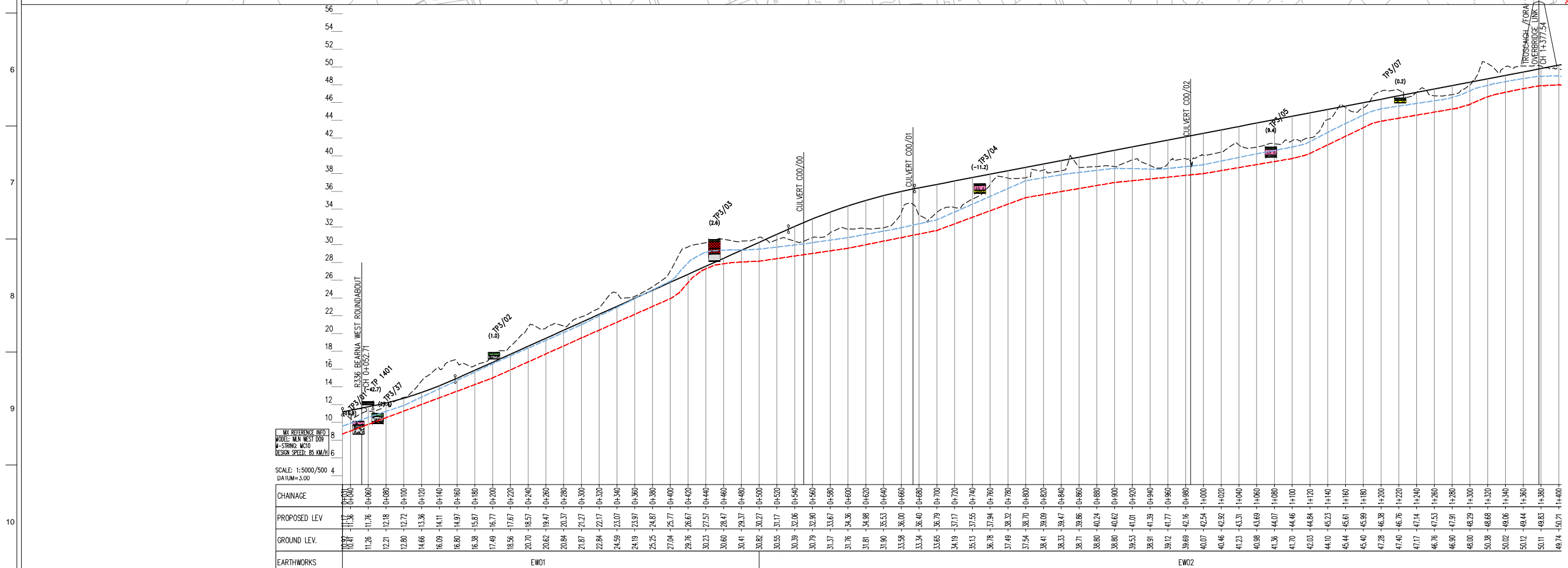


DESIGN REPORT

- Legend:**
- PLAN**
 - Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - Trial Pit
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records



- Geophysics**
- Geophysics Locations
 - PROFILE**
 - Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL
 - Geology**
 - Weathered Rock [WwR]
 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [CI]
 - Cobbles and Boulders [Cb]
 - Granite [TGRck]
 - Silty SAND
 - Organic CLAY
 - SAND
 - Cobbly CLAY
 - BOULDERS
 - Gravelly CLAY
 - Silty sandy gravelly CLAY
 - CLAY (MADE GROUND)
 - Sandy cobbly CLAY
 - TOPSOIL
 - COBBLES and BOULDERS
 - Sandy gravelly cobbly CLAY
 - Geophysics**
 - Layers from Seismic Refraction Model:
 - Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)

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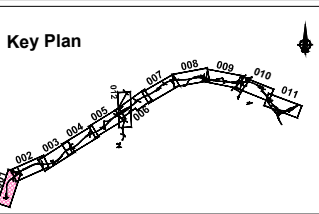
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair Turasoireachta agus Spóirt
Department Transport, Tourism and Sport

TII
Transport Infrastructure Ireland



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Job Title
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Scale
H 1:5000 / V 1:500 @ A3

Date:
February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

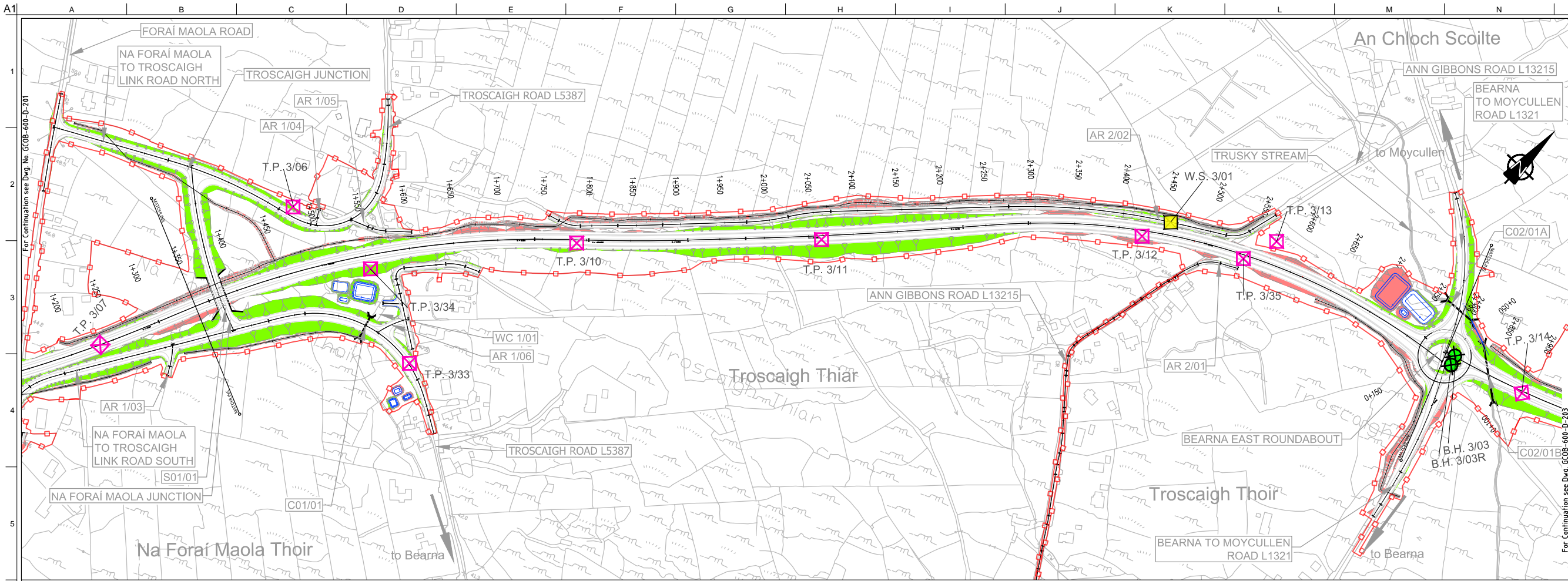
Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.0+000 to CH.1+350
Sheet 1 of 12

Drawing Status
For Information

Job No
233985

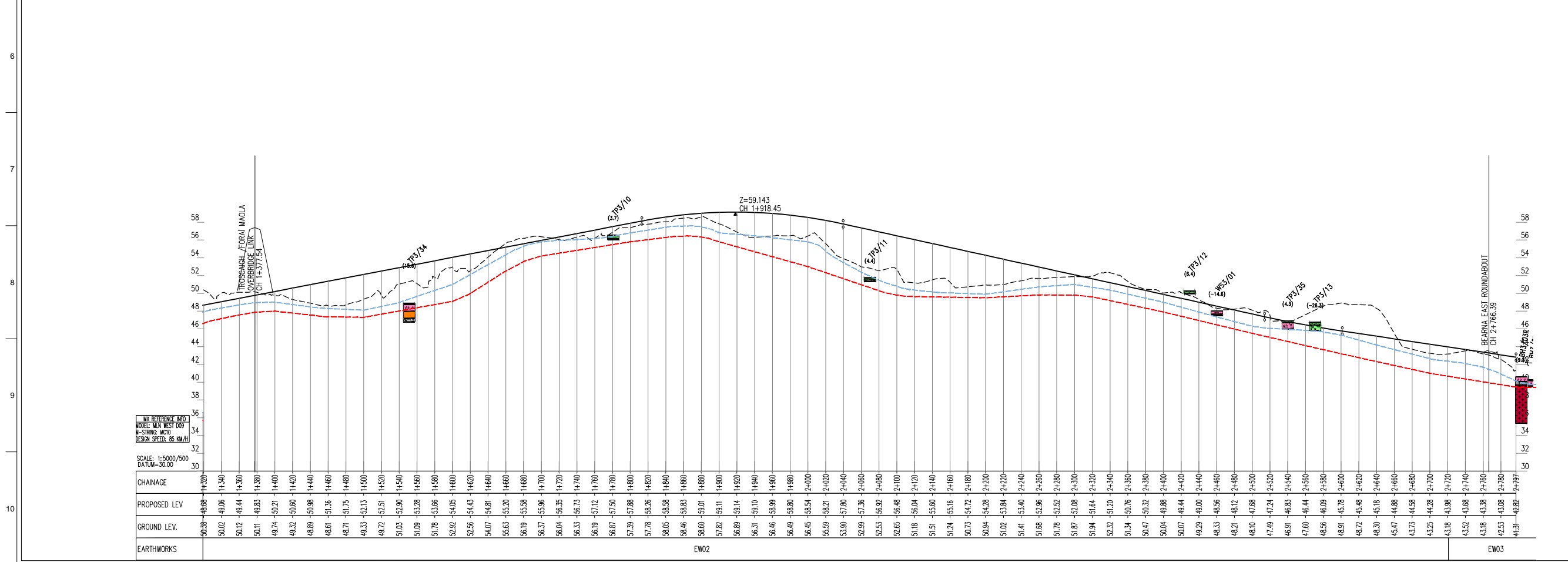
Drawing No
GC0B-600-D-201

Issue
12



DESIGN REPORT

- Legend:**
- PLAN**
 - Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - Trial Pit
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records
 - Geophysics**
 - Geophysics Locations
 - PROFILE**
 - Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL
 - Geology**
 - Weathered Rock [WwR]
 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [CI]
 - Cobbles and Boulders [Cb]
 - Granite [TGRck]
 - Silty SAND
 - Organic CLAY
 - SAND
 - Cobbly CLAY
 - BOULDERS
 - Gravelly CLAY
 - Silty sandy gravelly CLAY
 - FILL (MADE GROUND)
 - Sandy cobbly CLAY
 - TOPSOIL
 - COBBLES and BOULDERS
 - Sandy gravelly cobbly CLAY
 - Geophysics**
 - Layers from Seismic Refraction Model:
 - Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)



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Clients

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Galway County Council

An Roinn Iompair Turasoireachta agus Spóirt
Department Transport, Tourism and Sport

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Scale

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Date:

February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

For Information

Job No	Drawing No	Issue
233985	GC0B-600-D-202	12

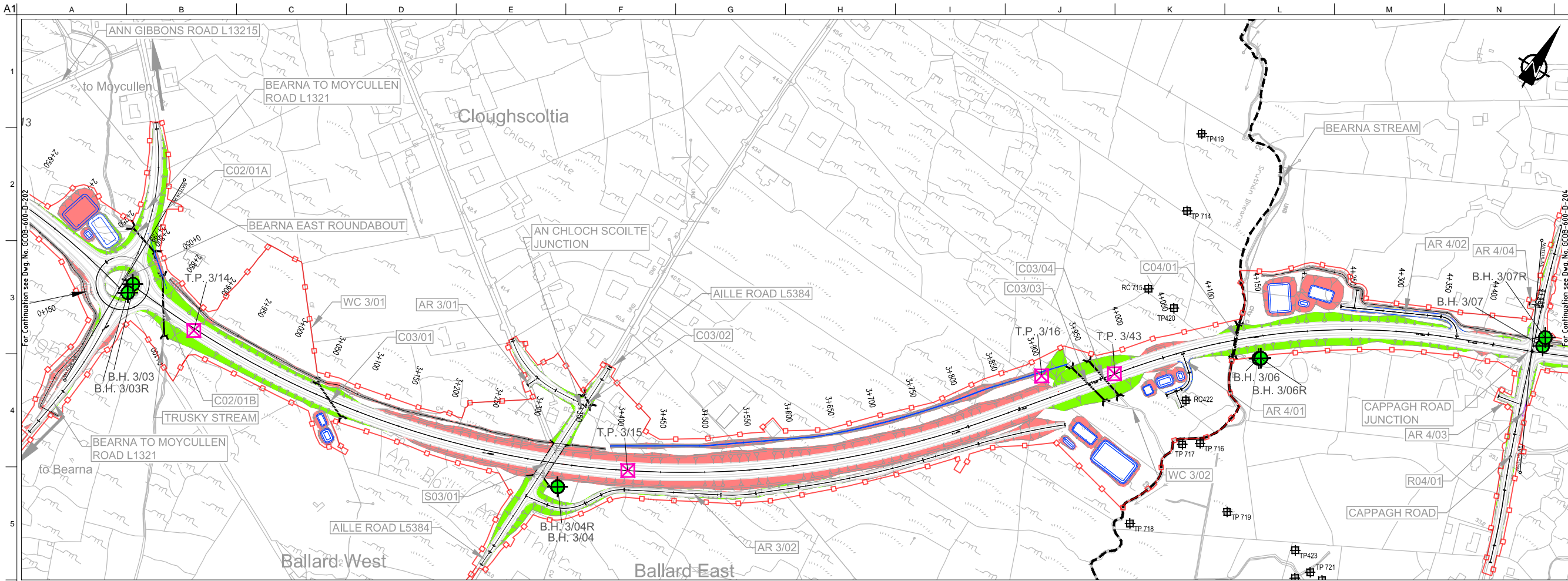
Drawing Title

Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.1+350 to CH.2+799
Sheet 2 of 12

Drawing Status

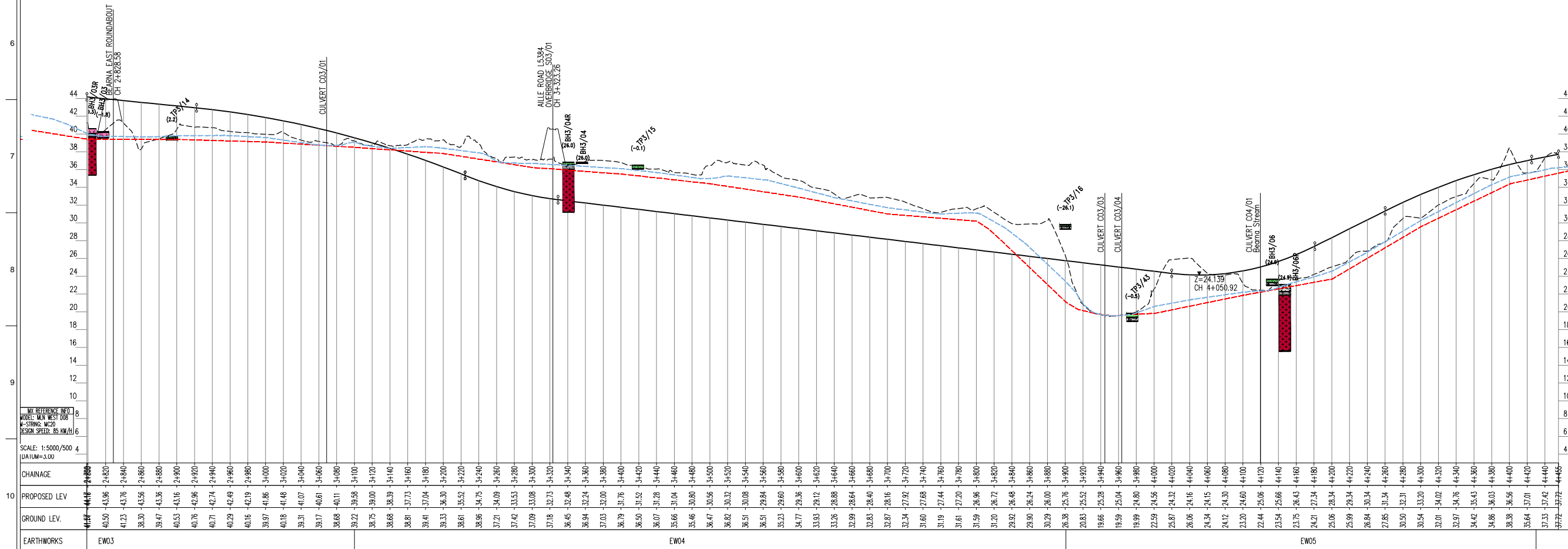
For Information

Job No	Drawing No	Issue
233985	GC0B-600-D-202	12



DESIGN REPORT

- Legend:**
- Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
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 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - Trial Pit
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records



- R19 GP3/24**
S19
- Geophysics**
- Geophysics Locations
- PROFILE**
- Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL
- Geology**
- Weathered Rock [WRR]
 - Limestone [LSRck]
 - Topsoil [TOP]
 - Gravel [GR]
 - Silt [SI]
 - Clay [CI]
 - Sand [Sa]
 - Cobbles and Boulders [Cb]
 - Peat [PEAT]
 - Granite [TRGrck]
 - Made Ground [MG]
 - Silty SAND
 - CONCRETE
 - Organic CLAY
 - LIMESTONE
 - MUDSTONE
 - SAND
 - NO RECOVERY
 - CLAY
 - BOULDERS
 - Sandy CLAY
 - Gravelly CLAY
 - Gravelly COBBLES
 - Silty sandy gravelly CLAY
 - Clayey COBBLES
 - CLAY (MADE GROUND)
 - COBBLES
 - Sandy cobbly CLAY
 - GRAVEL
 - TOPSOIL
 - Sandy SILT
 - COBBLES and BOULDERS
 - SILT
 - Sandy gravelly cobbly CLAY
- Geophysics**
- Layers from Seismic Refraction Model:
- Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)

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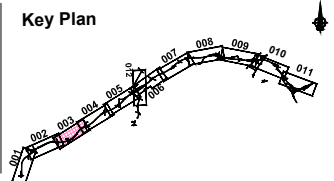
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair
Turasóireachta agus Spóirt

TII



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Scale
H 1:5000 / V 1:500 @ A3

Date
February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

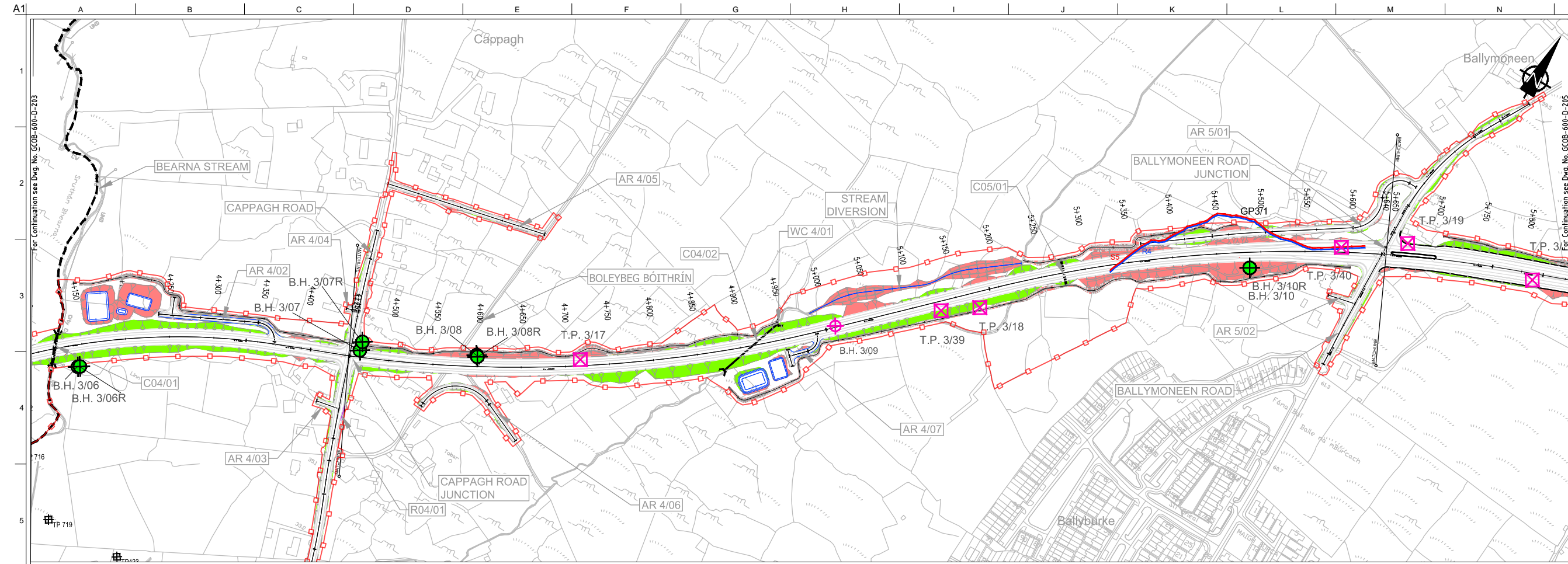
Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.2+799 to CH.4+455
Sheet 3 of 12

Drawing Status
For Information

Job No
233985

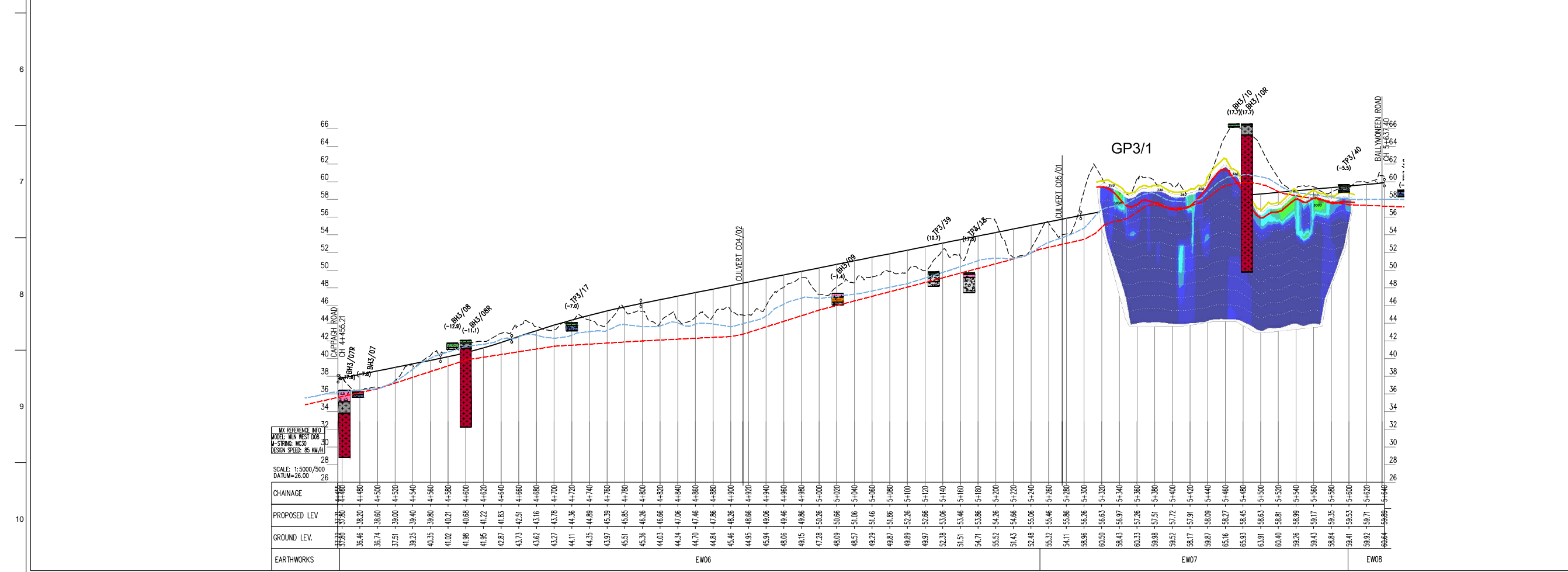
Drawing No
GC0B-600-D-203

Issue
12



DESIGN REPORT

- Legend:**
- PLAN**
 - Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - Trial Pit
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records



- R19 GP3/24**
S19
- Geophysics**
- Geophysics Locations
- PROFILE**
- Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL
- Geology**
- Weathered Rock [WwR]
 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [CI]
 - Cobbles and Boulders [Cb]
 - Granite [TGRck]
 - Silty SAND
 - Organic CLAY
 - SAND
 - Cobbly CLAY
 - BOULDERS
 - Gravelly CLAY
 - Silty sandy gravelly CLAY
 - Fill (MADE GROUND)
 - Sandy cobbly CLAY
 - TOPSOIL
 - COBBLES and BOULDERS
 - Sandy gravelly cobbly CLAY
- Geophysics**
- Layers from Seismic Refraction Model:
- Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)

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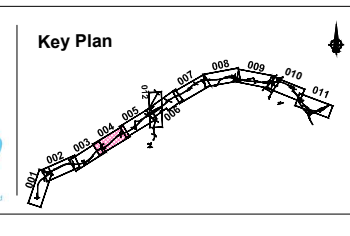
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair
Turasóireachta agus Spóirt

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www.arup.ie

Job Title
N6 Galway City Ring Road

Scale
H 1:5000 / V 1:500 @ A3

Date:
February 2018

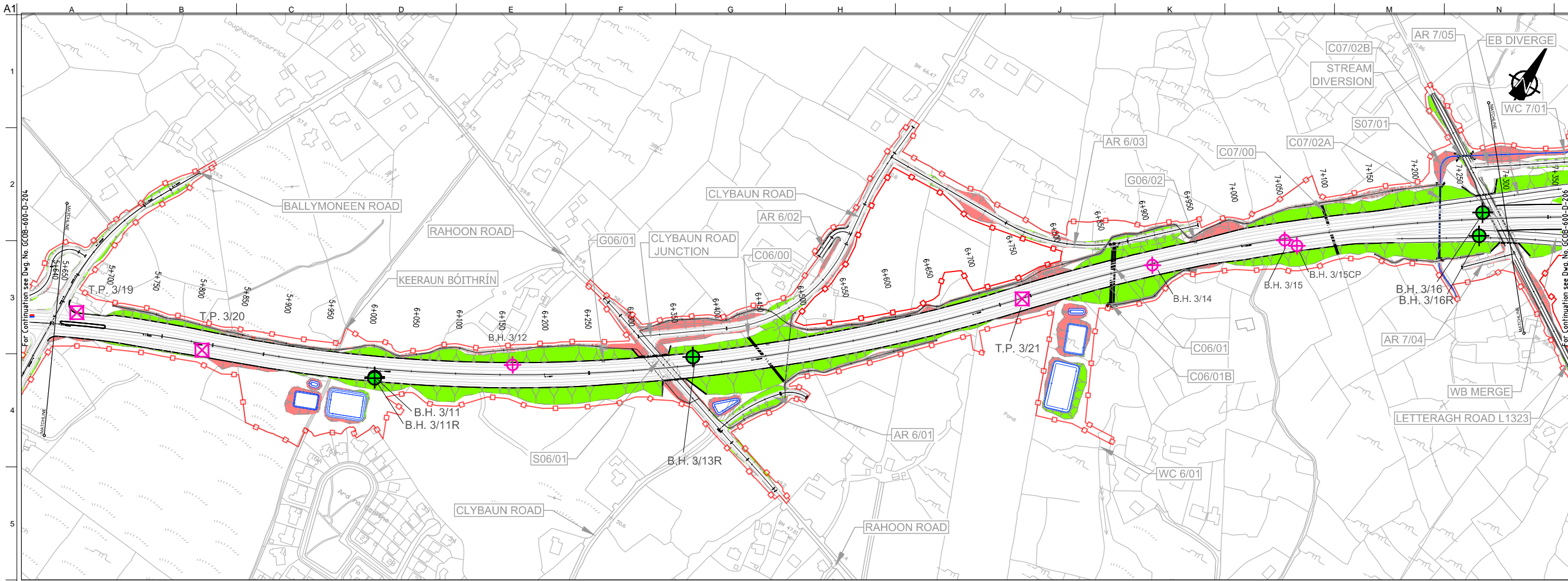
Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.4+455 to CH.5+640
Sheet 4 of 12

Drawing Status

For Information

Job No	Drawing No	Issue
233985	GC0B-600-D-204	12

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC



DESIGN REPORT

- Legend:**
- PLAN**
 - Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - Trial Pit
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records

Geophysics

- R19 GP3/24**
- Geophysics Locations
 - S19**

PROFILE

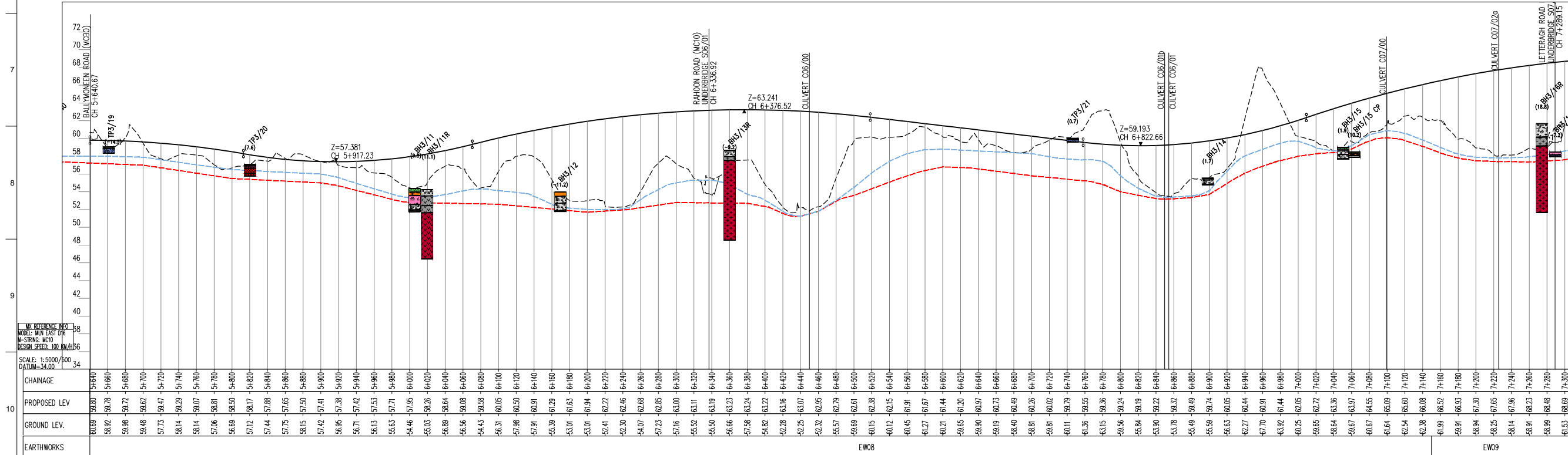
- Existing Ground
- Proposed Geometry Profile
- Maximum Groundwater Level
- Minimum Groundwater Level
- LACKAGH TUNNEL
- GALWAY RACECOURSE TUNNEL

- Geology**
- Weathered Rock [WRR]
 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [CI]
 - Cobbles and Boulders [Cb]
 - Granite [TGRck]

- CONCRETE
- LIMESTONE
- MUDSTONE
- NO RECOVERY
- CLAY
- Sandy CLAY
- Gravelly COBBLES
- Clayey COBBLES
- COBBLES
- GRAVEL
- Sandy SILT
- Silt
- Silty SAND
- Organic CLAY
- SAND
- Cobbly CLAY
- BOULDERS
- Gravelly CLAY
- Silty sandy gravelly CLAY
- FILL (MADE GROUND)
- Sandy cobbly CLAY
- TOPSOIL
- COBBLES and BOULDERS
- Sandy gravelly cobbly CLAY

Geophysics

- Layers from Seismic Refraction Model:
- Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)



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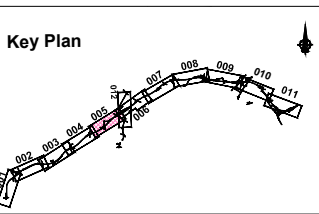
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair
Turasóireachta agus Spóirt

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Job Title
N6 Galway City Ring Road

Scale
H 1:5000 / V 1:500 @ A3

Date
February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

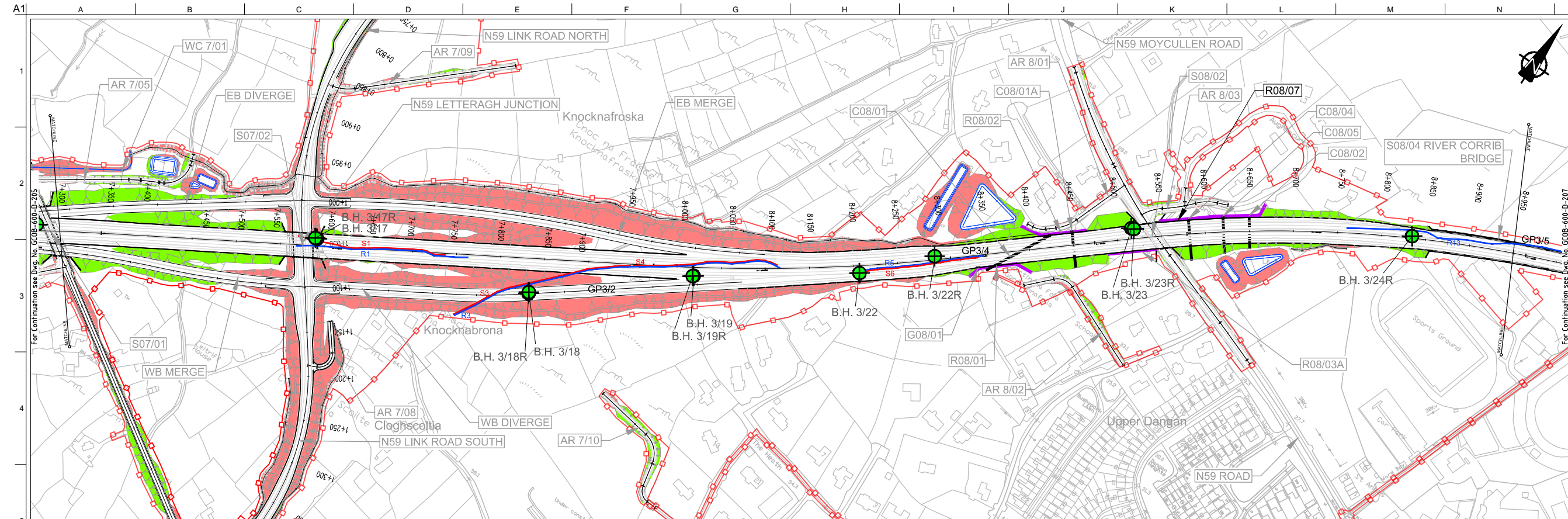
Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.5+640 to CH.7+300
Sheet 5 of 12

Drawing Status
For Information

Job No
233985

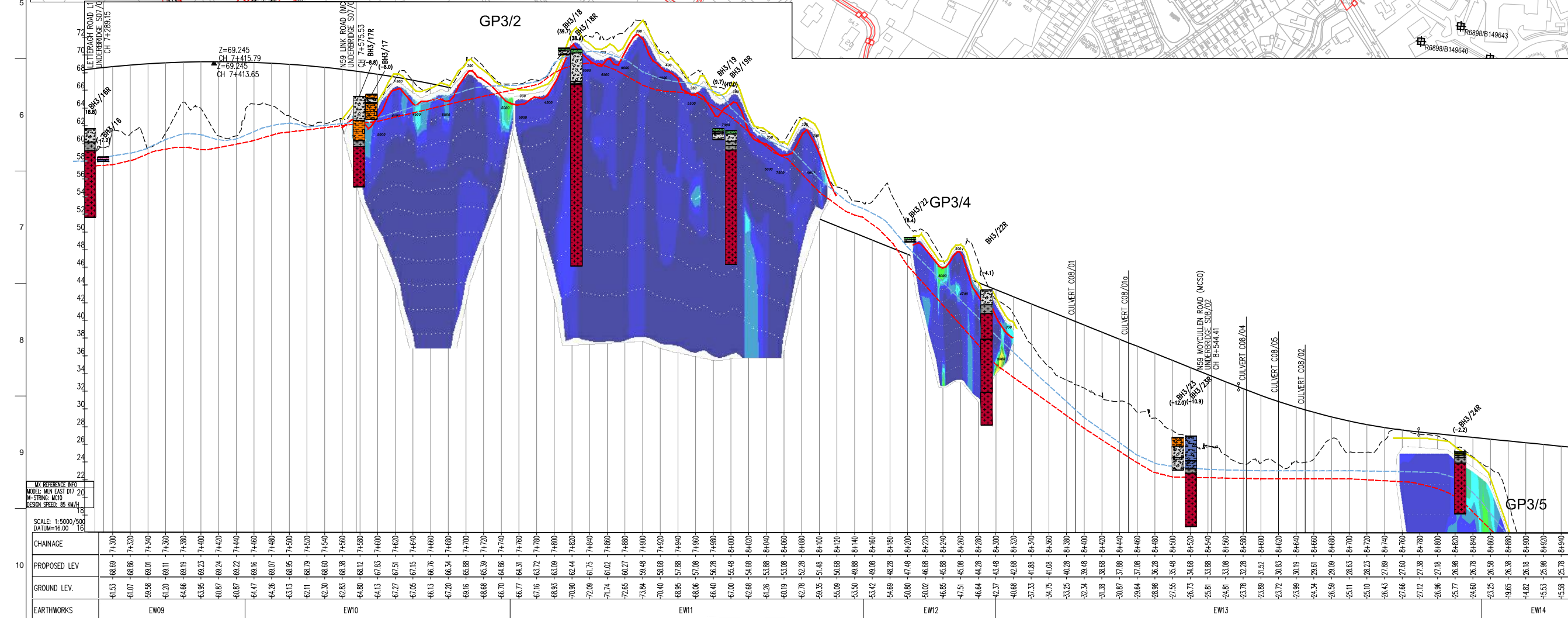
Drawing No
GC0B-600-D-205

Issue
12



DESIGN REPORT

- Legend:**
- PLAN**
 - Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - Trial Pit
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Historical GI Locations Records



- Geophysics**
- Geophysics Locations
 - PROFILE**
 - Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL
 - Geology**
 - Weathered Rock [Wrr]
 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [CI]
 - Cobbles and Boulders [Cb]
 - Granite [TRck]
 - Silty SAND
 - Organic CLAY
 - SAND
 - Cobbly CLAY
 - BOULDERS
 - Gravelly CLAY
 - Silty sandy gravelly CLAY (MADE GROUND)
 - Sandy cobbly CLAY
 - TOPSOIL
 - COBBLES and BOULDERS
 - Sandy gravelly cobbly CLAY
 - Geophysics**
 - Layers from Seismic Refraction Model:
 - Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)

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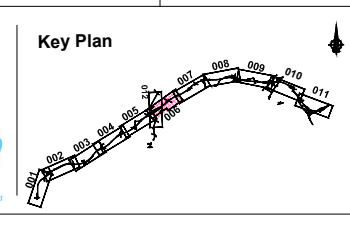
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair
Turasóireachta agus Spóirt

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Job Title
N6 Galway City Ring Road

Scale
H 1:5000 / V 1:500 @ A3

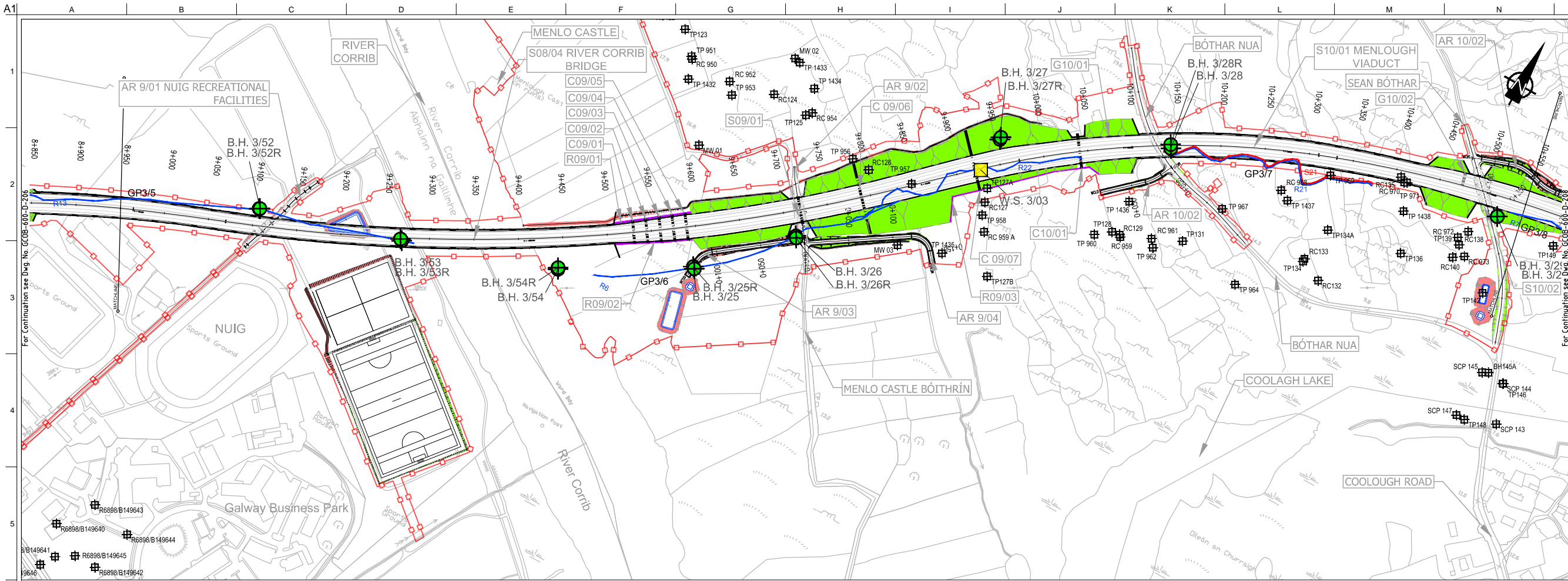
Date:
February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.7+300 to CH.8+950
Sheet 6 of 12

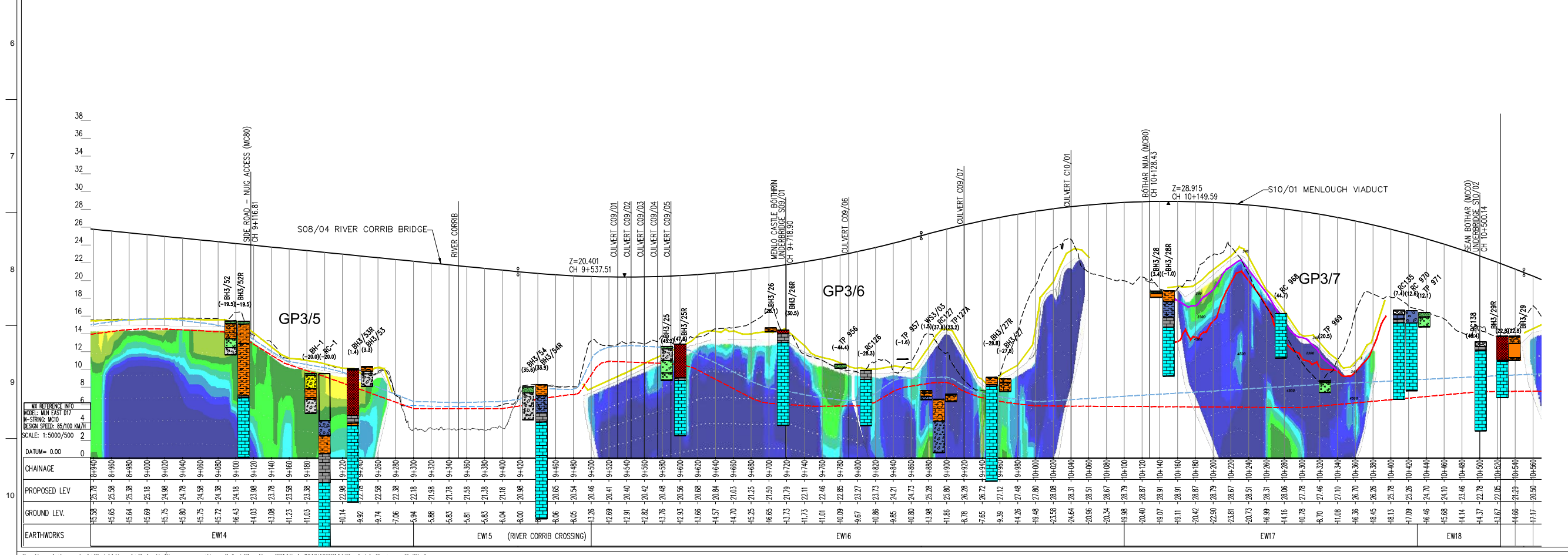
For Information

Job No: 233985
Drawing No: GCOB-600-D-206
Issue: 12



DESIGN REPORT

- Legend:**
- PLAN**
 - Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - T.P. No.
 - Window Sample
 - W.S. No.
 - Soakways
 - S.W. No.
 - GI Borehole (Lackagh area)
 - BH.No.
 - Horizontal Borehole (Lackagh Quarry)
 - BH.No.
 - Historical GI Locations Records
 - G.I. Code & Number



- R19 GP3/24**
S19
- Geophysics**
- Geophysics Locations
- PROFILE**
- Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL
- Geology**
- Weathered Rock [WRR]
 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [Cl]
 - Cobbles and Boulders [Cb]
 - Granite [TRck]
 - Silty SAND
 - Organic CLAY
 - MUDSTONE
 - SAND
 - Cobbly CLAY
 - BOULDERS
 - Sandy CLAY
 - Gravelly CLAY
 - Silty sandy gravelly CLAY (MADE GROUND)
 - COBBLES
 - Sandy cobbly CLAY
 - GRAVEL
 - TOPSOIL
 - COBBLES and BOULDERS
 - Sandy gravelly cobbly CLAY
- Geophysics**
- Layers from Seismic Refraction Model:
- Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)

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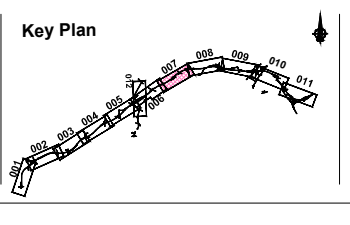
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair
Turastóireacht agus Sport

TII



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Job Title
N6 Galway City Ring Road

Scale
H 1:5000 / V 1:500 @A3

Date
February 2018

I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC
Issue	Date	By	Chkd	Appd

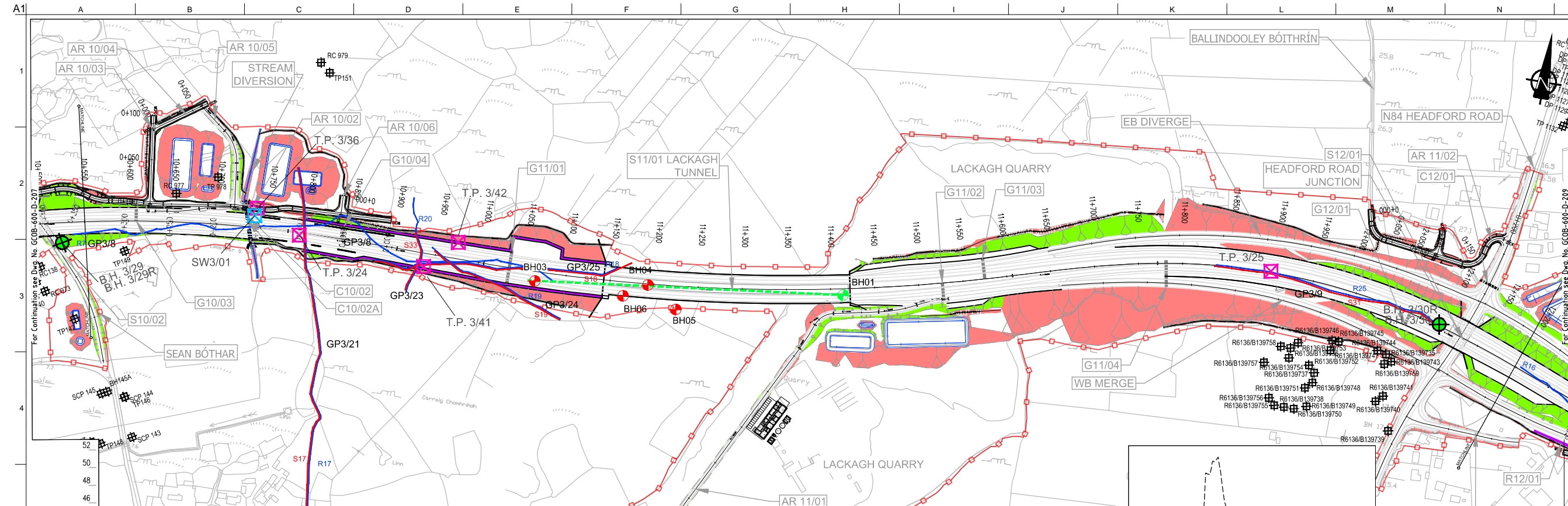
Drawing Title
Ground Investigation Plan & Profile
Mainline Plan /Profile - CH.8+950 to CH.10+550
Sheet 7 of 12

Drawing Status
For Information

Job No
233985

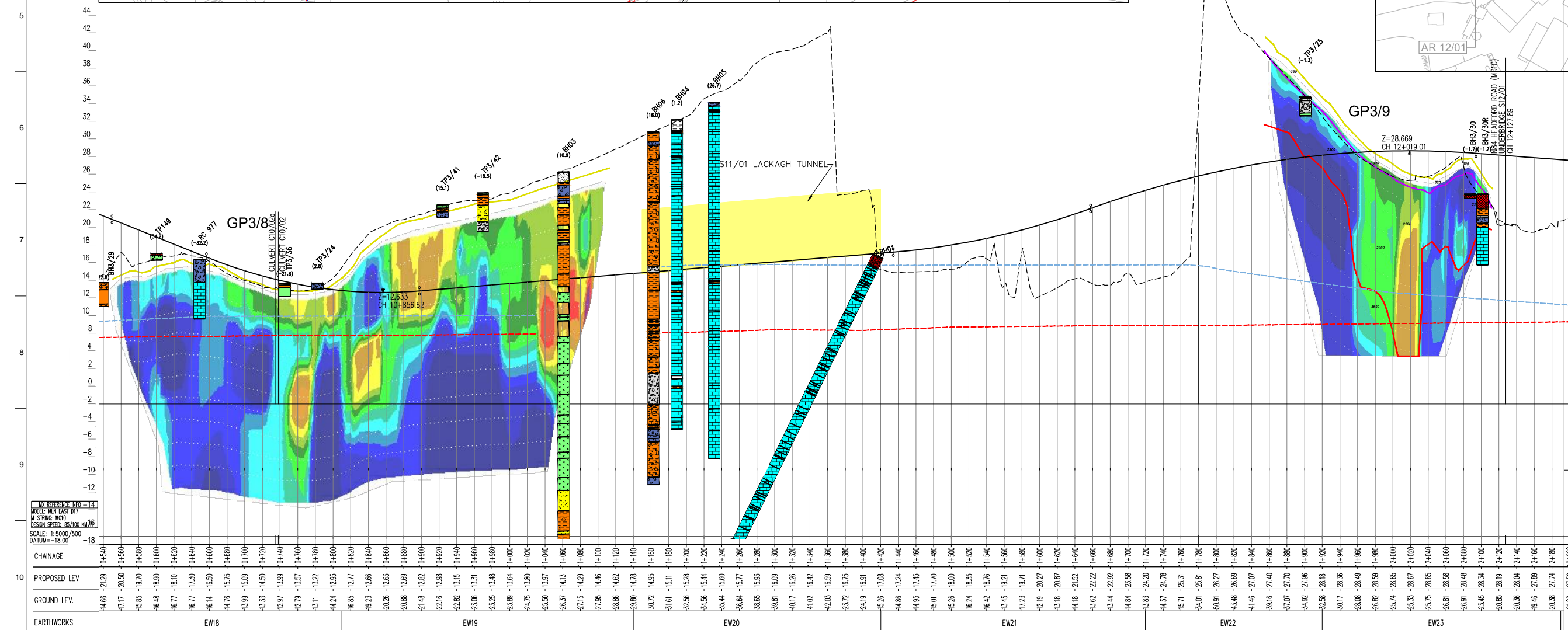
Drawing No
GC0B-600-D-207

Issue
12



DESIGN REPORT

- Legend:**
- PLAN**
 - Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
 - Geology**
 - Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - Trial Pit
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records
 - Geophysics**
 - Geophysics Locations
 - PROFILE**
 - Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
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 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL
 - Geology**
 - Weathered Rock [WwR]
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 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [CI]
 - Cobbles and Boulders [Cb]
 - Granite [TGRck]
 - Silty SAND
 - Organic CLAY
 - SAND
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 - BOULDERS
 - Gravelly CLAY
 - Silty sandy gravelly CLAY
 - CLAY (MADE GROUND)
 - Sandy cobbly CLAY
 - TOPSOIL
 - COBBLES and BOULDERS
 - Sandy gravelly cobbly CLAY
 - Geophysics**
 - Layers from Seismic Refraction Model:
 - Ground Surface/Top of Layer 1 (200 - 340m/s)
 - Top of Layer 2 (900 - 1200m/s)
 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)



CHAINAGE	PROPOSED LEV.	GROUND LEV.	EARTHWORKS
14.66	21.29	10.540	
17.17	20.50	10.560	
19.68	19.70	10.580	
22.19	18.90	10.600	
24.70	18.10	10.620	
27.21	17.30	10.640	
29.72	16.50	10.660	
32.23	15.70	10.680	
34.74	14.90	10.700	
37.25	14.10	10.720	
39.76	13.30	10.740	
42.27	12.50	10.760	
44.78	11.70	10.780	
47.29	10.90	10.800	
49.80	10.10	10.820	
52.31	9.30	10.840	
54.82	8.50	10.860	
57.33	7.70	10.880	
59.84	6.90	10.900	
62.35	6.10	10.920	
64.86	5.30	10.940	
67.37	4.50	10.960	
69.88	3.70	10.980	
72.39	2.90	11.000	
74.90	2.10	11.020	
77.41	1.30	11.040	
79.92	0.50	11.060	
82.43	-0.30	11.080	
84.94	-1.10	11.100	
87.45	-1.90	11.120	
89.96	-2.70	11.140	
92.47	-3.50	11.160	
94.98	-4.30	11.180	
97.49	-5.10	11.200	
100.00	-5.90	11.220	
102.51	-6.70	11.240	
105.02	-7.50	11.260	
107.53	-8.30	11.280	
110.04	-9.10	11.300	
112.55	-9.90	11.320	
115.06	-10.70	11.340	
117.57	-11.50	11.360	
120.08	-12.30	11.380	
122.59	-13.10	11.400	
125.10	-13.90	11.420	
127.61	-14.70	11.440	
130.12	-15.50	11.460	
132.63	-16.30	11.480	
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137.65	-17.90	11.520	
140.16	-18.70	11.540	
142.67	-19.50	11.560	
145.18	-20.30	11.580	
147.69	-21.10	11.600	
150.20	-21.90	11.620	
152.71	-22.70	11.640	
155.22	-23.50	11.660	
157.73	-24.30	11.680	
160.24	-25.10	11.700	
162.75	-25.90	11.720	
165.26	-26.70	11.740	
167.77	-27.50	11.760	
170.28	-28.30	11.780	
172.79	-29.10	11.800	
175.30	-29.90	11.820	
177.81	-30.70	11.840	
180.32	-31.50	11.860	
182.83	-32.30	11.880	
185.34	-33.10	11.900	
187.85	-33.90	11.920	
190.36	-34.70	11.940	
192.87	-35.50	11.960	
195.38	-36.30	11.980	
197.89	-37.10	12.000	
200.40	-37.90	12.020	
202.91	-38.70	12.040	
205.42	-39.50	12.060	
207.93	-40.30	12.080	
210.44	-41.10	12.100	
212.95	-41.90	12.120	
215.46	-42.70	12.140	
217.97	-43.50	12.160	
220.48	-44.30	12.180	
222.99	-45.10	12.200	

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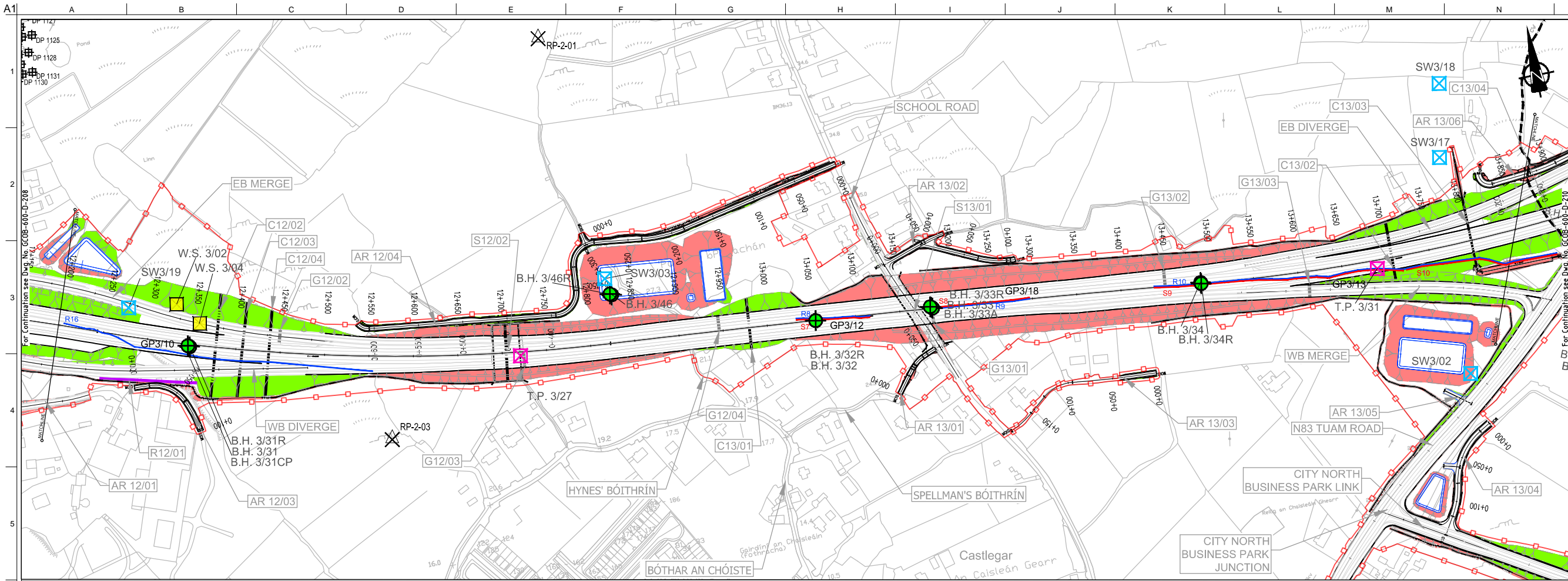


ARUP
Corporate House
City East Business Park
Ballybrit, Galway, Ireland.

Job Title
N6 Galway City Ring Road
Scale
H 1:5000 / V 1:500 @ A3
Date
February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

Drawing Title
Ground Investigation Plan & Profile
Mainline Plan /Profile - CH.10+550 to CH.12+200
Sheet 8 of 12
Drawing Status
For Information
Job No
233985
Drawing No
GCOB-600-D-208
Issue
12



DESIGN REPORT

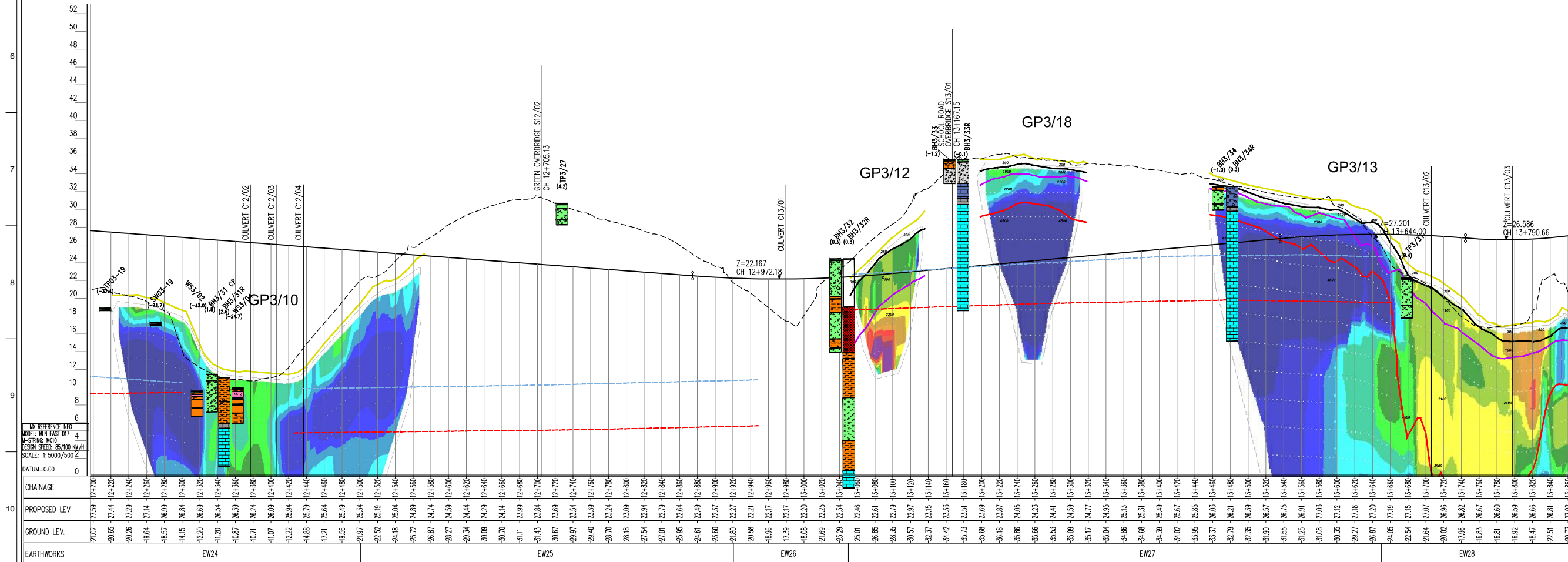
- Legend:**
- Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin
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 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records

Geophysics

- Geophysics Locations
- PROFILE**
 - Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
 - LACKAGH TUNNEL
 - GALWAY RACECOURSE TUNNEL

- Geology**
- Weathered Rock [WwR]
 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
 - Made Ground [MG]
 - CONCRETE
 - LIMESTONE
 - MUDSTONE
 - NO RECOVERY
 - CLAY
 - Sandy CLAY
 - Gravelly COBBLES
 - Clayey COBBLES
 - COBBLES
 - GRAVEL
 - Sandy SILT
 - SILT
 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [CI]
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 - Granite [TGRck]
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 - Top of Layer 3 (2000 - 2400m/s)
 - Top of Layer 4 (4000 - 5000m/s)



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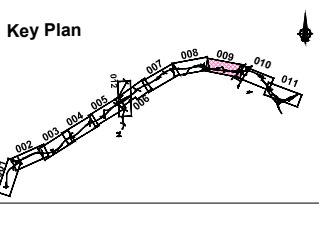
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair Turasóireachta agus Spóirt
Department Transport, Tourism and Sport

TII
Bonnairge Iompair Éireann
Transport Infrastructure Ireland



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Job Title
N6 Galway City Ring Road

Scale
H 1:5000 / V 1:500 @ A3

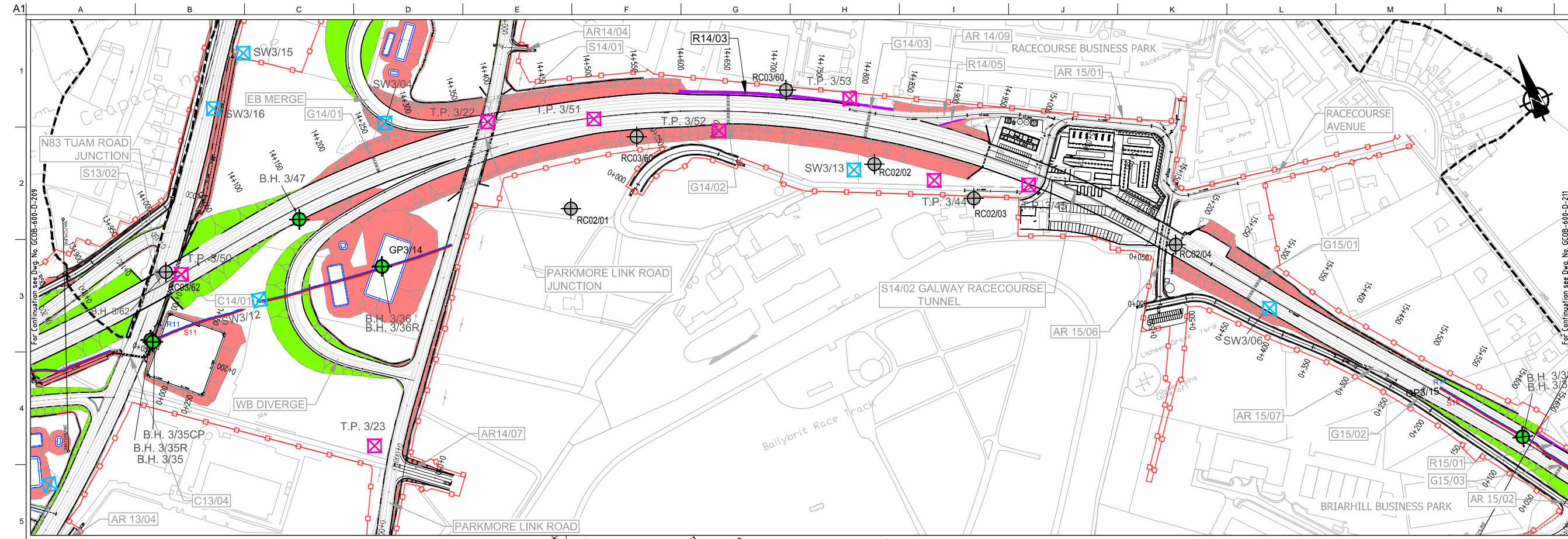
Date:
February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.12+200 to CH.13+850
Sheet 9 of 12

For Information

Job No	Drawing No	Issue
233985	GCOB-600-D-209	12



DESIGN REPORT

Legend:

PLAN

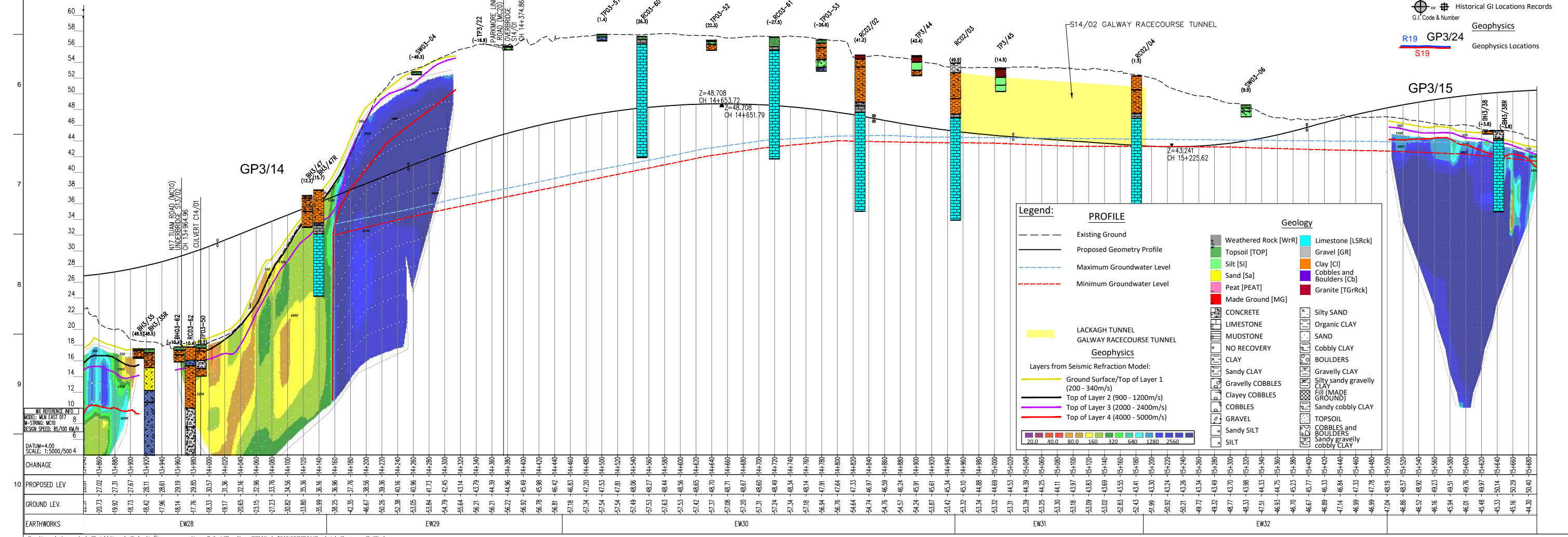
- Proposed Development Boundary
- Proposed Road Development
- Earthworks - Fill
- Earthworks - Cut
- Structure
- Proposed Retaining wall
- Proposed Culvert
- Proposed Environmental Underpass
- Proposed Attenuation Pond / Infiltration Basin / Wetlands

Geology

- Cable Percussive Borehole
- Cable Percussive + Rotary Core Borehole
- Trial Pit
- Window Sample
- Soakways
- GI Borehole (Lackagh area)
- Horizontal Borehole (Lackagh Quarry)
- Historical GI Locations Records

Geophysics

R19 GP3/24
S19



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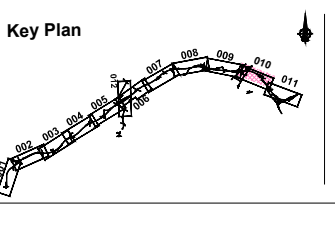
Clients

Comhairle Chontae na Gaillimhe
Galway County Council

Galway City Transport Project

An Roinn Iompair Turasóireachta agus Spóirt

TII



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Job Title
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Scale
H 1:5000 / V 1:500 @ A3

Date:
February 2018

Issue	Date	By	Chkd	Appd
I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC

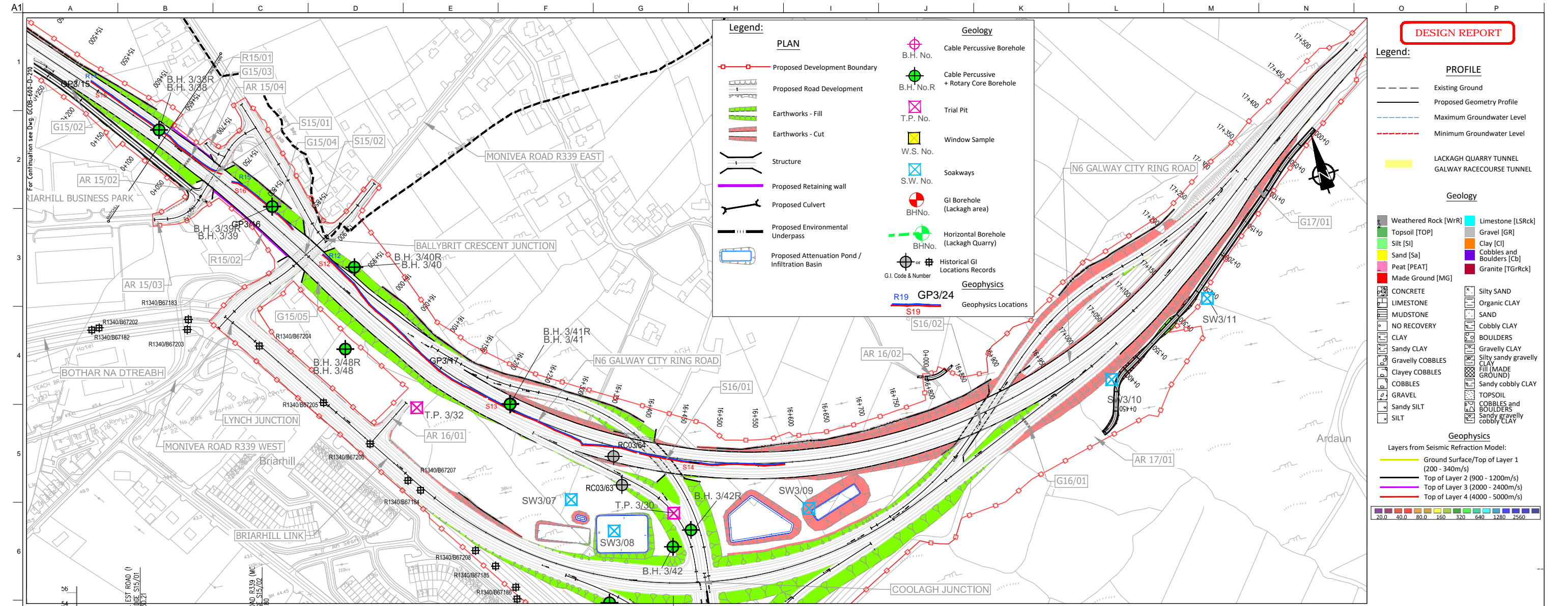
Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.13+850 to CH.15+650
Sheet 10 of 12

Drawing Status
For Information

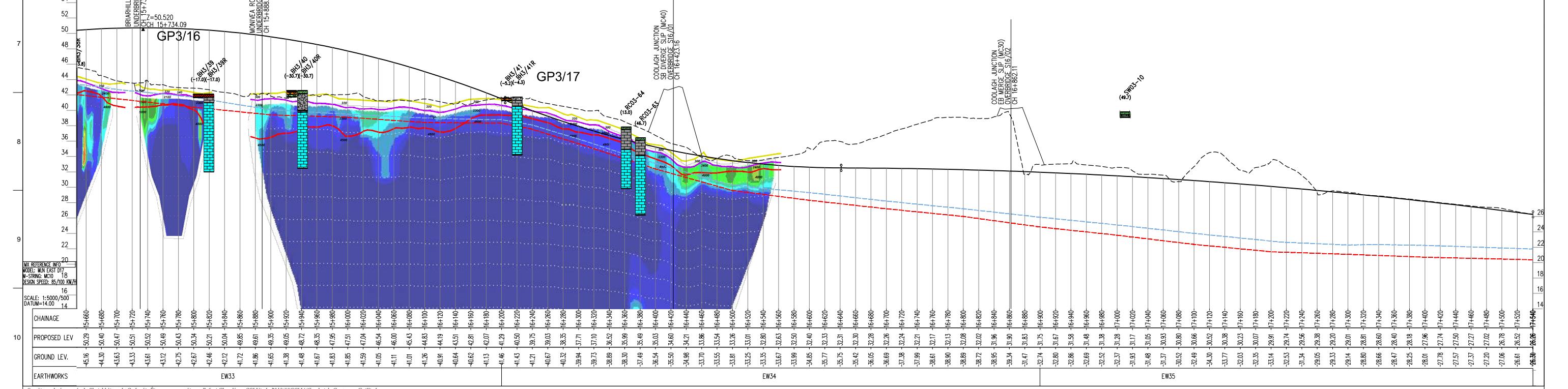
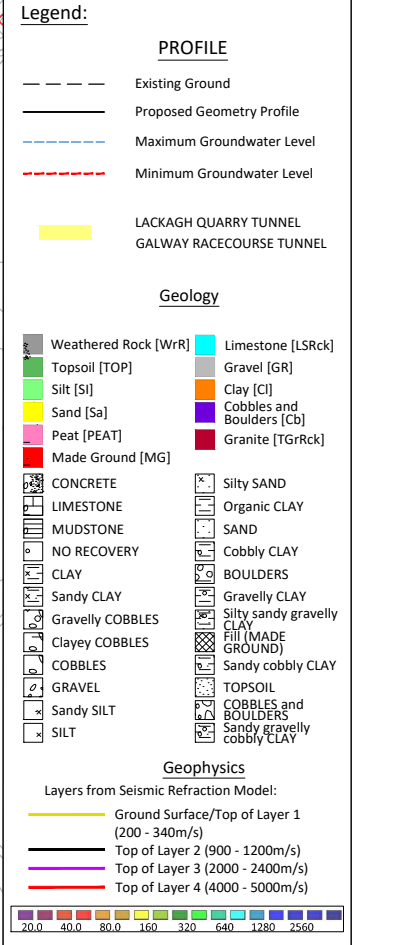
Job No
233985

Drawing No
GCOB-600-D-210

Issue
12



DESIGN REPORT



San áirneam tá sonraíocht Shuirbhíreacha Orlándaí Éireann arna aistriú go dtí fás Cheadúnas OSI Uimh. 2010/18CCMA/Comhairle Contae na Gaillimhe. Sírtaíonn aistriú go dtí na sonraíocht Shuirbhíreacha Orlándaí Éireann agus Rialtas na hÉireann. © Shuirbhíreacha Orlándaí Éireann, 2010.

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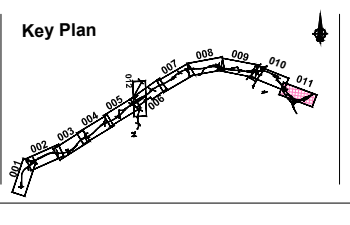
Clients

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Galway County Council

Galway City Transport Project

An Roinn Iompair
Turasoireacht agus Sport

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Job Title
N6 Galway City Ring Road

Scale
H 1:5000 / V 1:500 @ A3

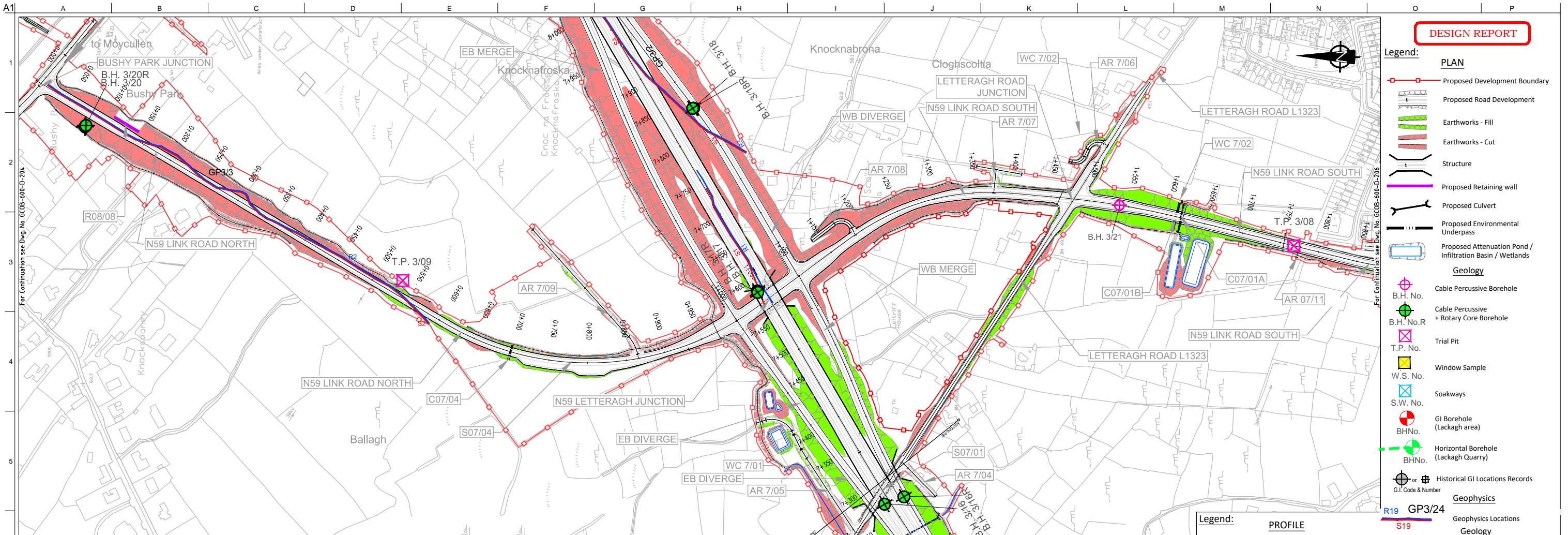
Date:
February 2018

Issue	Date	By	Chkd	Appd
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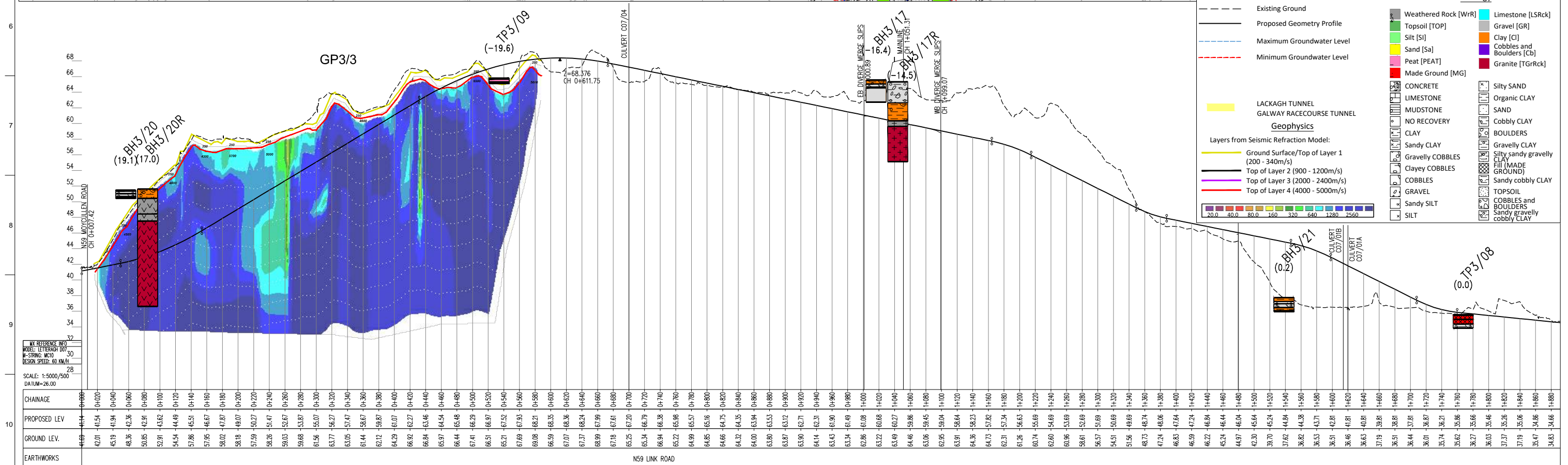
Drawing Title
Ground Investigation Plan & Profile
Mainline Plan/Profile - CH.15+650 to CH.17+540
Sheet 11 of 12

For Information

Job No: 233985
Drawing No: GCOB-600-D-211
Issue: 12



- DESIGN REPORT**
- Legend:**
- PLAN**
- Proposed Development Boundary
 - Proposed Road Development
 - Earthworks - Fill
 - Earthworks - Cut
 - Structure
 - Proposed Retaining wall
 - Proposed Culvert
 - Proposed Environmental Underpass
 - Proposed Attenuation Pond / Infiltration Basin / Wetlands
- Geology**
- Cable Percussive Borehole
 - Cable Percussive + Rotary Core Borehole
 - T.P. No.
 - Window Sample
 - Soakways
 - GI Borehole (Lackagh area)
 - Horizontal Borehole (Lackagh Quarry)
 - Historical GI Locations Records
- Geophysics**
- Geophysics Locations



- Legend:**
- PROFILE**
- Existing Ground
 - Proposed Geometry Profile
 - Maximum Groundwater Level
 - Minimum Groundwater Level
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- Layers from Seismic Refraction Model:
- Ground Surface/Top of Layer 1 (200 - 340m/s)
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 - Top of Layer 4 (4000 - 5000m/s)
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 - Topsoil [TOP]
 - Silt [SI]
 - Sand [Sa]
 - Peat [PEAT]
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 - Limestone [LSRck]
 - Gravel [GR]
 - Clay [Cl]
 - Cobbles and Boulders [Cb]
 - Granite [TGrRck]
 - Silty SAND
 - Organic CLAY
 - SAND
 - Cobbly CLAY
 - BOULDERS
 - Gravelly CLAY
 - Silty sandy gravelly CLAY
 - Fill (MADE GROUND)
 - Sandy cobbly CLAY
 - TOPSOIL
 - COBBLES and BOULDERS
 - Sandy gravelly cobbly CLAY
 - SILT

San áirneamh tá sonraíocht Shuirbhíreachtóirí Orlándaí Eireann arna aistriúchadh fós Cheadúnas OSI Uimh. 2010/18CCMA/Comhairle Contae na Gaillimhe. Sírúinn aistriúchadh namhidarthaí cóipeacht Shuirbhíreachtóirí Orlándaí Eireann agus Rialtas na hÉireann. © Suirbhíreachtóirí Orlándaí Eireann, 2010.

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Job Title
N6 Galway City Ring Road

Scale
H 1:5000 / V 1:500 @ A3

Date:
February 2018

I2	13/03/2018	AG	CM	JC
I1	22/02/2018	KJ	CM	JC
Issue	Date	By	Chkd	Appd

Drawing Title
Ground Investigation Plan & Profile
N59 Plan/Profile - Mainline CH.7+570
Sheet 12 of 12

Drawing Status
For Information

Job No	Drawing No	Issue
233985	GC0B-600-D-212	12