Junction
System Design

BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME

JUNCTION SYSTEMS DESIGN

DRAWING SERIES NUMBER(S)	DRAWING SERIES DESCRIPTION
BCIDA-ACM-TSM__IX-0001_XX_00-DR-CR-0001	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. COVER SHEET
BCIDA-ACM-TSM__KP-0001_XX_00-DR-CR-0001	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. KEY PLAN
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0001	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. MAYNE RIVER AVENUE
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0002	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. HILTON
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0003	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. CLAREHALL
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0004	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. BELCAMP LANE MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0005	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. BLUNDEN DRIVE
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0006	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. WOODYS MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0007	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. GREEN CASTLE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0008	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. TONGELEE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0009	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. ST BRENDANS CHURCH MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0010	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. COOLOCK VILLAGE MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0011	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. MASK AVENUE MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0012	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. ARDLEA ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0013	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. DANIELI ROAD MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0014	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. KILMORE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0015	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. KILLESTER AVENUE
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0016	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. ELM MOUNT ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0017	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. COLLINS AVENUE
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0018	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. ELM ROAD MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0019	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. DONNYCARNEY ROAD MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0020	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. CASINO PARK
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0021	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. NORTH OF GRIFFITH MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0022	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. GRIFFITH AVENUE
bCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0023	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. MARINO AVENUE BRIAN ROAD MALAHIDE ROAD
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0024	CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME. JUNCTION SYSTEMS DESIGN. CLONTARF ROAD

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

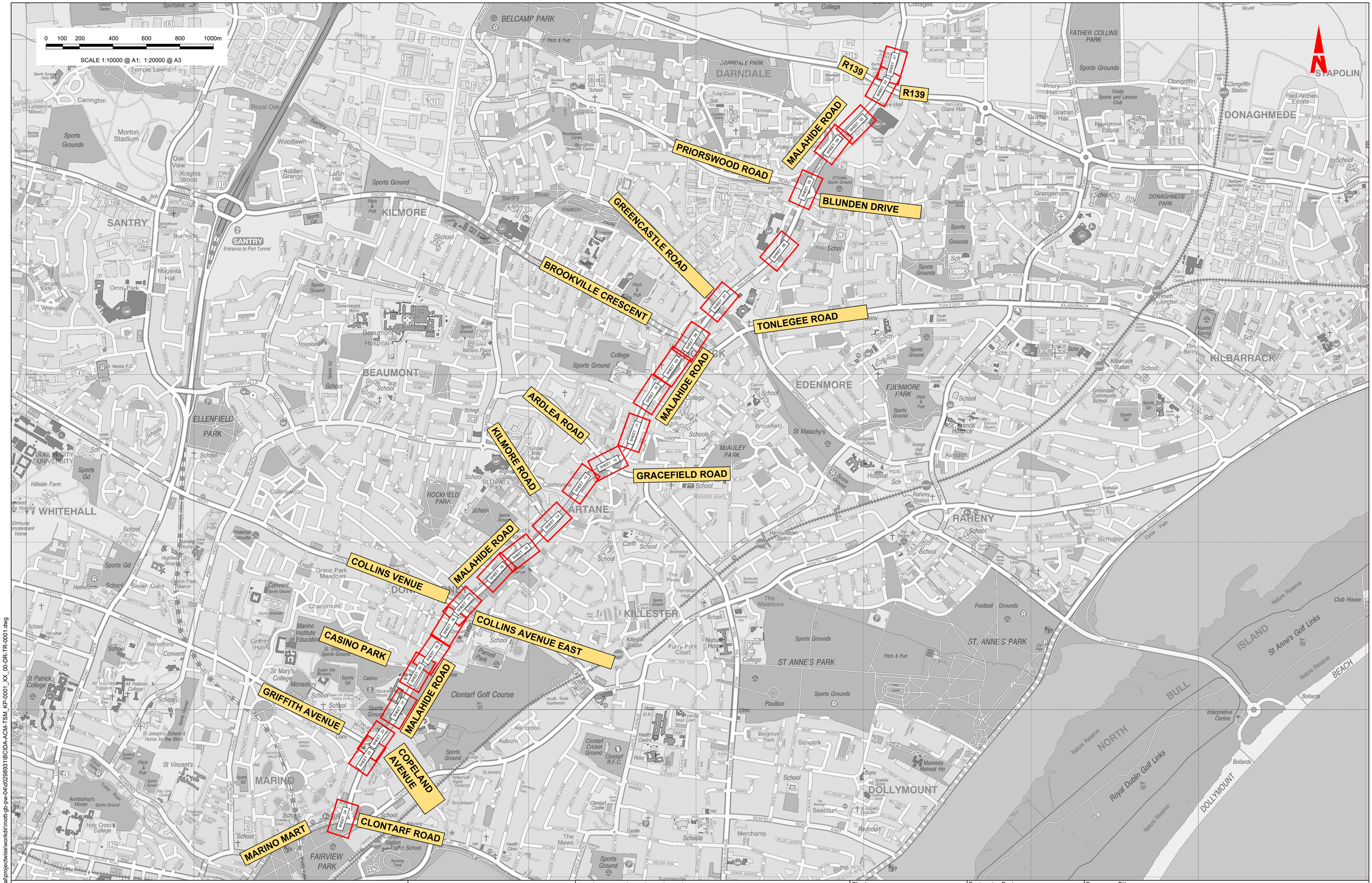
Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN COVER SHEET

Date	Scale	Drawn	Checked	Approved
05/12/21	NTS @ A1 NTS @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_IX-0001_XX_00-DR-TR-0001	01 of 01	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\users\poc83666\appdata\local\projectwise\workdir\mott-gb-pw-04\d0298931\BCIDA-ACM-TSM_IX-0001_XX_00-DR-TR-0001.dwg



Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN KEY PLAN

Date	Scale	Drawn	Checked	Approved
05/12/21	1:10000 @ A1 1:20000 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_KP-0001_XX_00-DR-TR-0001	01 of 01	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\users\poc83666\appdata\local\projectwise\workdir\mott-gb-pw-04\d0298931\BCIDA-ACM-TSM_KP-0001_XX_00-DR-TR-0001.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

MALAHIDE ROAD

MAYNE RIVER AVENUE

PROPOSED SCHEME

Tie in to Belmayne Main Street & Belmayne Avenue Scheme

LÁNA BUS

STOP

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 002(J) PRIMARY
- RTS 002(J) SECONDARY
- RTS 003(H) PRIMARY
- RTS 003(H) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

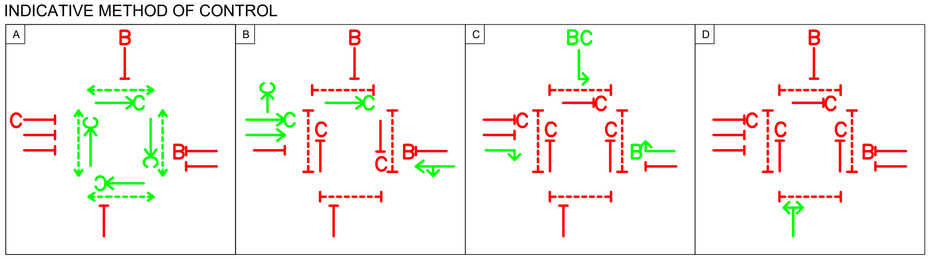
TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL



Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN MAYNE RIVER AVENUE

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

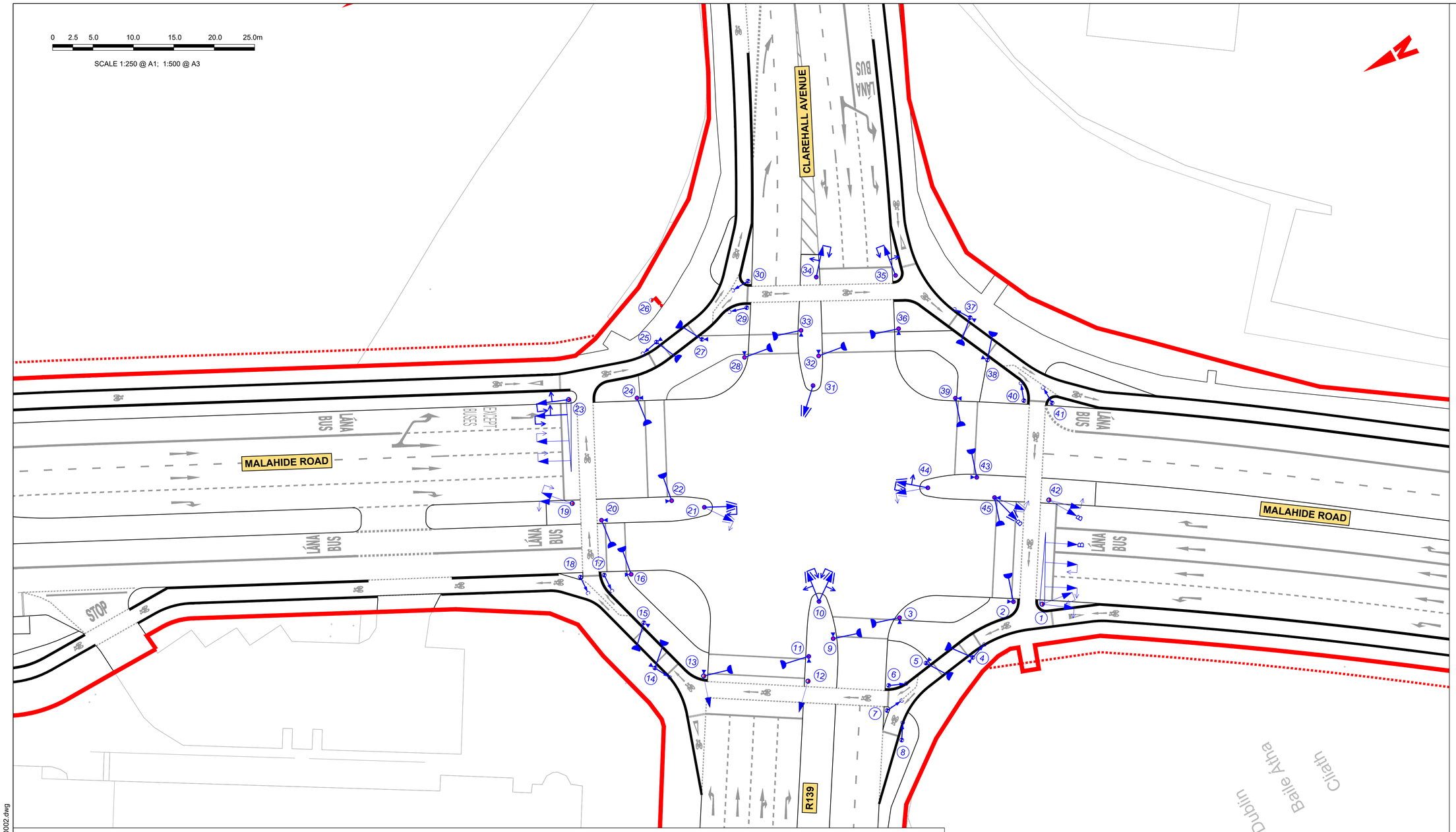
Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0001	01 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pocd83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0001.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(A) PRIMARY
- RTS 002(A) SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(H) PRIMARY
- RTS 003(H) SECONDARY
- RTS 003(J) PRIMARY
- RTS 003(J) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

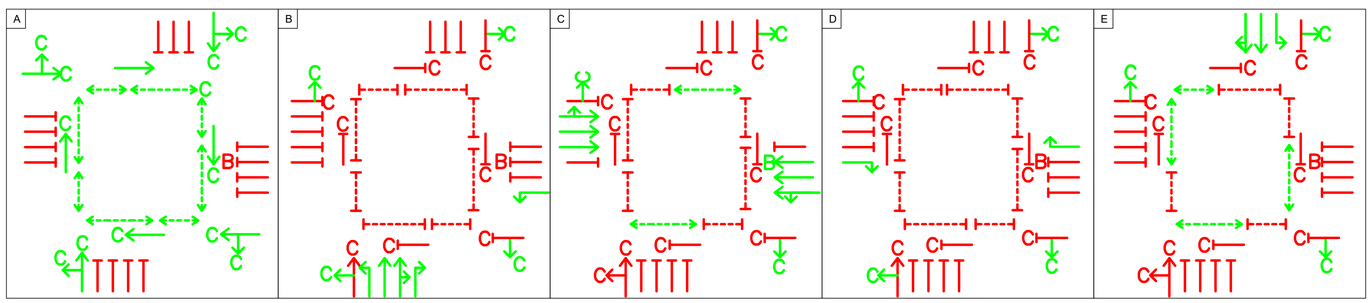
TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL



Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN HILTON

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

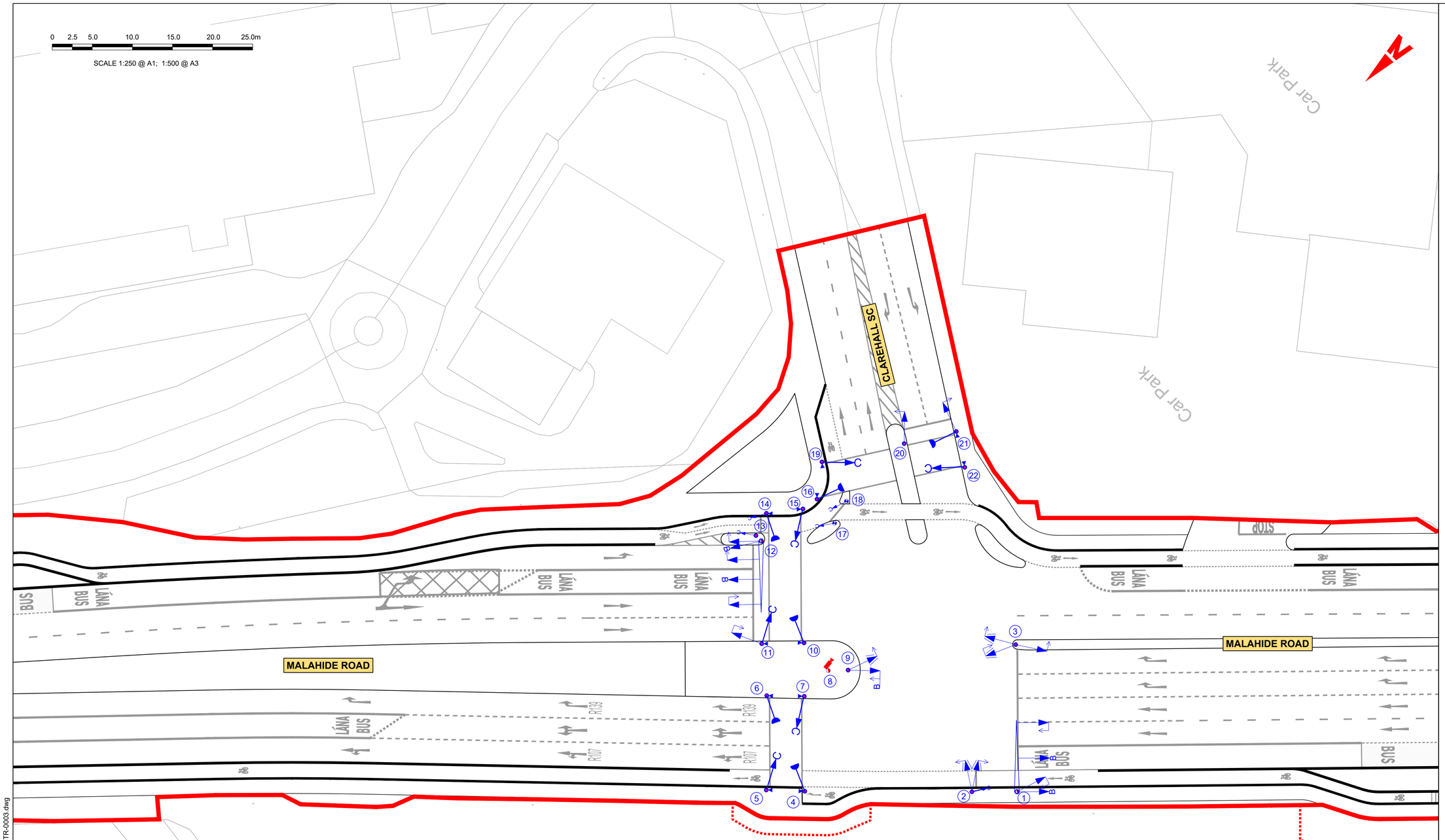
Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0002	02 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0002.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(A) PRIMARY
- RTS 002(A) SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(A) PRIMARY
- RTS 003(A) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

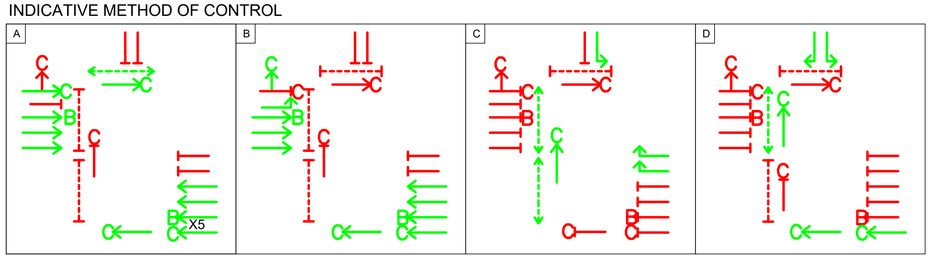
TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- (X) POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL



X5 denotes Advance 5 seconds Start for Cyclists and Buses

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

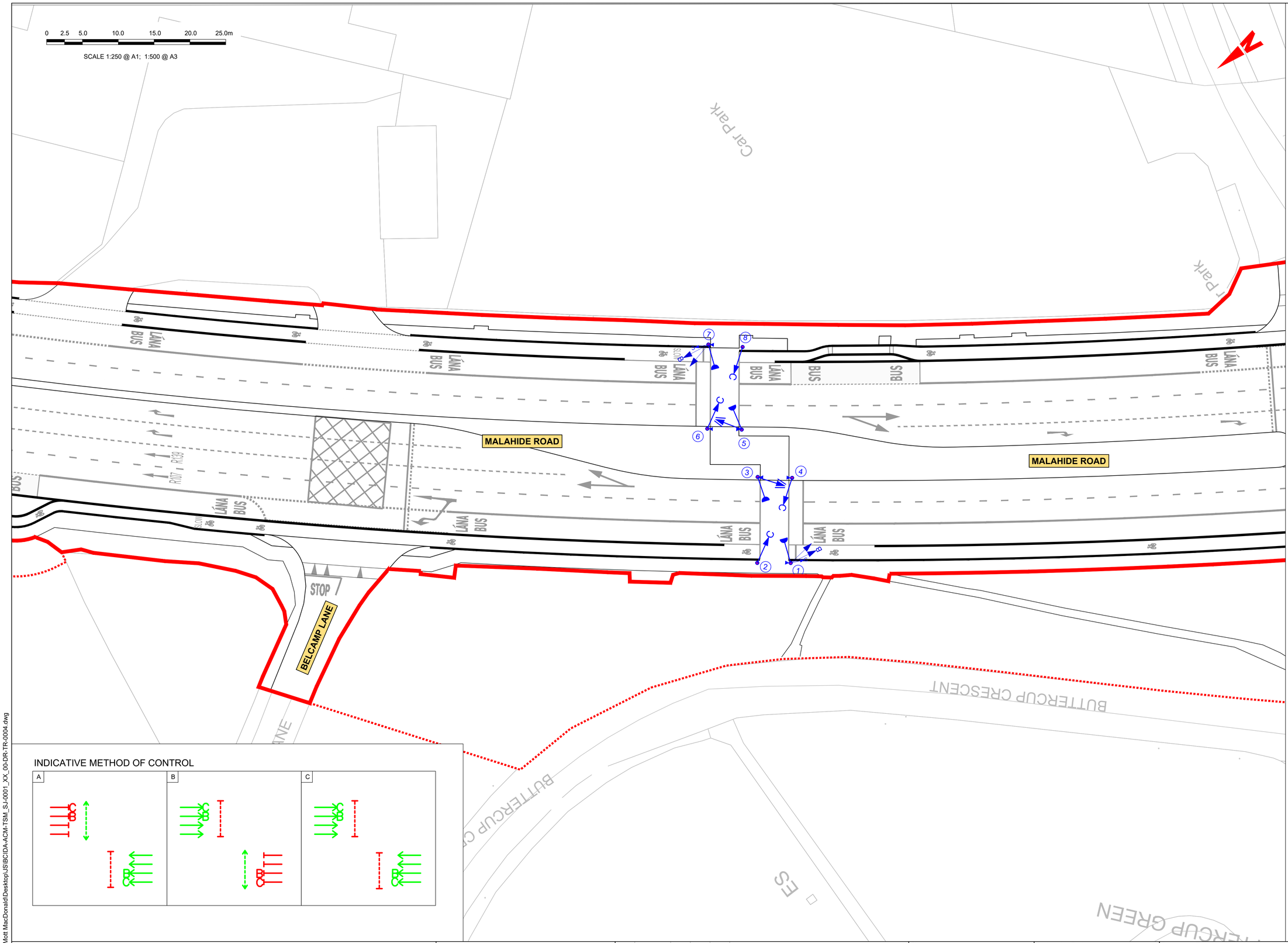
Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN CLAREHALL

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1, 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0003	03 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pcc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0003.dwg



INDICATIVE METHOD OF CONTROL

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN BELCAMP LANE MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0004	04 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0004.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

BLUNDEN DRIVE

MALAHIDE ROAD

PRIORSWOOD ROAD

LÁNA BUS

BUS

12

12a

Car Park

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(A) PRIMARY
- RTS 002(A) SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(H) PRIMARY
- RTS 003(H) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

A B C D E

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

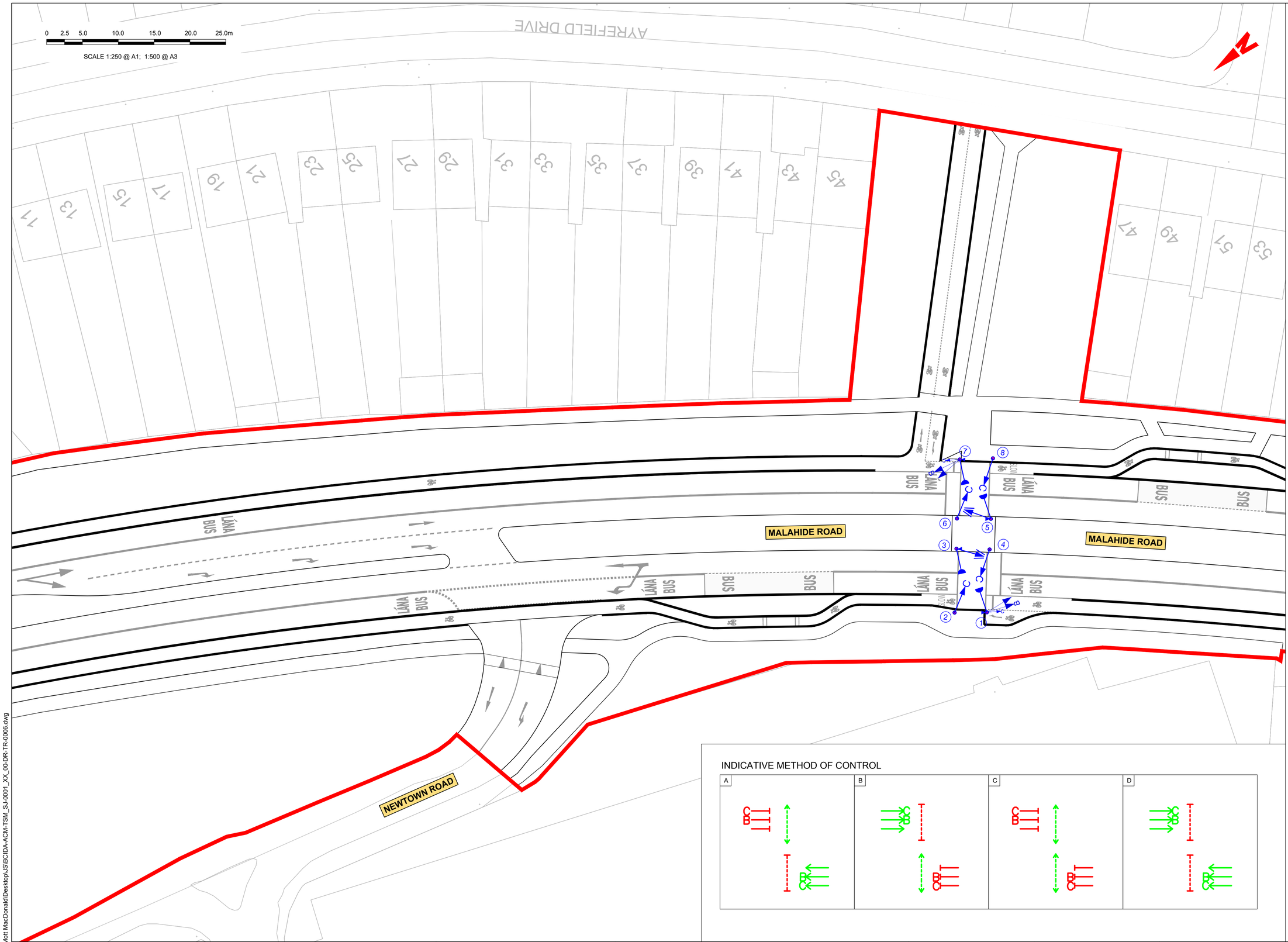
Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN BLUNDEN DRIVE

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1, 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0005	05 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0005.dwg



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/CSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN WOODYS MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

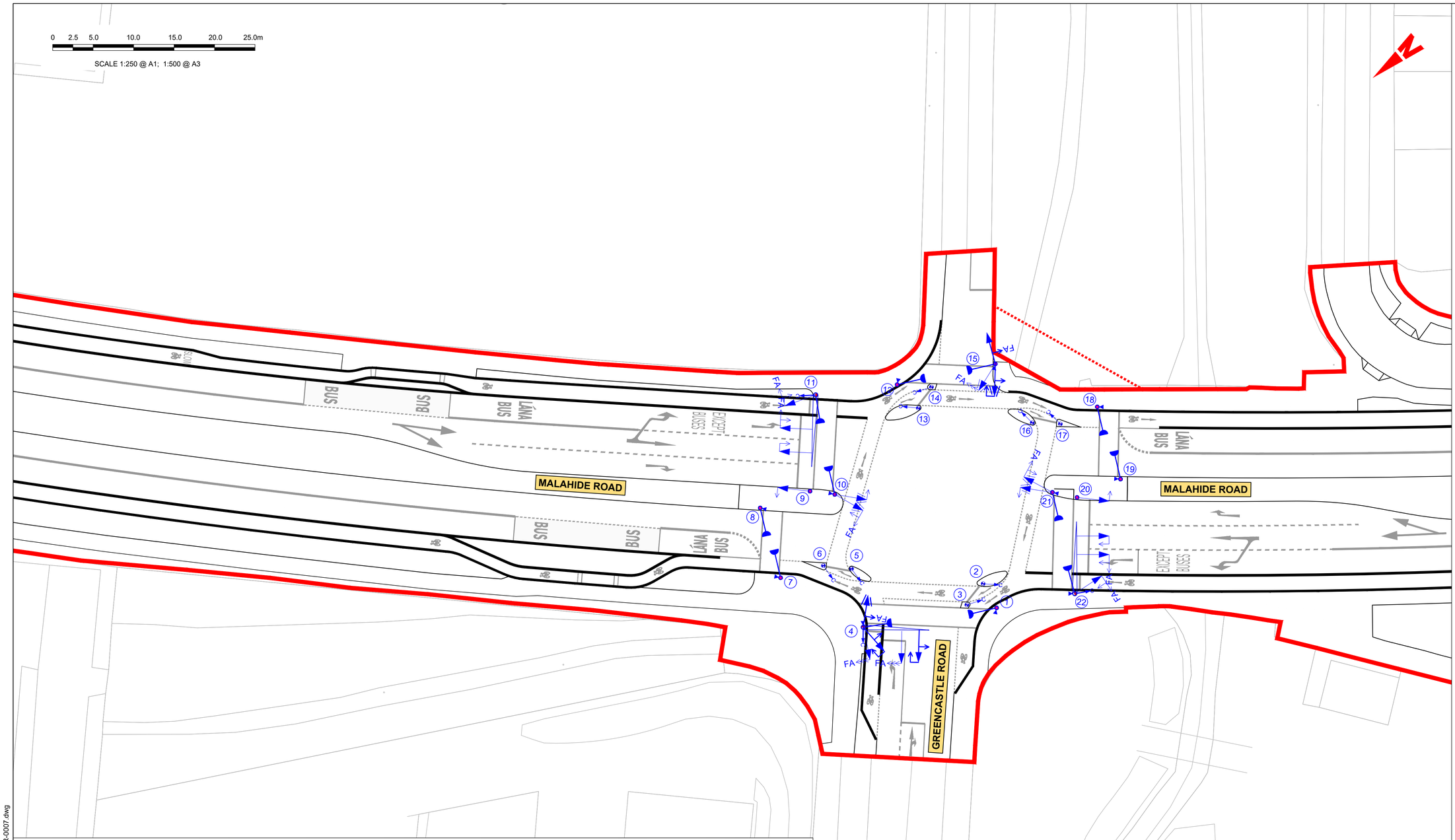
Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0006	06 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0006.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(A) PRIMARY
- RTS 002(A) SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 003(J) PRIMARY
- RTS 003(J) SECONDARY
- RTS 004(E) PRIMARY
- RTS 004(E) SECONDARY
- RTS 004(Z) PRIMARY
- RTS 004(Z) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

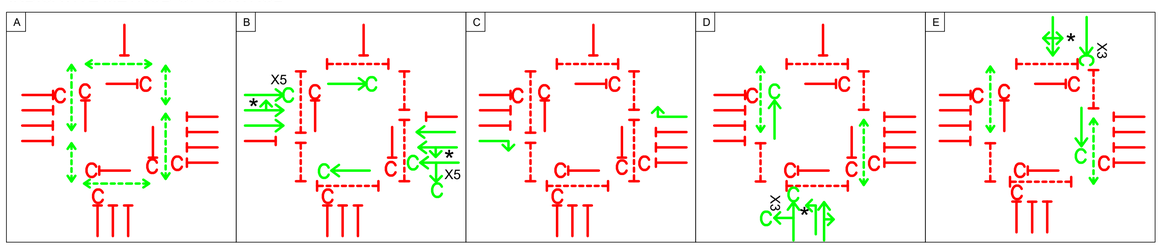
TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL



* denotes Flashing Amber
X5 denotes Advance 5 seconds Start for Cyclists
X3 denotes Advance 3 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN GREEN CASTLE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1, 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0007	07 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pcr83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0007.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

TONGELEE ROAD

MALAHIDE ROAD

MALAHIDE ROAD

BROOKVILLE CRESCENT

BROOKVILLE

LÁNA BUS

BUS

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(A) PRIMARY
- RTS 002(A) SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 004(G) PRIMARY
- RTS 004(G) SECONDARY
- RTS 004(E) PRIMARY
- RTS 004(E) SECONDARY
- RTS 004(Z) PRIMARY
- RTS 004(Z) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

A B C D E

* denotes Flashing Amber

X3 denotes Advance 3 seconds Start for Cyclists

X5 denotes Advance 5 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040 — Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN TONGELEE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0008	08 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pcr83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0008.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

ST. BRENDAN'S PARK

ST. BRENDAN'S AVENUE

MALAHIDE ROAD

MALAHIDE ROAD

BUS LÁNA

Car Park

Car Park

Saint Brendan's Catholic Church

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

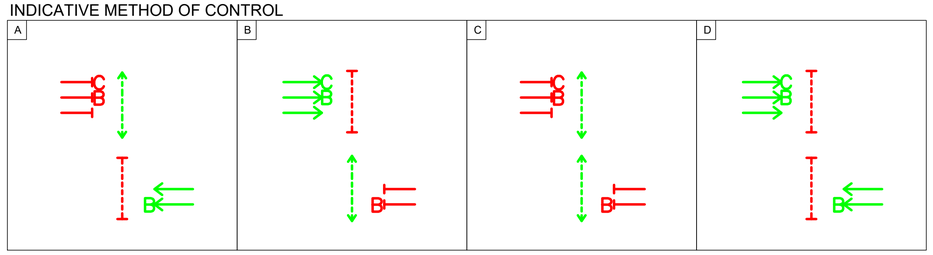
TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL



Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN ST BRENDANS CHURCH MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0009	09 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\users\poc83666\appdata\local\projectwise\workdir\mott-gb-pw-04\d0298931\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0009.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

MALAHIDE ROAD

ST. BRENDAN'S DRIVE

BROOKVILLE PARK

BUS

LÁNA BUS

EXCEPT BUSES

STOP

1 2 3 4 5 6 7 8

INDICATIVE METHOD OF CONTROL

A B C

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0010.dwg

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040 — Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

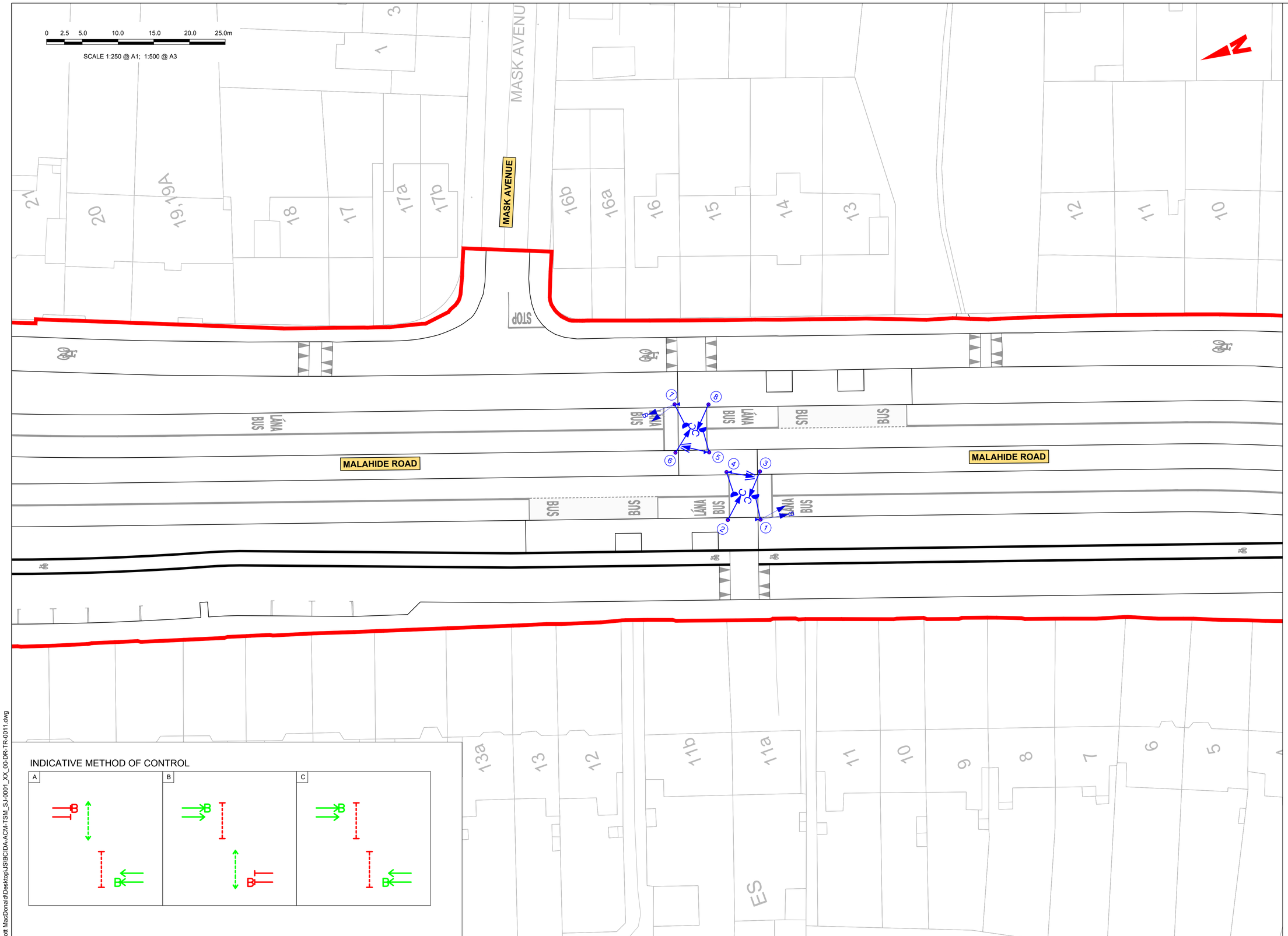
Project Code	Originator Code	QMS Code
BCIDA	ACM	

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN COOLOCK VILLAGE MALAHIDE ROAD

Drawing File Name	Sheet Number	Status	Rev
BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0010	10 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN MASK AVENUE MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0011	11 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0011.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

MALAHIDE ROAD

GRACEFIELD ROAD

ARDLEA ROAD

LÁNA BUS

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(A) PRIMARY
- RTS 003(A) SECONDARY
- RTS 004(G) PRIMARY
- RTS 004(G) SECONDARY
- RTS 004(E) PRIMARY
- RTS 004(E) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

A B C D

* denotes Flashing Amber

X3 denotes Advance 3 seconds Start for Cyclists

X5 denotes Advance 5 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040 — Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN ARDLEA ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1, 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0012	12 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pcc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0012.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

MALAHIDE ROAD

MALAHIDE ROAD

DANIELI ROAD

MORNINGTON GROVE

BUS LÁNA

STOP

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

A

B

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/CSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN DANIELI ROAD MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1, 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0013	13 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0013.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

MALAHIDE ROAD

KILMORE ROAD

LÁNA BUS

BUS

FA

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(A) PRIMARY
- RTS 003(A) SECONDARY
- RTS 004(G) PRIMARY
- RTS 004(G) SECONDARY
- RTS 004(Z) PRIMARY
- RTS 004(Z) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

A B C D

* denotes Flashing Amber

X3 denotes Advance 3 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN KILMORE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0014	14 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pcc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0014.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

KILLESTER AVENUE

MALAHIDE ROAD

LÁNA BUS

EXCEPT BUSES

SAINT DAVID'S WOOD

ST DAVID'S WOOD

THORNDALE GROVE

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(H) PRIMARY
- RTS 003(H) SECONDARY
- RTS 003(J) PRIMARY
- RTS 003(J) SECONDARY
- RTS 004(Z) PRIMARY
- RTS 004(Z) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

A B C D

* denotes Flashing Amber

TB denotes Turn Ban during AM Peak Hour

X5 denotes Advance 3 seconds Start for Cyclists

X3 denotes Advance 3 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/CSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

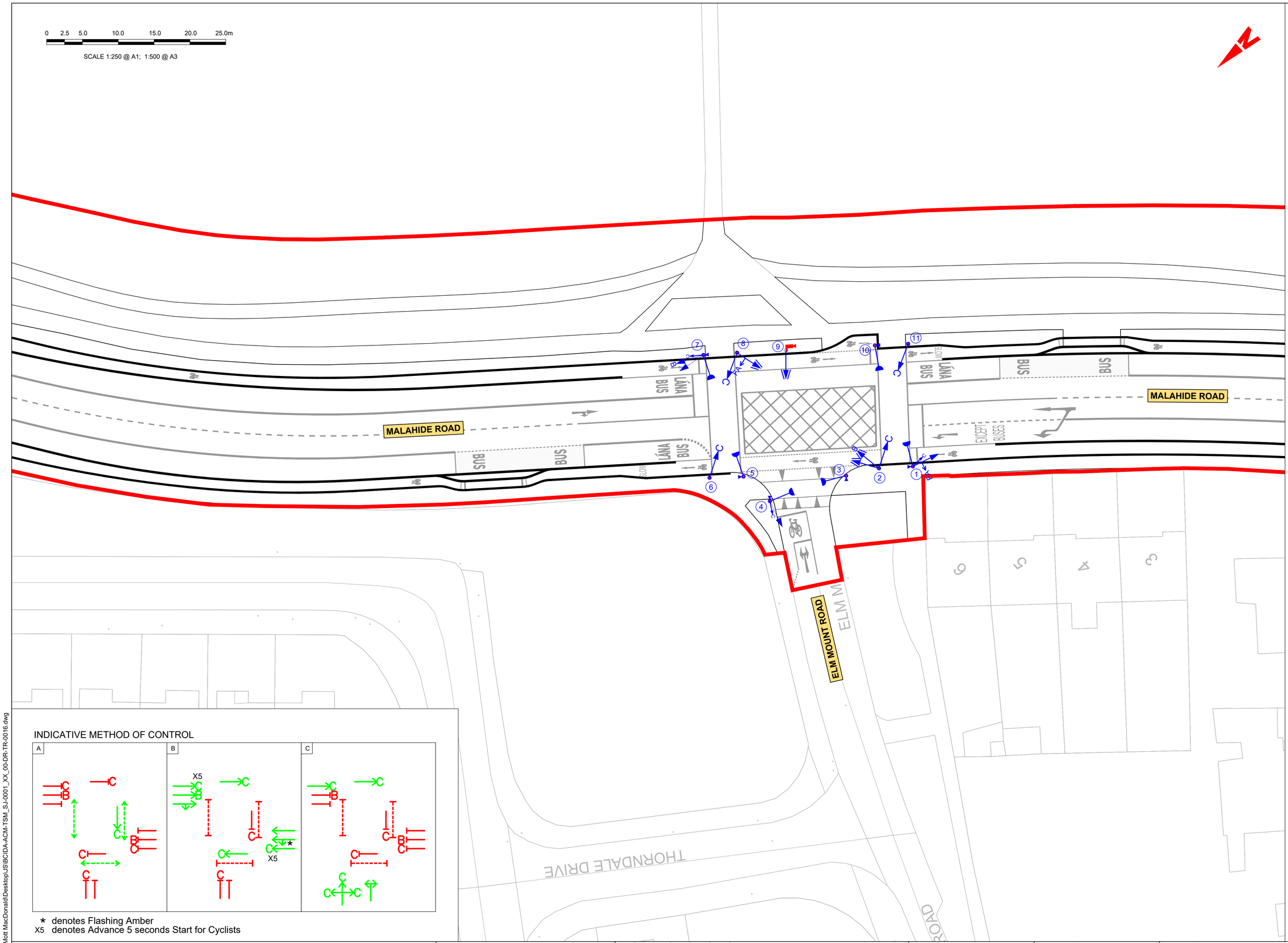
Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN KILLESTER AVENUE

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:1000 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0015	15 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0015.dwg



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 004(Z) PRIMARY
- RTS 004(Z) SECONDARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

* denotes Flashing Amber
X5 denotes Advance 5 seconds Start for Cyclists

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0016.dwg

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN ELM MOUNT ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0016	16 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

COLLINS AVENUE EAST

MALAHIDE ROAD

COLLINS AVENUE

LÁNA BUS

EXCEPT BUSES

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(A) PRIMARY
- RTS 003(A) SECONDARY
- RTS 004(E) PRIMARY
- RTS 004(E) SECONDARY
- RTS 004(G) PRIMARY
- RTS 004(G) SECONDARY
- RTS 004(Z) PRIMARY
- RTS 004(Z) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

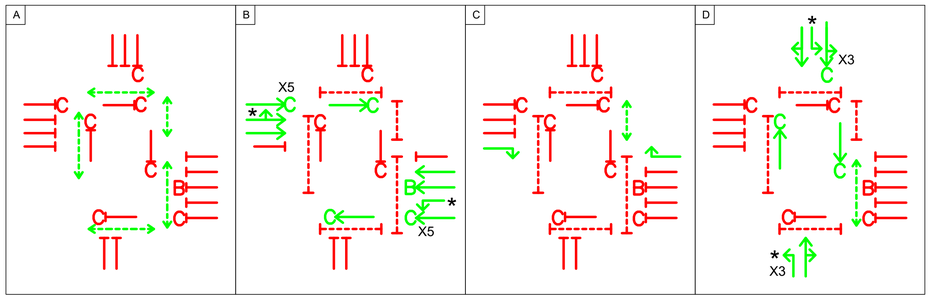
TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL



* denotes Flashing Amber
X5 denotes Advance 5 seconds Start for Cyclists
X3 denotes Advance 3 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.
b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.
c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.
e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN COLLINS AVENUE

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

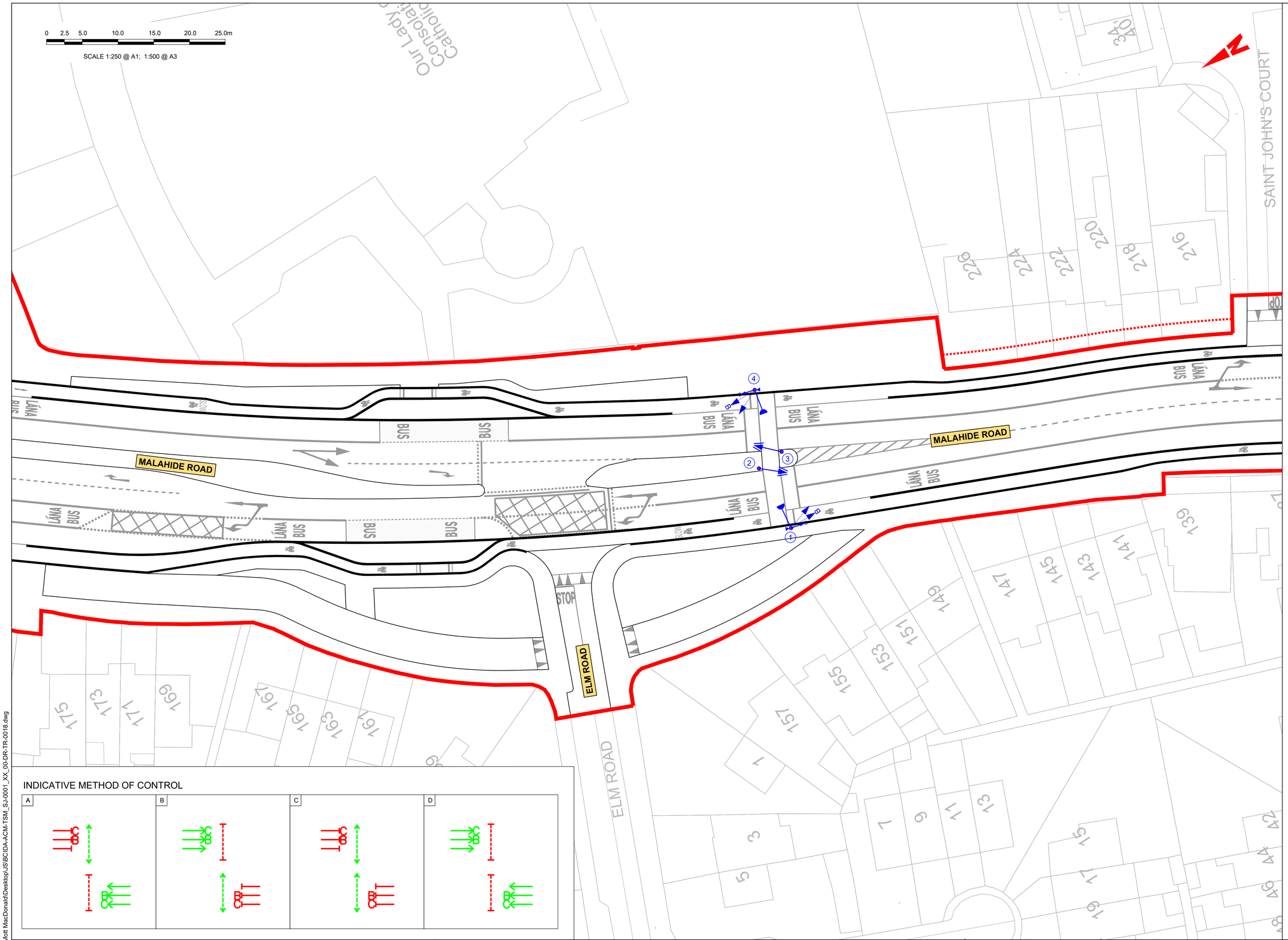
Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0017	17 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pcd83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0017.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

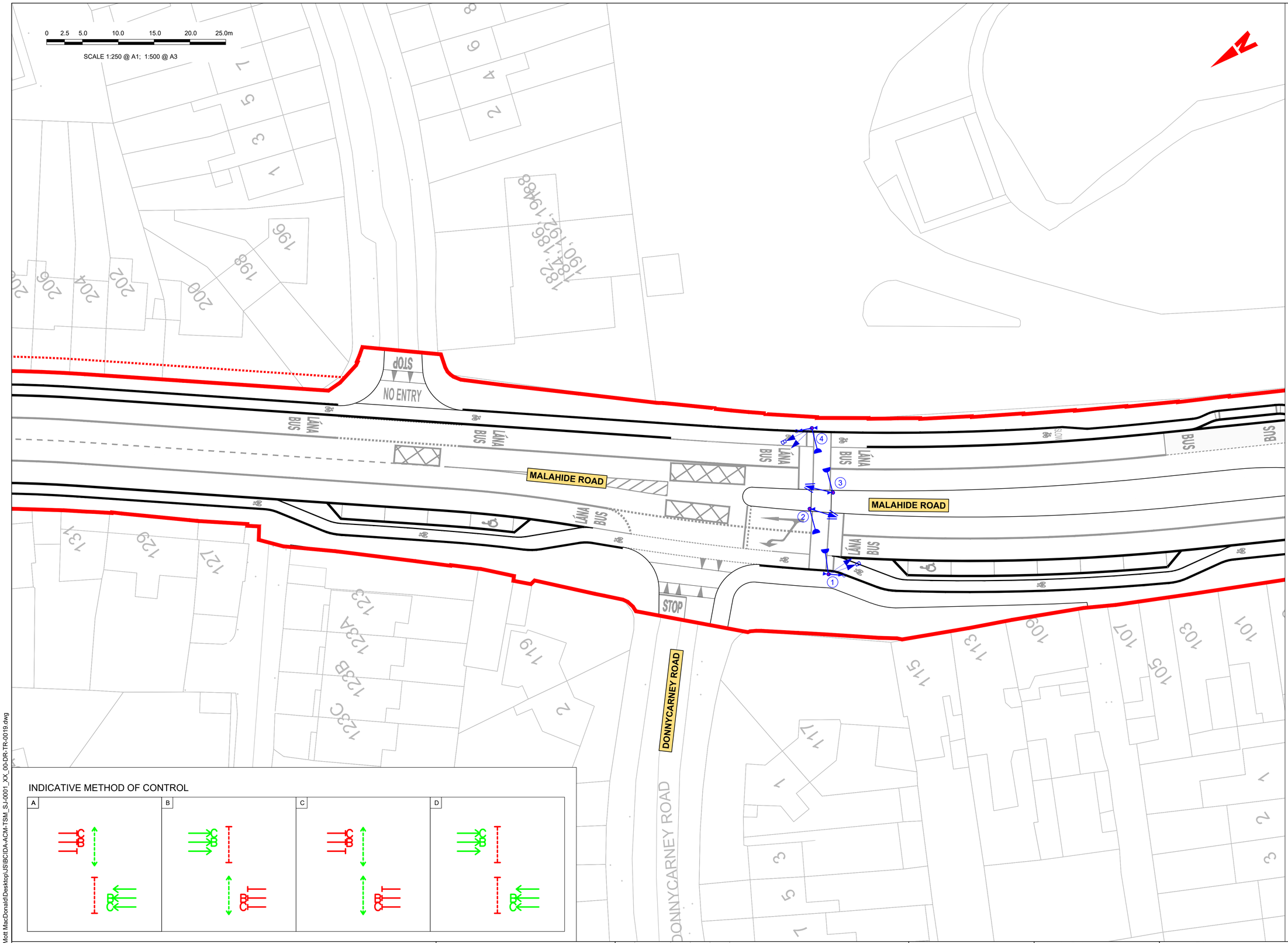
Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN ELM ROAD MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0018	18 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\pcd83666\OneDrive - Mott MacDonald\Desktop\USBCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0018.dwg



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0019.dwg

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN DONNYCARNEY ROAD MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0019	19 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

MALAHIDE ROAD

MALAHIDE ROAD

CASINOPARK

BUS LÁNA

EXCEPT BUSES

SLOW

LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(B) PRIMARY
- RTS 003(B) SECONDARY
- RTS 004(E) PRIMARY
- RTS 004(E) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

A B C D

X5

* denotes Flashing Amber

X5 denotes Advance 5 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/CSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040 — Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN CASINO PARK

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1, 1:1000 @ A3	M.T.BORAN	J.HAWE	C.ACTON

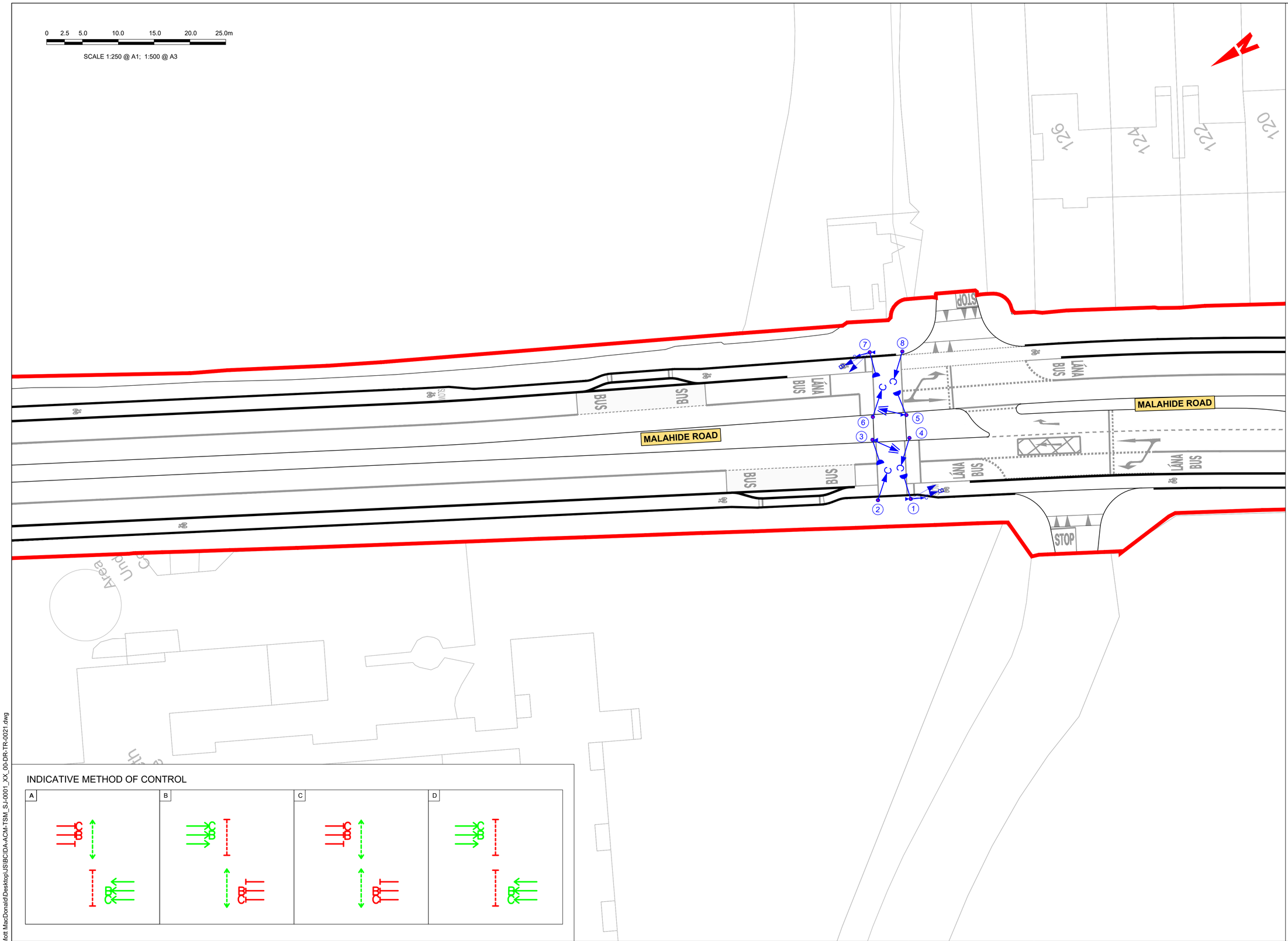
Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0020	20 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0020.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 001 SECONDARY
- RTS 002(D) PRIMARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN**
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

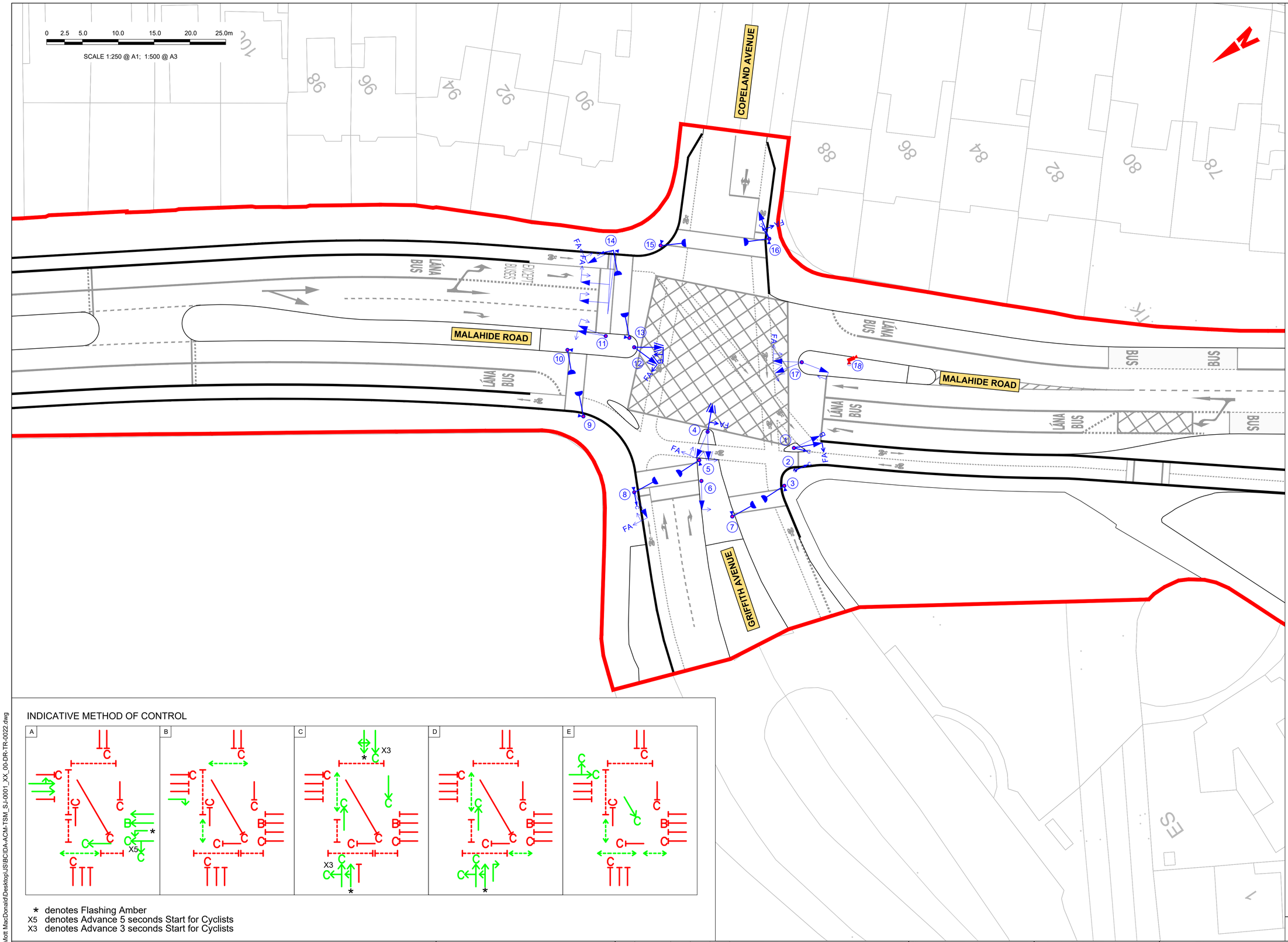
Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME
JUNCTION SYSTEMS DESIGN
NORTH OF GRIFFITH MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0021	21 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0021.dwg



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(A) PRIMARY
- RTS 002(A) SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 003(B) PRIMARY
- RTS 003(B) SECONDARY
- RTS 003(H) PRIMARY
- RTS 003(H) SECONDARY
- RTS 003(J) PRIMARY
- RTS 003(J) SECONDARY
- RTS 004(E) PRIMARY
- RTS 004(E) SECONDARY
- RTS 004(G) PRIMARY
- RTS 004(G) SECONDARY
- RTS 004(Z) PRIMARY
- RTS 004(Z) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

INDICATIVE METHOD OF CONTROL

* denotes Flashing Amber
X5 denotes Advance 5 seconds Start for Cyclists
X3 denotes Advance 3 seconds Start for Cyclists

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

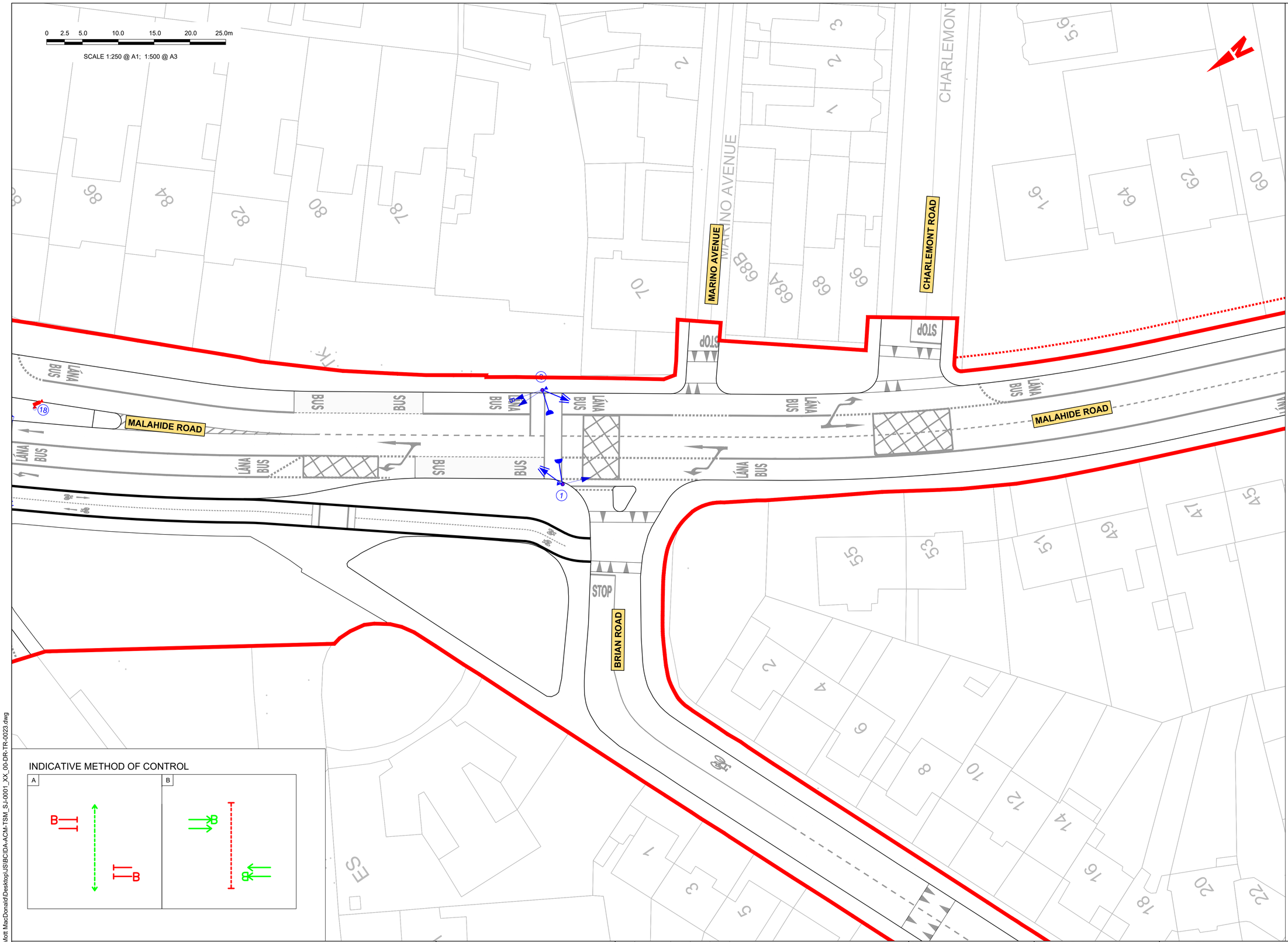
Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN GRIFFITH AVENUE

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0022	22 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0022.dwg



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 001 PRIMARY
- RTS 002(D) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN MARINO AVENUE BRIAN ROAD MALAHIDE ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0023	23 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0023.dwg

0 2.5 5.0 10.0 15.0 20.0 25.0m

SCALE 1:250 @ A1; 1:500 @ A3

PROPOSED SCHEME

Tie in to Clontarf to City Centre Cycle & Bus Priority Project

CLONTARF ROAD

MALAHIDE ROAD

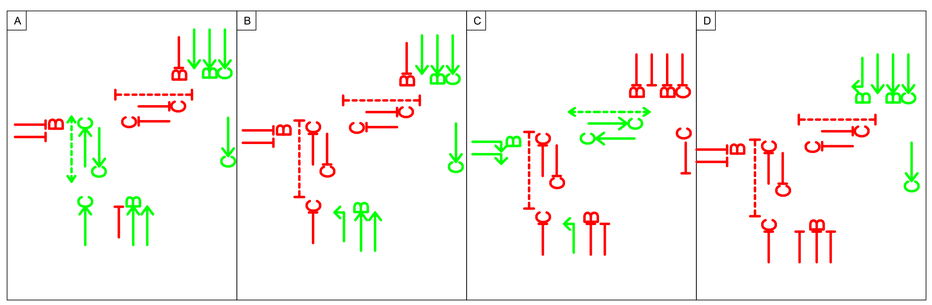
MARINO MART

LÁNA BUS

STOP

Dublin Baile Átha Cliath

INDICATIVE METHOD OF CONTROL



LEGEND:

TRAFFIC SIGNAL HEADS:

- RTS 002(A) PRIMARY
- RTS 002(A) SECONDARY
- RTS 002(B) PRIMARY
- RTS 002(B) SECONDARY
- RTS 002(C) PRIMARY
- RTS 002(C) SECONDARY
- RTS 002(D) PRIMARY
- RTS 002(D) SECONDARY
- RTS 002(E) PRIMARY
- RTS 002(E) SECONDARY
- RTS 002(J) PRIMARY
- RTS 002(J) SECONDARY
- RTS 003(B) PRIMARY
- RTS 003(B) SECONDARY
- RTS 007 (LOW LEVEL) PRIMARY
- RTS 007 (HIGH LEVEL) PRIMARY
- RPC 004 PEDESTRIAN HEAD

TRAFFIC SIGNAL EQUIPMENT:

- POLE (STANDARD HEIGHT)
- SMALL POLE
- TALL POLE (TRAFFIC SIGNALS)
- MAST ARM (VARIABLE LENGTH)
- TALL POLE (CCTV/TRAFFIC SIGNALS)
- POLE NUMBER
- PUSH BUTTON UNIT
- PAN / TILT / ZOOM CCTV CAMERA

GENERAL:

- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

Disclaimer

a. © National Transport Authority (NTA) 2021. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2021/OSi_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus.The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Project Ireland 2040
Building Ireland's Future

Rev	Date	Drn	Chk'd	App'd	Description
M01	05/12/21	MB	JH	CA	ISSUE FOR PHASE 4: PLANNING

Client: NTA Údarás Náisiúnta Iompair National Transport Authority

Engineering Designer: AECOM / MOTT MACDONALD

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: CLONGRIFFIN TO CITY CENTRE CORE BUS CORRIDOR SCHEME JUNCTION SYSTEMS DESIGN CLONTARF ROAD

Date	Scale	Drawn	Checked	Approved
05/12/21	1:250 @ A1, 1:500 @ A3	M.T.BORAN	J.HAWE	C.ACTON

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
BCIDA	ACM		BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0024	24 of 24	A	M01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

C:\Users\poc83666\OneDrive - Mott MacDonald\Desktop\JS\BCIDA-ACM-TSM_SJ-0001_XX_00-DR-TR-0024.dwg