

Legend

KEY	Manhole details: Cross-To be used Filled-In use Clear-Empty	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole	Manhole

KEY
 Proposed Fibre & Civils Elements are shown in RED
 Proposed Copper Elements are shown in BLUE
 All Existing Elements are shown in BLACK
 Existing Fibre Cable
 Existing Copper Cable
 Existing Screen Cable
 All Recoveries are shown in GREEN

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	24/05/2011	Converted to As-built	MT	RP	SW
A	28/08/2008	2nd Issue	MT	AEL	SW
DA	20/08/2008	1st Issue	MT	AEL	SW

Contractor(s)

As-built
 ELR & Mileage
 HOU

Designed	Michal Taraj	Sign.		Date	24/05/2011
Drawn	Michal Taraj	Sign.		Date	24/05/2011
Checked	Rashmi Patel	Sign.		Date	24/05/2011
Approved	Steve Witt	Sign.		Date	24/05/2011

**FTN / GSM-R Project
 WP10-04**

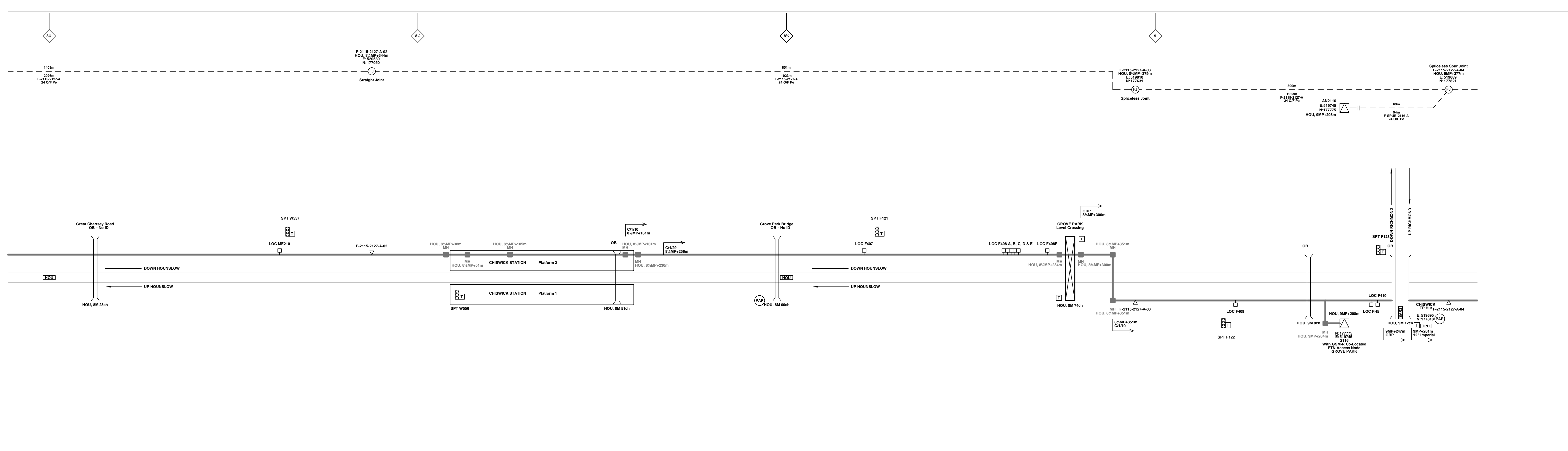
**Barnes Relay Room (2115)
 Grove Park (2116)**

FTN/GSM-R Project
 Tottenham House
 London
 W2 1HA

Alternative Reference: See Layout Tab A3 Sheets 1 and 2

Drawing Number: NTPO\SLD\2115\2116\001

Sheet: 1 of 2
 Revision: B



Legend

Notes

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B	24/05/2011	Converted to As-built	MT	RP	SW
A	28/08/2008	2nd Issue	MT	AEL	SW
DA	20/08/2008	1st Issue	MT	AEL	SW

Contractor(s)

Status
As-built

Scale(s)
ELR & Mileage
HOU

Designed	Michal Taraj	Sign.		Date	24/05/2011
Drawn	Michal Taraj	Sign.		Date	24/05/2011
Checked	Rashmi Patel	Sign.		Date	24/05/2011
Approved	Steve Witt	Sign.		Date	24/05/2011

Project
FTN / GSM-R Project
WP10-04

Drawing Title
Barnes Relay Room (2115)
Grove Park (2116)

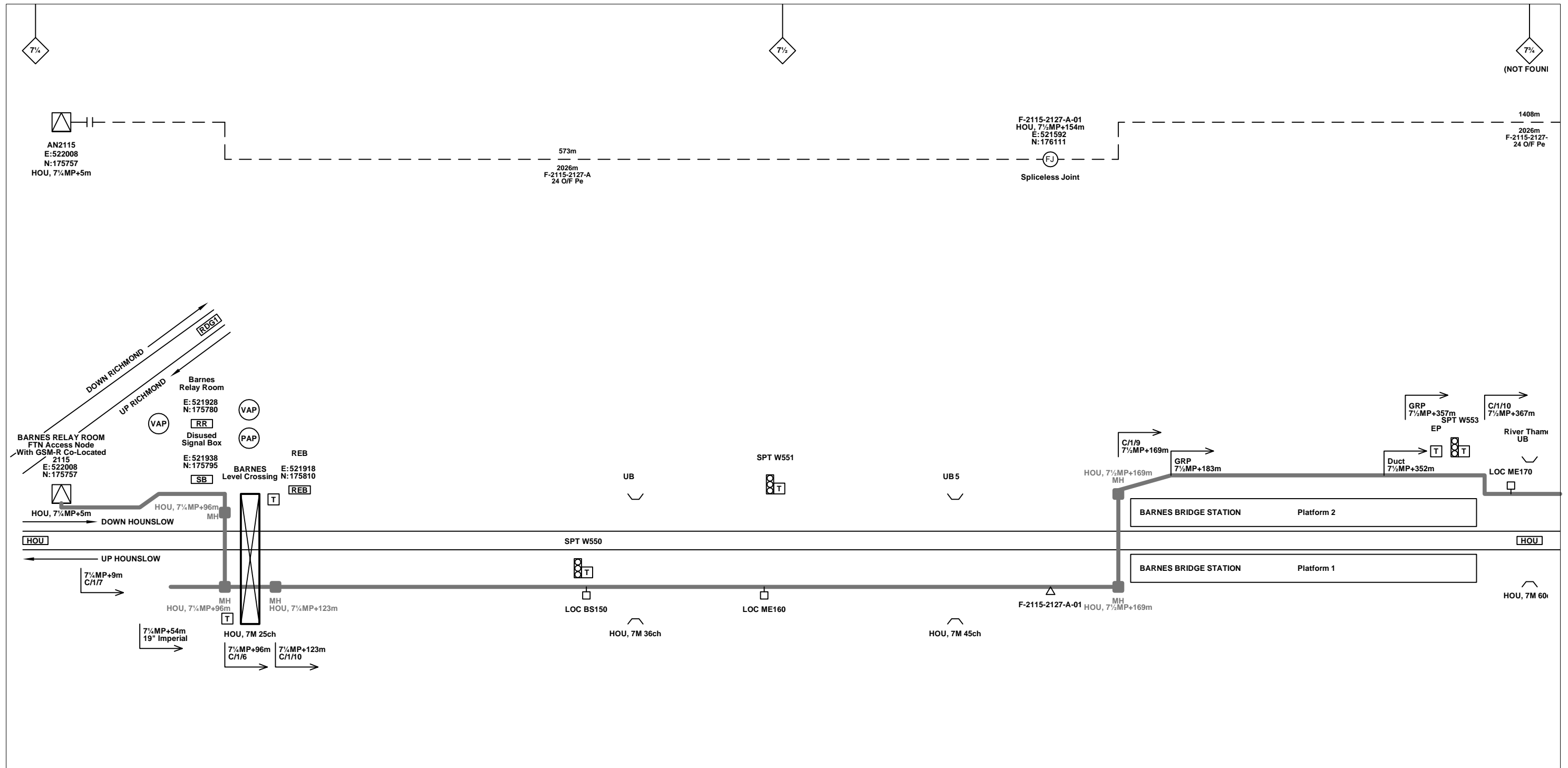
Alternative Reference
See Layout Tab A3 Sheets 3 and 4

Sheet
2 of 2

Revision
B

Project
FTN/GSM-R Project
Tottenham House
London
W2 1HA

Drawing Number
NTPO\SLD\2115\2116\001



Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Overbridge	Signal	Engineer's Line Reference	Crossing	GAS — GAS — GAS — Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Underbridge	Vehicle Access Point	Mile Post	Gantry	HV — HV — HV — HV Cable
KEY	Screening Conductor Joint with/without Earth	Manhole	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Manhole details: Cross-To be used	Pedestrian Access Point	Platform	SEW — SEW — SEW — Sewer	LV — LV — LV — LV Cable
Proposed Fibre & Civils Elements are shown in RED				FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Telephone	TEL — TEL — TEL — Telecoms	W — W — W — Water
Proposed Copper Elements are shown in BLUE							Buffer Stop	Cable Pull	AC Stanchion	
Proposed Screening Elements are shown in MAGENTA										
All Recoveries are shown in GREEN										

Notes

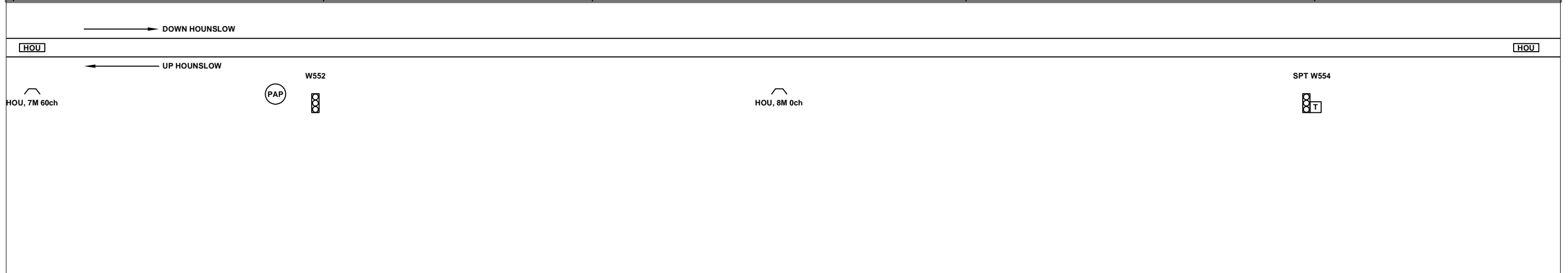
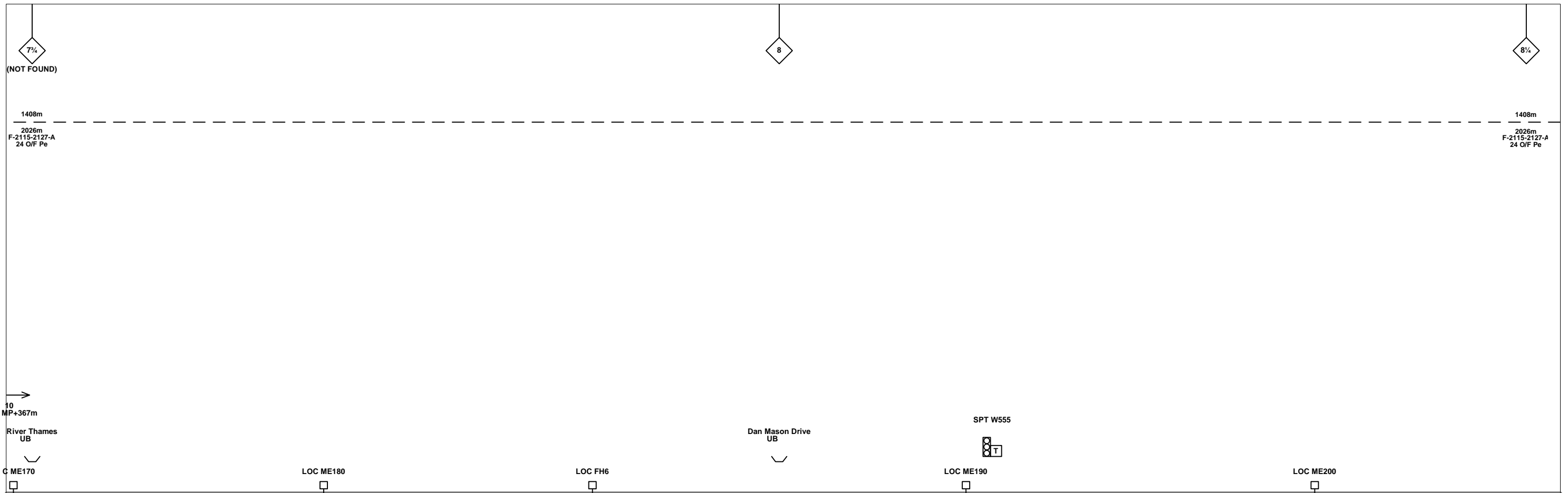
Contractor(s)

1988m
2034m
F-DIDC-RGAC-A

Status - as per Key Below

Existing Fibre Cable
Existing Copper Cable
Existing Screen Cable

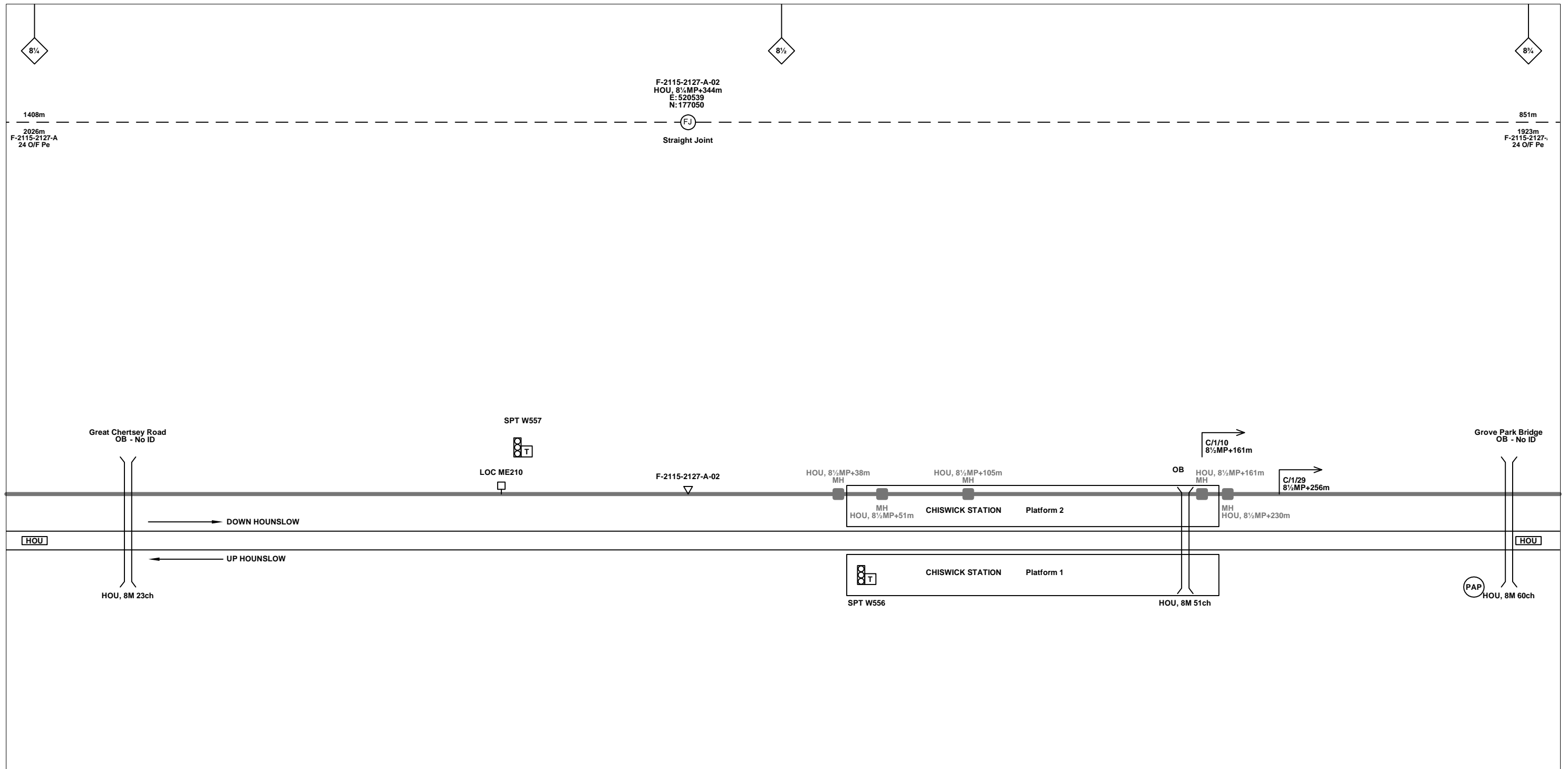
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<p>Notes</p>		<p>Project</p> <p align="center">FTN / GSM-R Project WP10-04</p>		<p>FTN/GSM-R Project Tournament House Paddington London W2 1HA</p>																									
<p>Rev</p> <table border="1"> <tr> <th>Rev</th> <th>Date</th> <th>Description of Revisions</th> <th>Drawn</th> <th>Chkd</th> <th>Appr</th> </tr> <tr> <td>B</td> <td>24/05/2011</td> <td>Converted to As-built</td> <td>MT</td> <td>RP</td> <td>SW</td> </tr> <tr> <td>A</td> <td>28/08/2008</td> <td>2nd Issue</td> <td>MT</td> <td>AEL</td> <td>SW</td> </tr> <tr> <td>DA</td> <td>20/08/2008</td> <td>1st Issue</td> <td>MT</td> <td>AEL</td> <td>SW</td> </tr> </table>		Rev	Date	Description of Revisions	Drawn	Chkd	Appr	B	24/05/2011	Converted to As-built	MT	RP	SW	A	28/08/2008	2nd Issue	MT	AEL	SW	DA	20/08/2008	1st Issue	MT	AEL	SW	<p>Drawing Title</p> <p align="center">Barnes Relay Room (2115) Grove Park (2116)</p>		<p>Alternative Reference</p> <p align="center">See Layout Tab 841 x 297 Sheet 1</p>	
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<p>Status</p> <p align="center">As-built</p>		<p>Project</p> <p align="center">FTN / GSM-R Project WP10-04</p>		<p>Sheet</p> <p align="center">1 of 4</p>																									
<p>Revision</p> <p align="center">B</p>		<p>Project</p> <p align="center">FTN / GSM-R Project WP10-04</p>		<p>Revision</p> <p align="center">B</p>																									



Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Overbridge	Signal	Engineer's Line Reference	Crossing	Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Underbridge	Vehicle Access Point	Mile Post	Gantry	HV Cable
KEY	Screening Conductor Joint with/without Earth	Manhole	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Manhole details: Cross-To be used, Filled-In use, Clear-Empty	Pedestrian Access Point	Platform	Sewer	LV Cable
Proposed Fibre & Civils Elements are shown in RED										Sewer
Proposed Copper Elements are shown in BLUE										Telecoms
Proposed Screening Elements are shown in MAGENTA										Water
All Recoveries are shown in GREEN										
										Earth Farm
										Buffer Stop
										Telephone
										Cable Pull
										AC Stanchion

Notes		Contractor(s)		Designed Michal Taraj		Sign.		Date 24/05/2011			
				Drawn Michal Taraj		Sign.		Date 24/05/2011			
				Checked Rashmi Patel		Sign.		Date 24/05/2011			
				Approved Steve Witt		Sign.		Date 24/05/2011			
				Project		FTN / GSM-R Project WP10-04					
		Status As-built		Drawing Title		Barnes Relay Room (2115) Grove Park (2116)		Alternative Reference See Layout Tab 841 x 297 Sheet 1		Sheet 2 of 4	
		Scale(s) NTS		ELR & Mileage		HOU		Drawing Number NTPO\SLD\2115\2116\001		Revision B	
Rev	Date	Description of Revisions		Drawn	Chkd	Appr					
B	24/05/2011	Converted to As-built		MT	RP	SW					
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Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Overbridge	Signal	Engineer's Line Reference	Crossing	GAS — GAS — Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Manhole	Vehicle Access Point	Mile Post	HV — HV — HV Cable	LV — LV — LV Cable
KEY	Screening Conductor Joint with/without Earth	Status - as per Key Below	Mid Length Sheath Gap Fibre	FTN Access Node	Cabinet Routeworks	Manhole details: Cross-To be used, Filled-In use, Clear-Empty	Pedestrian Access Point	Platform	SEW — SEW — Sewer	v — v — Water
Proposed Fibre & Civils Elements are shown in RED		All Existing Elements are shown in BLACK	Sheath Gap Copper	FTN Access Node with GSM-R Colocated	Fibre Joint Routeworks	Tunnel	Earth Farm	Gantry	Copper Blue	AC Stanchion
Proposed Copper Elements are shown in BLUE		Existing Fibre Cable					Buffer Stop	Cable Pull	Fibre Red	
Proposed Screening Elements are shown in MAGENTA		Existing Copper Cable							Screen Green	
All Recoveries are shown in GREEN		Existing Screen Cable								

Notes

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B	24/05/2011	Converted to As-built	MT	RP	SW
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Contractor(s)

Status As-built

Scale(s) NTS

ELR & Mileage HOU

Designed	Michal Taraj	Sign.	Date	24/05/2011
Drawn	Michal Taraj	Sign.	Date	24/05/2011
Checked	Rashmi Patel	Sign.	Date	24/05/2011
Approved	Steve Witt	Sign.	Date	24/05/2011
Project	FTN / GSM-R Project WP10-04			
Drawing Title	Barnes Relay Room (2115) Grove Park (2116)			

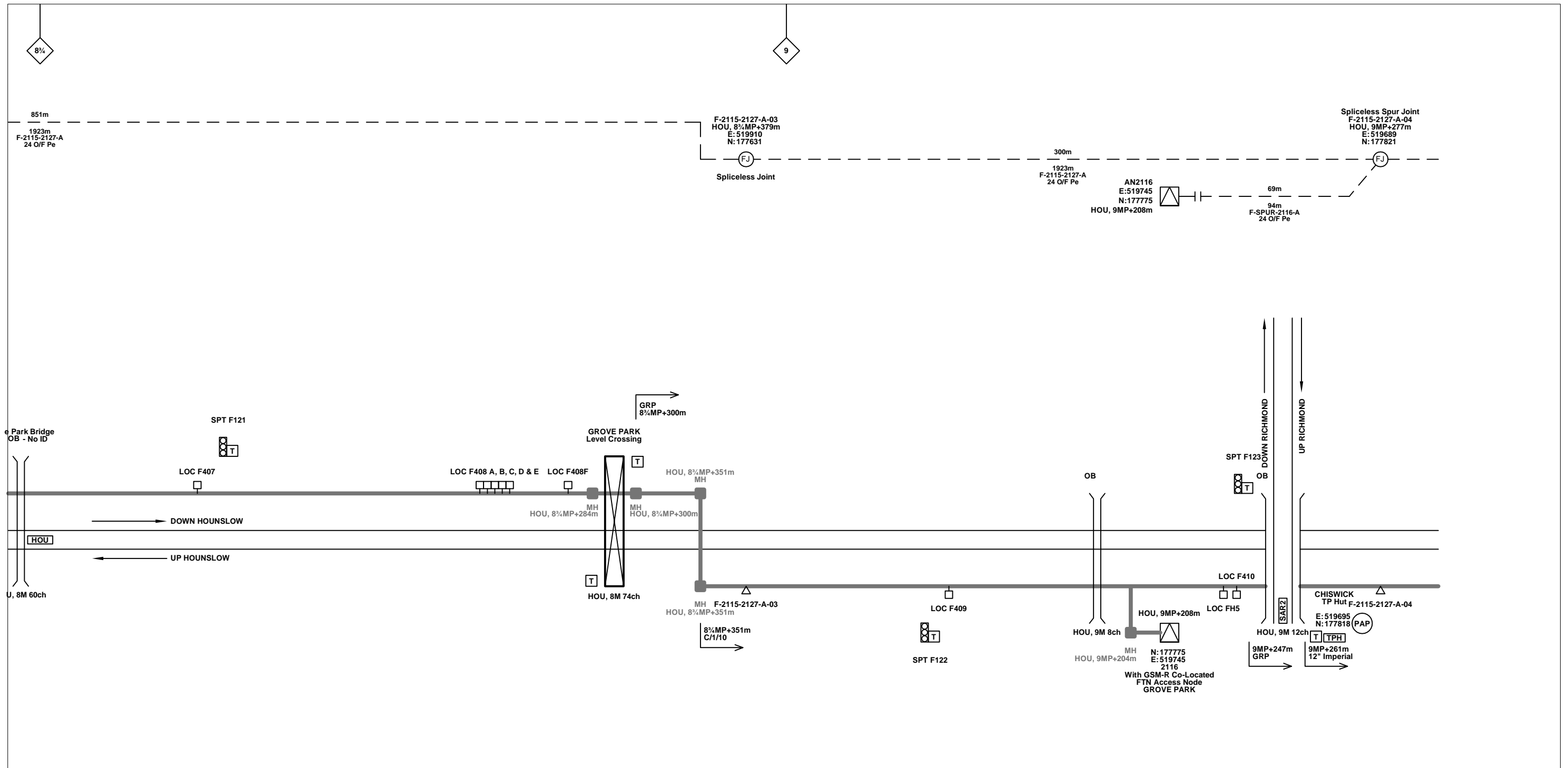
FTN/GSM-R Project
Tournament House
Paddington
London
W2 1HA

Alternative Reference See Layout Tab 841 x 297 Sheet 2

Drawing Number NTPO\SLD\2115\2116\001

Sheet 3 of 4

Revision B



Legend

Cabinet and Verts	Copper Joint	Trough Duct Cable Tray	Signal Box	FTN Core Node	Screen Joint Routeworks	Overbridge	Signal	Engineer's Line Reference	Crossing	Gas Line
Cabinet with Regenerator and Verts	Fibre Joint	Cable - Type Identified by FTN Code	Electrical Control Room	Core Node with GSM-R Colocated	Copper Joint Routeworks	Underbridge	Vehicle Access Point	Mile Post	Gantry	HV Cable
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Proposed Copper Elements are shown in BLUE									Cable Pull	AC Stanchion
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		Contractor(s) HOU		Designed Michal Taraj Drawn Michal Taraj Checked Rashmi Patel Approved Steve Witt		Sign. Date 24/05/2011			
Status As-built		Project FTN / GSM-R Project WP10-04		Drawing Title Barnes Relay Room (2115) Grove Park (2116)		Alternative Reference See Layout Tab 841 x 297 Sheet 2		Sheet 4 of 4	
Scale(s) NTS		ELR & Mileage HOU		Drawing Number NTPO\SLD\2115\2116\001		Revision B			
Rev Date Description of Revisions		Drawn Chkd Appr		Project		Project		Project	