

M54 to M6 Link Road
TR010054
Volume 2
2.11 Outline Drainage Works

Regulation 5(2)(o)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

March 2021

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

**M54 to M6 Link Road
Development Consent Order 202[]**

Outline Drainage Works

Regulation Number	Regulation 5(2)(o)
Planning Inspectorate Scheme Reference	TR010054
Application Document Reference	2.11
Author	M54 to M6 Link Road Project Team and Highways England

Version	Date	Status of Version
P04	March 2021	Issued to the ExA at Deadline 7

Schedule of Plans included in this Application Document

Drawing Number	Drawing Title	Revision
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1700	DRAINAGE ENGINEERING REGULATIONS 5(2)(O) KEY SHEET	P04
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1701	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 1 OF 10	P03
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1702	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 2 OF 10	P01
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1703	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 3 OF 10	P02
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1704	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 4 OF 10	P03
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1705	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 5 OF 10	P02
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1706	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 6 OF 10	P02
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1707	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 7 OF 10	P01
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1708	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 8 OF 10	P01
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1709	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 9 OF 10	P01
HE514465-ACM-DCO-M54_SW_PR_Z-DR-CD-1710	DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 10 OF 10	P01



- NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE WORKS ARE SHOWN ILLUSTRATIVELY ONLY AND ARE SUBJECT TO CHANGE THROUGH DETAILED DESIGN IN ACCORDANCE WITH THE TERMS OF THE DEVELOPMENT CONSENT ORDER.
 6. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 7. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.
 8. THIS PLAN WAS AMENDED IN MAY 2020 TO REMOVE A SMALL AREA OF THE ORDER LIMITS WITHIN THE HIGHWAY BOUNDARY OF THE M54 PREVIOUSLY INCLUDED FOR THE REPLACEMENT OF A ROAD SIGN. THE REPLACEMENT OF THIS SIGN IS NO LONGER REQUIRED. THIS CHANGE MEANS THAT SHROPSHIRE COUNTY COUNCIL IS NO LONGER A HOST AUTHORITY FOR THE SCHEME.

- KEY
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS

First Issue	SO	RR	14/01/20	P01
Sheet 1 Inset 'A' removed.	MW	RR	23/03/20	P02
Note 8 added.	MW	RR	11/05/20	P03
Updated to reflect Oct 2020 scheme changes.	MW	SB	28/09/20	P04
Revision Details		By	Date	Suffix
		Check		

Purpose of issue

DCO APPLICATION

Client
Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
Birmingham
B4 6BN



Development Consent Order Number

TR010054

Project Title

M54 to M6 Link Road

Development Consent Order Drawing Number

TR010054/APP/2.11

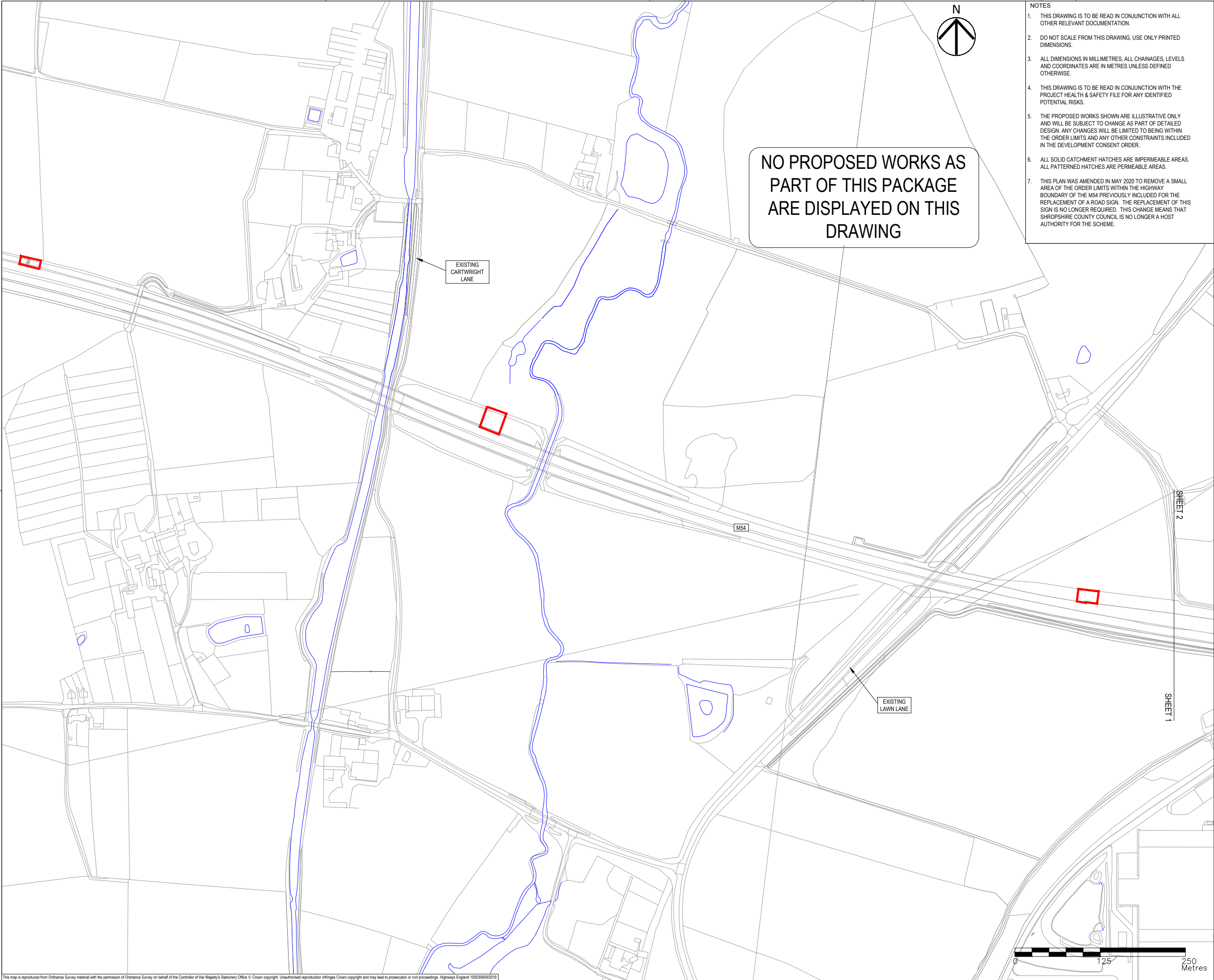
Drawing Title

DRAINAGE ENGINEERING
REGULATIONS 5(2)(O)
KEY SHEET

Designed SO	Drawn MW	Checked JH	Approved SB	Date 28/09/20
Internal Project No. 60536736		Suitability S8		
Scale @ A1 1:20000H/1:20000V		Zone Development Consent Order		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

Drawing Number HE514465	Highways England PIN -ACM	Volume -DCO-	Rev P04
M54_SW_PR_Z		-DR-CD-1700	
Location	I Type	I Role	I Number



- NOTES**
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 6. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.
 7. THIS PLAN WAS AMENDED IN MAY 2020 TO REMOVE A SMALL AREA OF THE ORDER LIMITS WITHIN THE HIGHWAY BOUNDARY OF THE M54 PREVIOUSLY INCLUDED FOR THE REPLACEMENT OF A ROAD SIGN. THE REPLACEMENT OF THIS SIGN IS NO LONGER REQUIRED. THIS CHANGE MEANS THAT SHROPSHIRE COUNTY COUNCIL IS NO LONGER A HOST AUTHORITY FOR THE SCHEME.

- KEY**
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS
 - PROPOSED ALIGNMENT
 - PROPOSED WATERCOURSE
 - EXISTING WATERCOURSE
 - EXISTING CULVERTS
 - PROPOSED CULVERT
 - EXISTING DRAINAGE DITCH
 - PROPOSED DRAINAGE DITCH
 - CHAMBER (AND ASSOCIATED PIPEWORK)
 - EARTHWORK DRAINAGE
 - PROPOSED CATCHMENT 1
 - PROPOSED CATCHMENT 2
 - PROPOSED CATCHMENT 3
 - PROPOSED CATCHMENT 4
 - PROPOSED CATCHMENT 5
 - PROPOSED CATCHMENT 6
 - PROPOSED CATCHMENT 7
 - PROPOSED CATCHMENT 8
 - PROPOSED CATCHMENT 9
 - PROPOSED CATCHMENT 10
 - PROPOSED CATCHMENT 11
 - PROPOSED CATCHMENT 12
 - PROPOSED CATCHMENT 13
 - PROPOSED CATCHMENT 14
 - PROPOSED CATCHMENT 15
 - PROPOSED CATCHMENT 16
 - PROPOSED CATCHMENT 17

First Issue	SO	RR	14/01/20	P01
Sheet 1 Inset 'A' removed.	MW	RR	23/03/20	P02
Note 7 added.	MW	RR	11/05/20	P03
Revision Details		By	Date	Suffix
		Check		

DCO APPLICATION

Client
Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
Birmingham
B4 6BN

Development Consent Order Number
TR010054

Project Title
M54 to M6 Link Road

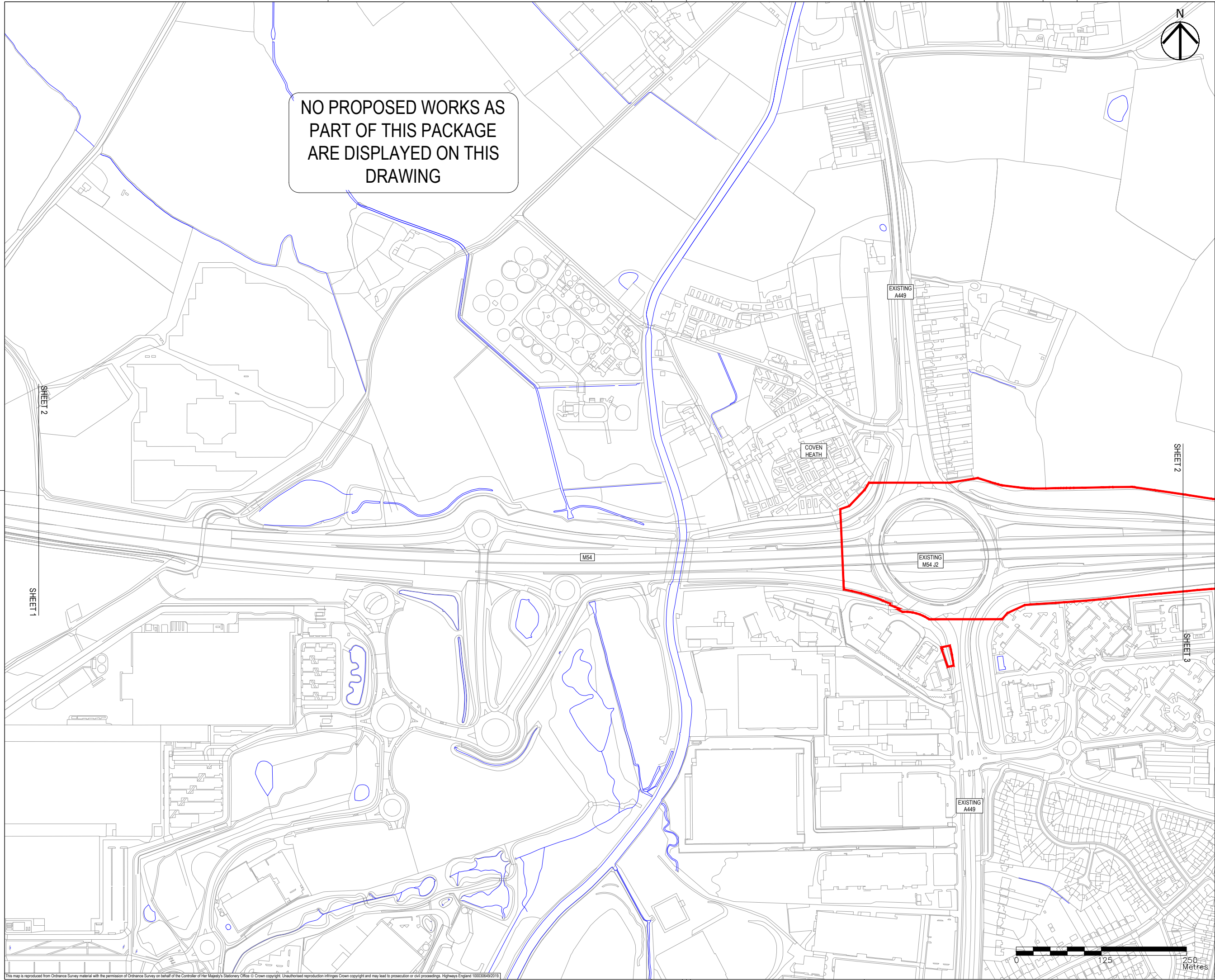
Development Consent Order Drawing Number
TR010054/APP/2.11

Drawing Title
**DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 1 OF 10**

Designed SO	Drawn MW	Checked AM	Approved RR	Date 11/05/20
Internal Project No. 60536736		Suitability S8		
Scale @ A1 1:1250H/1:1250V		Zone Development Consent Order		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

Drawing Number Highways England PIN HE514465	I Originator -ACM	I Volume -DCO-	Rev P03
Location Z1_SW_PR_Z	I Type -DR-CD-1701	I Role I	I Number 1



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100030649/2018

- NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING. USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 6. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

- KEY
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS
 - PROPOSED ALIGNMENT
 - PROPOSED WATERCOURSE
 - EXISTING WATERCOURSE
 - EXISTING CULVERTS
 - PROPOSED CULVERT
 - EXISTING DRAINAGE DITCH
 - PROPOSED DRAINAGE DITCH
 - CHAMBER (AND ASSOCIATED PIPEWORK)
 - EARTHWORK DRAINAGE
 - PROPOSED CATCHMENT 1
 - PROPOSED CATCHMENT 2
 - PROPOSED CATCHMENT 3
 - PROPOSED CATCHMENT 4
 - PROPOSED CATCHMENT 5
 - PROPOSED CATCHMENT 6
 - PROPOSED CATCHMENT 7
 - PROPOSED CATCHMENT 8
 - PROPOSED CATCHMENT 9
 - PROPOSED CATCHMENT 10
 - PROPOSED CATCHMENT 11
 - PROPOSED CATCHMENT 12
 - PROPOSED CATCHMENT 13
 - PROPOSED CATCHMENT 14
 - PROPOSED CATCHMENT 15
 - PROPOSED CATCHMENT 16
 - PROPOSED CATCHMENT 17

First Issue	SO	RR	14/01/20	P01
Revision Details	By	Check	Date	Suffix

Purpose of Issue

DCO APPLICATION

Client
Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
Birmingham
B4 6BN

highways
england

Development Consent Order Number

TR010054

Project Title

M54 to M6 Link Road

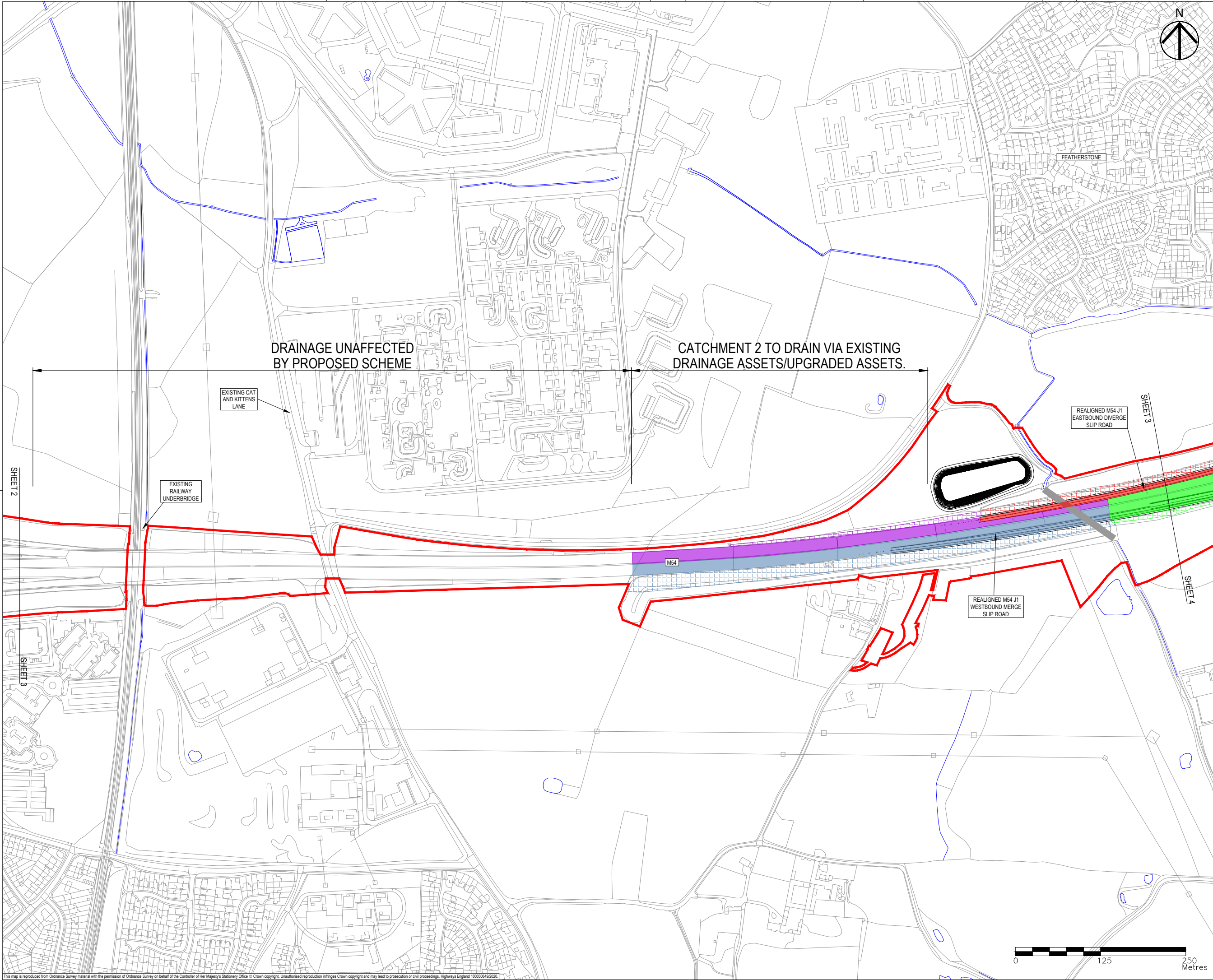
Development Consent Order Drawing Number

TR010054/APP/2.11

Drawing Title

DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 2 OF 10

Designed SO	Drawn SO	Checked SB	Approved RR	Date 14/01/20
Internal Project No. 60536736		Suitability S8		
Scale @ A1 1:2500H/1:2500V		Zone Development Consent Order		
THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.				
Drawing Number Highways England PIN	Originator	Volume	Rev	
HE514465 -ACM		-DCO-	P01	
Z1_SW_PR_Z		-DR-CD-1702		
Location	Type	Role	Number	



NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
- DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
- ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
- THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE CHANGED AS PART OF DETAILED DESIGN ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
- ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

KEY

- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- PROPOSED ALIGNMENT
- PROPOSED WATERCOURSE
- EXISTING WATERCOURSE
- EXISTING CULVERTS
- PROPOSED CULVERT
- EXISTING DRAINAGE DITCH
- PROPOSED DRAINAGE DITCH
- CHAMBER (AND ASSOCIATED PIPEWORK)
- EARTHWORK DRAINAGE
- PROPOSED CATCHMENT 1
- PROPOSED CATCHMENT 2
- PROPOSED CATCHMENT 3
- PROPOSED CATCHMENT 4
- PROPOSED CATCHMENT 5
- PROPOSED CATCHMENT 6
- PROPOSED CATCHMENT 7
- PROPOSED CATCHMENT 8
- PROPOSED CATCHMENT 9
- PROPOSED CATCHMENT 10
- PROPOSED CATCHMENT 11
- PROPOSED CATCHMENT 12
- PROPOSED CATCHMENT 13
- PROPOSED CATCHMENT 14
- PROPOSED CATCHMENT 15
- PROPOSED CATCHMENT 16
- PROPOSED CATCHMENT 17

First Issue	SO	RR	14/01/20	P01
Updated to reflect Oct 2020 scheme changes.	MW	SB	28/09/20	P02
Revision Details	By	Check	Date	Suffix

Purpose of issue

DCO APPLICATION

Client
Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
Birmingham
B4 6BN

Development Consent Order Number
TR010054

Project Title
M54 to M6 Link Road

Development Consent Order Drawing Number
TR010054/APP/2.11

Drawing Title
**DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 3 OF 10**

Designed SO	Drawn MW	Checked JH	Approved SB	Date 28/09/20
----------------	-------------	---------------	----------------	------------------

Internal Project No.
60536736

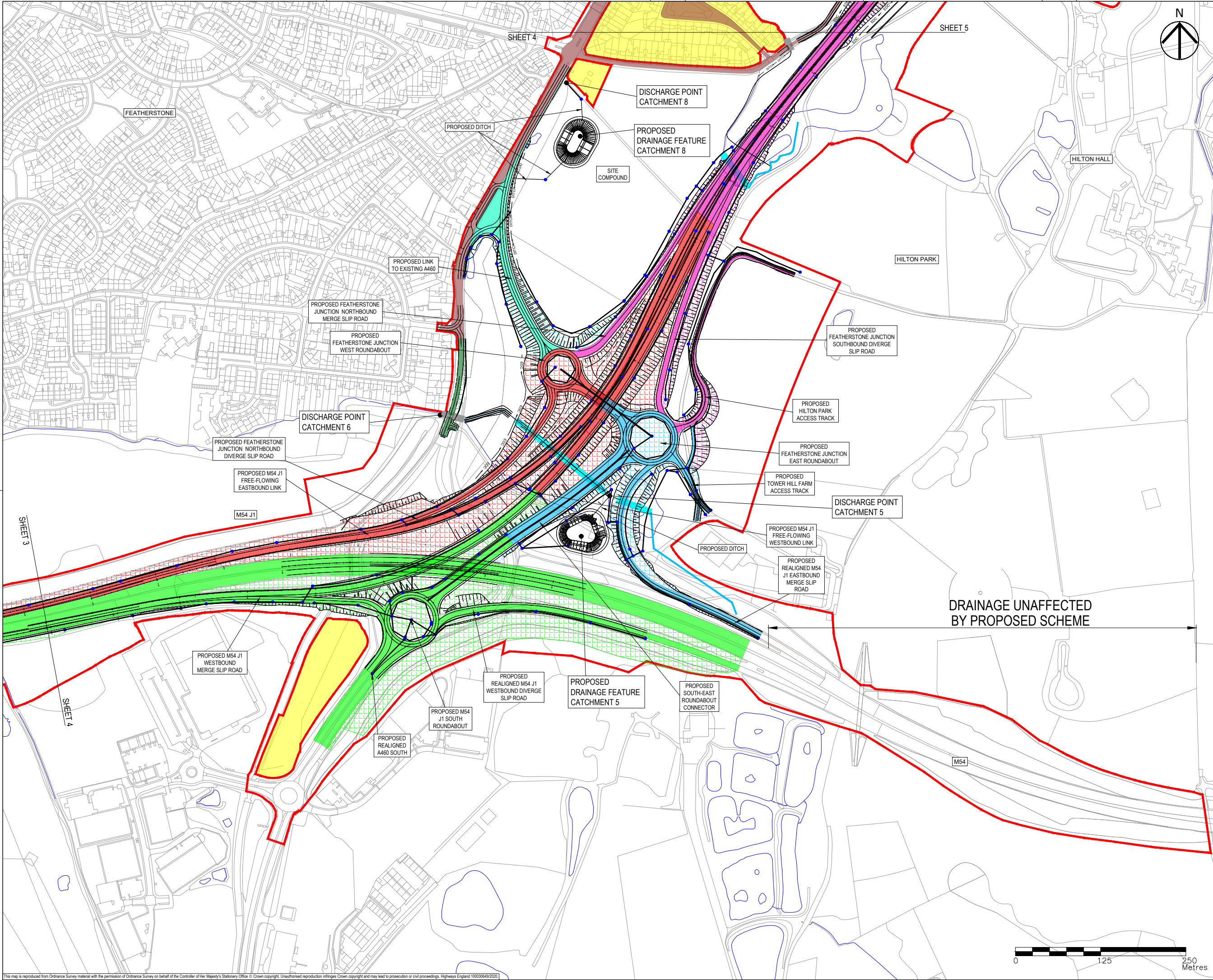
Scale @ A1
1:2500H/1:2500V

Suitability
S8

Zone
Development Consent Order

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

Drawing Number HE514465	Highways England PIN -ACM	I Originator -DCO-	I Volume Z1_SW_PR_Z	I Type -DR-CD-1703	I Role P02
----------------------------	------------------------------	-----------------------	------------------------	-----------------------	---------------



NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
- DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
- ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
- THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
- ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

KEY

- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- PROPOSED ALIGNMENT
- PROPOSED WATERCOURSE
- EXISTING WATERCOURSE
- EXISTING CULVERTS
- PROPOSED CULVERT
- EXISTING DRAINAGE DITCH
- PROPOSED DRAINAGE DITCH
- DITCH+
- CHAMBER (AND ASSOCIATED PIPEWORK)
- EDC
- EARTHWORK DRAINAGE
- PROPOSED CATCHMENT 1
- PROPOSED CATCHMENT 2
- PROPOSED CATCHMENT 3
- PROPOSED CATCHMENT 4
- PROPOSED CATCHMENT 5
- PROPOSED CATCHMENT 6
- PROPOSED CATCHMENT 7
- PROPOSED CATCHMENT 8
- PROPOSED CATCHMENT 9
- PROPOSED CATCHMENT 10
- PROPOSED CATCHMENT 11
- PROPOSED CATCHMENT 12
- PROPOSED CATCHMENT 13
- PROPOSED CATCHMENT 14
- PROPOSED CATCHMENT 15
- PROPOSED CATCHMENT 16
- PROPOSED CATCHMENT 17

First Issue	JP	RR	14/01/20	P01
Updated to reflect Oct 2020 scheme changes.	MW	SB	28/09/20	P02
DCO changes around A460 tie in	EL	RR	23/03/21	P03
Revision Details	By	Check	Date	Suffix

Purpose of issue

DCO APPLICATION

Client
Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
Birmingham
B4 6BN

Development Consent Order Number
TR010054

Project Title
M54 to M6 Link Road

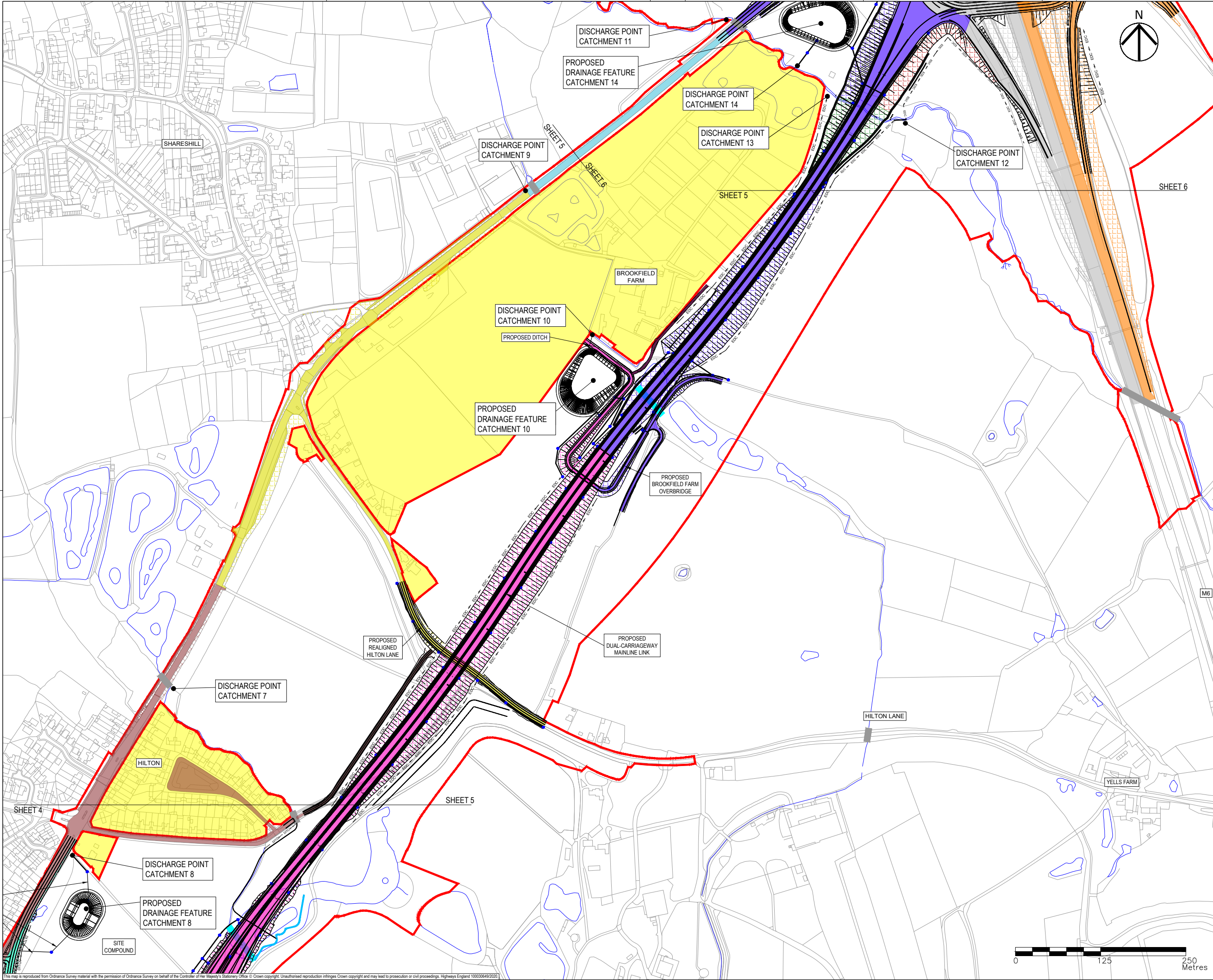
Development Consent Order Drawing Number
TR010054/APP/2.11

Drawing Title
**DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 4 OF 10**

Designed SO	Drawn EL	Checked AM	Approved RR	Date 23/03/21
Internal Project No. 60536736			Suitability S8	
Scale @ A1 1:2500H/1:2500V			Zone Development Consent Order	

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

Drawing Number Highways England PIN HE514465	Originator -ACM	Volume -DCO-	Rev P03
Location Z1_SW_PR_Z	Type -DR-CD-1704	Role 1	Number 1



NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
- DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
- ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
- THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
- ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

KEY

- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
- LAND NOT INCLUDED WITHIN THE ORDER LIMITS
- PROPOSED ALIGNMENT
- PROPOSED WATERCOURSE
- EXISTING WATERCOURSE
- EXISTING CULVERTS
- PROPOSED CULVERT
- EXISTING DRAINAGE DITCH
- PROPOSED DRAINAGE DITCH
- CHAMBER (AND ASSOCIATED PIPEWORK)
- EARTHWORK DRAINAGE
- PROPOSED CATCHMENT 1
- PROPOSED CATCHMENT 2
- PROPOSED CATCHMENT 3
- PROPOSED CATCHMENT 4
- PROPOSED CATCHMENT 5
- PROPOSED CATCHMENT 6
- PROPOSED CATCHMENT 7
- PROPOSED CATCHMENT 8
- PROPOSED CATCHMENT 9
- PROPOSED CATCHMENT 10
- PROPOSED CATCHMENT 11
- PROPOSED CATCHMENT 12
- PROPOSED CATCHMENT 13
- PROPOSED CATCHMENT 14
- PROPOSED CATCHMENT 15
- PROPOSED CATCHMENT 16
- PROPOSED CATCHMENT 17

First Issue	JP	RR	14/01/20	P01
Updated to reflect Oct 2020 scheme changes.	MW	SB	28/09/20	P02
Revision Details	By	Check	Date	Suffix

Purpose of issue

DCO APPLICATION

Client
Highways England
Floor 5
38 Colmore Circus
Birmingham
B4 6BN

Development Consent Order Number
TR010054

Project Title
M54 to M6 Link Road

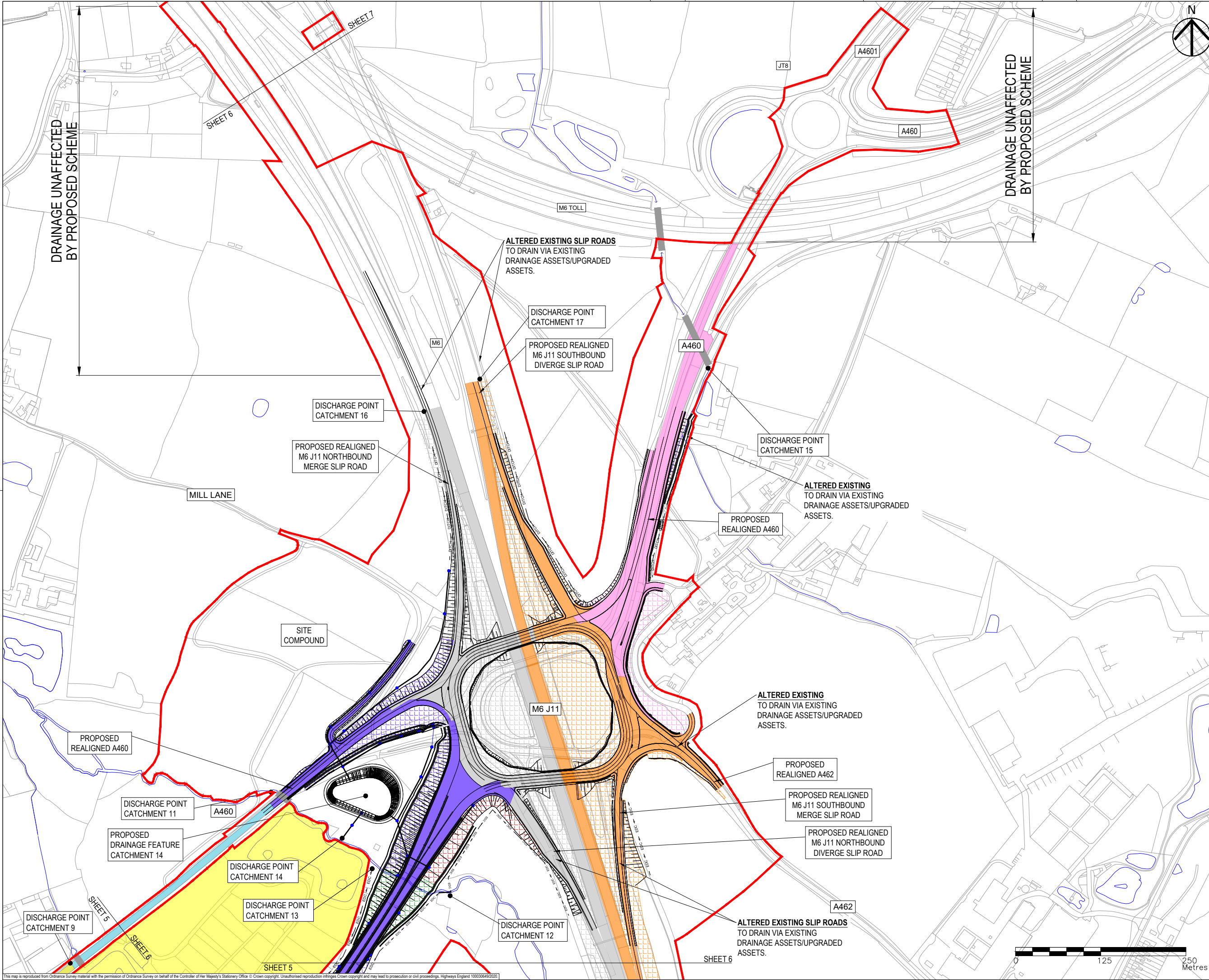
Development Consent Order Drawing Number
TR010054/APP/2.11

Drawing Title
**DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 5 OF 10**

Designed SO	Drawn MW	Checked JH	Approved SB	Date 28/09/20
Internal Project No. 60536736			Suitability S8	
Scale @ A1 1:2500H/1:2500V			Zone Development Consent Order	

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

Drawing Number HE514465	Highways England PIN -ACM	Originator -DCO-	Volume -DR-CD-1705	Rev P02
Location Z2 SW_PR_Z		Type	Role	Number



- NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 6. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

- KEY
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS
 - PROPOSED ALIGNMENT
 - PROPOSED WATERCOURSE
 - EXISTING WATERCOURSE
 - EXISTING CULVERTS
 - PROPOSED CULVERT
 - EXISTING DRAINAGE DITCH
 - PROPOSED DRAINAGE DITCH
 - CHAMBER (AND ASSOCIATED PIPEWORK)
 - EARTHWORK DRAINAGE
 - PROPOSED CATCHMENT 1
 - PROPOSED CATCHMENT 2
 - PROPOSED CATCHMENT 3
 - PROPOSED CATCHMENT 4
 - PROPOSED CATCHMENT 5
 - PROPOSED CATCHMENT 6
 - PROPOSED CATCHMENT 7
 - PROPOSED CATCHMENT 8
 - PROPOSED CATCHMENT 9
 - PROPOSED CATCHMENT 10
 - PROPOSED CATCHMENT 11
 - PROPOSED CATCHMENT 12
 - PROPOSED CATCHMENT 13
 - PROPOSED CATCHMENT 14
 - PROPOSED CATCHMENT 15
 - PROPOSED CATCHMENT 16
 - PROPOSED CATCHMENT 17

First Issue	JP	RR	14/01/20	P01
Updated to reflect Oct 2020 scheme changes.	MW	SB	28/09/20	P02
Revision Details	By	Check	Date	Suffix

Purpose of issue

DCO APPLICATION

Client
Highways England
Floor 5
38 Colmore Square
Birmingham
B4 6BN

Development Consent Order Number

TR010054

Project Title

M54 to M6 Link Road

Development Consent Order Drawing Number

TR010054/APP/2.11

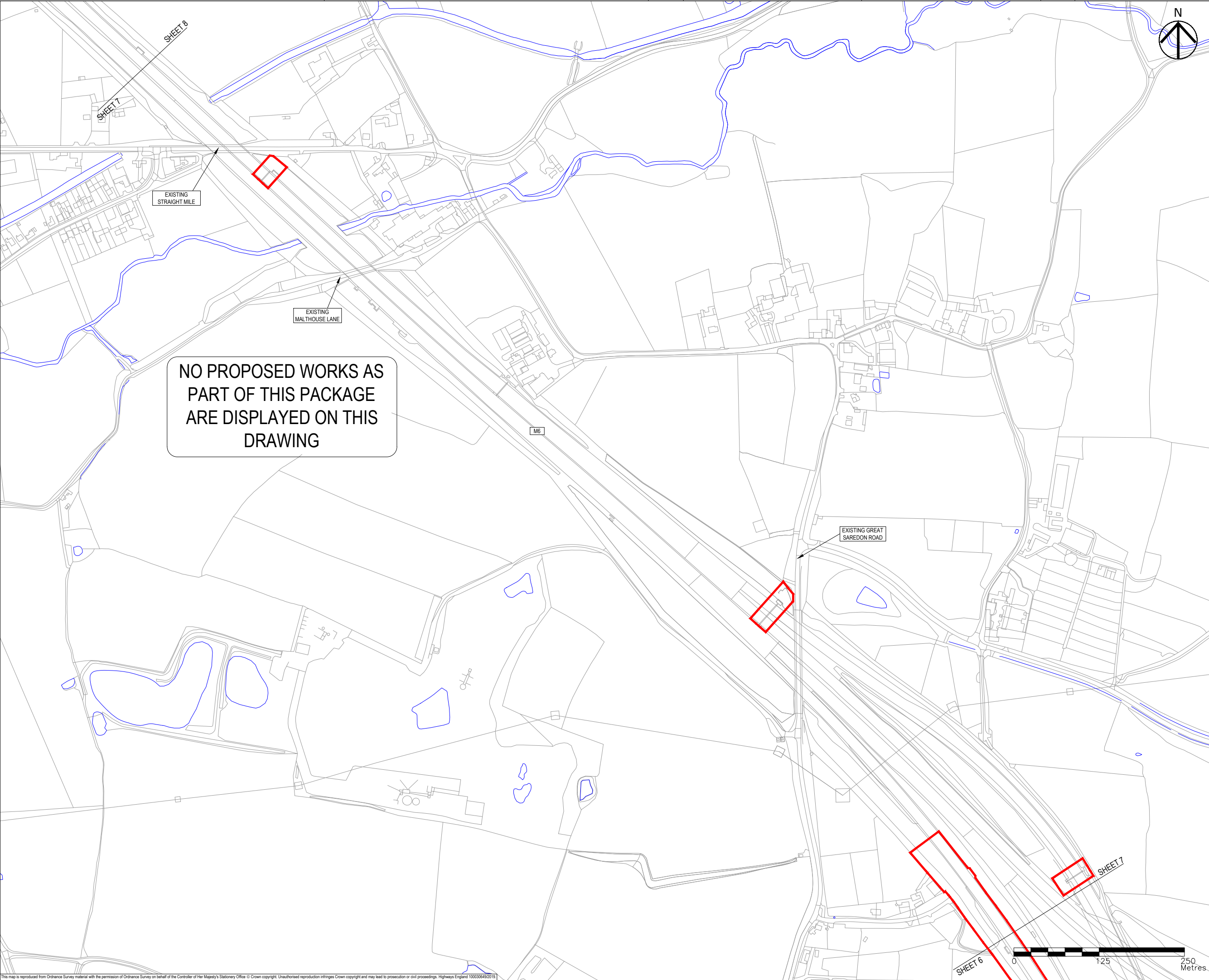
Drawing Title

**DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 6 OF 10**

Designed SO	Drawn MW	Checked JH	Approved SB	Date 28/09/20
Internal Project No. 60536736	Suitability S8			
Scale @ A1 1:2500H/1:2500V	Zone Development Consent Order			

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

Drawing Number HE514465	Originator -ACM	Volume -DCO-	Rev P02
Location Z3 SW_PR_Z	Type -DR-CD-1706	Role I Number	



- NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING. USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 6. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

- KEY
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS
 - PROPOSED ALIGNMENT
 - PROPOSED WATERCOURSE
 - EXISTING WATERCOURSE
 - EXISTING CULVERTS
 - PROPOSED CULVERT
 - EXISTING DRAINAGE DITCH
 - PROPOSED DRAINAGE DITCH
 - CHAMBER (AND ASSOCIATED PIPEWORK)
 - EDC
 - PROPOSED CATCHMENT 1
 - PROPOSED CATCHMENT 2
 - PROPOSED CATCHMENT 3
 - PROPOSED CATCHMENT 4
 - PROPOSED CATCHMENT 5
 - PROPOSED CATCHMENT 6
 - PROPOSED CATCHMENT 7
 - PROPOSED CATCHMENT 8
 - PROPOSED CATCHMENT 9
 - PROPOSED CATCHMENT 10
 - PROPOSED CATCHMENT 11
 - PROPOSED CATCHMENT 12
 - PROPOSED CATCHMENT 13
 - PROPOSED CATCHMENT 14
 - PROPOSED CATCHMENT 15
 - PROPOSED CATCHMENT 16
 - PROPOSED CATCHMENT 17

First Issue	SO	RR	14/01/20	P01
Revision Details	By	Check	Date	Suffix

Purpose of Issue

DCO APPLICATION

Client
Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
Birmingham
B4 6BN

Development Consent Order Number
TR010054

Project Title
M54 to M6 Link Road

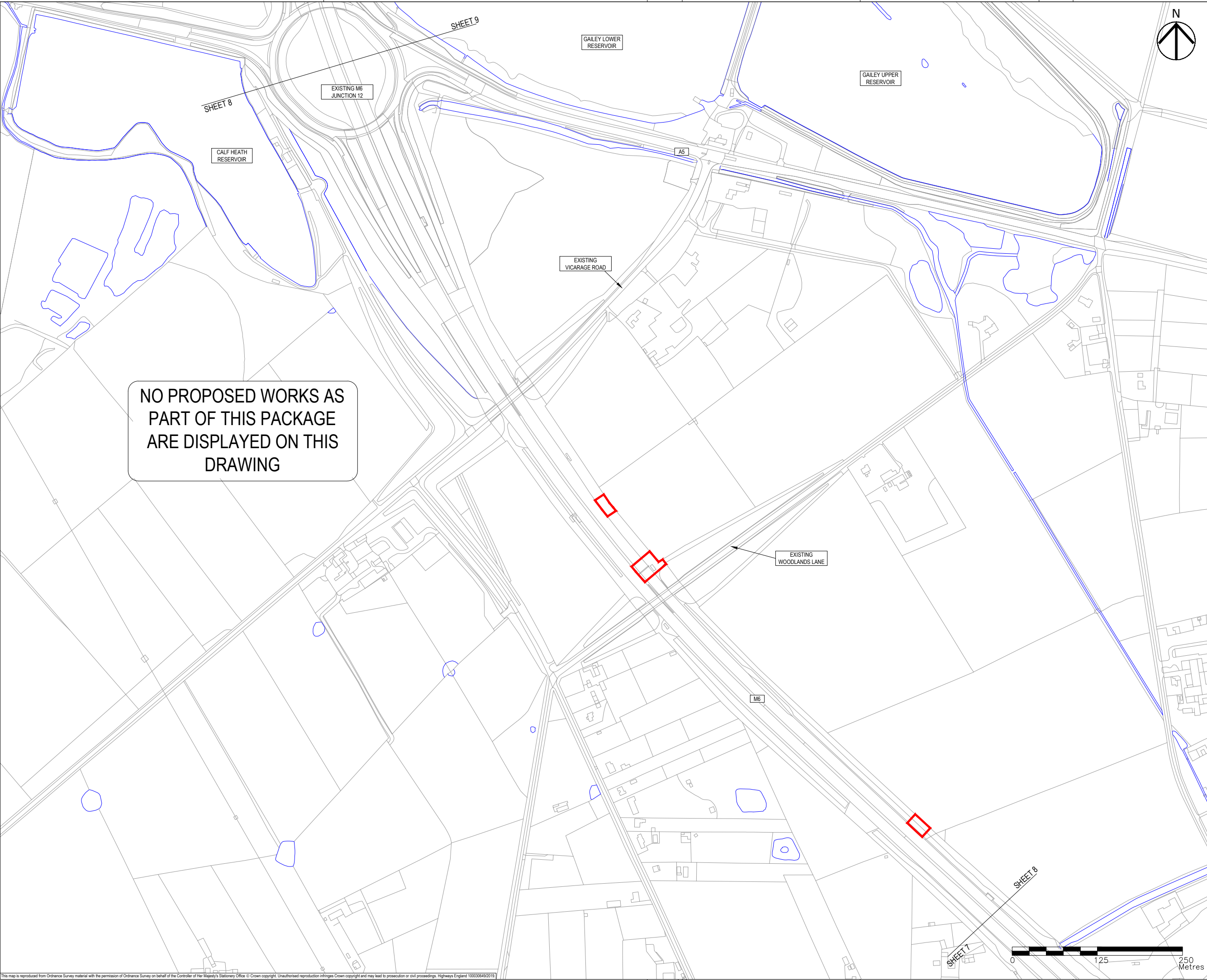
Development Consent Order Drawing Number
TR010054/APP/2.11

Drawing Title
**DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 7 OF 10**

Designed SO	Drawn SO	Checked SB	Approved RR	Date 14/01/20
Internal Project No. 60536736		Suitability S8		
Scale @ A1 1:2500H/1:2500V		Zone Development Consent Order		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

Drawing Number HE514465	Originator -ACM	Volume -DCO-	Rev P01
Location Z3_SW_PR_Z	Type -DR-CD-1707	Role I Number	



- NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING. USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 6. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

- KEY
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS
 - PROPOSED ALIGNMENT
 - PROPOSED WATERCOURSE
 - EXISTING WATERCOURSE
 - EXISTING CULVERTS
 - PROPOSED CULVERT
 - EXISTING DRAINAGE DITCH
 - PROPOSED DRAINAGE DITCH
 - CHAMBER (AND ASSOCIATED PIPEWORK)
 - EARTHWORK DRAINAGE
 - PROPOSED CATCHMENT 1
 - PROPOSED CATCHMENT 2
 - PROPOSED CATCHMENT 3
 - PROPOSED CATCHMENT 4
 - PROPOSED CATCHMENT 5
 - PROPOSED CATCHMENT 6
 - PROPOSED CATCHMENT 7
 - PROPOSED CATCHMENT 8
 - PROPOSED CATCHMENT 9
 - PROPOSED CATCHMENT 10
 - PROPOSED CATCHMENT 11
 - PROPOSED CATCHMENT 12
 - PROPOSED CATCHMENT 13
 - PROPOSED CATCHMENT 14
 - PROPOSED CATCHMENT 15
 - PROPOSED CATCHMENT 16
 - PROPOSED CATCHMENT 17

First Issue	SO	RR	14/01/20	P01
Revision Details	By	Check	Date	Suffix

Purpose of Issue

DCO APPLICATION

Client
Highways England
Floor 5
Two Colmore Square
38 Colmore Circus
Birmingham
B4 6BN

highways
england

Development Consent Order Number

TR010054

Project Title

M54 to M6 Link Road

Development Consent Order Drawing Number

TR010054/APP/2.11

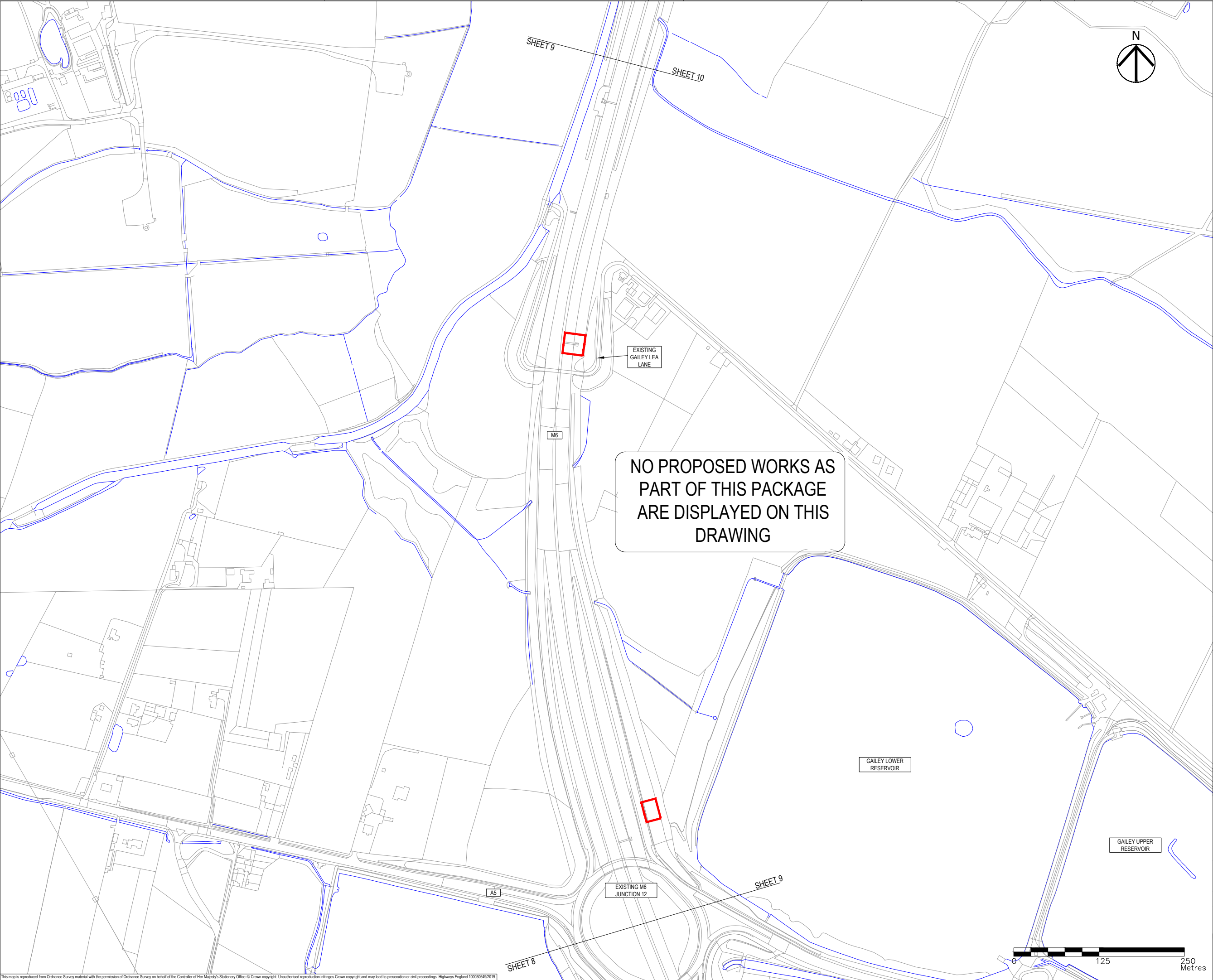
Drawing Title

DRAINAGE ENGINEERING
REGULATION 5(2)(O)
SHEET 8 OF 10

Designed SO	Drawn SO	Checked SB	Approved RR	Date 14/01/20
Internal Project No. 60536736		Suitability S8		
Scale @ A1 1:2500H/1:2500V		Zone Development Consent Order		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

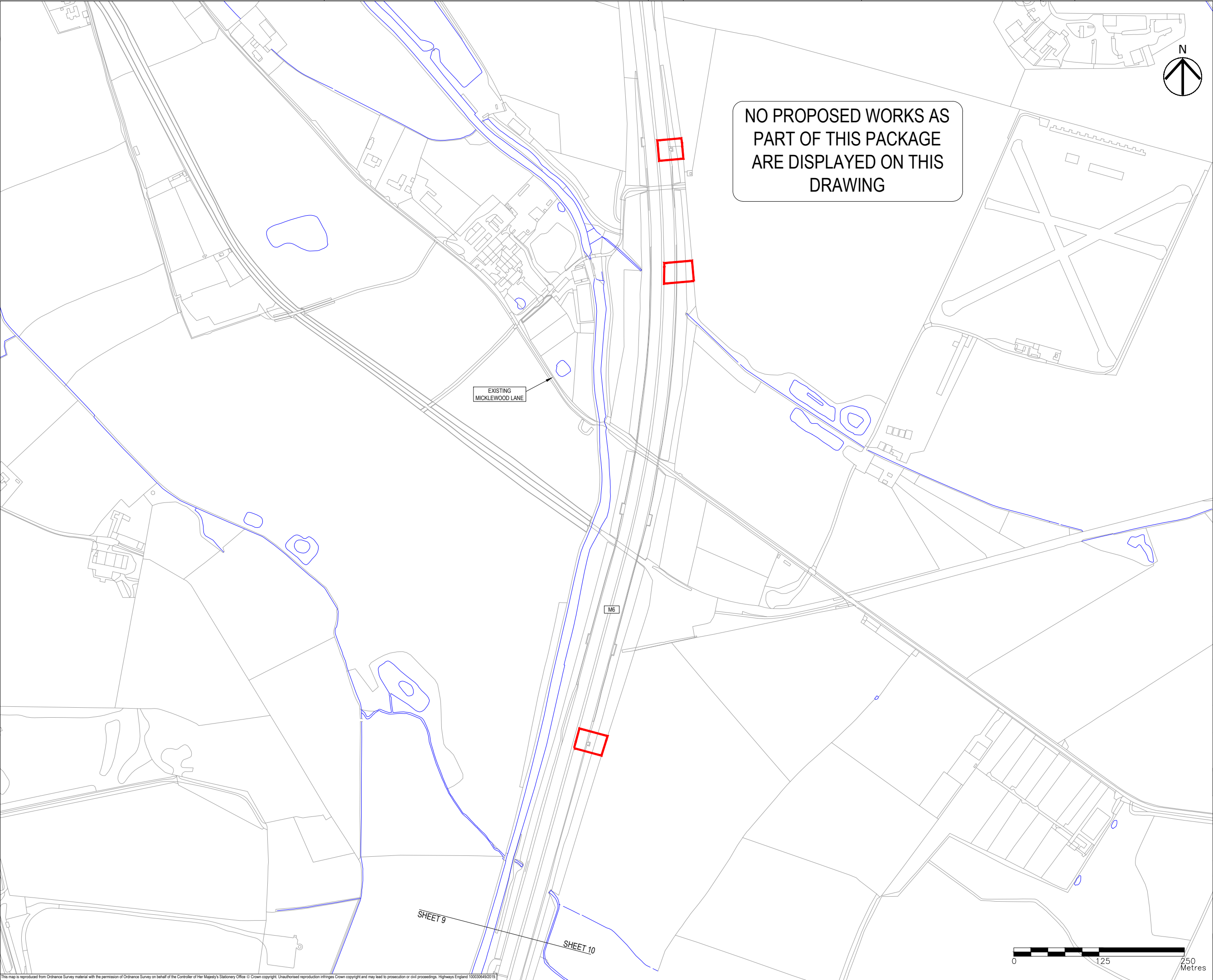
Drawing Number HE514465	Originator -ACM	Volume -DCO-	Rev P01
Location Z3 SW_PR_Z	Type -DR-	Role CD-1708	Number 1



- NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING. USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 6. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

- KEY
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS
 - PROPOSED ALIGNMENT
 - PROPOSED WATERCOURSE
 - EXISTING WATERCOURSE
 - EXISTING CULVERTS
 - PROPOSED CULVERT
 - EXISTING DRAINAGE DITCH
 - PROPOSED DRAINAGE DITCH
 - CHAMBER (AND ASSOCIATED PIPEWORK)
 - EARTHWORK DRAINAGE
 - PROPOSED CATCHMENT 1
 - PROPOSED CATCHMENT 2
 - PROPOSED CATCHMENT 3
 - PROPOSED CATCHMENT 4
 - PROPOSED CATCHMENT 5
 - PROPOSED CATCHMENT 6
 - PROPOSED CATCHMENT 7
 - PROPOSED CATCHMENT 8
 - PROPOSED CATCHMENT 9
 - PROPOSED CATCHMENT 10
 - PROPOSED CATCHMENT 11
 - PROPOSED CATCHMENT 12
 - PROPOSED CATCHMENT 13
 - PROPOSED CATCHMENT 14
 - PROPOSED CATCHMENT 15
 - PROPOSED CATCHMENT 16
 - PROPOSED CATCHMENT 17

First Issue	SO	RR	14/01/20	P01
Revision Details	By	Check	Date	Suffix
Purpose of Issue				
DCO APPLICATION				
Client Highways England Floor 5 Two Colmore Square 38 Colmore Circus Birmingham B4 6BN				
Development Consent Order Number TR010054				
Project Title M54 to M6 Link Road				
Development Consent Order Drawing Number TR010054/APP/2.11				
Drawing Title DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 9 OF 10				
Designed SO	Drawn SO	Checked SB	Approved RR	Date 14/01/20
Internal Project No. 60536736		Suitability S8		
Scale @ A1 1:2500H/1:2500V		Zone Development Consent Order		
THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.				
Drawing Number Highways England PIN HE514465	Originator -ACM	Volume -DCO-	Rev P01	
Z3 SW_PR_Z		-DR-CD-1709		
Location	Type	Role	Number	



- NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
 2. DO NOT SCALE FROM THIS DRAWING. USE ONLY PRINTED DIMENSIONS.
 3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.
 5. THE PROPOSED WORKS SHOWN ARE ILLUSTRATIVE ONLY AND WILL BE SUBJECT TO CHANGE AS PART OF DETAILED DESIGN. ANY CHANGES WILL BE LIMITED TO BEING WITHIN THE ORDER LIMITS AND ANY OTHER CONSTRAINTS INCLUDED IN THE DEVELOPMENT CONSENT ORDER.
 6. ALL SOLID CATCHMENT HATCHES ARE IMPERMEABLE AREAS. ALL PATTERNED HATCHES ARE PERMEABLE AREAS.

- KEY
- LIMITS OF LAND TO BE ACQUIRED OR USED PERMANENTLY OR TEMPORARILY (THE ORDER LIMITS)
 - LAND NOT INCLUDED WITHIN THE ORDER LIMITS
 - PROPOSED ALIGNMENT
 - PROPOSED WATERCOURSE
 - EXISTING WATERCOURSE
 - EXISTING CULVERTS
 - PROPOSED CULVERT
 - EXISTING DRAINAGE DITCH
 - PROPOSED DRAINAGE DITCH
 - CHAMBER (AND ASSOCIATED PIPEWORK)
 - EARTHWORK DRAINAGE
 - PROPOSED CATCHMENT 1
 - PROPOSED CATCHMENT 2
 - PROPOSED CATCHMENT 3
 - PROPOSED CATCHMENT 4
 - PROPOSED CATCHMENT 5
 - PROPOSED CATCHMENT 6
 - PROPOSED CATCHMENT 7
 - PROPOSED CATCHMENT 8
 - PROPOSED CATCHMENT 9
 - PROPOSED CATCHMENT 10
 - PROPOSED CATCHMENT 11
 - PROPOSED CATCHMENT 12
 - PROPOSED CATCHMENT 13
 - PROPOSED CATCHMENT 14
 - PROPOSED CATCHMENT 15
 - PROPOSED CATCHMENT 16
 - PROPOSED CATCHMENT 17

First Issue	SO	RR	14/01/20	P01
Revision Details	By	Check	Date	Suffix
Purpose of Issue				
DCO APPLICATION				
Client Highways England Floor 5 Two Colmore Square 38 Colmore Circus Birmingham B4 6BN				
Development Consent Order Number TR010054				
Project Title M54 to M6 Link Road				
Development Consent Order Drawing Number TR010054/APP/2.11				
Drawing Title DRAINAGE ENGINEERING REGULATION 5(2)(O) SHEET 10 OF 10				
Designed SO	Drawn SO	Checked SB	Approved RR	Date 14/01/20
Internal Project No. 60536736		Suitability S8		
Scale @ A1 1:2500H/1:2500V		Zone Development Consent Order		
THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.				
Drawing Number HE514465	Highways England PIN -ACM	Originator -DCO-	Volume -DR-CD-1710	Rev P01
Location Z3 SW_PR_Z		Type I	Role I	Number I