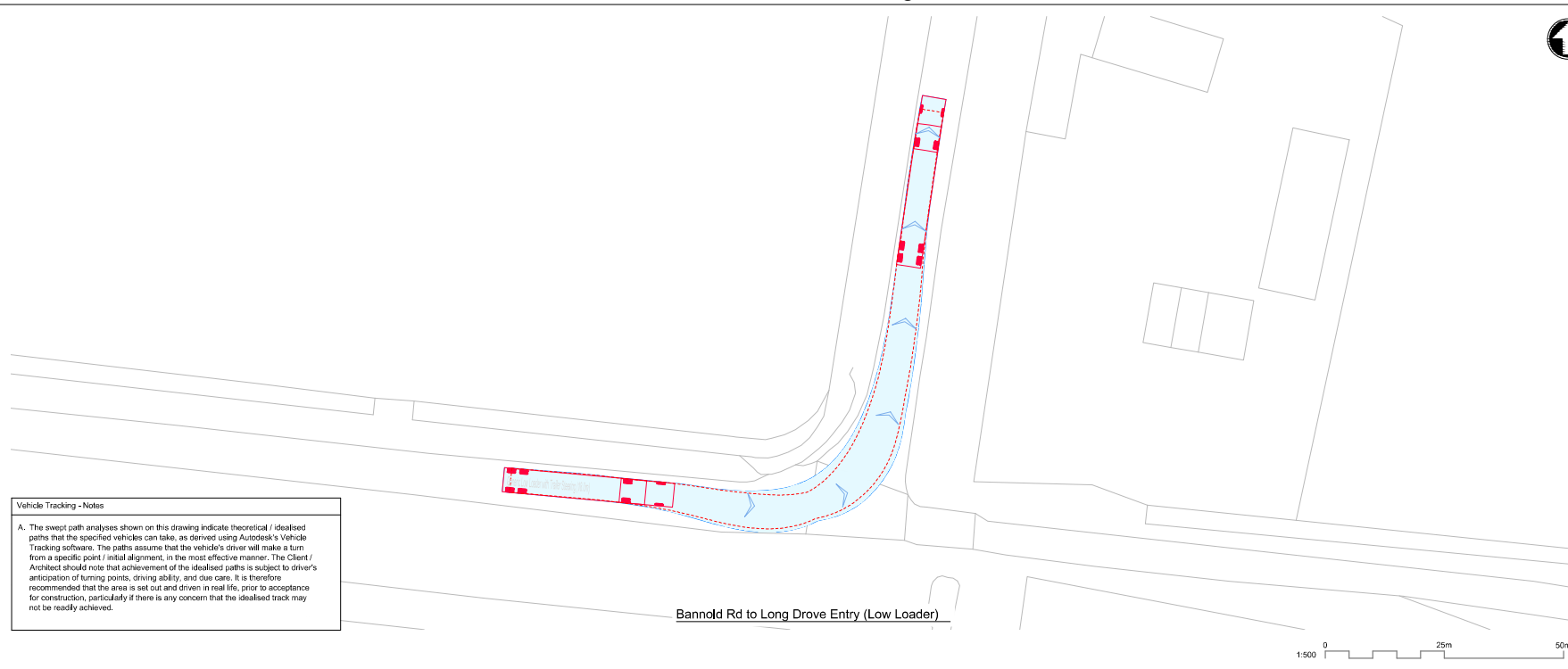


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Bannold Drive
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-	
Drawn	M Fonseca	M/F	Coordination	-	
Dwg check	-		Approved	-	

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

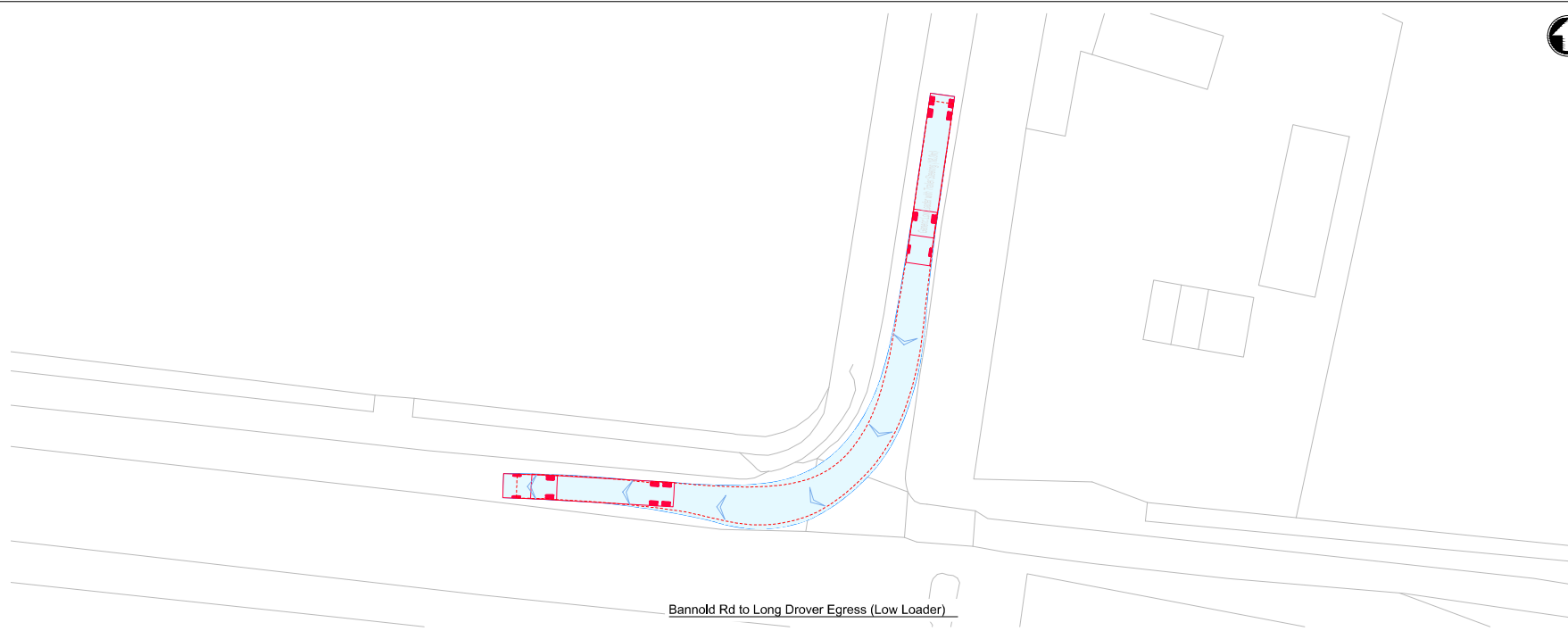
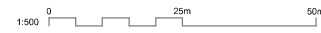
Drawing Number
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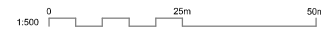
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Bannold Rd to Long Drive Entry (Low Loader)

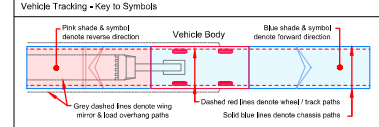


Bannold Rd to Long Drover Egress (Low Loader)



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15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

<p>Overhead Low Loader with Trailer (Steering 1800m)</p> <p>Overall Length 24.60m Overall Width 2.40m Overall Body Height 3.40m Max Body Ground Clearance 2.00m Max. Trail Over 6.00m Lock to Lock Time 4.00m Kerb to Kerb Turning Radius 10.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.00m Overall Width 2.40m Overall Body Height 3.00m Max Body Ground Clearance 2.00m Max. Trail Over 2.50m Lock to Lock Time 4.00m Kerb to Kerb Turning Radius 10.00m</p>	<p>Large Tipper</p> <p>Overall Length 10.00m Overall Width 2.40m Overall Body Height 3.00m Max Body Ground Clearance 2.00m Max. Trail Over 11.50m Lock to Lock Time 4.00m Kerb to Kerb Turning Radius 10.00m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.50m Overall Width 1.90m Overall Body Height 1.90m Max Body Ground Clearance 2.00m Max. Trail Over 2.00m Lock to Lock Time 4.00m Kerb to Kerb Turning Radius 6.00m</p>

Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	13/09/22	MF	Draft for Discussion / Review.	MF	MF
Rev	Date	Drawn	Description	CHK'd	App'd

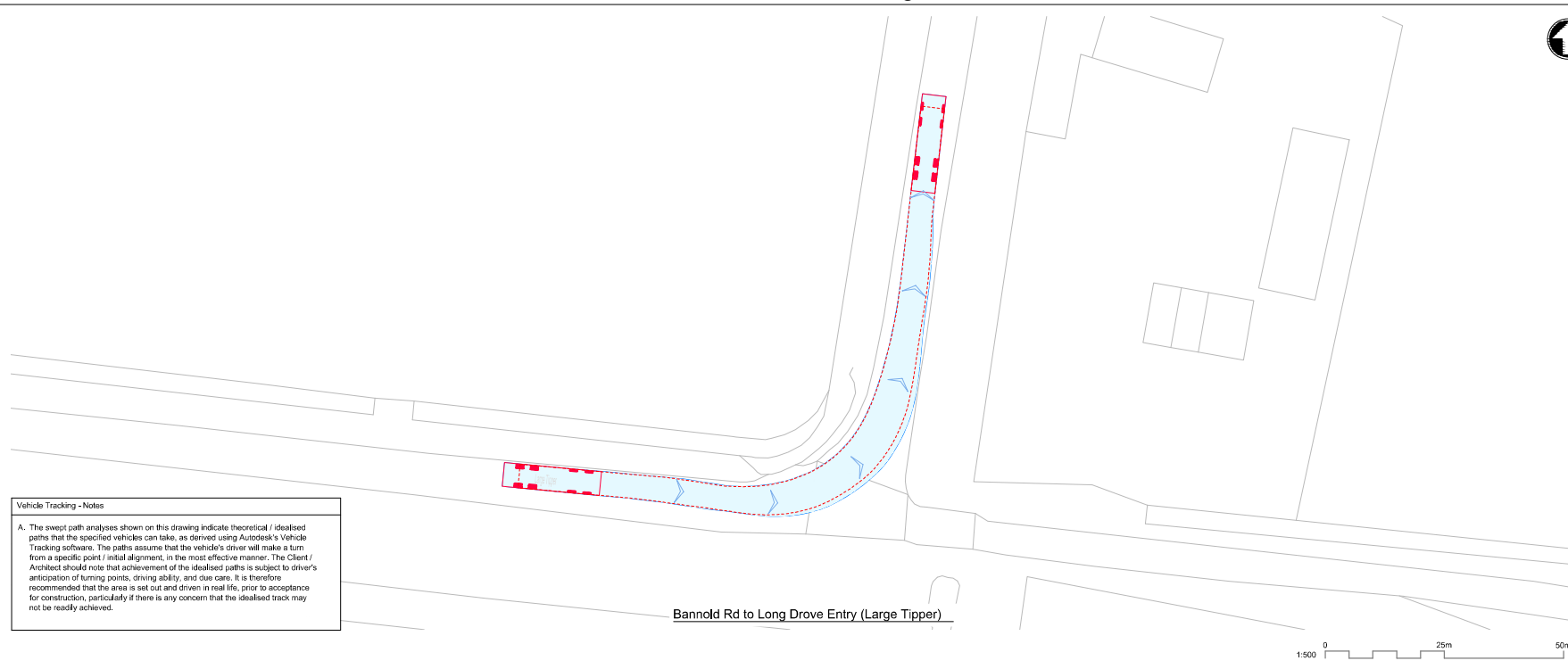


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 Bannold Rd - Long Drive
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

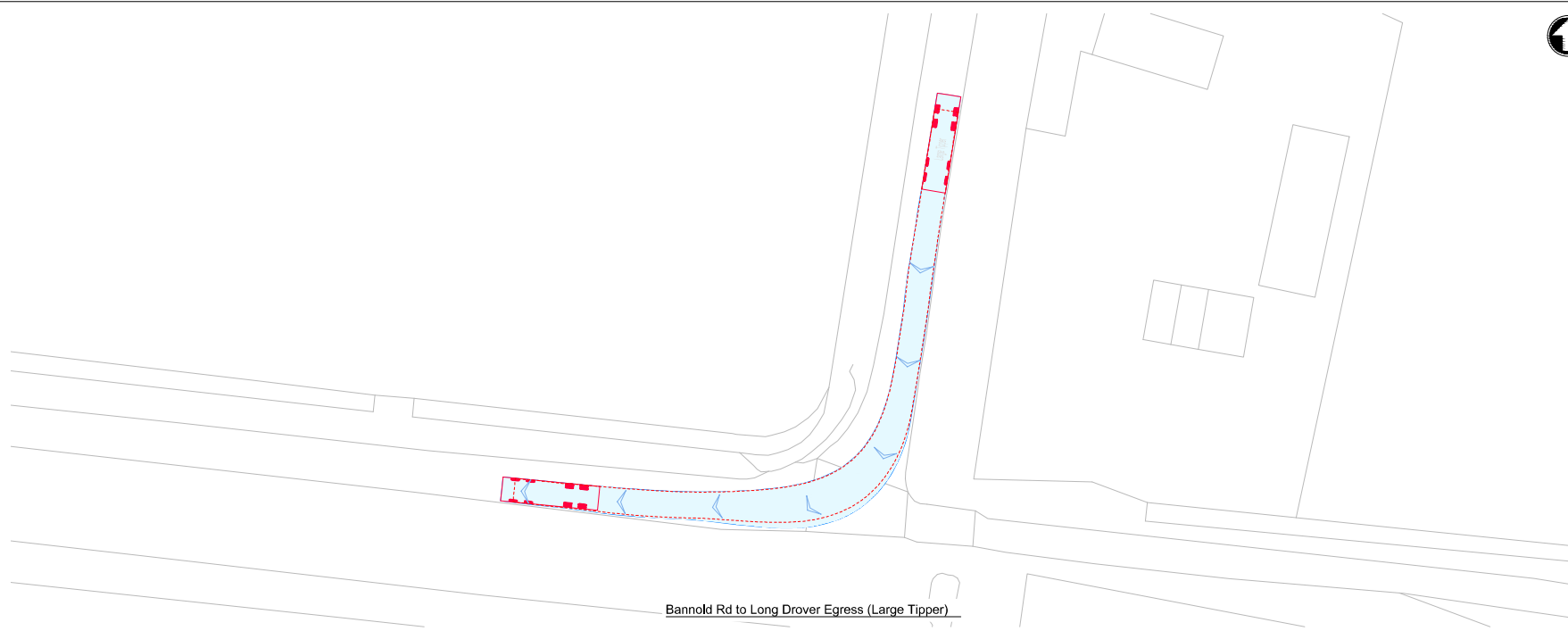
Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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Bannold Rd to Long Drove Entry (Large Tipper)



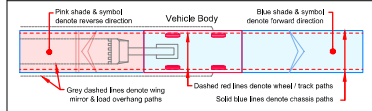
Bannold Rd to Long Drove Egress (Large Tipper)



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15. DRAWING MUST BE READ IN COLOUR

Vehicle Tracking - Key to Symbols



Vehicle Tracking - Vehicle Details

<p>Standard Low Loader with Trailer (Steering 1820m)</p> <p>Overall Length 24.60m Overall Width 2.45m Overall Body Height 3.40m Max Body Ground Clearance 2.00m Max. Trail Over 6.00m Lock to Lock time 4.00m Kerb to Kerb Turning Radius 18.00m</p>	<p>Large Mobile Crane</p> <p>Overall Length 12.00m Overall Width 2.45m Overall Body Height 3.40m Max Body Ground Clearance 2.00m Max. Trail Over 6.00m Lock to Lock time 4.00m Kerb to Kerb Turning Radius 18.00m</p>
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<p>Large Tipper</p> <p>Overall Length 10.00m Overall Width 2.85m Overall Body Height 3.50m Max Body Ground Clearance 2.00m Max. Trail Over 11.50m Lock to Lock time 4.00m Kerb to Kerb Turning Radius 8.00m</p>	<p>Standard Design Vehicle (SDV)</p> <p>Overall Length 4.80m Overall Width 1.90m Overall Body Height 2.00m Max Body Ground Clearance 1.20m Max. Trail Over 4.00m Lock to Lock time 4.00m Kerb to Kerb Turning Radius 8.00m</p>
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Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	15/09/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Appr

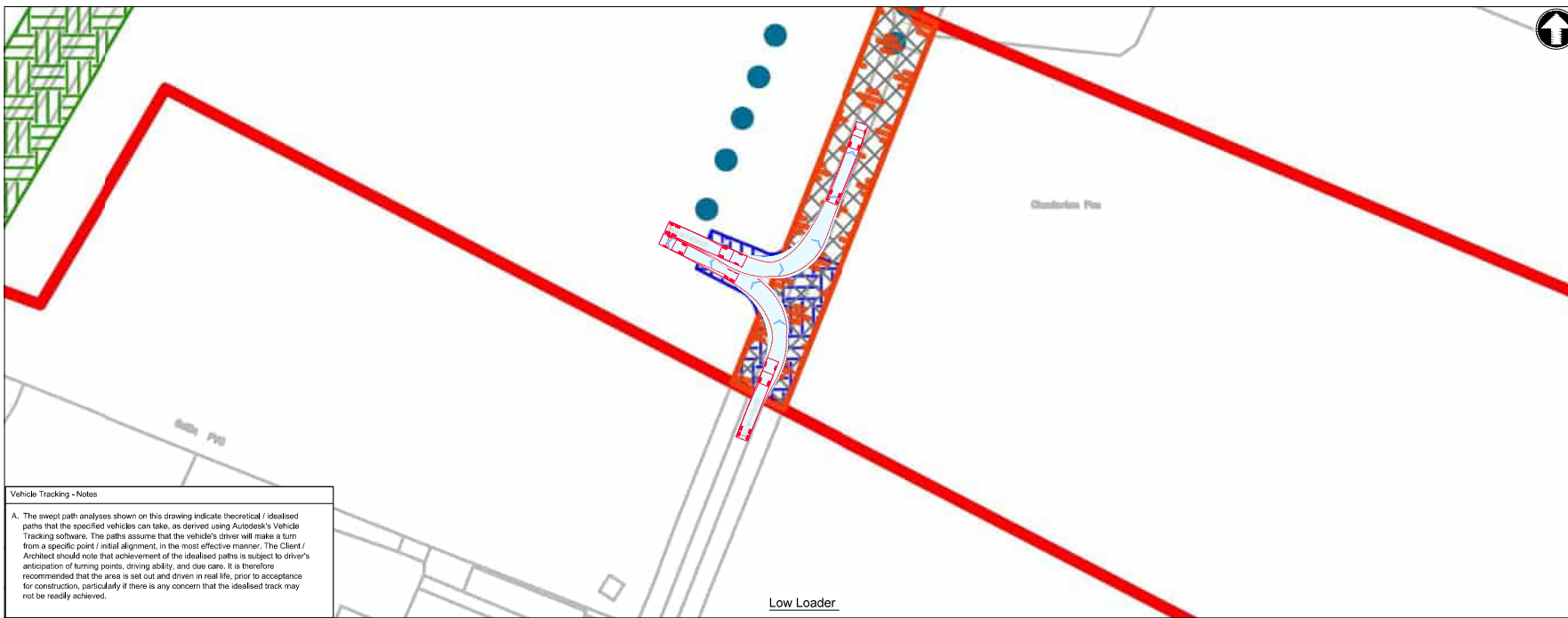


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
Bannold Rd - Long Drove
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:250	PRE	P1	STD

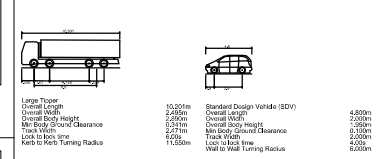
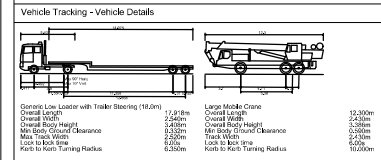
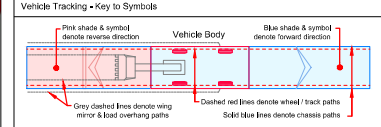
Drawing Number
102375-MMD-01-XX-DR-C-DRAFT



Vehicle Tracking - Notes

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 15. DRAWING MUST BE READ IN COLOUR



- Vehicle Tracking - Risks & Compliance**
- Risks**
- ⚠️ Kerb overrun
 - 🚫 Restrictive road width

P1	01/07/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Approved

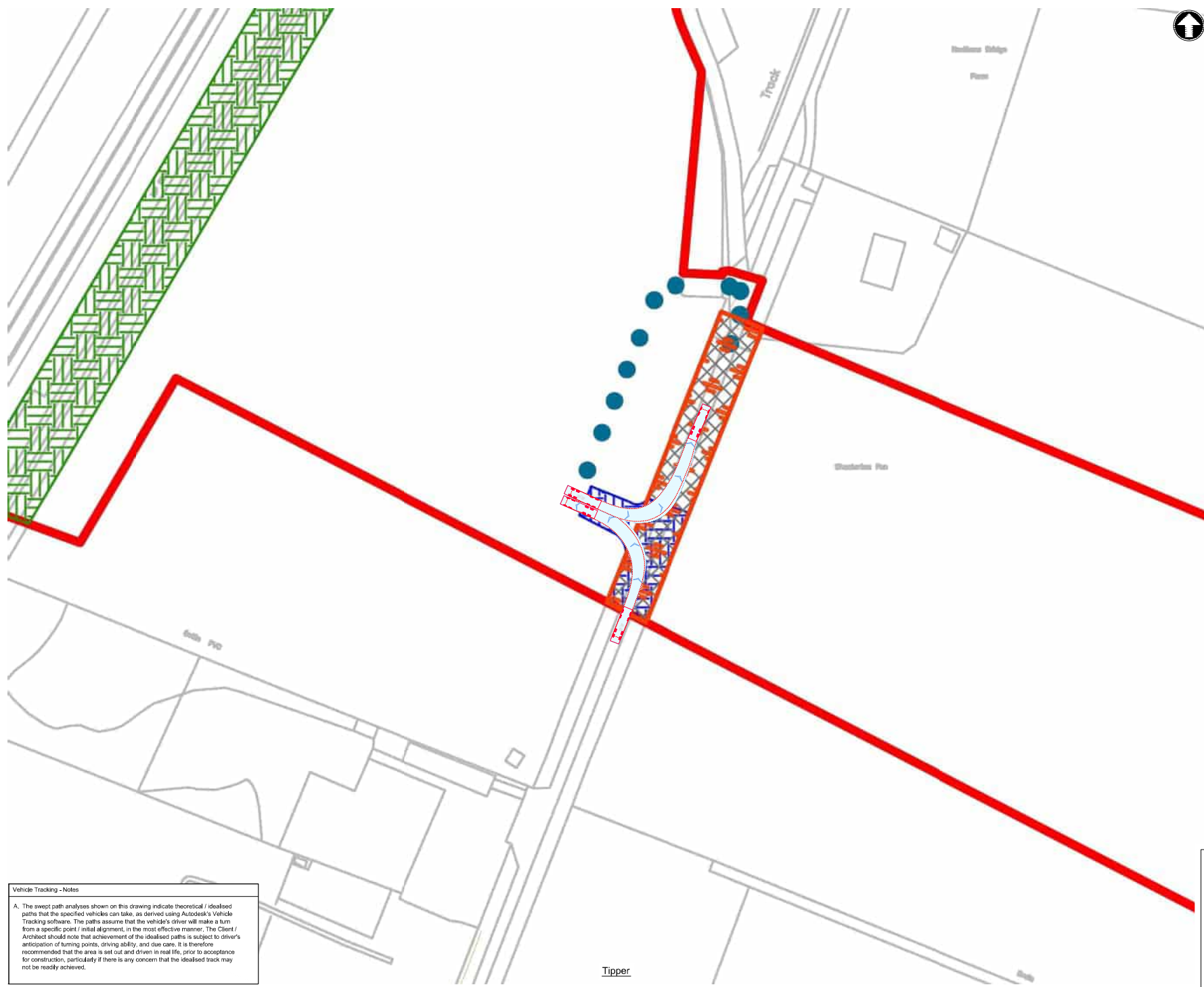


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 9012
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

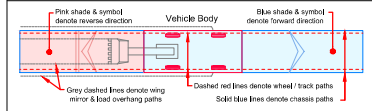
Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT



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Vehicle Tracking - Key to Symbols



Vehicle Tracking - Vehicle Details

	General Low Loader with Trailer (Steering 1820m)	Overall Length 24.60m	Overall Width 2.40m	Overall Body Height 3.30m	Max Body Ground Clearance 0.20m	Lock to Lock time 6.00m	Kerb to Kerb Turning Radius 10.00m
	Large Mobile Crane	Overall Length 12.200m	Overall Width 2.40m	Overall Body Height 3.30m	Max Body Ground Clearance 0.20m	Lock to Lock time 6.00m	Kerb to Kerb Turning Radius 10.00m
	Large Tipper	Overall Length 10.00m	Overall Width 2.85m	Overall Body Height 2.95m	Max Body Ground Clearance 0.20m	Lock to Lock time 6.00m	Kerb to Kerb Turning Radius 8.00m
	Standard Design Vehicle (EDV)	Overall Length 4.80m	Overall Width 1.95m	Overall Body Height 1.90m	Max Body Ground Clearance 0.20m	Lock to Lock time 4.00m	Kerb to Kerb Turning Radius 6.00m

Vehicle Tracking - Risks & Compliance

- Risks
- Kerb overrun
 - Restrictive road width

Rev	Date	Drawn	Description	CHK'd	App'd
P1		MF	Draft for Discussion / Review.	MF	MF



Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
9012
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT

Vehicle Tracking - Notes

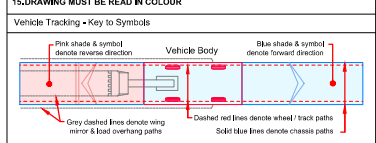
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Vehicle Tracking - Notes

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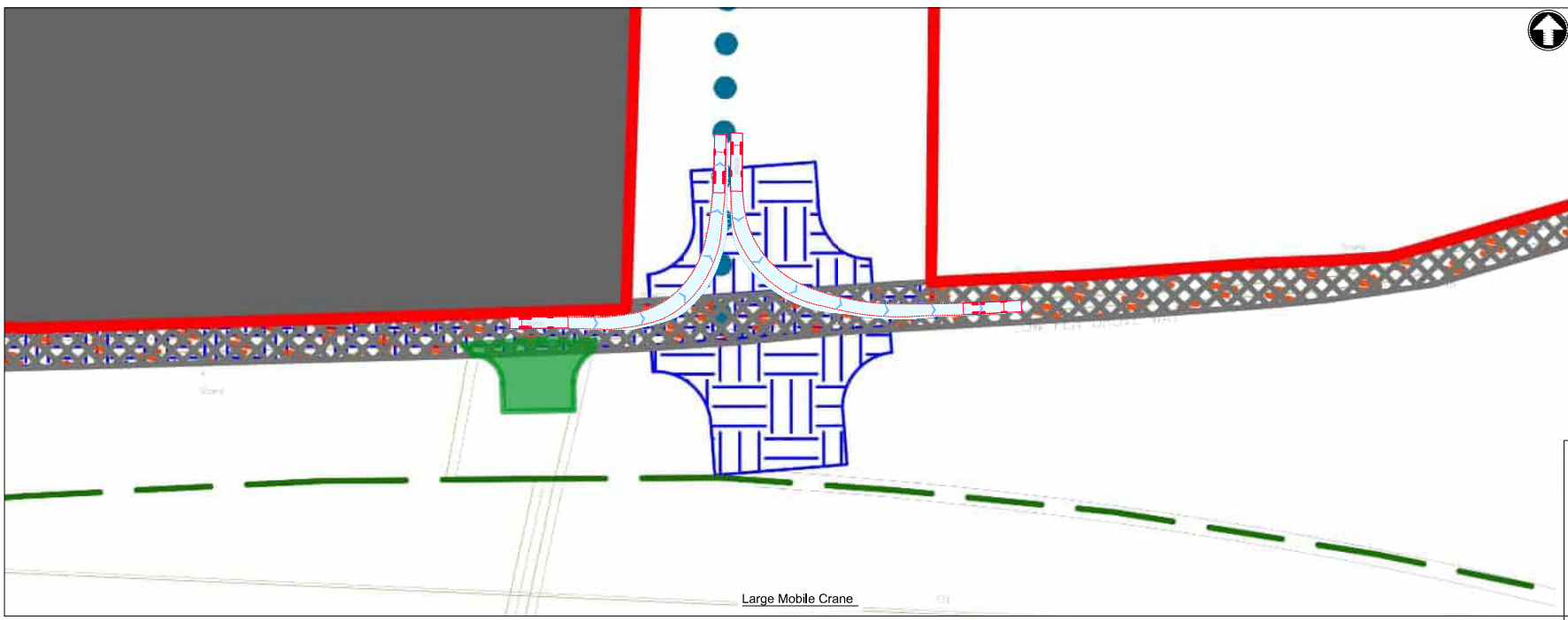
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Vehicle Tracking - Vehicle Details

Dimension	Low Loader with Trailer (Steering 1820m)	Large Mobile Crane	Standard Design Vehicle (SDV)
Overall Length	2,910mm	Overall Length	12,200mm
Overall Width	2,640mm	Overall Width	2,400mm
Overall Body Height	2,400mm	Overall Body Height	3,200mm
Max Body Ground Clearance	230mm	Max Body Ground Clearance	2,000mm
Max Wheel Height	620mm	Max Wheel Height	2,200mm
Lock to Lock Time	6.00s	Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	6.00m	Kerb to Kerb Turning Radius	10.00m

Dimension	Low Loader with Trailer (Steering 1820m)	Large Mobile Crane	Standard Design Vehicle (SDV)
Overall Length	2,910mm	Overall Length	12,200mm
Overall Width	2,640mm	Overall Width	2,400mm
Overall Body Height	2,400mm	Overall Body Height	3,200mm
Max Body Ground Clearance	230mm	Max Body Ground Clearance	2,000mm
Max Wheel Height	620mm	Max Wheel Height	2,200mm
Lock to Lock Time	6.00s	Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	6.00m	Kerb to Kerb Turning Radius	10.00m



- Vehicle Tracking - Risks & Compliance**
- Risks**
- ⚠️ Kerb overrun
 - 🚫 Restrictive road width

Rev	Date	Drawn	Description	CHK'd	App'd
P1		MF	Draft for Discussion / Review.	MF	MF

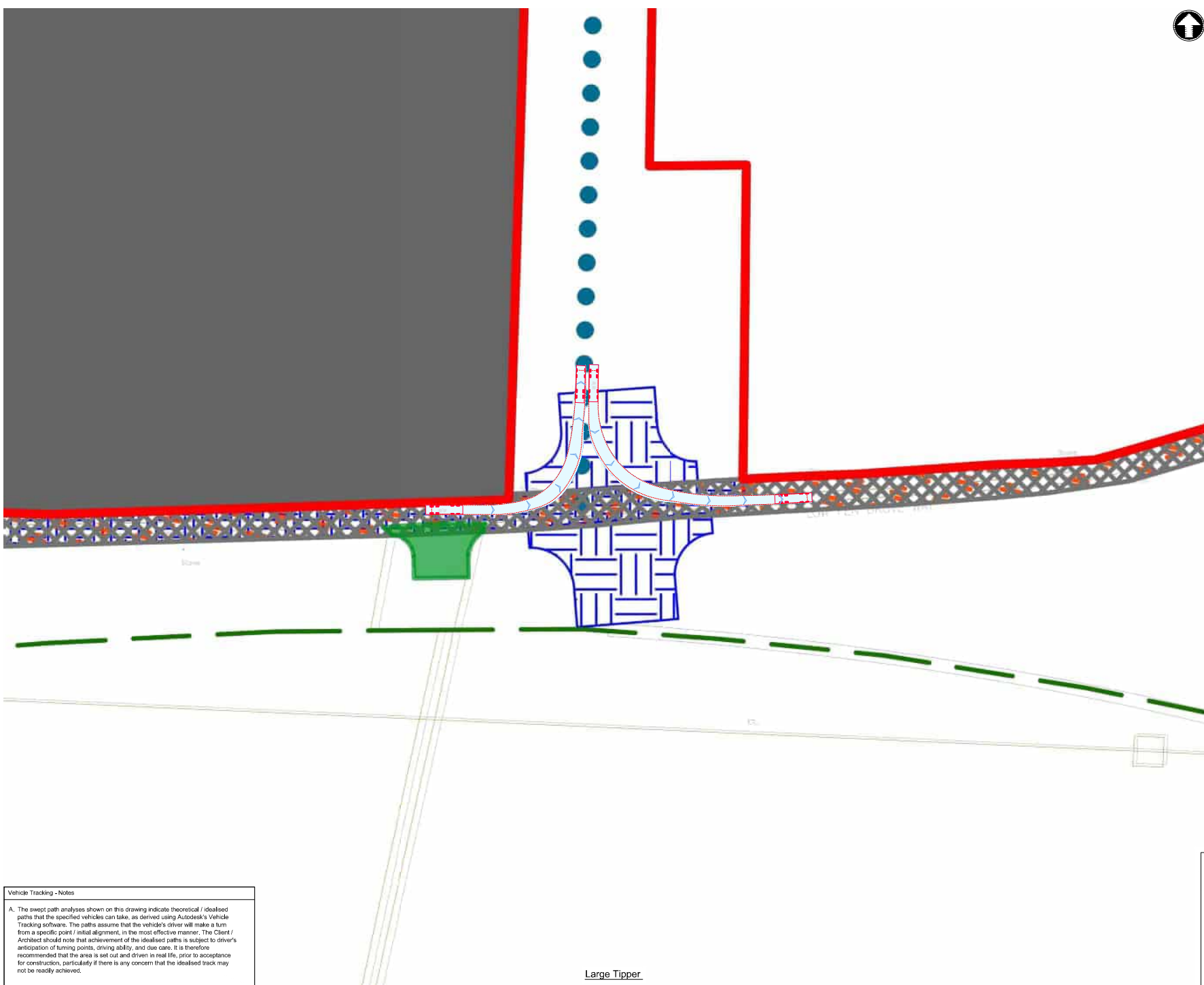


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
9013
Highways GA, Visibility Splay and
Vehicle Tracking

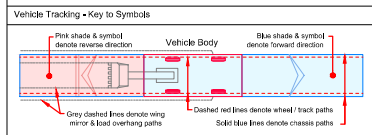
Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT



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Vehicle Tracking - Vehicle Details

Parameter	Large Tipper	Standard Design Vehicle (SDV)
Overall Length	10.00m	4.80m
Overall Width	2.85m	2.00m
Overall Body Height	3.25m	2.00m
Min Body Ground Clearance	0.25m	0.25m
Max Wheel Overhang	2.50m	0.75m
Lock to Lock time	6.00m	4.00m
Kerb to Kerb Turning Radius	11.50m	6.00m

Vehicle Tracking - Risks & Compliance

Risks

- Kerb overrun
- Restrictive road width

Rev	Date	Drawn	Description	Appr	Appr
P1		MF	Draft for Discussion / Review.	MF	MF



Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
9013
Highways GA, Visibility Splay and
Vehicle Tracking

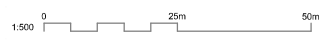
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Drawn	M Fonseca	MF	Coordination	-
Dwg check	-		Approved	-

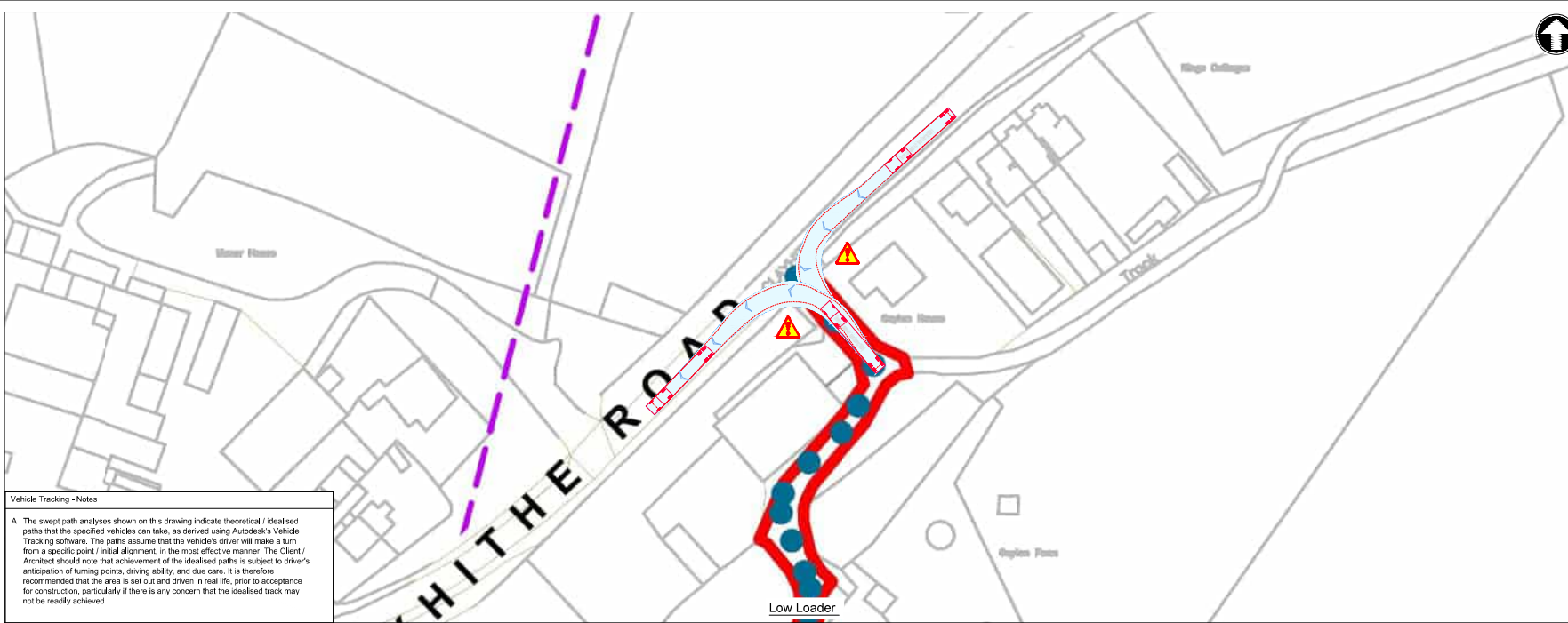
Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT

Vehicle Tracking - Notes

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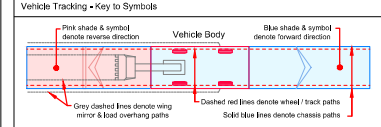


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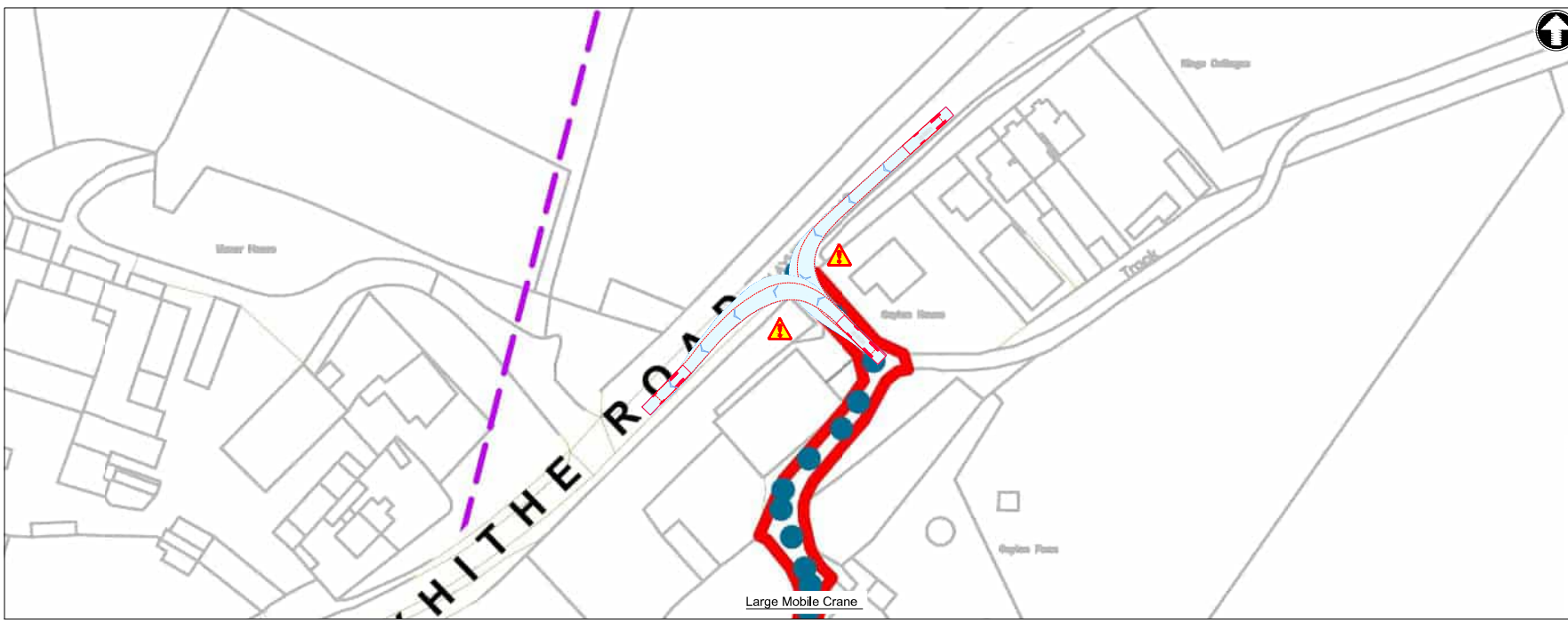
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Vehicle Tracking - Vehicle Details

<p>General Low Loader with Trailer (Steering 1820m)</p> <ul style="list-style-type: none"> Overall Length: 24.60m Overall Width: 2.40m Overall Body Height: 2.40m Min Body Ground Clearance: 0.30m Max. Turn Time: 6.00m Lock to Lock Time: 6.00m Kerb to Kerb Turning Radius: 6.00m 	<p>Large Mobile Crane</p> <ul style="list-style-type: none"> Overall Length: 12.30m Overall Width: 2.40m Overall Body Height: 3.30m Min Body Ground Clearance: 0.30m Max. Turn Time: 6.00m Lock to Lock Time: 6.00m Kerb to Kerb Turning Radius: 6.00m

<p>Large Tipper</p> <ul style="list-style-type: none"> Overall Length: 10.00m Overall Width: 2.85m Overall Body Height: 2.85m Min Body Ground Clearance: 0.30m Max. Turn Time: 11.50m Lock to Lock Time: 11.50m Kerb to Kerb Turning Radius: 11.50m 	<p>Standard Design Vehicle (SDV)</p> <ul style="list-style-type: none"> Overall Length: 4.80m Overall Width: 1.90m Overall Body Height: 1.90m Min Body Ground Clearance: 0.30m Max. Turn Time: 4.80m Lock to Lock Time: 4.80m Kerb to Kerb Turning Radius: 4.80m



Vehicle Tracking - Risks & Compliance

- Risks**
- Kerb overrun
 - Restrictive road width

P1	01/11/2022	M/F	Draft for Discussion / Review.	M/F	M/F
Rev	Date	Drawn	Description	Checked	Approved



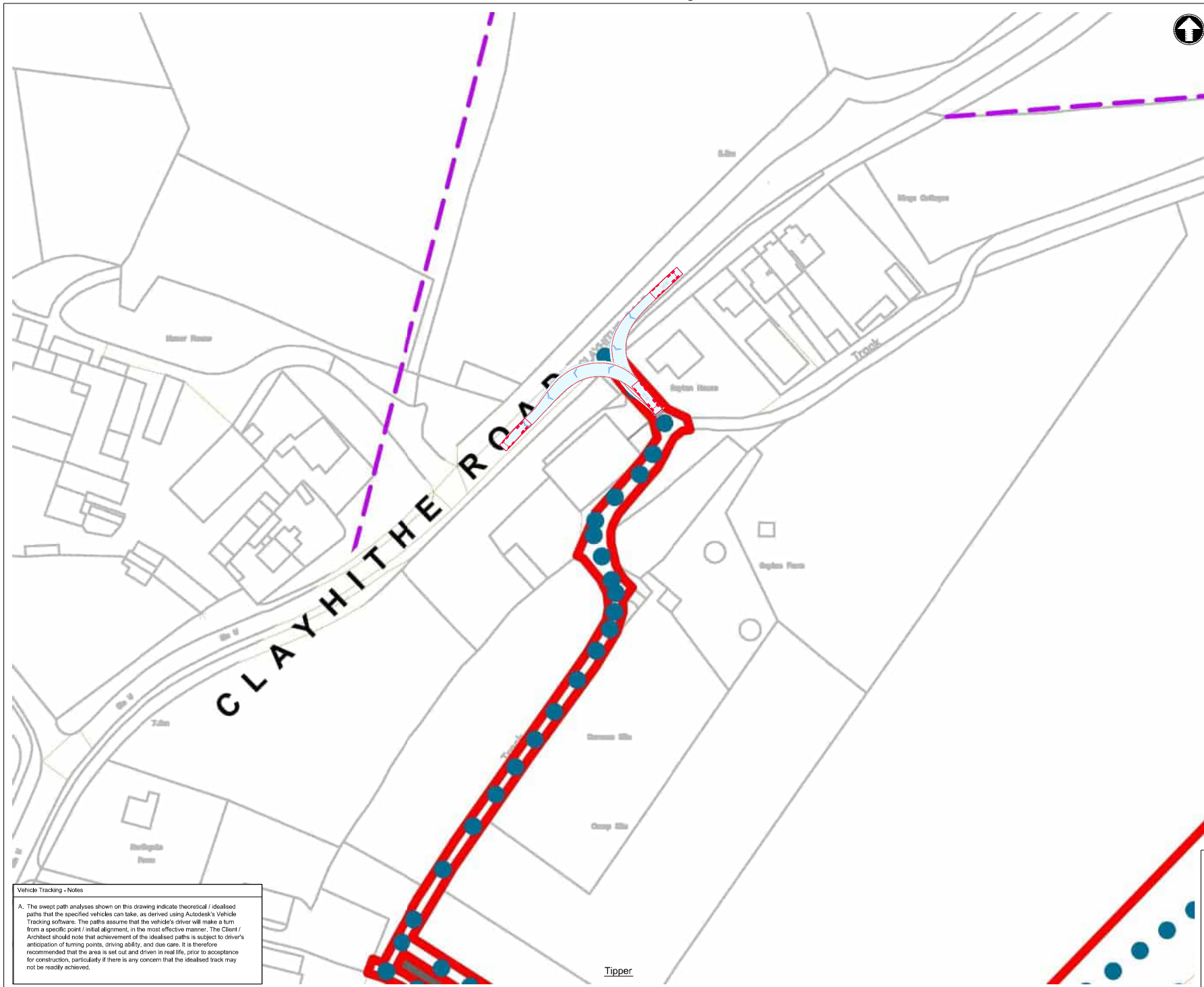
Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 9016
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

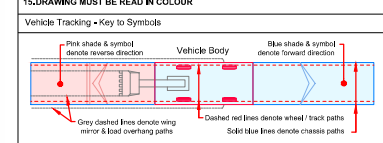
Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
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Vehicle Tracking - Vehicle Details

Parameter	Value	Parameter	Value
Container Lorry (with Trailer Stacking (1620))	2.90m	Large Mobile Crane	12.20m
Overall Length	2.90m	Overall Width	2.40m
Overall Width	2.40m	Overall Height	3.20m
Overall Body Height	2.40m	Max Body Ground Clearance	0.20m
Max Body Ground Clearance	0.20m	Max Body Ground Clearance	0.20m
Max Wheel Overhang	0.20m	Max Wheel Overhang	0.20m
Lock to Lock time	6.00m	Lock to Lock time	6.00m
Kerb to Kerb Turning Radius	11.50m	Kerb to Kerb Turning Radius	11.50m

Parameter	Value	Parameter	Value
Large Tipper	10.00m	Standard Design Vehicle (SDV)	4.80m
Overall Length	10.00m	Overall Width	2.00m
Overall Width	2.00m	Overall Height	2.00m
Overall Body Height	2.00m	Max Body Ground Clearance	0.20m
Max Body Ground Clearance	0.20m	Max Body Ground Clearance	0.20m
Max Wheel Overhang	0.20m	Max Wheel Overhang	0.20m
Lock to Lock time	11.50m	Lock to Lock time	11.50m
Kerb to Kerb Turning Radius	11.50m	Kerb to Kerb Turning Radius	11.50m

- Vehicle Tracking - Risks & Compliance
- Risks
- Kerb overrun
 - Restrictive road width

Rev	Date	Drawn	Description	Rev	Appr
P1		MF	Draft for Discussion / Review.	MF	MF
Rev 1				CHV	ALD

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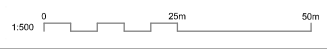


Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 9016
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-		Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
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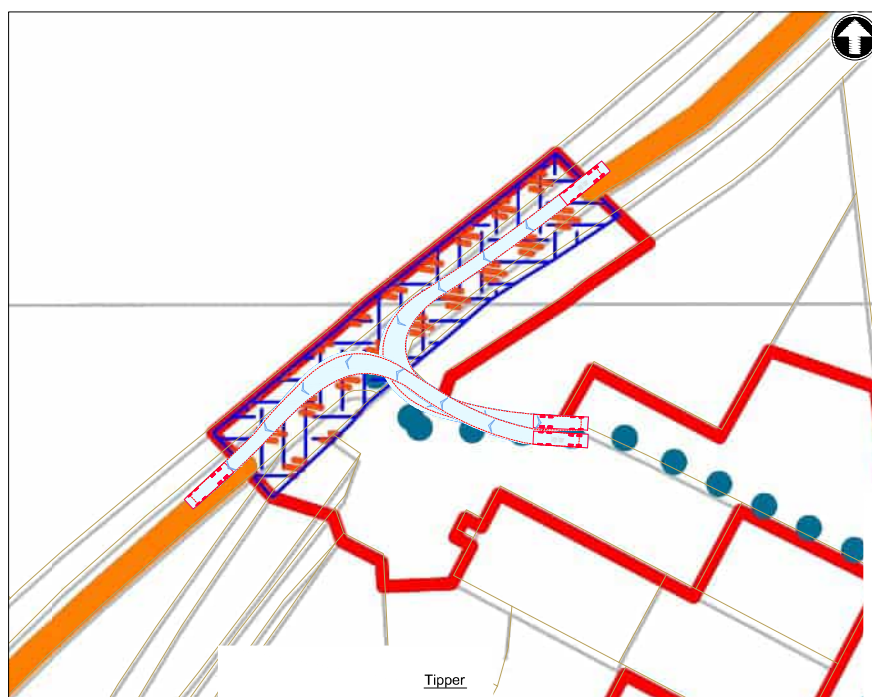
Low Loader



Large Mobile Crane

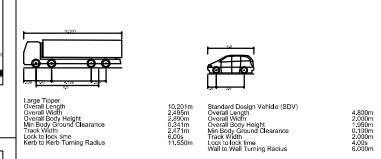
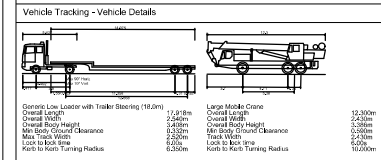
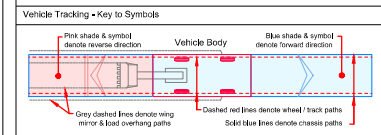


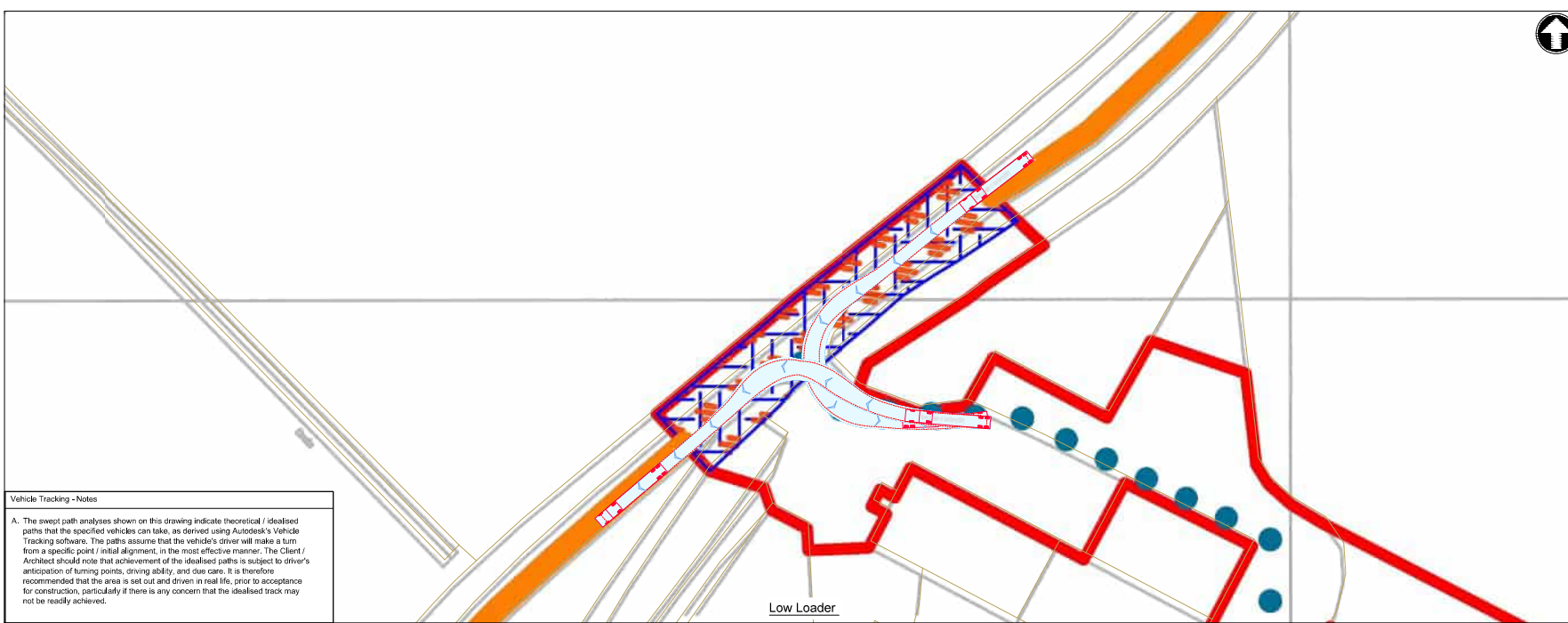
Tipper



Tipper

- Notes
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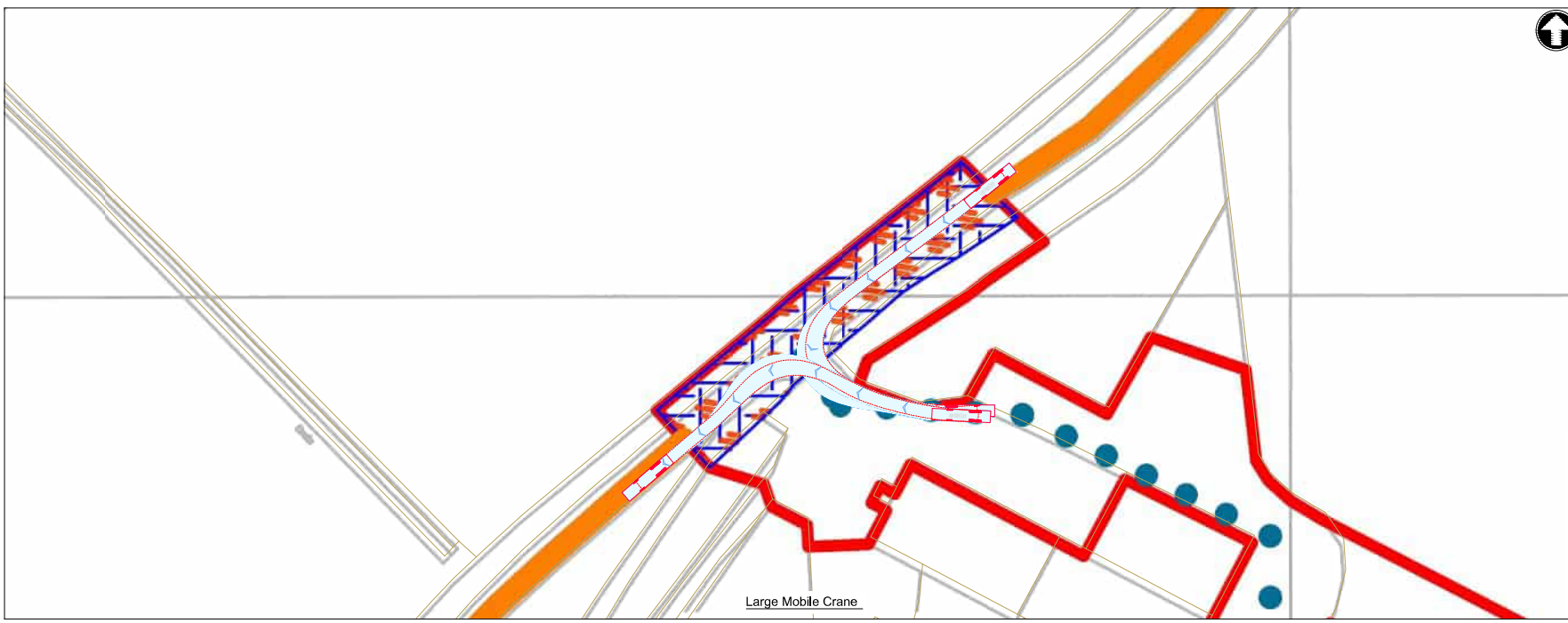
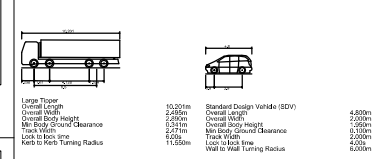
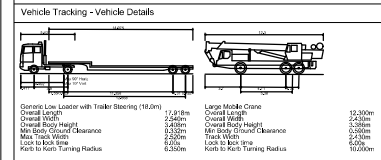
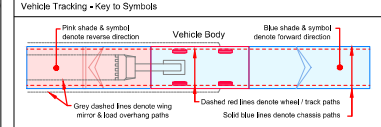




Vehicle Tracking - Notes

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- Vehicle Tracking - Risks & Compliance**
- Risks**
- ⚠️ Kerb overrun
 - 🚫 Restrictive road width

Rev	Date	Drawn	Description	Rev	Appr
P1		MF	Draft for Discussion / Review.	MF	MF
				CHW	Appr

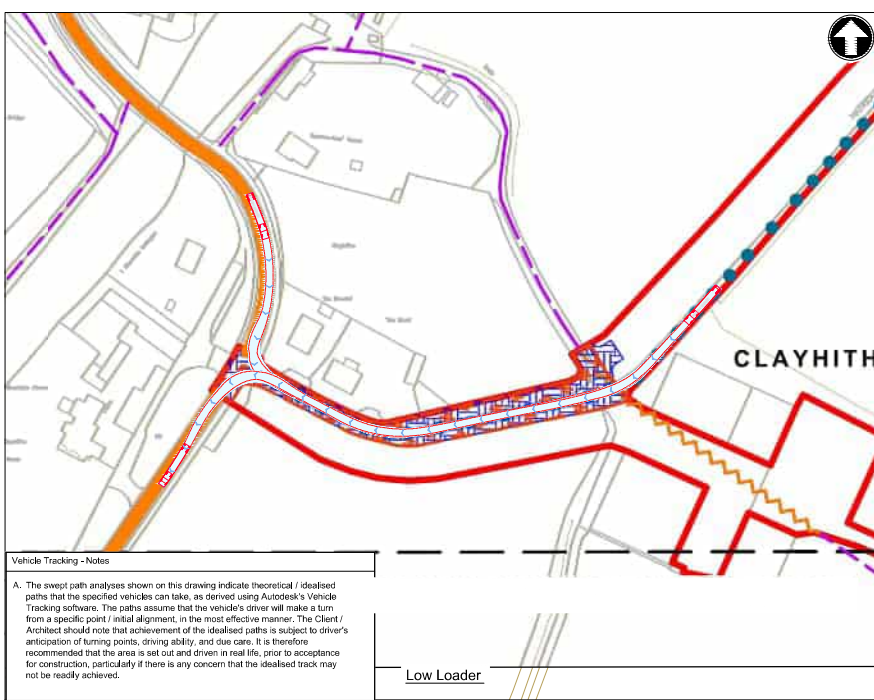


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
9017
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-
Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

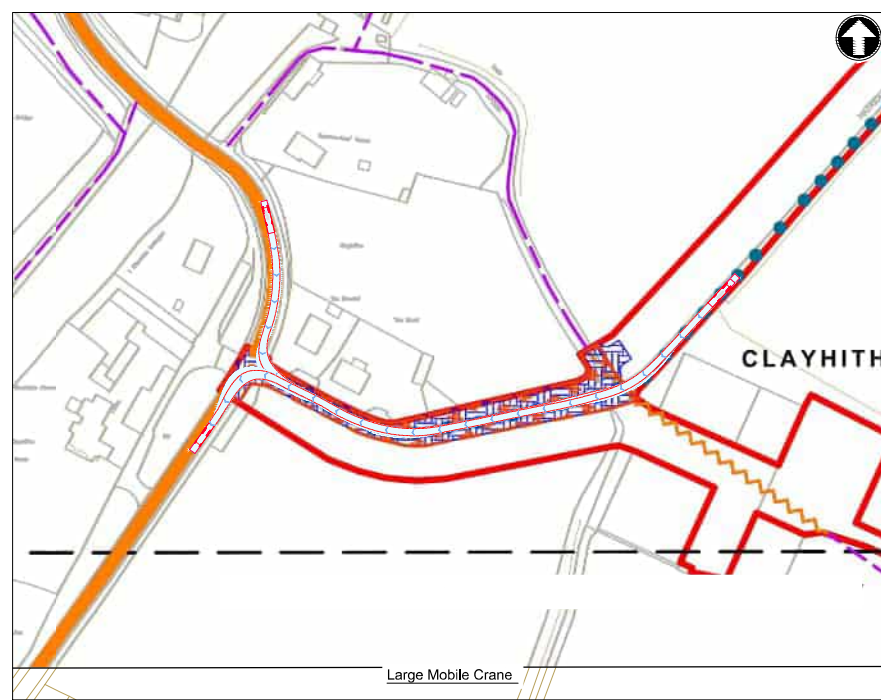
Drawing Number
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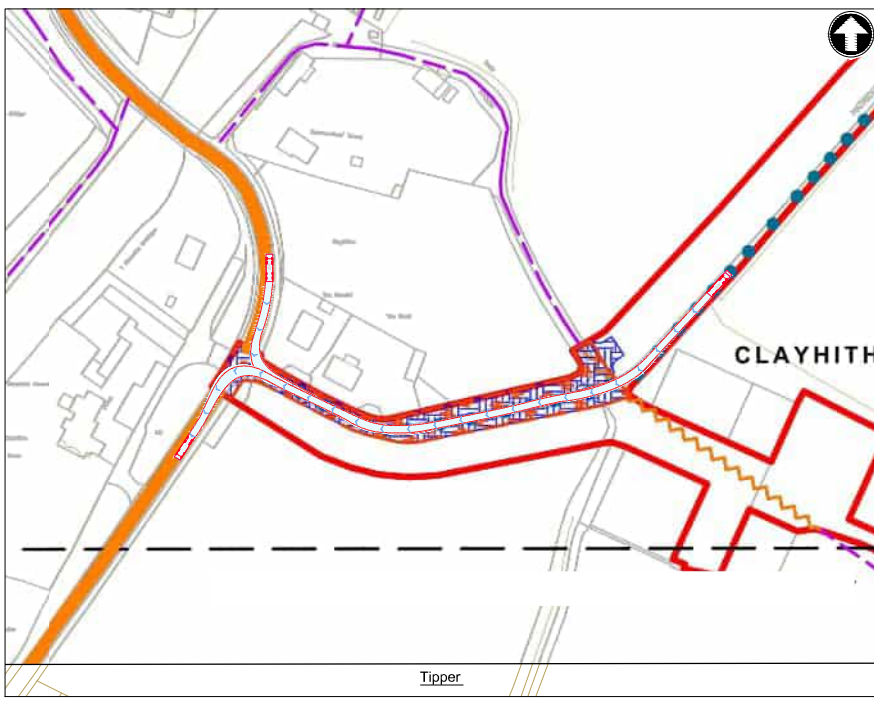
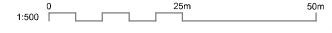
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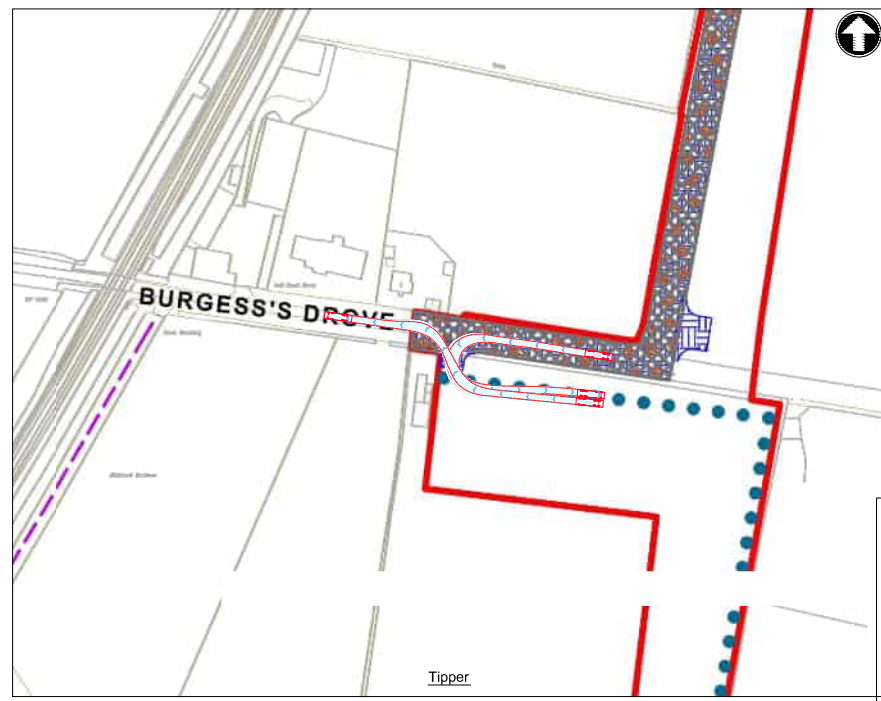
Low Loader



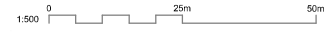
Large Mobile Crane



Tipper

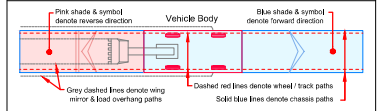


Tipper



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Vehicle Tracking - Vehicle Details

Vehicle Type	Overall Length	Overall Width	Overall Height	Max Body Ground Clearance	Max Body Overhang	Wheel Track	Lock to Lock	Kerb to Kerb Turning Radius
Low Loader with Trailer (Steering 180°)	24.60m	2.40m	2.40m	0.30m	2.40m	2.40m	6.00m	6.00m
Large Mobile Crane	12.00m	2.40m	2.40m	0.30m	2.40m	2.40m	6.00m	6.00m

Vehicle Type	Overall Length	Overall Width	Overall Height	Max Body Ground Clearance	Max Body Overhang	Wheel Track	Lock to Lock	Kerb to Kerb Turning Radius
Large Tipper	10.00m	2.40m	2.40m	0.30m	2.40m	2.40m	6.00m	6.00m
Standard Design Vehicle (SDV)	4.50m	2.00m	2.00m	0.30m	2.00m	2.00m	4.00m	4.00m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

Rev	Date	Drawn	Description	Checked	Approved
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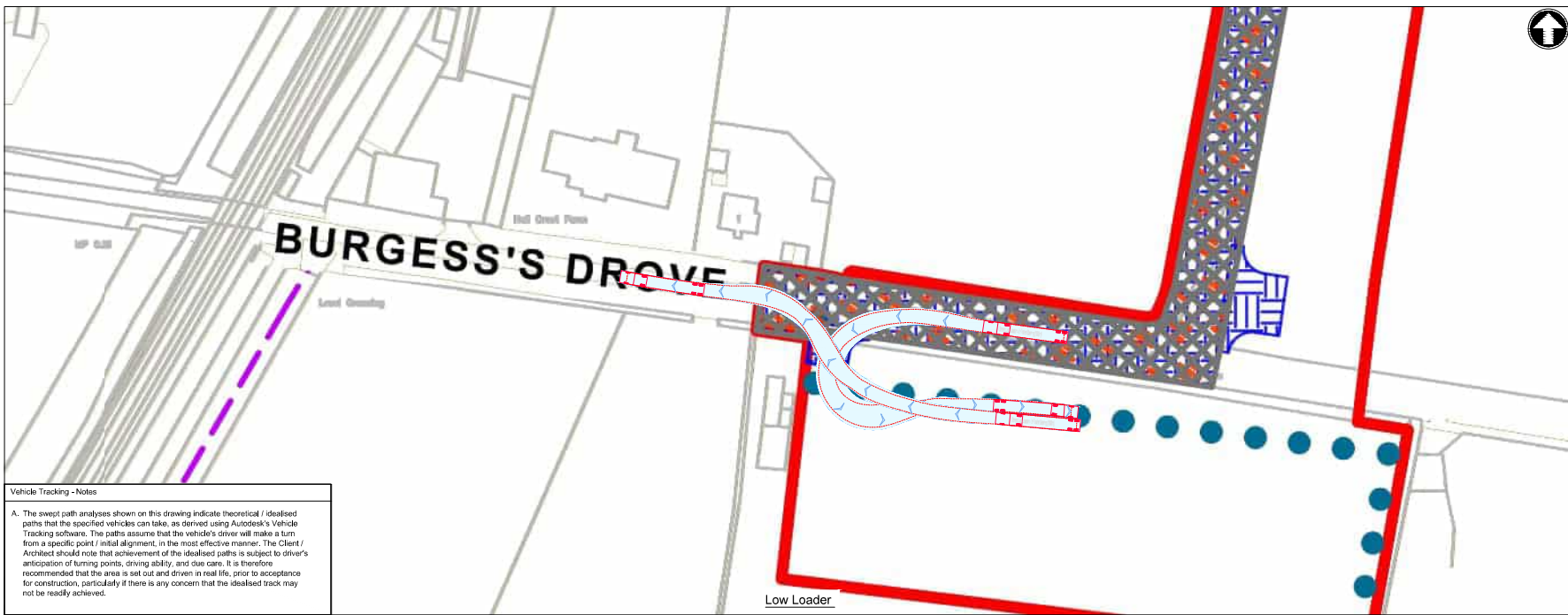


Title
Cambridge Waste Water Treatment Works Relocation
Temporary Access Junctions
9018
Highways GA, Visibility Splay and
Vehicle Tracking

Designed	M Fonseca	M/F	Eng check	-
Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
1:1000	PRE	P1	STD

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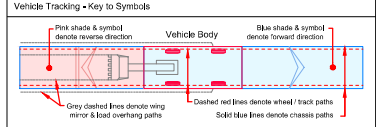


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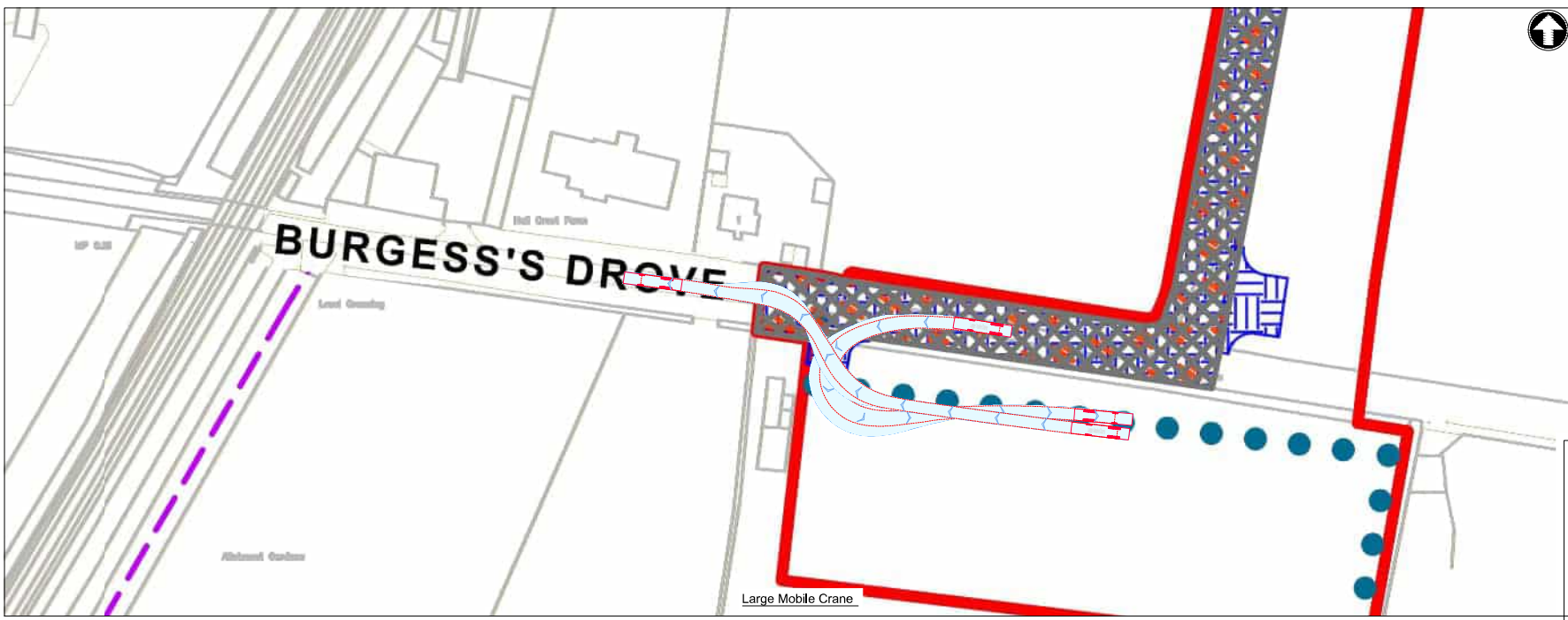
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Vehicle Tracking - Vehicle Details

Vehicle Type	Overall Length	Overall Width	Overall Height	Max Body Ground Clearance	Max Wheel Ground Clearance	Lock to Lock time	Kerb to Kerb Turning Radius
General Low Loader with Trailer (Steering 1820m)	24.60m	2.40m	3.40m	0.30m	0.25m	6.00m	10.00m
Large Mobile Crane	12.00m	2.40m	3.50m	0.30m	0.25m	6.00m	10.00m

Large Tipper	10.00m	2.40m	3.50m	0.30m	0.25m	6.00m	10.00m
Standard Design Vehicle (SDV)	4.60m	1.90m	1.90m	0.20m	0.15m	4.00m	6.00m



- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

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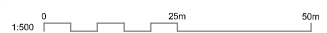


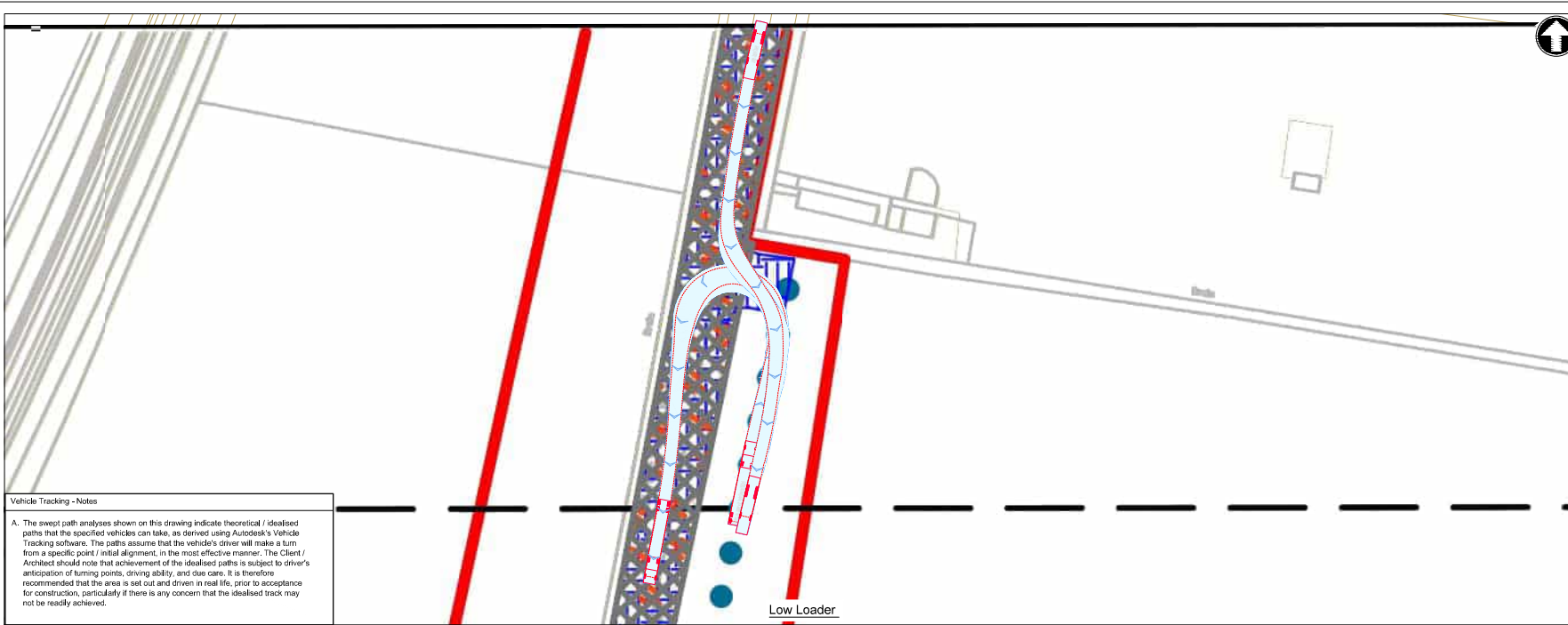
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9018
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Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
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Drawing Number
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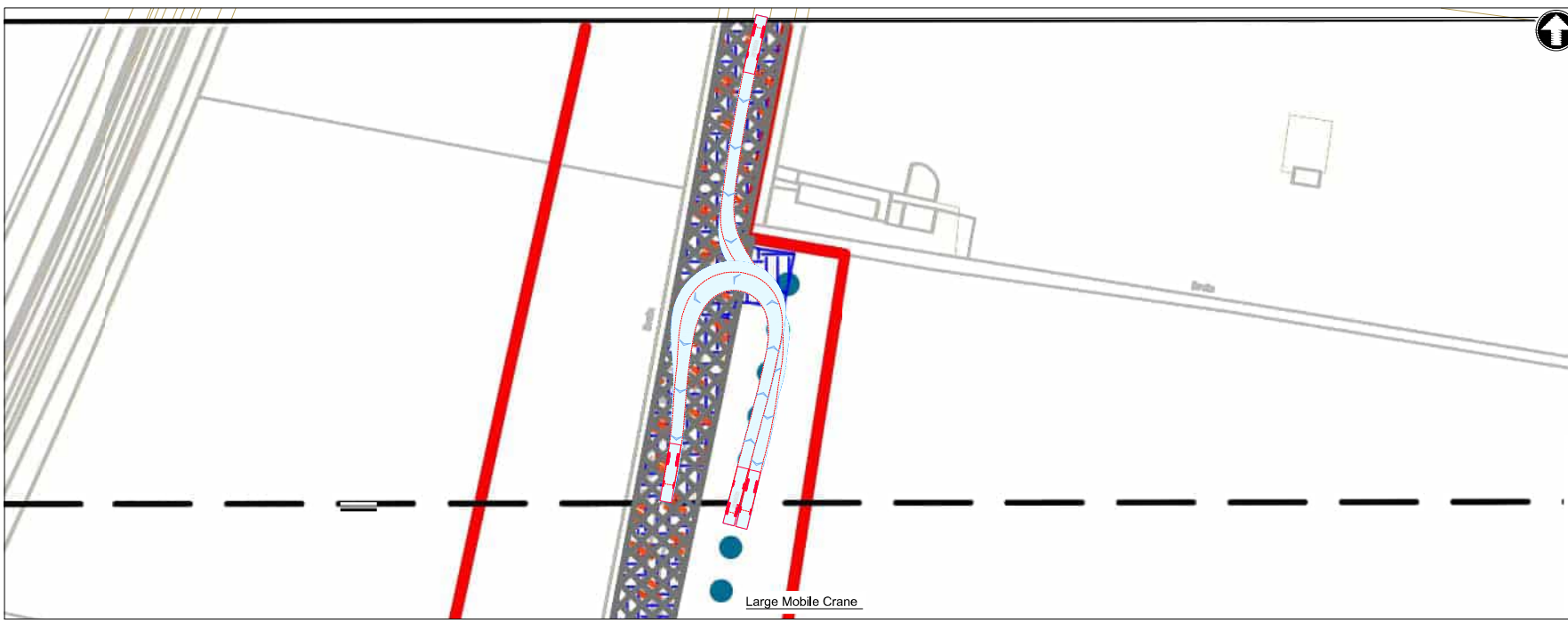
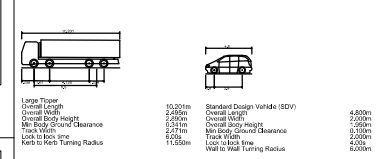
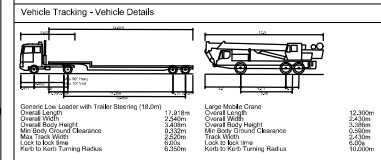
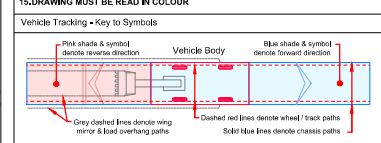




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- Vehicle Tracking - Risks & Compliance**
- Risks**
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Rev	Date	Drawn	Description	CHK'd	App'd

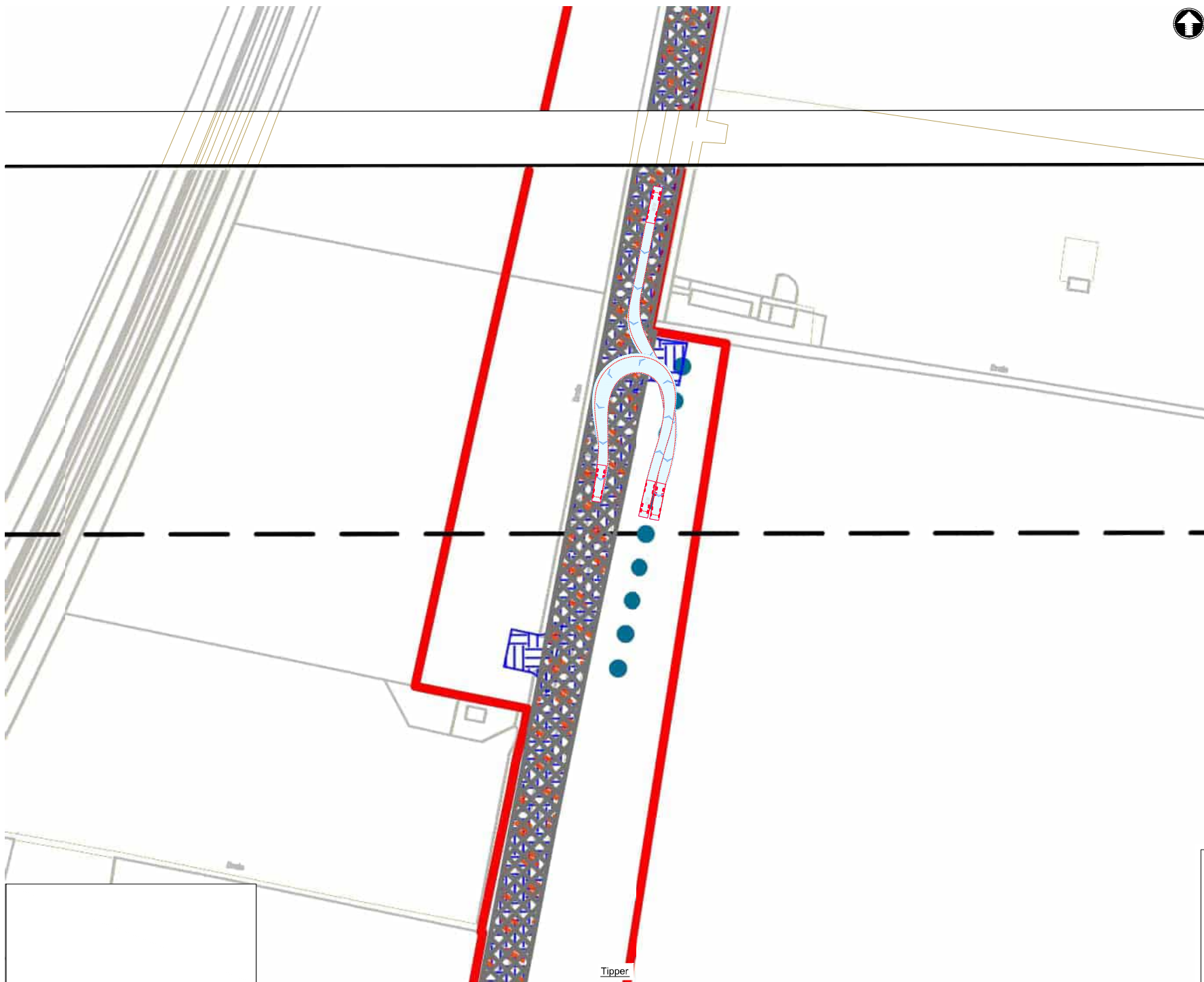


Title
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Temporary Access Junctions
9018
Highways GA, Visibility Splay and
Vehicle Tracking

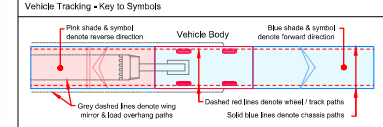
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Drawn	M Fonseca	M/F	Coordination	-
Dwg check	-	-	Approved	-

Scale at A1	Status	Rev	Security
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Vehicle Tracking - Vehicle Details

Parameter	Tipper	Standard Design Vehicle (SDV)
Overall Length	7.97m	12.20m
Overall Width	2.66m	2.45m
Overall Body Height	3.49m	3.20m
Min Body Ground Clearance	0.32m	0.25m
Max Wheel Overhang	2.20m	2.50m
Lock to Lock Time	6.07m	6.07m
Kerb to Kerb Turning Radius	10.66m	10.00m

- Vehicle Tracking - Risks & Compliance**
- Risks**
- Kerb overrun
 - Restrictive road width

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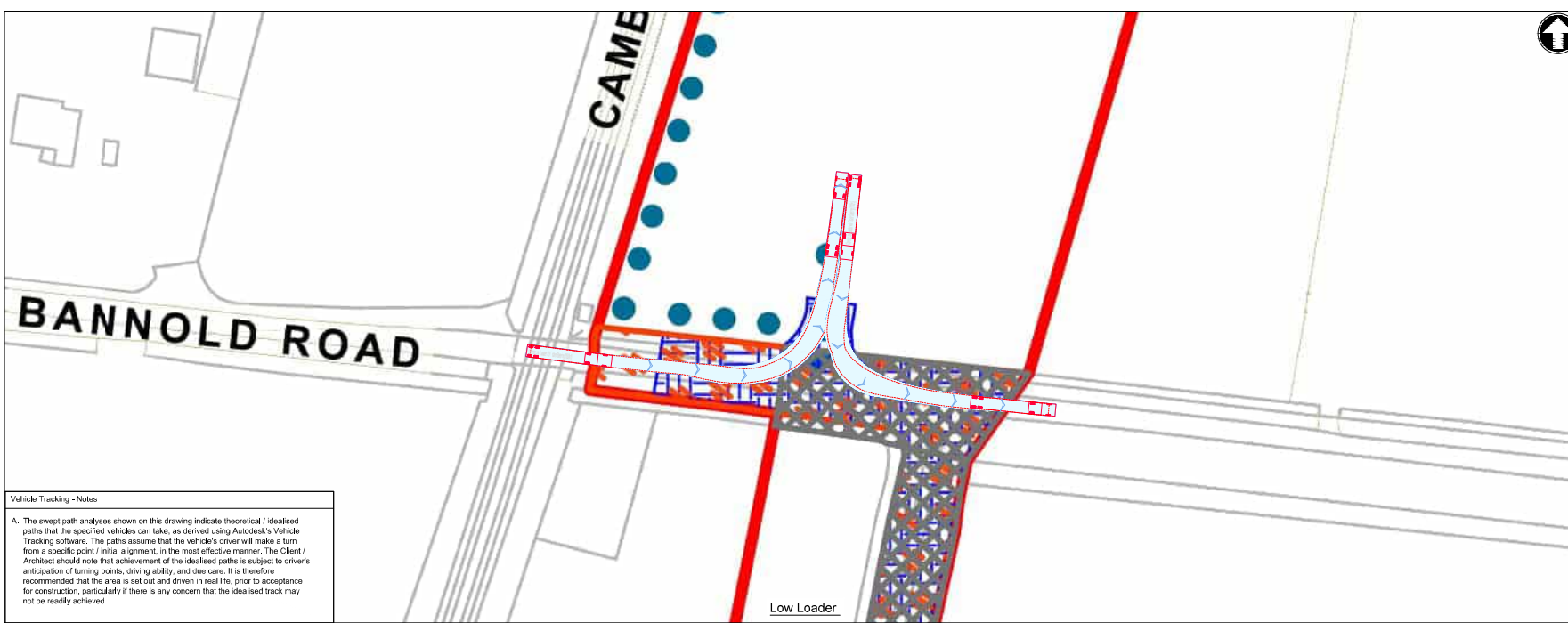
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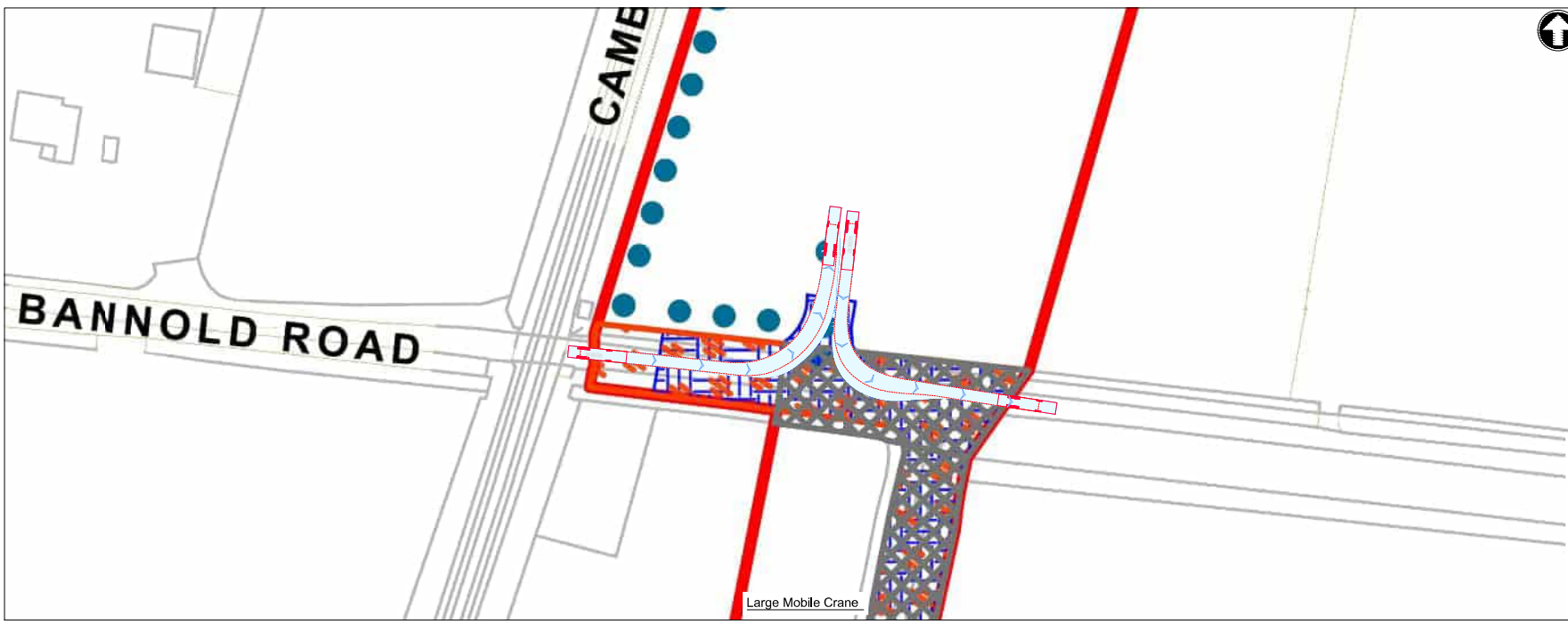
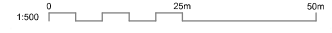
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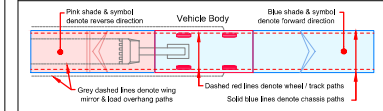
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Vehicle Tracking - Vehicle Details

<p>Standard Low Loader with Trailer (Steering 1820m)</p> <ul style="list-style-type: none"> Overall Length: 24.60m Overall Width: 2.40m Overall Body Height: 3.40m Max Body Ground Clearance: 0.20m Max. Trail: 12.00m Lock to lock time: 6.00m Kerb to Kerb Turning Radius: 6.00m 	<p>Large Mobile Crane</p> <ul style="list-style-type: none"> Overall Length: 12.00m Overall Width: 2.40m Overall Body Height: 3.50m Max Body Ground Clearance: 0.20m Max. Trail: 12.00m Lock to lock time: 6.00m Kerb to Kerb Turning Radius: 6.00m
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<p>Large Tipper</p> <ul style="list-style-type: none"> Overall Length: 16.00m Overall Width: 2.85m Overall Body Height: 2.95m Max Body Ground Clearance: 0.20m Max. Trail: 11.50m Lock to lock time: 6.00m Kerb to Kerb Turning Radius: 6.00m 	<p>Standard Design Vehicle (SDV)</p> <ul style="list-style-type: none"> Overall Length: 4.80m Overall Width: 1.90m Overall Body Height: 1.90m Max Body Ground Clearance: 0.20m Max. Trail: 4.00m Lock to lock time: 4.00m Kerb to Kerb Turning Radius: 4.00m
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Vehicle Tracking - Risks & Compliance

Risks

- Kerb overrun
- Restrictive road width

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Rev	Date	Drawn	Description	Checked	Appr



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Drawn	M Fonseca	MF	Coordination	-
Dwg check	-	-	Approved	-

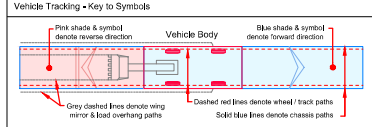
Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
102375-MMD-01-XX-DR-C-DRAFT



- Notes
1. Do not scale from this drawing.
 2. All dimensions are in metres unless otherwise shown. All levels are in metres above Ordnance Datum (AOD). All dimensions & levels should be checked on site.
 3. Any drawing errors or discrepancies should be brought to the attention of Mott MacDonald at the address shown in the title block.
 4. This drawing has been prepared for the initial high level optioneering study for the CWWTW project.
 5. The drawing is based on OS mapping information and LIDAR data.
 6. The information is preliminary and subject to further detailed design.
 7. The design has not been submitted to the Highway Authority or Highways England for their technical review.
 8. The drawing does not include any information on proposed highway drainage and associated SUDS, existing or proposed utilities or other existing assets that may need to be protected or diverted as part of the works.
 9. The design requires works to the public highway and would require further discussions with the relevant stakeholders. The design is subject to change and additional land take.
 10. The drawings do not include any street lighting or other highway infrastructure which may be required as part of the overall scheme design.
 11. The design assumes an embankment slope of 1:3 is acceptable to the relevant stakeholders.
 12. The design is based on the requirements of DMRB, Manual for Streets has been adopted for some extents of the proposed access roads.
 13. The proposal requires third party land to be constructed. The extent of the land take is to be determined during future stages of the design development of this option.
 14. This drawing should be read in conjunction with the Technical Memo - Cambridge Waste Water Treatment Works Relocation Early assessment and siting of proposed site access options.

15. DRAWING MUST BE READ IN COLOUR



Vehicle Tracking - Vehicle Details

Tipper		Standard Design Vehicle (SDV)	
Overall Length	7.91m	Overall Length	12.200m
Overall Width	2.66m	Overall Width	2.45m
Overall Body Height	3.49m	Overall Body Height	3.30m
Min Body Ground Clearance	0.32m	Min Body Ground Clearance	0.25m
Max. Rear Overhang	2.50m	Max. Rear Overhang	2.50m
Lock to Lock time	6.07m	Lock to Lock time	6.07m
Kerb to Kerb Turning Radius	11.550m	Kerb to Kerb Turning Radius	10.000m

Vehicle Tracking - Risks & Compliance

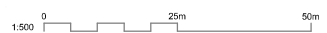
Risks

- Kerb overrun
- Restrictive road width

Rev	Date	Drawn	Description	CHK'd	APP'd
P1		MF	Draft for Discussion / Review.	MF	MF

Vehicle Tracking - Notes

A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.



Title
 Cambridge Waste Water Treatment Works Relocation
 Temporary Access Junctions
 9019
 Highways GA, Visibility Splay and
 Vehicle Tracking

Designed	M Fonseca	MF	Eng check	-	
Drawn	M Fonseca	MF	Coordination	-	
Dwg check	-		Approved	-	

Scale at A1	Status	Rev	Security
1:500	PRE	P1	STD

Drawing Number
 102375-MMD-01-XX-DR-C-DRAFT

The ExA:

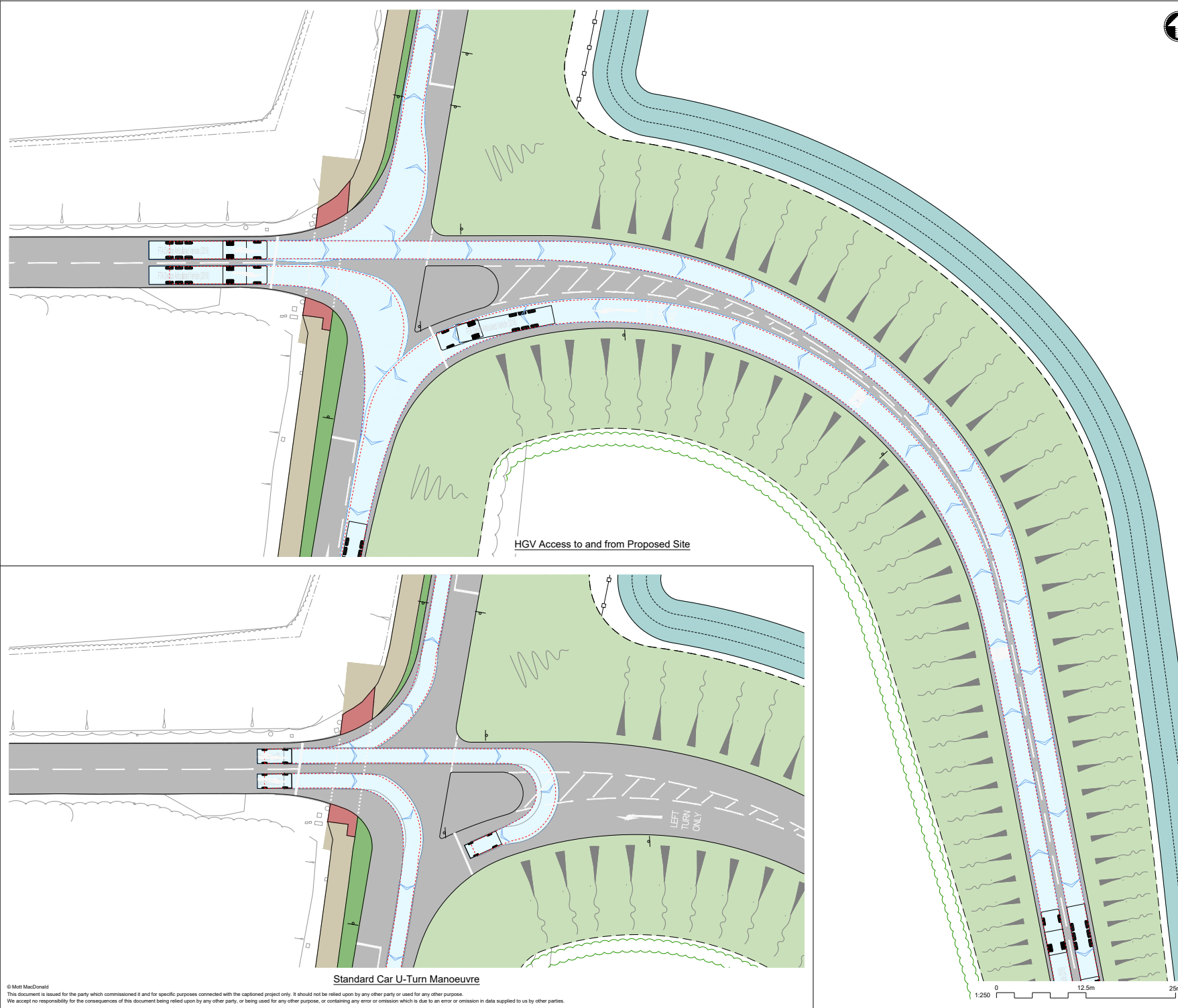
Construction traffic routes – safety

At Appendix G of the TA [AS-108] there are swept path analyses of the J34 on-slip. Please provide:

- a. a swept path analysis for the off-slip junction with the A14 overbridge, including for tipper trucks; and
- b. commentary on whether construction vehicles would be able to safely turn left or right from the J34 off-slip in the event that southbound queuing to the J34 on-slip extends close to or beyond (to the north of) the junction of the J34 off-slip and the A14 overbridge (for example when concrete pouring / directional drilling works take place during the peak periods).

The Applicant has produced these drawings. The Applicant's commentary for these swept paths is as follows:

There are no issues noted for an articulated vehicle (maximum vehicle size expected at site) to complete the left and right turn from the offslip onto Horningsea Road. It is noted that for both manoeuvres, articulated vehicles would need to encroach slightly into the opposite lane to complete the manoeuvres. In spite of this, there is no risk of collision with vehicles from opposite lanes when turning from the offslip as the traffic signal sequence at the junction ensures that when the traffic signals on the offslip are green, traffic signals on other arms would be red. In the event that southbound queuing on A14 overbridge from the on-slip extends close to or beyond the junction of the J34 offslip and the A14 overbridge, articulated vehicles would not be able to complete the right turn from the offslip due to lack of space. The left turn from the offslip onto Horningsea Road northbound north of J34 can be completed as vehicles are not expected to queue in front of the stop line on Horningsea Road southbound leading towards the offslip/A14 overbridge. Therefore, even if an articulated vehicle were to encroach on the opposite lane, there would be no traffic present on that lane owing to the location of the stop line.

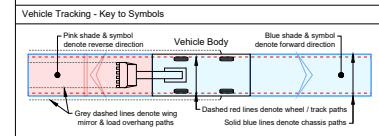


- Notes
1. Do not scale from this drawing.
 2. All dimensions are in metres unless otherwise shown. All levels are in metres above Ordnance Datum (AOD). All dimensions & levels should be checked on site.
 3. Any drawing errors or discrepancies should be brought to the attention of Mott MacDonald at the address shown in the title block.
 4. This drawing has been prepared as an initial technical audit and Road Safety Audit Stage 1 by Cambridgeshire County Council.
 5. The drawing is based on OS mapping and topographic survey information.
 6. The information is preliminary and subject to further detailed design.
 7. The drawing does not include any information on existing or proposed utilities or other existing assets that may need to be protected or diverted as part of the works.
 8. The proposal requires third party land to be constructed. The extent of the land take is to be determined during detailed design development.
 9. The design is based on the requirements of DMRB.
 10. The design assumes an embankment slope of 1:2 is acceptable to the relevant stakeholders.
 11. The design is based on the requirements of DMRB.
 12. Street lighting on Homingsea Road to remain as existing with minor changes to the locations of the lamp columns due to the reconfigured 'off-slip' junction and the realignment of Homingsea Road.

13. DRAWING MUST BE READ IN COLOUR

Key to Symbols

	Carriageway
	Footway
	Tactile Paving (Buff - Uncontrolled)
	Tactile Paving (Red - Controlled)
	Verge
	Reprofiled Embankments
	Swale



Vehicle Tracking - Vehicle Details

	FTA Design Articulated Vehicle (1998)		Standard Design Vehicle (From ICE Car Park Designers' Handbook)
Overall Length	16.480m	Overall Length	4.900m
Chassis Width	2.950m	Chassis Width	2.000m
Overall Width inc. Wing Mirrors	3.150m	Overall Width inc. Wing Mirrors	2.300m
Overall Body Height	3.870m	Overall Body Height	2.000m
Max. Track Width	2.470m	Track Width	2.000m
Kerb to Kerb Turning Radius	6.050m	Wheel to Wheel Turning Radius	6.000m

Reference drawings

P2	14.12.23	LJR	HGV viewpoint adjusted to include Northern stop line.	JRT	dvt
P1	05.07.22	LJR	Preliminary Issue	JR	ARR
Rev	Date	Drawn	Description	Checked	Approved

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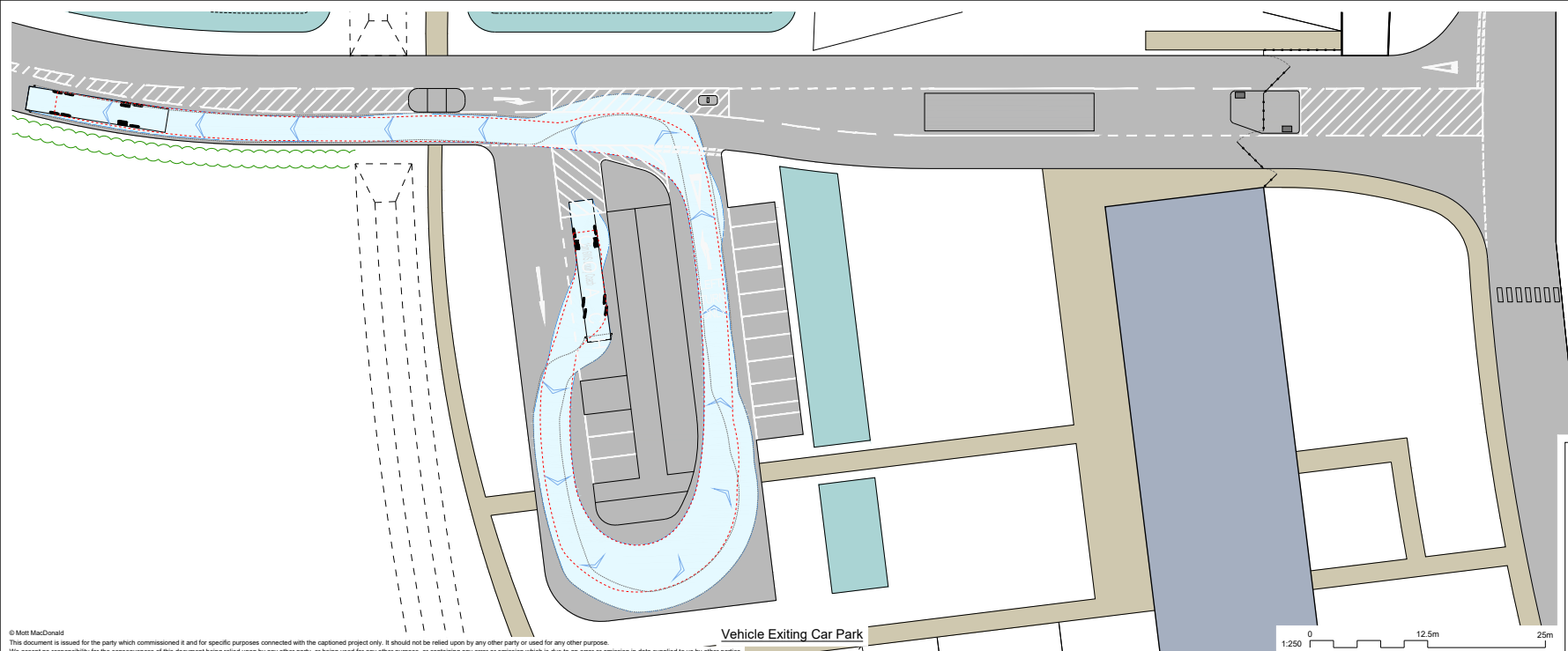
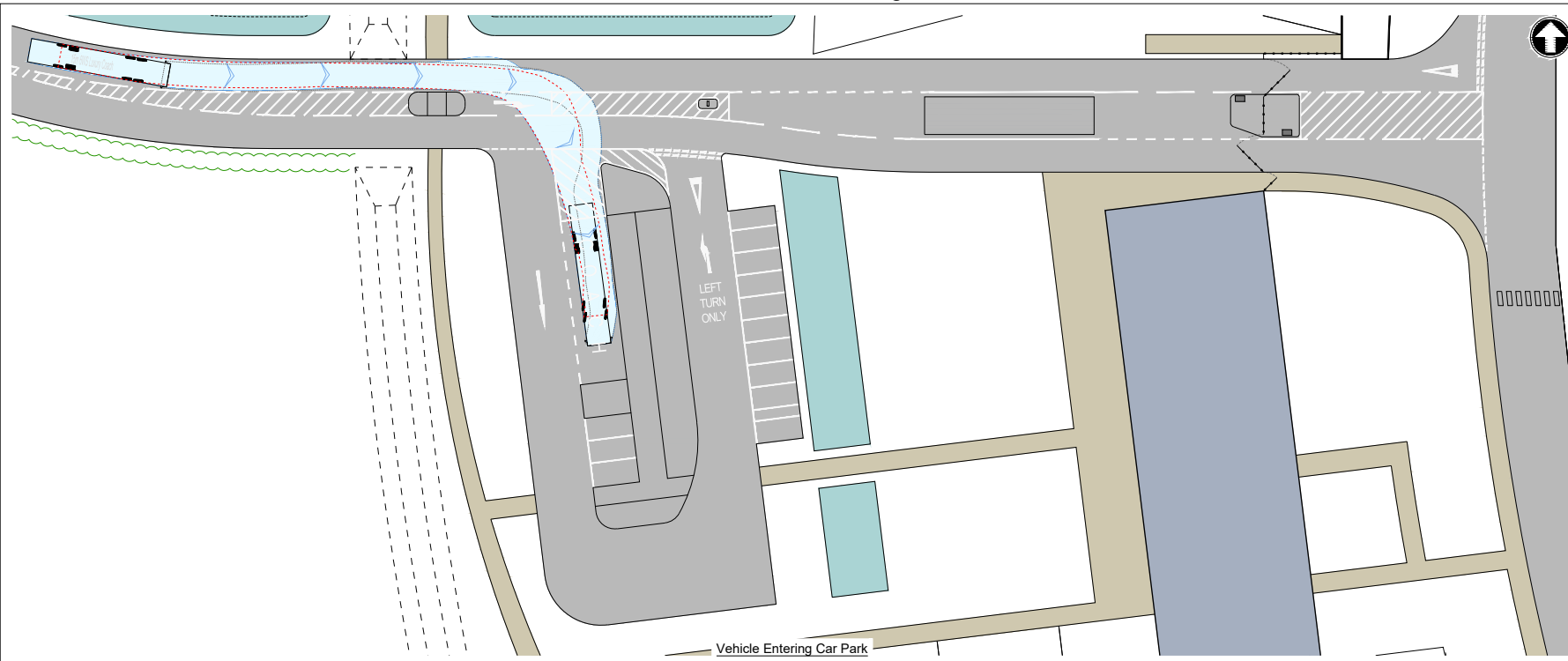


NOT FOR CONSTRUCTION

Title
**Cambridge Waste Water Treatment Works Relocation
Vehicle Tracking
Homingsea Road Junction**

Designed	J.Reeve	JJR	Eng check	W.Tong	W/T
Drawn	L.W.Russell	LJR	Coordination	A.M.Rawlings	AMR
Dwg check	J.D.Seaton	JDS	Approved	G.Wicks	GW
Scale at A1	Status	Rev	Security		
1:250	PRE	P2	STD		

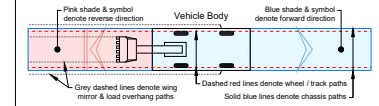
Drawing Number
102375-MMD-01-XX-DR-C-1121



Notes

1. Do not scale from this drawing.
2. All dimensions are in metres unless otherwise shown. All levels are in metres above Ordnance Datum (AOD). All dimensions & levels should be checked on site.
3. Any drawing errors or discrepancies should be brought to the attention of Mott MacDonald at the address shown in the title block.
4. **DRAWING MUST BE READ IN COLOUR**

Vehicle Tracking - Key to Symbols



Vehicle Tracking - Vehicle Details



Luxury Coach (Neoplan Megaliner)
 Overall Length 15.000m
 Overall Width 2.500m
 Overall Body Height 4.157m
 Track Width 2.500m
 Kerb to Kerb Turning Radius 9.773m
 Note: This vehicle incorporates rear steering.

Vehicle Tracking - Risks & Compliance

Moderate Risks
M1 Vehicle must overrun opposite lane to exit car park.

Vehicle Tracking - Notes

A. The swept path analyses shown on this drawing indicate theoretical / idealised paths that the specified vehicles can take, as derived using Autodesk's Vehicle Tracking software. The paths assume that the vehicle's driver will make a turn from a specific point / initial alignment, in the most effective manner. The Client / Architect should note that achievement of the idealised paths is subject to driver's anticipation of turning points, driving ability, and due care. It is therefore recommended that the area is set out and driven in real life, prior to acceptance for construction, particularly if there is any concern that the idealised track may not be readily achieved.

Reference drawings

Rev	Date	Drawn	Description	WT	GW
P1	14.12.23	LJR	Preliminary Issue		

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 W mottmac.com

Client

love every drop
 anglia water

Title
 Cambridge Waste Water Treatment Works Relocation
 Site Access and Visitor Car Park
 Coach Access to Visitor's Car Park

Designed	J.Reeve	JJR	Eng check	W.Tong	WT
Drawn	L.W.Russell	LJR	Coordination	A.M.Rawlings	AMR
Dwg check	J.D.Seaton	JDS	Approved	G.Wicks	GW
Scale at A1	1:250	Status	PRE	Rev	P1
		Security			STD

Drawing Number
 102375-MMD-01-XX-DR-C-1142

NOT FOR CONSTRUCTION

Cambridge Waste Water Treatment Relocation Project
Transport Assessment



Appendix H: Discovery Centre TRICS® Data

Calculation Reference: AUDIT-704113-220804-0830

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : I - ART GALLERIES/MUSEUMS/EXHIBITIONS
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

16 ULSTER (REPUBLIC OF IRELAND)
 DN DONEGAL 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 750 to 750 (units: sqm)
 Range Selected by User: 200 to 5000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 23/11/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 1 days
 Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town Centre 1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

High Street 1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

F1(c) 1 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000 1 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*Population within 5 miles:

5,001 to 25,000 1 days

*This data displays the number of selected surveys within stated 5-mile radii of population.*Car ownership within 5 miles:

0.6 to 1.0 1 days

*This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.*Travel Plan:

No 1 days

*This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.*PTAL Rating:

No PTAL Present 1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 DN-07-I-02 COUNTY MUSEUM DONEGAL
HIGH ROAD
LETTERKENNY
BALLYBOE GLENCAR
Edge of Town Centre
High Street
Total Gross floor area: 750 sqm
Survey date: WEDNESDAY 10/10/18 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DU-07-I-01	Location unsuitable
ES-07-I-01	Location unsuitable

TRIP RATE for Land Use 07 - LEISURE/I - ART GALLERIES/MUSEUMS/EXHIBITIONS

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.88

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	750	0.267	1	750	0.133	1	750	0.400
10:00 - 11:00	1	750	0.000	1	750	0.133	1	750	0.133
11:00 - 12:00	1	750	0.000	1	750	0.000	1	750	0.000
12:00 - 13:00	1	750	0.133	1	750	0.000	1	750	0.133
13:00 - 14:00	1	750	0.133	1	750	0.133	1	750	0.266
14:00 - 15:00	1	750	0.400	1	750	0.267	1	750	0.667
15:00 - 16:00	1	750	0.533	1	750	0.267	1	750	0.800
16:00 - 17:00	1	750	0.133	1	750	0.667	1	750	0.800
17:00 - 18:00	1	750	0.000	1	750	0.133	1	750	0.133
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.599			1.733			3.332

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	750 - 750 (units: sqm)
Survey date range:	01/01/14 - 23/11/19
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 07 - LEISURE/I - ART GALLERIES/MUSEUMS/EXHIBITIONS

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	750	0.267	1	750	0.133	1	750	0.400
10:00 - 11:00	1	750	0.000	1	750	0.133	1	750	0.133
11:00 - 12:00	1	750	0.000	1	750	0.000	1	750	0.000
12:00 - 13:00	1	750	0.133	1	750	0.000	1	750	0.133
13:00 - 14:00	1	750	0.267	1	750	0.133	1	750	0.400
14:00 - 15:00	1	750	0.533	1	750	0.533	1	750	1.066
15:00 - 16:00	1	750	0.933	1	750	0.533	1	750	1.466
16:00 - 17:00	1	750	0.133	1	750	0.800	1	750	0.933
17:00 - 18:00	1	750	0.000	1	750	0.133	1	750	0.133
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.266			2.398			4.664

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 07 - LEISURE/I - ART GALLERIES/MUSEUMS/EXHIBITIONS

MULTI-MODAL PEDESTRIANS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	750	0.000	1	750	0.000	1	750	0.000
10:00 - 11:00	1	750	0.400	1	750	0.400	1	750	0.800
11:00 - 12:00	1	750	0.000	1	750	0.000	1	750	0.000
12:00 - 13:00	1	750	0.000	1	750	0.000	1	750	0.000
13:00 - 14:00	1	750	0.400	1	750	0.133	1	750	0.533
14:00 - 15:00	1	750	0.000	1	750	0.000	1	750	0.000
15:00 - 16:00	1	750	0.000	1	750	0.267	1	750	0.267
16:00 - 17:00	1	750	0.000	1	750	0.000	1	750	0.000
17:00 - 18:00	1	750	0.000	1	750	0.000	1	750	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.800			0.800			1.600

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 07 - LEISURE/I - ART GALLERIES/MUSEUMS/EXHIBITIONS

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.88

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	750	0.267	1	750	0.133	1	750	0.400
10:00 - 11:00	1	750	0.400	1	750	0.533	1	750	0.933
11:00 - 12:00	1	750	0.000	1	750	0.000	1	750	0.000
12:00 - 13:00	1	750	0.133	1	750	0.000	1	750	0.133
13:00 - 14:00	1	750	0.667	1	750	0.267	1	750	0.934
14:00 - 15:00	1	750	0.533	1	750	0.533	1	750	1.066
15:00 - 16:00	1	750	0.933	1	750	0.800	1	750	1.733
16:00 - 17:00	1	750	0.133	1	750	0.800	1	750	0.933
17:00 - 18:00	1	750	0.000	1	750	0.133	1	750	0.133
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.066			3.199			6.265

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 07 - LEISURE/I - ART GALLERIES/MUSEUMS/EXHIBITIONS

MULTI-MODAL CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	750	0.267	1	750	0.133	1	750	0.400
10:00 - 11:00	1	750	0.000	1	750	0.133	1	750	0.133
11:00 - 12:00	1	750	0.000	1	750	0.000	1	750	0.000
12:00 - 13:00	1	750	0.133	1	750	0.000	1	750	0.133
13:00 - 14:00	1	750	0.133	1	750	0.133	1	750	0.266
14:00 - 15:00	1	750	0.400	1	750	0.267	1	750	0.667
15:00 - 16:00	1	750	0.533	1	750	0.267	1	750	0.800
16:00 - 17:00	1	750	0.133	1	750	0.667	1	750	0.800
17:00 - 18:00	1	750	0.000	1	750	0.133	1	750	0.133
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.599			1.733			3.332

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRICS 7.9.2**Trip Rate Parameter: Gross floor area**

TRIP RATE for Land Use 07 - LEISURE/I - ART

GALLERIES/MUSEUMS/EXHIBITIONS

Calculation Factor: 100 sqm

Count Type: TOTAL VEHICLES

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00									
08:00-09:00									
09:00-10:00	1	750	0.267	1	750	0.133	1	750	0.4
10:00-11:00	1	750	0	1	750	0.133	1	750	0.133
11:00-12:00	1	750	0	1	750	0	1	750	0
12:00-13:00	1	750	0.133	1	750	0	1	750	0.133
13:00-14:00	1	750	0.133	1	750	0.133	1	750	0.266
14:00-15:00	1	750	0.4	1	750	0.267	1	750	0.667
15:00-16:00	1	750	0.533	1	750	0.267	1	750	0.8
16:00-17:00	1	750	0.133	1	750	0.667	1	750	0.8
17:00-18:00	1	750	0	1	750	0.133	1	750	0.133
18:00-19:00									
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.599			1.733			3.332

TRICS 7.9.2**Trip Rate Parameter: Gross floor area**

TRIP RATE for Land Use 07 - LEISURE/I - ART

GALLERIES/MUSEUMS/EXHIBITIONS

Calculation Factor: 100 sqm

Count Type: VEHICLE OCCUPANTS

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00									
08:00-09:00									
09:00-10:00	1	750	0.267	1	750	0.133	1	750	0.4
10:00-11:00	1	750	0	1	750	0.133	1	750	0.133
11:00-12:00	1	750	0	1	750	0	1	750	0
12:00-13:00	1	750	0.133	1	750	0	1	750	0.133
13:00-14:00	1	750	0.267	1	750	0.133	1	750	0.4
14:00-15:00	1	750	0.533	1	750	0.533	1	750	1.066
15:00-16:00	1	750	0.933	1	750	0.533	1	750	1.466
16:00-17:00	1	750	0.133	1	750	0.8	1	750	0.933
17:00-18:00	1	750	0	1	750	0.133	1	750	0.133
18:00-19:00									
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.266			2.398			4.664

TRICS 7.9.2**Trip Rate Parameter: Gross floor area**

TRIP RATE for Land Use 07 - LEISURE/I - ART

GALLERIES/MUSEUMS/EXHIBITIONS

Calculation Factor: 100 sqm

Count Type: PEDESTRIANS

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00									
08:00-09:00									
09:00-10:00	1	750	0	1	750	0	1	750	0
10:00-11:00	1	750	0.4	1	750	0.4	1	750	0.8
11:00-12:00	1	750	0	1	750	0	1	750	0
12:00-13:00	1	750	0	1	750	0	1	750	0
13:00-14:00	1	750	0.4	1	750	0.133	1	750	0.533
14:00-15:00	1	750	0	1	750	0	1	750	0
15:00-16:00	1	750	0	1	750	0.267	1	750	0.267
16:00-17:00	1	750	0	1	750	0	1	750	0
17:00-18:00	1	750	0	1	750	0	1	750	0
18:00-19:00									
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.8			0.8			1.6

TRICS 7.9.2**Trip Rate Parameter: Gross floor area**

TRIP RATE for Land Use 07 - LEISURE/I - ART

GALLERIES/MUSEUMS/EXHIBITIONS

Calculation Factor: 100 sqm

Count Type: TOTAL PEOPLE

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00									
08:00-09:00									
09:00-10:00	1	750	0.267	1	750	0.133	1	750	0.4
10:00-11:00	1	750	0.4	1	750	0.533	1	750	0.933
11:00-12:00	1	750	0	1	750	0	1	750	0
12:00-13:00	1	750	0.133	1	750	0	1	750	0.133
13:00-14:00	1	750	0.667	1	750	0.267	1	750	0.934
14:00-15:00	1	750	0.533	1	750	0.533	1	750	1.066
15:00-16:00	1	750	0.933	1	750	0.8	1	750	1.733
16:00-17:00	1	750	0.133	1	750	0.8	1	750	0.933
17:00-18:00	1	750	0	1	750	0.133	1	750	0.133
18:00-19:00									
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			3.066			3.199			6.265

TRICS 7.9.2**Trip Rate Parameter: Gross floor area**

TRIP RATE for Land Use 07 - LEISURE/I - ART

GALLERIES/MUSEUMS/EXHIBITIONS

Calculation Factor: 100 sqm

Count Type: CARS

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00									
08:00-09:00									
09:00-10:00	1	750	0.267	1	750	0.133	1	750	0.4
10:00-11:00	1	750	0	1	750	0.133	1	750	0.133
11:00-12:00	1	750	0	1	750	0	1	750	0
12:00-13:00	1	750	0.133	1	750	0	1	750	0.133
13:00-14:00	1	750	0.133	1	750	0.133	1	750	0.266
14:00-15:00	1	750	0.4	1	750	0.267	1	750	0.667
15:00-16:00	1	750	0.533	1	750	0.267	1	750	0.8
16:00-17:00	1	750	0.133	1	750	0.667	1	750	0.8
17:00-18:00	1	750	0	1	750	0.133	1	750	0.133
18:00-19:00									
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			1.599			1.733			3.332

TRICS 7.9.2**Trip Rate Parameter: Gross floor area****Mode split**

Mode	Total number of trips	Mode split
Taxis	0	0.0%
OGVs	0	0.0%
PSVs	0	0.0%
LGVs	0	0.0%
Cars	7	34.7%
Cyclists	0	0.0%
Pedestrians	13	65.3%
Bus	0	0.0%
Rail	0	0.0%
Motorcycles	0	0.0%
Total	20	100.0%

Total people

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site1	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip Rate2
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00	1	750	0.267	1	1	750	0.133	0	1	750	0.4	1
10:00-11:00	1	750	0.4	1	1	750	0.533	1	1	750	0.933	2
11:00-12:00	1	750	0	0	1	750	0	0	1	750	0	0
12:00-13:00	1	750	0.133	0	1	750	0	0	1	750	0.133	0
13:00-14:00	1	750	0.667	1	1	750	0.267	1	1	750	0.934	2
14:00-15:00	1	750	0.533	1	1	750	0.533	1	1	750	1.066	2
15:00-16:00	1	750	0.933	2	1	750	0.8	2	1	750	1.733	4
16:00-17:00	1	750	0.133	0	1	750	0.8	2	1	750	0.933	2
17:00-18:00	1	750	0	0	1	750	0.133	0	1	750	0.133	0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			3.066	6			3.199	7			6.265	13

Total proposed floorspace (sqm) 209 100sqm conversion factor 2.09

Total vehicles

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip Rate2
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00	1	750	0.267	1	1	750	0.133	0	1	750	0.4	1
10:00-11:00	1	750	0	0	1	750	0.133	0	1	750	0.133	0
11:00-12:00	1	750	0	0	1	750	0	0	1	750	0	0
12:00-13:00	1	750	0.133	0	1	750	0	0	1	750	0.133	0
13:00-14:00	1	750	0.133	0	1	750	0.133	0	1	750	0.266	1
14:00-15:00	1	750	0.4	1	1	750	0.267	1	1	750	0.667	1
15:00-16:00	1	750	0.533	1	1	750	0.267	1	1	750	0.8	2
16:00-17:00	1	750	0.133	0	1	750	0.667	1	1	750	0.8	2
17:00-18:00	1	750	0	0	1	750	0.133	0	1	750	0.133	0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			1.599	3			1.733	4			3.332	7

Total proposed
floorspace (sqm) 209
100sqm
conversion factor 2.09

Taxis

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip rate for site22
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm)
100sqm
conversion
factor** **209

2.09**

Vehicle occupants

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip Rate2
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00				0				0				0
06:00-07:00				0				0				0
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00	1	750	0.267	1	1	750	0.133	0	1	750	0.4	1
10:00-11:00	1	750	0	0	1	750	0.133	0	1	750	0.133	0
11:00-12:00	1	750	0	0	1	750	0	0	1	750	0	0
12:00-13:00	1	750	0.133	0	1	750	0	0	1	750	0.133	0
13:00-14:00	1	750	0.267	1	1	750	0.133	0	1	750	0.4	1
14:00-15:00	1	750	0.533	1	1	750	0.533	1	1	750	1.066	2
15:00-16:00	1	750	0.933	2	1	750	0.533	1	1	750	1.466	3
16:00-17:00	1	750	0.133	0	1	750	0.8	2	1	750	0.933	2
17:00-18:00	1	750	0	0	1	750	0.133	0	1	750	0.133	0
18:00-19:00				0				0				0
19:00-20:00				0				0				0
20:00-21:00				0				0				0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			2.266	5			2.398	5			4.664	10

Total proposed
floorspace (sqm) 209
100sqm
conversion factor 2.09

Cars

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00				0				0				0
06:00-07:00				0				0				0
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00	1	750	0.267	1	1	750	0.133	0	1	750	0.4	1
10:00-11:00	1	750	0	1	1	750	0.133	0	1	750	0.133	0
11:00-12:00	1	750	0	1	1	750	0	0	1	750	0	0
12:00-13:00	1	750	0.133	1	1	750	0	0	1	750	0.133	0
13:00-14:00	1	750	0.133	1	1	750	0.133	0	1	750	0.266	1
14:00-15:00	1	750	0.4	1	1	750	0.267	1	1	750	0.667	1
15:00-16:00	1	750	0.533	1	1	750	0.267	1	1	750	0.8	2
16:00-17:00	1	750	0.133	1	1	750	0.667	1	1	750	0.8	2
17:00-18:00	1	750	0	1	1	750	0.133	0	1	750	0.133	0
18:00-19:00				0				0				0
19:00-20:00				0				0				0
20:00-21:00				0				0				0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			1.599	3			1.733	4			3.332	7

Total proposed
floorspace (sqm) 209
100sqm
conversion 2.09
factor

Pedestrians

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA2	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA3	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00	1	750	0	0	1	750	0	0	1	750	0.4	1
10:00-11:00	1	750	0.4	1	1	750	0.4	1	1	750	0.933	2
11:00-12:00	1	750	0	0	1	750	0	0	1	750	0	0
12:00-13:00	1	750	0	0	1	750	0	0	1	750	0.133	0
13:00-14:00	1	750	0.4	1	1	750	0.133	0	1	750	0.934	2
14:00-15:00	1	750	0	0	1	750	0	0	1	750	1.066	2
15:00-16:00	1	750	0	0	1	750	0.267	1	1	750	1.733	4
16:00-17:00	1	750	0	0	1	750	0	0	1	750	0.933	2
17:00-18:00	1	750	0	0	1	750	0	0	1	750	0.133	0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.8	2			0.8	2			6.265	13

Total proposed
floorspace (sqm) 209
100sqm
conversion factor 2.09

OGVs

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm) 209**
**100sqm
conversion factor 2.09**

PSVs

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm)
100sqm
conversion
factor** **209

2.09**

LGVs

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00				0				0				0
06:00-07:00				0				0				0
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00				0				0				0
20:00-21:00				0				0				0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm) 209**
**100sqm
conversion factor 2.09**

Bus passengers

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA2	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA3	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm)
100sqm
conversion
factor**

0

Cyclists

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA3	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA4	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00				0				0				0
06:00-07:00				0				0				0
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00				0				0				0
20:00-21:00				0				0				0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm)
100sqm
conversion
factor** **209

2.09**

Motorcyclists

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA2	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA3	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00				0				0				0
06:00-07:00				0				0				0
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00				0				0				0
20:00-21:00				0				0				0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm)
100sqm
conversion
factor** **209

2.09**

Rail passengers

Calculation factor: 100sqm

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Trip rate for site	No. Days2	Ave. GFA2	Trip Rate3	Trip rate for site2	No. Days3	Ave. GFA3	Trip Rate2	Trip rate for site3
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00				0				0				0
08:00-09:00				0				0				0
09:00-10:00				0				0				0
10:00-11:00				0				0				0
11:00-12:00				0				0				0
12:00-13:00				0				0				0
13:00-14:00				0				0				0
14:00-15:00				0				0				0
15:00-16:00				0				0				0
16:00-17:00				0				0				0
17:00-18:00				0				0				0
18:00-19:00				0				0				0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:				0				0				0

**Total proposed
floorspace (sqm)
100sqm
conversion
factor**

0



Appendix I: MCC and ATC comparisons



Document Control

Document title	5.4.19.13 ATC to MCC Comparison
Version No.	1
Date Approved	17 October 2022
Date 1st Issued	

Version History

Version	Date	Author	Checked	Approved	Description of change
1		—	—	—	Final

Contents

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Tables

Table 1.1:	Summary of sites surveyed	1
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1 Sites surveyed

1.1 Overview

Table 1.1: Summary of sites surveyed

Site number	Road name	% difference	Summary
Site 1	Denny End Road	8.0%	ATC is around 8% higher than MCC counts in both AM and PM peak. A possible explanation for the higher ATC figures than MCC is that the ATC captures traffic accessing and egressing the construction site access point along Denny End Lane at the Cambridgeshire Army Cadets Force from the Waterbeach direction whereas the MCC does not as the MCC is placed at the A10/Denny End Lane junction. Traffic could choose to egress from the construction site by turning left as there are queues on the right hand turn towards the A10 from the site construction access point and the MCC would not capture this movement.
Site 2	Car Dyke Road	1.1%	MCC is 10% higher than ATC in AM Peak, However ATC is 7% higher than MCC in the PM peak
Site 3	Clayhithe Road	Comparable location not available	N/A
Site 4	Bannold Road	3.5%	ATC is 2% higher than MCC in AM Peak and around 5% higher in the PM peak
Site 5	Horningsea Road	1.0%	MCC is around 109% higher than ATC counts in AM peak and 91% higher in PM peak
Site 6	Miltom Road	0.4%	MCC is 4% higher than ATC counts in AM peak, however ATC is 3% higher in PM peak
Site 7	Fen Road	Comparable location not available	N/A
Site 8	Green End Road	3.1%	MCC is 11% higher than ATC counts in AM peak, however ATC is 5% higher in PM peak
Site 9	Water Street	10.5%	MCC is around 14% higher than ATC counts in AM peak and around 8% higher in PM peak
Average		3.9%	

1.2 ATC Site – Denny End Road

	3-day Average (Tue-Thur)			Summary
	ATC	MCC	Percentage Difference	
7000-1000	1472	1359	8.3%	ATC is around 8% higher than MCC counts in both AM and PM peak. A possible explanation for the higher ATC figures than MCC is that the ATC captures traffic accessing and egressing the construction site access point along Denny End Lane at the Cambridgeshire Army Cadets Force from the Waterbeach direction whereas the MCC does not as the MCC is placed at the A10/Denny End Lane junction. Traffic could choose to egress from the construction site by turning left as there are queues on the right hand turn towards the A10 from the site construction access point and the MCC would not capture this movement.
1600-1800	1494	1388	7.6%	
Total	2966	2747	8.0%	

ATC Site 1 location



ATC location



MCC location



1.3 ATC Site 2 – Car Dyke Road

	3-day Average (Tue-Thur)			Summary
	ATC	MCC	Percentage difference	
7000-1000	1067	1176	10.2%	MCC is 10% higher than ATC in AM Peak, However ATC is 7% higher than MCC in the PM peak
1600-1800	1205	1121	7.4%	
Total	2272	2297	1.1%	

1.4 ATC Site 3 – Clayhithe Road

	3-day Average (Tue-Thur)		
	ATC	MCC	Percentage difference
7000-1000	908	NA	
1600-1800	1025	NA	
Total	1933	0	Comparable location not available

1.5 ATC Site 4 – Clayhithe Road

	3-day Average (Tue-Thur)			Summary
	ATC	MCC	Percentage difference	
7000-1000	628	615	2.1%	ATC is 2% higher than MCC in AM Peak and around 5% higher in the PM peak
1600-1800	722	689	4.7%	
Total	1350	1304	3.5%	

1.6 ATC Site 5 – Horningsea Road

	3-day Average (Tue-Thur)			Summary
	ATC	MCC	Percentage difference	
				MCC is around 109% higher than ATC counts in AM peak and 91% higher in PM peak
7000-1000	1108	1147	3.5%	
1600-1800	1206	1144	5.4%	
Total	2314	2291	1.0%	

1.7 ATC Site 6 - Milton Road

	3-day Average (Tue-Thur)			Summary
	ATC	MCC	Percentage difference	
				MCC is 4% higher than ATC counts in AM peak, however ATC is 3% higher in PM peak
7000-1000	4369	4542	4.0%	
1600-1800	4269	4132	3.3%	
Total	8639	8674	0.4%	

1.8 ATC Site 7 – Fen Road

	3-day Average (Tue-Thur)		
	ATC (Fen Road)	MCC (Water Lane)	Percentage Difference
7000-1000		521	
1600-1800		600	
Total		1121	Comparable location not available

1.9 ATC Site 8 – Green End Road

	3-day Average (Tue-Thur)			Summary
	ATC (Green End Road)	MCC (Green End Road) (NE)	Percentage Difference	
				MCC is 11% higher than ATC counts in AM peak, however ATC is 5% higher in PM peak
7000-1000		1848	2055	11.2%
1600-1800		1862	1768	5.3%
Total		3710	3823	3.1%

1.10 ATC Site 9 – Water Street

	3-day Average (Tue-Thur)			Summary
	ATC (Water Street)	MCC (Site 20 Water Lane (SE))	Percentage difference	
7000- 1000	998	1135	13.7%	MCC is around 14% higher than ATC counts in AM peak and around 8% higher in PM peak
1600- 1800	1100	1183	7.6%	
Total	2098	2318	10.5%	

Cambridge Waste Water Treatment Relocation Project
Transport Assessment



Appendix J: Consultation 2 Stakeholder Feedback

Date	Consultee	Points raised	How and where addressed
18/08/21	Cambridge Past, Present & Future (CPPF)	The main area of uncertainty is the vehicle access. CPPF strongly objects to any proposals to provide vehicular access into the site from the farm access bridge at Honey Hill via Junction 35 (Option 2).	Option 2 was not selected, the access within the Proposed Development is Option 1b, which does not interact directly with Junction 35. The selection of vehicle access and consideration of all options is discussed further within Chapter 3: Site Selection and Alternatives (Application Document Reference 5.2.3). The assessment provided in Section 4 (Assessment of Effects) of this chapter assesses Option 1b.
12 August 2021	National Highways	Access option 1a remains National Highways' preferred option, closely followed by Option 1b. Access option 3 would be contrary to policy 'The Strategic Road Network and the delivery of sustainable development' and therefore National Highways object to this proposal.	Option 3 has not been selected on account of technical issues around creating a new junction off the A14 based on National Highways' feedback – the access is Option 1b. The selection of vehicle access and consideration of all options is discussed in further within Chapter 3: Alternatives Considered. The assessment provided in Section 4 (Assessment of Effects) of this chapter assesses Option 1b.
12 August 2021	National Highways	The TA should also consider any other development that makes up part of the application, such as the proposed recreation facilities.	Noted and accepted. The Transport Assessment Application Document Reference 5.4.19.3) covers all aspects of Proposed Development, including the proposed visitor centre.
13 August 2021	East Cambridge District Council	Most acceptable options are options 1a and 1b. To create an additional access from the A14 is unlikely to be acceptable.	The preferred access option is Option 1b.
18 August 2021	Urban and Civic	U&C offers a preliminary view that a new junction off the A14 appears, without the benefit of the detailed assessments that will follow, to be preferable and justified given the strategic importance of the proposed facility.	Noted. Option 3 has not been selected on account of technical issues around creating a new junction off the A14 based feedback provided by National Highways– the access is Option 1b. The selection of vehicle access and consideration of all options is discussed in further detail within Chapter 3: Site Selection and Alternatives (Application Document Reference 5.2.3). The assessment provided in Section 4 (Assessment of Effects) of this chapter assesses Option 1b.
16 August 2021	Natural England	Access assessment needs to include air quality assessment. A CEMP is also needed.	Noted. An air quality assessment has been undertaken as part of Chapter 7: Air Quality (Application Document Reference 5.2.7). The CoCP Part A and B (Application Document Reference. 5.4.2.1, 5.4.2.2) requires a CEMP to be produced prior to any works commencing on site.

Date	Consultee	Points raised	How and where addressed
17 August 2021	Cambridgeshire County Council	Cambridgeshire County Council (CCC) has worked with the applicant to ensure that this junction (junction 34 of the A14) has been modelled in accordance with CCC requirements and the modelling done so far shows that this junction will operate within capacity. This is subject to further work on the flows and so is the preliminary findings of the modelling. The assessment will need to include the construction traffic as well as the operational, and visitor traffic once built. Improvements are proposed to the cycle and pedestrian route on the north and south of the proposed Waste Water Treatment Plant site access. The Applicant is asked to continue to ensure that the drawings for this area are coordinated with the Greater Cambridge Partnership and the Horningsea Greenway project.	Noted and accepted. As stated, Junction 34 of the A14 has been modelling in accordance with CCC requirements, whereby preliminary findings show that the junction works within capacity. The Transport Assessment (Application Document Reference. 5.4.19.3) includes information on modelling during construction, operation (including visitor traffic) and decommissioning. Mitigation proposals and drawings for Horningsea Road have taken into account the Horningsea Greenway project.
17 August 2021	South Cambridge District Council	If Option 1b remains, the District Council will expect to see within the DCO, carefully detailed designs for the junction and details of control systems to prevent vehicles travelling to and from the site using any access routes other than the A14 during the construction and operation stages. Given the rationale presented by Anglian Water for the choice of Option 1b, the District Council's recommendation again if this remains the proposed option, it should also deliver enhanced pedestrian and cycle access, cycling facilities. Importantly, details indicating how access to the site would not compromise cycling safety along Horningsea Road, in the vicinity of the new junction/4th arm will be required as part of the DCO. In addition, the District Council considers that measures to avoid traffic queuing/congestion on Denny End Road and Bannold Road need to be incorporated into the DCO proposals as this route is prone to congestion. The District Council remains of the opinion that direct access from the A14 would be the preferred option rather than Option 1b and asks Anglian Water to reconsider.	Option 1b-has been selected and taken forward into the Proposed Development. Option 3 has not been selected on account of technical issues around creating a new junction off the A14 based on feedback provided by National Highways. The Transport Assessment (Application Document Reference.- 5.4.19.3) provides details on the mitigation measures on Horningsea Road, which is also summarised in the section 2.8 of this chapter. These mitigation measures ensure that access to the site does not compromise safety along Horningsea Road. The Transport Assessment Application Document Reference. 5.4.19.3) includes a review of the junctions with the A10 / Denny End Road and A10 / Car Dyke Lane to assess capacity and delay during the construction works. Bannold Road at its junction with Denny End Road is noted as narrow (Application Document Reference. 5.4.19.3) and mitigation will be in place to prevent parking on that corner to minimise traffic conflicts. The CTMP (Application Document Reference. 5.4.19.7) and CoCP (Application Document Reference. 5.4.2.1, 5.4.2.2) set out the construction route to and from the proposed WWTP site.

Cambridge Waste Water Treatment Relocation Project
Appendix J: Consultation 2 stakeholder feedback

Date	Consultee	Points raised	How and where addressed
17 August 2021	Fen Ditton Parish Council	FDPC considers extra mitigation is required and should include: <ul style="list-style-type: none"> Commitment to model overall traffic performance with historic data as a baseline and not rely on AWS surveys since these were at a time when traffic into Cambridge was below historic levels. 	The modelling approach and use of survey information has been discussed and agreed with CCC. This includes checks to ensure survey results provided by AWS are not abnormal due to the Covid-19 pandemic. The Transport Assessment (Application Document Reference.- 5.4.19.3) is supported by additional surveys completed to verify the data used.
24 August 2021	Horningsea Parish Council	HPC is not aware of any evaluation assessment material being published by AWS and would like to request this information to allow HPC a full understanding of the relevant facts. We also request a copy of the determination by Highways that found it was not possible to access the site from the A14, Option 3.	Chapter 3: Site Selection and Alternatives (Application Document Reference 5.2.3) provides details of the access options considered for the project. Option 3 has not been selected on account of technical issues around creating a new junction off the A14 based on feedback from National Highways.
24 August 2021	Horningsea Parish Council	We fear that the traffic volume has been underestimated. We would like to see this analysis including all of the access routes into the site; including A14 westbound and A14 eastbound.	The modelling approach and use of survey information has been discussed and agreed with CCC. This includes checks to ensure that survey results provided by AWS are not abnormal due to the Covid-19 pandemic. The Transport Assessment (Application Document Reference. 5.4.19.3) is supported by additional surveys completed to verify the data used.
24 August 2021	Horningsea Parish Council	HPC also supports reduced speed limits on Horningsea Road. Suggest reduce to 30mph and 20mph in the village and enforce with speed cameras and traffic calming measures. We also want confirmation that this mitigation is within the control of AWS.	A set of mitigation measures for Horningsea Road have been included in the design and are outlined in mitigation measures adopted as part of the Proposed Development.
24 August 2021	Horningsea Parish Council	It is a significant concern that we believe AWS has failed to factor in the cumulative traffic impact of previous recorded congestion at junction 34, reduction in traffic flows (due to Covid) during the 2021 AWS surveys, CWWTP Construction traffic, CWWTP operational traffic, the proposed additional J34 arm, Waterbeach New Town, Marleigh, development at Fulbourn, dualling of the A10, general traffic growth and the pending development of the airport site.	The modelling approach and use of survey information has been discussed and agreed with CCC. This includes checks to ensure survey results provided by the Applicant are not abnormal due to the Covid-19 pandemic. The Transport Assessment (Document Reference.- 5.4.19.3) is supported by additional surveys completed to verify the data used. Impacts associated with committed developments in the area are accounted for within the TEMPro growth factors used, which has been agreed with CCC.
24 August 2021	Horningsea Parish Council	We request forecast operational HGV movements. Most of the movements are liquid sludge imports and septic tank	The Transport Assessment (Application Document Reference. 5.4.19.3) provides information on operational HGV movements. The routing of

Cambridge Waste Water Treatment Relocation Project
Appendix J: Consultation 2 stakeholder feedback

Date	Consultee	Points raised	How and where addressed
		<p>movements, why are these being trucked here from destinations such as Ely and Huntingdon? We request forecast for operational HGV movements and an alternative plan for the movement of sludge lorries to more appropriate sites.</p>	<p>HGVs in operation has been based on sludge imports at the existing Cambridge WWTP. A technical note (Appendix C, Application Document Ref: 5.4.19.3) outlines the origins of sludge imports during operation in 2020 at the existing Cambridge WWTP.</p>

Cambridge Waste Water Treatment Relocation Project
Transport Assessment



Appendix K: TEMPro Growth Factor Technical Note

Cambridge Waste Water Treatment Relocation Project
5.4.19.3 – Appendix K



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Style Definition: TOC 2: Tab stops: 1.55 cm, Left + 16.49 cm, Right,Leader: ...

Document Control

Document title	Technical Note: Modelling Overview and TEMPro Growth Factor
Version No.	1
Date Approved	
Date 1st Issued	12/01/2022

Version History

Version	Date	Author	Description of change
0	12/01/2022	-	Technical note at PEI.
<u>1</u>	<u>15/02/2024</u>	-	<u>Revisions to TEMPro growth factors following modelling review and formatting updates.</u>

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1 Technical Note: Modelling overview and TEMPro growth factors

1.1 Preliminary Modelling Overview

- 1.1.1 Each option has been assessed using the industry-standard software of either Junctions 9 (PICADY) or LinSig (Version 3) to anticipate if the proposed junction designs would be predicted to operate within capacity.
- 1.1.2 Junctions9 software measures performance as the ratio of flow to capacity (RFC). An RFC value is greater than one means that a turning movement has a higher level of traffic flow than its theoretical capacity. As a result, queues may occur. An RFC below 0.85 is considered acceptable as there is still scope to accommodate future growth.
- 1.1.3 LinSig is a computer software package for assessing and designing traffic signal junctions either individually or as a network comprised of several junctions. It is used by traffic engineers to construct a model of the junction or network which can then be used to assess different designs and methods of operation. LinSig v3 software measures performance as the degree of saturation (DoS). A DoS value of greater than 100% means that a lane movement has a higher level of traffic flow than its theoretical capacity. As a result, queues may occur. A DoS below 90% is considered acceptable as there is still coped to accommodate future growth.

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1.2 Survey and TEMPro growth factors

- 1.2.1 Survey (December 2021) data has been used to inform the base years. To estimate the future 2025 base, a TEMPro 7.2 growth factors for South Cambridgeshire have been applied to the base flows. The applied factors are outlined in Table 1-1 below:

Table 1-1: TEMPro growth factors

Base Year to Scenario Year	TEMPro growth factors
2021 – 2026	<u>1.060</u>
2021 – 2028	<u>1.082</u>
<u>2021 – 2033</u>	<u>1.1362</u>
2021 – 2038	<u>1.1857</u>

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- 1.2.2 To predict future growth as accurate as possible, TEMPro 7.2 reflects all planned growth in the area. TEMPro 7.2 growth factors are in line with the most recent Road Traffic Forecast (2018). However, as land use developments are a source of uncertainty, TEMPro 7.2 growth factors are blanket, and they do not predict where exactly growth will appear.

Cambridge Waste Water Treatment Relocation Project
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1.2.3 It is suggested to apply unadjusted growth factors to estimate the future base as the Cambridge Wastewater Treatment plant will not generate a significant number of homes or jobs in the area.

1.2.4 However, if any significant developments appear in the area, forecasted trips could be excluded from the growth to avoid double counting. In this case, the developments and the number of excluded trips should be agreed with CCC.

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Base Year to Scenario Year

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