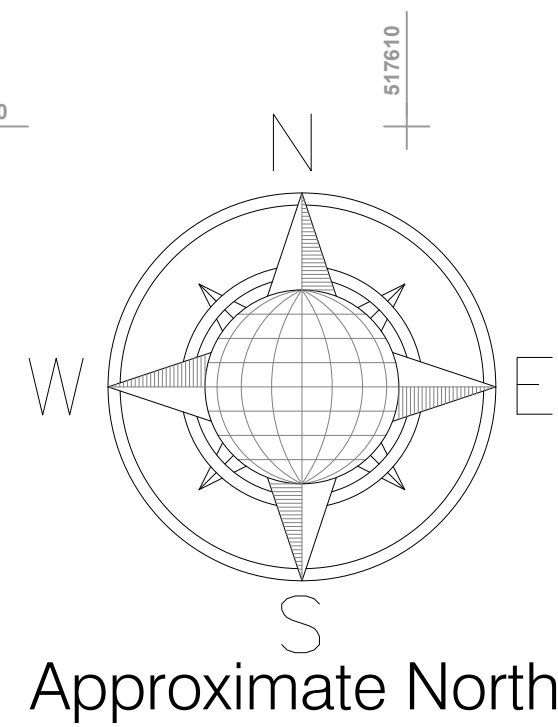




ARCH
ASSOCIATES

APPENDIX 2

TOPOGRAPHICAL AND UTILITY SURVEY



LEGEND			
Utility Survey Point Features			
AV	Air Valve	GL	Gas Round
BV	Belisha Beacon	IC	IC - Round
CC	CCTV Camera Pole	IC -	IC - Corrmis
CP	Cable Release	ICE	12-24
DP	Down Pipe	IC -	IC - Electric
DP	Down Pipe To Ground	IC -	IC - Round
EE	Electrical Pole	ICTC	IC - Telecom
ER	Earth Rod	ICTV	IC - CATV
FE	Fire Hydrant	LP	Lamp Post
GM	Gas Meter	MH	MH
GV	Gas Valve	MH -	MH - District Heat
GU	Gully	MH	MH - Foul
		MH	MH - Round
		MH	MH - Surface Water
		MK	Marker Post
		RL	Recessed Light
		RE	Roading Eye
		RP	Stop Rock
		TL	Traffic Light
		TP	Telegraph Pole
		V	Valve General
		WM	Water Meter
		WW	Water Valve

[illegible]

FRW — Fire Water	DH — District Heat
WM — Water Main	FU — Fuel Pipe
WS — Water Service	XX — Decommissioned/Abandoned
	Manhole Chamber
	Manhole ID
E — Electrical Service	PEO — Pot End
EE — Electrical Earth	Scope of Works
P — Electrical Pilot Cable	

PAS128 Quality Levels			
(Consult document 'PAS128:2014.pdf' for full details)			
—XX - A—	Quality Level A	—XX - B3—	Quality Level B3
—XX - B1—	Quality Level B1	—XX - B3P—	Quality Level B3P
—XX - B1P—	Quality Level B1P	—XX - B4—	Quality Level B4
—XX - B2—	Quality Level B2	—XX - C—	Quality Level C
—XX - B2P—	Quality Level B2P	—XX - D—	Quality Level D

Special Survey Features					
E=XXXXXXX ID A=YYYYYYY	Survey Station	E=XXXXXXX HZZZ HZZZ ID B=YYYYYYY	Scan Target		
Utility Survey Abbreviations					
AB	Abandoned	CSER	Control Space Entry Required		
AR	Assumed Route	MH	Manhole		
B	Illuminated Borehole	NVO	Not Visible Outside		
BL	Buried	OE	Overhead Electric		
CPD	Capped	OT	Overhead Telecom		
CL	Cover Level	SOF	Soft Foot		
CPD	Capped	TFR	Taken From Records		
CUT	Disconnected Utility	TVM	Trench Vending Machine		
EODCTV	End of CCTV Signal	UTO	Unable to Open		
EOD EPR	End of EPR Signal	UVT	Unable to Survey		
END	End of Trace	UTT	Unable to Trace		
EOS	End of Survey	UNK	Unknown		
IC	Inspection Cover	WL	Water Level		
IL	Invert Level	XGD	Survey Depth		

Utility Material Abbreviations					
AC	Asbestos Cement	CO	Concret	SI	Spun Iron
BC	Brick Chamber	DI	Ductile Iro	ST	Steel
CI	Cast Iron	PE	Polyethylene	WTR	Water
Level Measured For Ducts/Pipes At Pits Is To Top Of The Service			Level Measured For Drainage At Pits Is To Invert Level Of The Service		

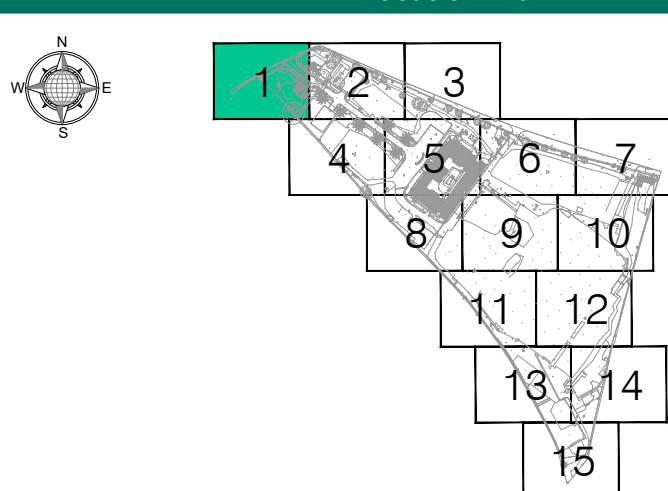
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For full terms and conditions visit **Terms and Conditions** www.murphyys.com

Location Plan



Revisions				
Rev	Description	Surveyed by	Drawn by	Checked by
A	First Issue	DA - 16/11/24	CN - 20/11/24	DS - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24	CN - 29/11/24	DS - 02/12/24



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Woodshots Meadow
Watford
WD18 8YX
Phone: (+44) 0192 362 4800
Email: info@murphyys.com



London Manchester Birmingham Glasgow Belfast Cork Kildare

Client	TPS Management
Project	Novartis site Horsham - GPR Survey
Site Address	32 Wimbleshurst Rd Horsham RH12 2ED
Description	Underground Utility Survey (PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
Survey Datum	GNSS - Ordnance Datum Newlyn (ODN)
RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	MGS60622-U-RevB-All-Combined-01

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PLEASE NOTE:

Previous topographic and utility survey done in 2018.
Old utility survey can be found in gray color.



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Previous topographic and utility survey done in 2018.
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LEGEND		
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BB Belisha Beacon	IC - Electric	MH - Surface Water
CP CCTV Camera Pole	IC - Round	MP Marker Post
CR Cable Riser	IC - Telecom	PR Pipe Riser
DP Down Pipe To Ground	IC - TCSU/TFL	RE Recessed Light
EP Electrical Pole	IC - CATV	RE Rodding Eye
ER Earth Rod	LP Lamp Post	SC Stop Cock
FR Fire Hydrant	MH	TL Traffic Light
GM Gas Meter	MH - District Heat	TP Telegraph Pole
GV Gas Valve	MH - Foul	V Valve General
G Gully		WM Water Meter
		WV Water Valve

Utility Survey Linework Features		
BT British Telecom	EHV Electrical - Extra High Voltage	
CATV Cable TV	HV Electrical - High Voltage	
CCTV Closed Circuit TV	LV Electrical - Low Voltage	
COMMS Communications	TFL Electrical - TFL	
FOLC Fibre Optic Line - Colt	SL Street Lighting	
FOLC Fibre Optic Line - Energis	TCSU Traffic Control System Unit	
FOLC Fibre Optic Line - Fibernet	G Gas	
FOLC Fibre Optic Line - Level 3	GP Gas Low Pressure	
FOLC Fibre Optic Line - Mercury	GP Gas Intermediate Pressure	
FOLC Fibre Optic Line - MFCSC	GP Gas Medium Pressure	
FOLC Fibre Optic Line - Tanet	GP Gas High Pressure	
FOLC Fibre Optic Line - Virgin	GP Gas Unknown	
FOLC Fibre Optic Line - Vodafone	ED Empty Duct	
FOLC Fibre Optic Line - Verizon	GPR GPR Anomaly	
FOLC Fibre Optic Line - WCOM	UA Unknown Asset	
TS Telecom Service	UA Possible Sweep	
	UCL Unknown Cable	
	GRS GPR Slab	
	GRS GPR Survey Area	
	GRS GPR buried structure	
	GRS GPR Reinforced Slab	
	GRS GPR Interface layer (change in material)	
	Other	
	DH District Heat	
	FU Fuel Pipe	
	XX Decommissioned/Abandoned	
	Manhole Chamber	
	Manhole ID	
	PEO Pot End	
	Scope of Works	

PAS128 Quality Levels		
(Consult document PAS128-2014.pdf for full details)		
XX - A - Quality Level A	XX - B3 - Quality Level B3	
XX - B1 - Quality Level B1	XX - B3P - Quality Level B3P	
XX - B1P - Quality Level B1P	XX - B4 - Quality Level B4	
XX - B2 - Quality Level B2	XX - C - Quality Level C	
XX - B2P - Quality Level B2P	XX - D - Quality Level D	

Special Survey Features		
E-XXXX-XXX ID A NYYYY YYY Survey Station	ES-XXXX-XXX ID NYYYY YYY Scan Target	
HZZZ ZZZ	HZZZ ZZZ	

Utility Survey Abbreviations		
AB Abandoned	CSER Confined Space Entry Required	
AR Assumed Route	MH Manhole	
BI Illuminated Bollard	NVO Not Visible Outlet	
BLD Blocked	OE Overhead Electric	
CPD Capped	OT Overhead Telecom	
CL Cover Level	SOF Soffit Level	
CPD Capped	TFR Taken From Rafters	
CUT Disconnected Utility	TVM Ticket Vending Machine	
EOCCTV End of CCTV Survey	UTO Unable to Open	
EOC End of GPR Signal	UTT Unable to Trace	
EDT End of Trace	UKN Unknown	
EOS End of Survey	WL Water Level	
IC Inspection Cover	XXS Service Depth	
IL Invert Level		

Utility Material Abbreviations		
AC Asbestos Cement	CO Concrete	SI Spun Iron
BC Brick Chamber	DI Ductile Iro	ST Steel
CI Cast Iron	PE Polyethylene	WTR Water
Level Measured For		
Duts/Pipes At Pits Is To Top of The Service	At Pits Is To Invert Level Of The Service	

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For full terms and conditions visit Terms and Conditions www.murphygs.com		

Location Plan		

Revisions		
Rev	Description	Surveyed by Drawn by Checked by
A	First issue	DA - 16/11/24 CN - 20/11/24 DS - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24 CN - 20/11/24 DS - 03/12/24

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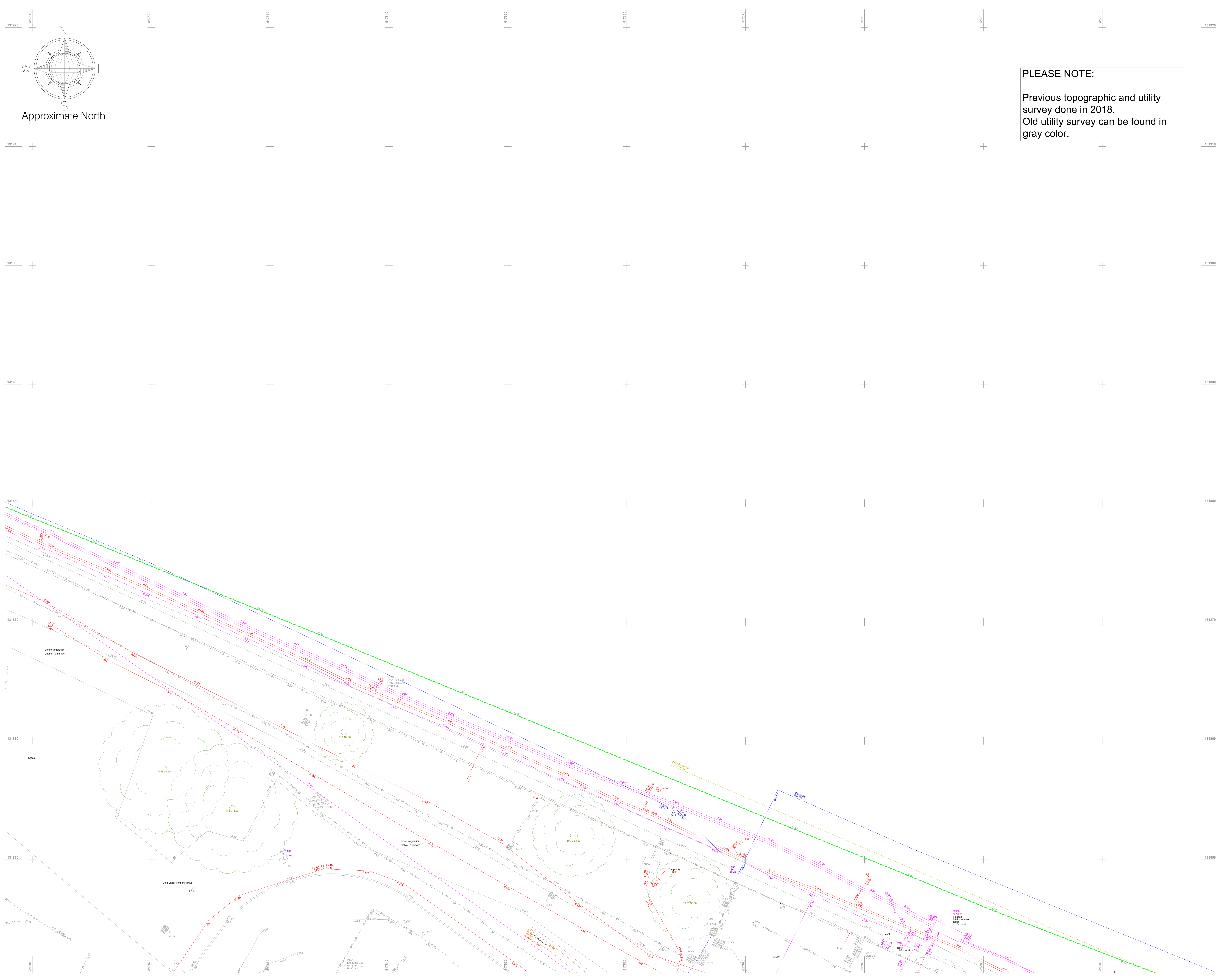
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Revisions		
Rev		



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FOLC Fibre Optic Line - Cot	TCSU Traffic Control System Unit	
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FOLF Fibre Optic Line - Fibernet	GP Gas Low Pressure	
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FOLM Fibre Optic Line - Mercury	GMP Gas Medium Pressure	
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FOLV Fibre Optic Line - Virgin	ED Empty Duct	
FOLVF Fibre Optic Line - Vodafone	GPR Anomaly	
FOLVN Fibre Optic Line - Verizon	GPR Unknown	
FOLVW Fibre Optic Line - WCOM	UA Unknown Asset	
TS Telecom Service	UAPS UA Passive Sweep	
	UCL Unknown Cable	
CW Combined Water	GPR Slab	
FW Foul Water	GPR Survey Area	
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	GPR Interface layer (change in material)	
	Water	
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(Consult document PAS128-2014.pdf for full details)	
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Special Survey Features	
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ID NYYYY-YYY Survey Station	ID NYYYY-YYY Scan Target
HZZZ ZZZ	HZZZ ZZZ

Utility Survey Abbreviations	
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IL Invert Level	XGS Service Depth
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	SI Spun Iron
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Level Measured For	
Ducts/Pipes At Pits Is To Top of The Service	Level Measured For Drainage At Pits Is To Invert Level Of The Service

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London Manchester Birmingham Glasgow Belfast Cork Kildare	

Client	TPS Management
Project	Novartis site Horsham - GPR Survey
Site Address	32 Wimblehurst Rd Horsham RH12 2ED
Description	Underground Utility Survey(PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
Survey Datum	GNSS - Ordnance Datum Newlyn (ODN)
RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	GS60622-U-RevB-All-Combined-03

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LEGEND			
Utility Survey Point Features			
AV	Air Valve	IC	Gully Round
BV	Belisha Beacon	IC	MH - Round
CB	CP/CAT Camera Pole	IC	MH - Square Water
CC	Cable Rise	ICE	IC - Electric
CD	Down Pipe	ICR	Marker Post
DD	Down Pipe to Ground	ICR	12.24
ED	Electrical Pole	ICR	RR
ER	Earth Rod	ICR	Pipe Riser
FF	Fire Hydrant	ICR	Recessed Light
GM	Gas Meter	ICR	Roading Eye
GV	Gas Valve	ICR	SC
GV	Gas Valve	ICR	Stop Cock
GV	Gas Valve	ICR	Traffic Light
GV	Gas Valve	ICR	TP
GV	Gas Valve	ICR	Telegraph Pole
GV	Gas Valve	ICR	Water General
GV	Gas Valve	ICR	Water Meter
GV	Gas Valve	ICR	Water Valve

[illegible]

PAS128 Quality Levels
(Consult document 'PAS128:2014.pdf' for full details)

—XX - A—	Quality Level A	—XX - B3—	Quality Level B3
—XX - B1—	Quality Level B1	—XX - B3P—	Quality Level B3P
—XX - B1P—	Quality Level B1P	—XX - B4—	Quality Level B4
—XX - B2—	Quality Level B2	—XX - C—	Quality Level C
—XX - B2P—	Quality Level B2P	—XX - D—	Quality Level D

Special Survey Features			
ID		E=XXXX.XXX N=YYYY.YYY H=ZZZ.ZZZ	Survey Station
ID		E=XXXX.XXX N=YYYY.YYY H=ZZZ.ZZZ	Scan Target

Utility Survey Abbreviations		
AB	Abandoned	CSEF Confined Space Entry Required
AR	Assumed Route	GH Manhole
BI	Illuminated Bolland	NVO Not Visible Outlet
BLD	Blocked	OE Overhead Electric
CP	Caped	OT Overhead Telecom
CL	Core Level	SOF Soft Level
CP	Caped	TFR Taken From Records
CT	Disconnected Utility	TVM Ticket Vending Machine
EOC/CTV	End of CTV Survey	UNT Unable to Open
EOG	End of GPR Signal	UNT Unable to Survey
EOE	End of Trace	UNT Unable to Trace
EOS	End of Survey	UNK Unknown
IC	Inspection Cover	WL Water Level
IL	Invert Level	XXG Service Depth

Utility Material Abbreviations					
AC	Asbestos Cement	CO	Concret	SI	Spun Iron
BC	Brick Chamber	DI	Ductile Iro	ST	Steel
CI	Cast Iron	PE	Polyethylene	WTR	Water
Level Measured For Ducts/Pipes At Pits Is To Top Of The Service			Level Measured For Drainage At Pits Is To Invert Level Of The Service		

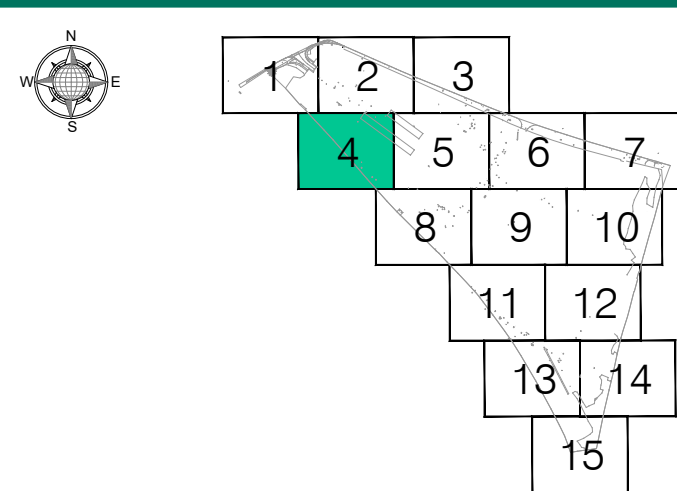
Murphy Geospatial Disclaimer

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Location Plan



Revisions				
Rev	Description	Surveyed by	Drawn by	Checked by
A	First Issue	DA - 16/11/24	CN - 20/11/24	DS - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24	CN - 29/11/24	DS - 02/12/24



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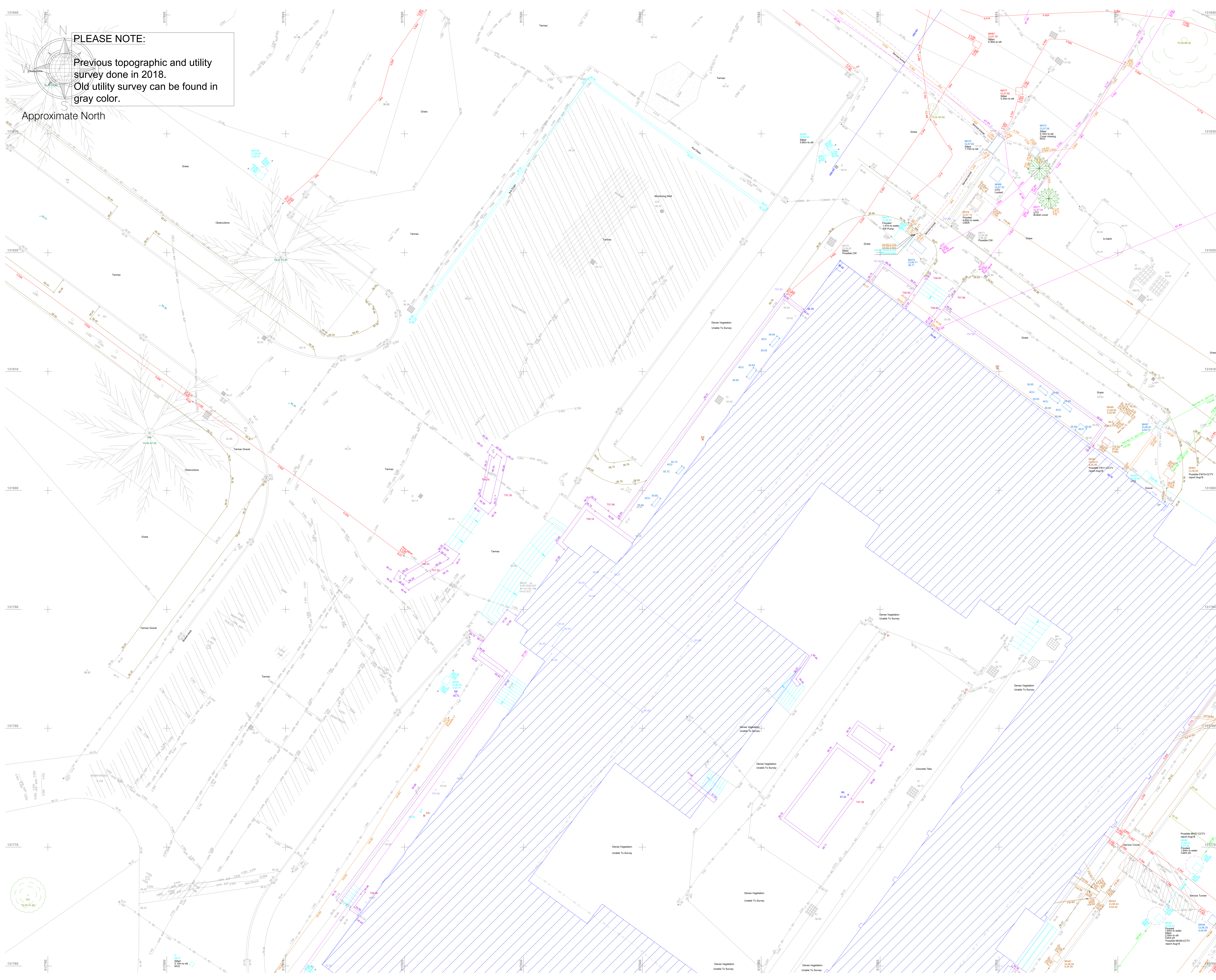
London Manchester Birmingham Glasgow Belfast Cork Kildare

Client	TPS Management
Project	Novartis site Horsham - GPR Survey
Site Address	32 Wimbleshurst Rd Horsham RH12 2ED
Description	Underground Utility Survey (PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
Survey Datum	GNSS - Ordnance Datum Newlyn (ODN)
RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	GS60622-U-RevB-All-Combined-

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PLEASE NOTE:

Previous topographic and utility survey done in 2018.
Old utility survey can be found in gray color.



LEGEND			
Utility Survey Point Features			
AV Air Valve	GU Gully Round	MH MH - Round	
BB Belisha Beacon	IC IC	MH MH - Surface Water	
CC CCTV Camera Pole	IC IC - Comm	MP Marker Post	
CR Cable Riser	IC IC - Electric	PR Pipe Riser	
DP Down Pipe	IC IC - Round	RL Recessed Light	
DPC Down Pipe To Ground	IC IC - Telecom	RE Roding Eye	
EP Electrical Pole	IC IC - TCSU/TFL	SC Stop Cook	
ER Earth Rod	IC IC - CATV	TL Traffic Light	
FR Fire Hydrant	LP Lamp Post	TP Telegraph Pole	
GM Gas Meter	MH MH	V Valve General	
GV Gas Valve	MH MH - District Heat	WM Water Meter	
G Gully	MH MH - Foul	WV Water Valve	

Utility Survey Linework Features			
BT British Telecom	EHV Electrical - Extra High Voltage		
CATV Cable TV	HV Electrical - High Voltage		
CCTV Closed Circuit TV	LV Electrical - Low Voltage		
COMMS Communications	TFL Electrical - TFL		
FOL Fibre Optic Line	SL Street Lighting		
FOLC Fibre Optic Line - Cof	TCSU Traffic Control System Unit		
FOLF Fibre Optic Line - Energis	Gas		
FOLF Fibre Optic Line - Fibernet	Gas Service		
FOLF Fibre Optic Line - Level 3	Gas Low Pressure		
FOLM Fibre Optic Line - Mercury	Gas Intermediate Pressure		
FOLM Fibre Optic Line - MFS	Gas Medium Pressure		
FOLF Fibre Optic Line - Tanet	Gas High Pressure		
FOLV Fibre Optic Line - Virgin	Gas Unknown		
FOLV Fibre Optic Line - Vodafone	ED Empty Duct		
FOLV Fibre Optic Line - Verizon	GPR Anomaly		
FOLV Fibre Optic Line - WCOM	GPR Cable		
TS Telecom Service	UA UA Possible Sweep		
	UCL Unknown Cable		
OW Combined Water	GPR Slab		
FW Foul Water	GPR Survey Area		
SW Surface Water	GPR buried structure		
RM Rising Main	GPR Reinforced Slab		
	GPR Interface layer (change in material)		
FRW Fire Water	Other		
WM Water Main	DH District Heat		
WS Water Service	FU Fuel Pipe		
	XX Decommissioned/Abandoned		
E Electrical	Manhole Chamber		
EE Electrical Service	Manhole ID		
EE Electrical Earth	PEO Pot End		
P Electrical Pilot Cable	Scope of Works		

PAS128 Quality Levels			
(Consult document 'PAS128-2014.pdf' for full details)			
XX - A - Quality Level A	XX - B3 - Quality Level B3		
XX - B1 - Quality Level B1	XX - B3P - Quality Level B3P		
XX - B1P - Quality Level B1P	XX - B4 - Quality Level B4		
XX - B2 - Quality Level B2	XX - C - Quality Level C		
XX - B2P - Quality Level B2P	XX - D - Quality Level D		

Special Survey Features			
E-XXXX-XXX	ES-XXXX-XXX		
ID A NYYYYYYY Survey Station	ID NYYYYYYY Scan Target		
HZZZZ ZZZ	HZZZZ ZZZ		

Utility Survey Abbreviations			
AB Abandoned	CSER Confined Space Entry Required		
AR Assumed Route	MH Manhole		
BI Illuminated Bollard	NVO Not Visible Outlet		
BLD Blocked	OE Overhead Electric		
CPD Capped	OT Overhead Telecom		
CL Cover Level	SOF Soffit Level		
CPD Capped	TFR Taken From Records		
CUT Disconnected Utility	TYM Ticket Vending Machine		
EOCCTV End of CCTV Survey	UTO Unable to Open		
EOC End of GPR Signal	UTS Unable to Survey		
EDT End of Trace	UTT Unable to Trace		
EOS End of Survey	UKN Unknown		
IC Inspection Cover	WL Water Level		
IL Invert Level	XXS Service Depth		

Utility Material Abbreviations			
AC Asbestos Cement	CO Concrete	SI Spun Iron	
BC Brick Chamber	DI Ductile Iro	ST Steel	
CI Cast Iron	PE Polyethylene	WTR Water	

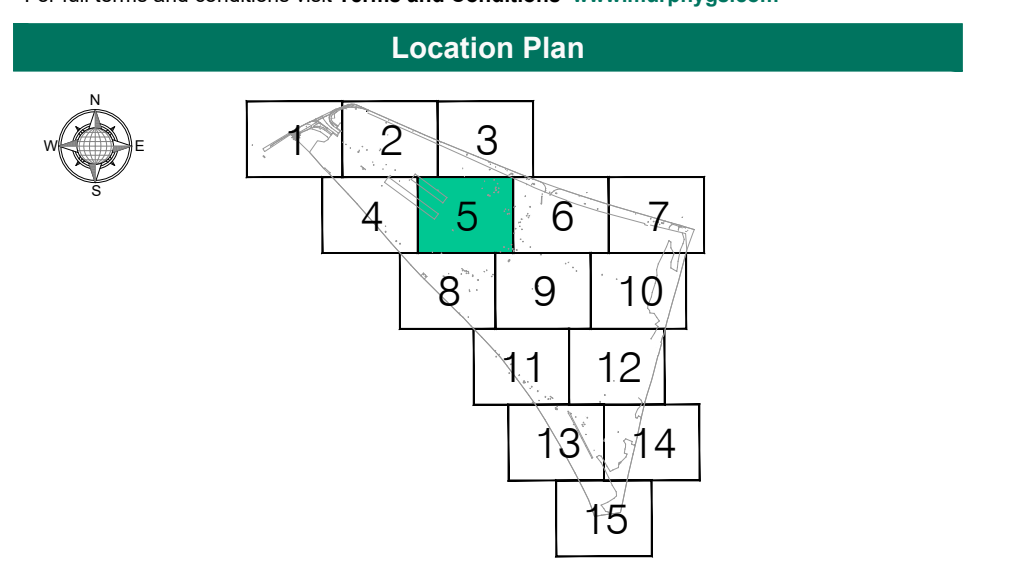
Level Measured For Ducts/Pipes At Pits Is To Top of The Service	Level Measured For Drainage At Pits Is To Invert Level Of The Service
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Revisions				
Rev	Description	Surveyed by	Drawn by	Checked by
A	First Issue	DA - 16/11/24	CN - 20/11/24	DS - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24	CN - 29/11/24	DS - 03/12/24

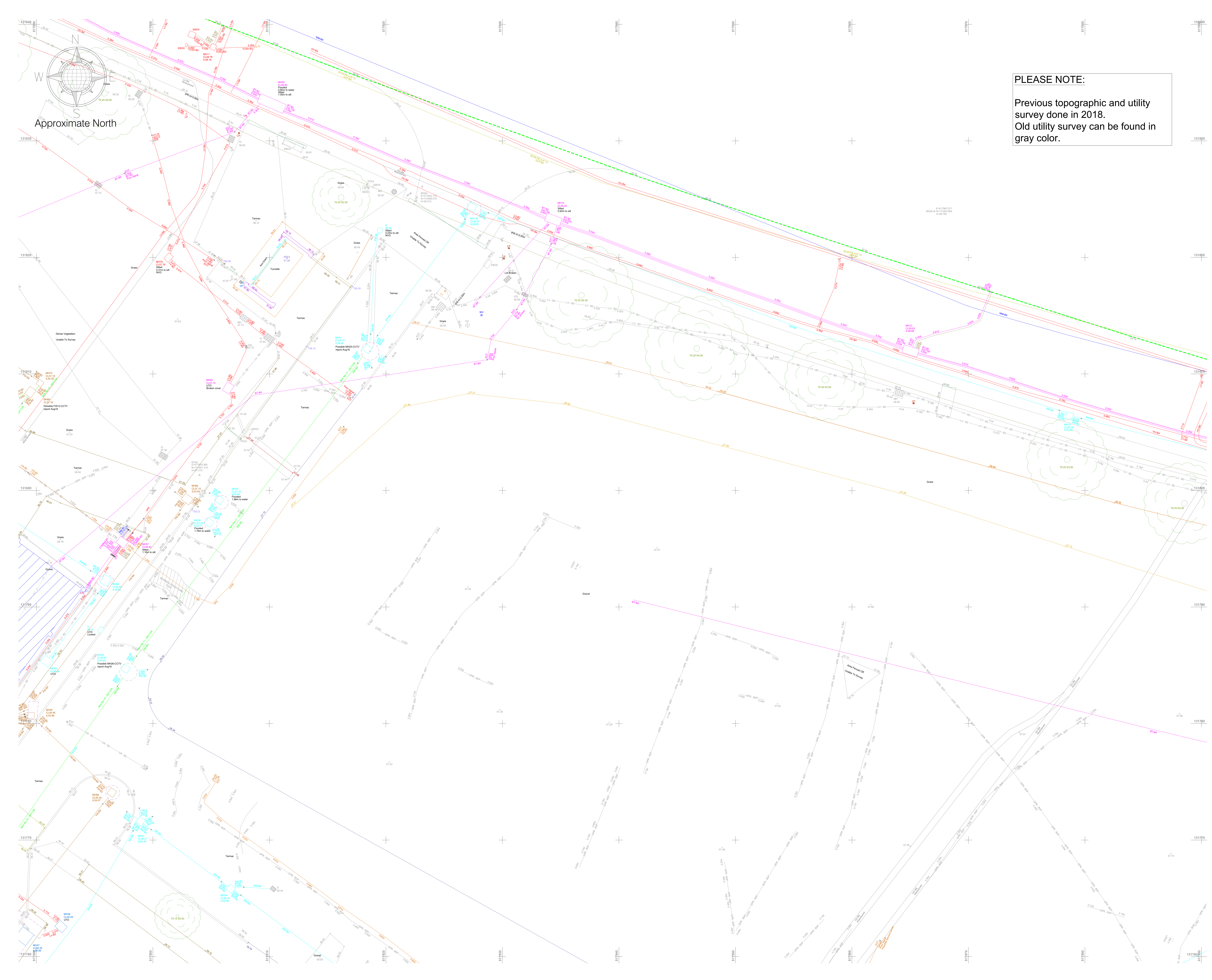


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Email: info@murphygs.com

London Manchester Birmingham Glasgow Belfast Cork Kildare

Client	TPS Management
Project	Novartis site Horsham - RDR Survey
Site Address	32 Wimblehurst Rd Horsham RH12 2ED
Description	Underground Utility Survey (PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
Survey Datum	GNSS - Ordnance Datum Newlyn (ODN)
RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	GS60622-U-RevB-All-Combined-05



PLEASE NOTE:

Previous topographic and utility survey done in 2018.
Old utility survey can be found in gray color.

LEGEND		
Utility Survey Point Features		
AV Air Valve	IC - Comm	MH - Round
BB Belisha Beacon	IC - Electric	MH - Surface Water
CP CCTV Camera Pole	IC - Round	Marker Post
CR Cable Riser	IC - Telecom	Pipe Riser
DP Down Pipe To Ground	IC - TCSU/TFL	Recessed Light
EP Electrical Pole	IC - CATV	Rodding Eye
ER Earth Rod	LP Lamp Post	Stop Cook
FR Fire Hydrant	MH	Traffic Light
GM Gas Meter	MH - District Heat	Valve General
GV Gas Valve	MH - Foul	Water Meter
G Gully		Water Valve

Utility Survey Linework Features		
BT British Telecom	EHV Electrical - Extra High Voltage	
CATV Cable TV	HV Electrical - High Voltage	
CCTV Closed Circuit TV	LV Electrical - Low Voltage	
COMMS Communications	TFL Electrical - TFL	
FOL Fibre Optic Line	SL Street Lighting	
FOLC Fibre Optic Line - Colt	TCSU Traffic Control System Unit	
FOLN Fibre Optic Line - Energis		
FOLP Fibre Optic Line - Fibernet		
FOLM Fibre Optic Line - Mercury		
FOLV Fibre Optic Line - MFS		
FOLT Fibre Optic Line - Tanet		
FOLV Fibre Optic Line - Virgin		
FOLV Fibre Optic Line - Vodafone		
FOLV Fibre Optic Line - Verizon		
FOLV Fibre Optic Line - WCOM		
TS Telecom Service		
Drainage		
FW Combined Water		
FW Foul Water		
SW Surface Water		
RM Rising Main		
Water		
FRW Fire Water		
WM Water Main		
WS Water Service		
Electrical		
E Electrical Service		
EE Electrical Earth		
P Electrical Pilot Cable		

PAS128 Quality Levels	
(Consult document PAS128-2014.pdf for full details)	
XX - A - Quality Level A	XX - B3 - Quality Level B3
XX - B1 - Quality Level B1	XX - B3P - Quality Level B3P
XX - B1P - Quality Level B1P	XX - B4 - Quality Level B4
XX - B2 - Quality Level B2	XX - C - Quality Level C
XX - B2P - Quality Level B2P	XX - D - Quality Level D

Special Survey Features	
E-XXXX-XXX	ES-XXXX-XXX
ID A-NNNNN-YYY Survey Station	ID N-NNNNN-YYY Scan Target
H-ZZZ-ZZZ	H-ZZZ-ZZZ

Utility Survey Abbreviations	
AB Abandoned	CSER Confined Space Entry Required
AR Assumed Route	MH Manhole
BI Illuminated Bollard	NVO Not Visible Outlet
BLD Blocked	OE Overhead Electric
CPD Capped	OT Overhead Telecom
CL Cover Level	SOF Soffit Level
CPD Capped	TFR Taken From Records
CUT Disconnected Utility	TVM Ticket Vending Machine
EOCCTV End of CCTV Survey	UTO Unable to Open
EOC End of GPR Signal	UTO Unable to Survey
EOT End of Trace	UTT Unable to Trace
EOS End of Survey	UKN Unknown
IC Inspection Cover	WL Water Level
IL Invert Level	XKS Service Depth
AC Asbestos Cement	CO Concrete
BC Brick Chamber	DI Ductile Iro
CI Cast Iron	PE Polyethylene
	SI Spun Iron
	ST Steel
	WTR Water

Utility Material Abbreviations	
Level Measured For Ducts/Pipes At Pits Is To Top of The Service	Level Measured For Drainage At Pits Is To Invert Level Of The Service
0.80d	0.80d

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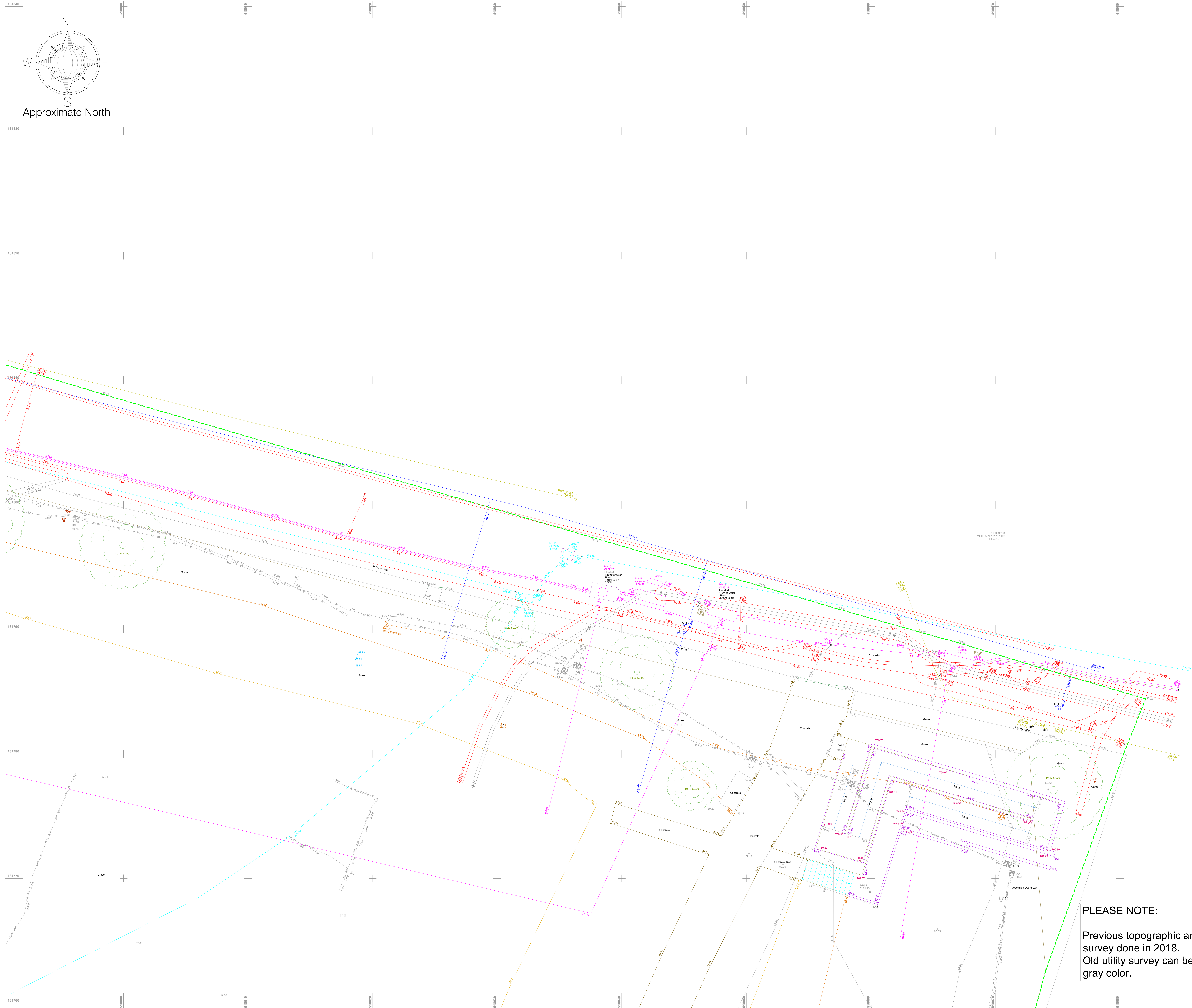
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Location Plan	

Revisions			
Rev	Description	Surveyed by	Drawn by
A	First Issue	DA - 16/11/24	CN - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24	CN - 20/11/24

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Client	TPS Management
Project	Novartis site Horsham - GPR Survey
Site Address	32 Wimbleshurst Rd Horsham RH12 2ED
Description	Underground Utility Survey (PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
Survey Datum	GNSS - Ordnance Datum Newlyn (ODN)
RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	GS60622-U-RevB-All-Combined-06



LEGEND		
Utility Survey Point Features		
AV Air Valve	IC Gully Round	MH - Round
BB Belisha Beacon	IC IC	MH - Surface Water
CP CCTV Camera Pole	IC - Comms	Marker Post
CR Cable Riser	IC - Electric	Pipe Riser
DP Down Pipe	IC - Round	Recessed Light
DPO Down Pipe To Ground	IC - Telecom	Rodding Eye
EP Electrical Pole	IC - TCSU/TFL	Stop Cock
ER Earth Rod	IC - CATV	Traffic Light
FR Fire Hydrant	Lamp Post	Telegraph Pole
GM Gas Meter	MH	Valve General
GV Gas Valve	MH - District Heat	Water Meter
G Gully	MH - Foul	Water Valve

Utility Survey Linework Features		
Communications	Electrical - Extra High Voltage	
BT British Telecom	EHV	
Cable TV	Electrical - High Voltage	
CCTV Closed Circuit TV	HV	
COMMS Communications	Electrical - Low Voltage	
Fibre Optic Line	Electrical - TFL	
Fibre Optic Line - Cot	SL	
Fibre Optic Line - Energis	TCSU	
Fibre Optic Line - Fibernet	Gas	
Fibre Optic Line - Level 3	Gas Low Pressure	
Fibre Optic Line - Mercury	Gas Intermediate Pressure	
Fibre Optic Line - MFS	Gas Medium Pressure	
Fibre Optic Line - Tanet	Gas High Pressure	
Fibre Optic Line - Virgin	GPR - Unknown	
Fibre Optic Line - Vodafone	ED Empty Duct	
Fibre Optic Line - Verizon	GPR Anomaly	
Fibre Optic Line - WCOM	UA Unknown Asset	
Telecom Service	UA Passive Sweep	
Drainage	Unknown Cable	
Combined Water	GPR Slab	
Foul Water	GPR Survey Area	
Surface Water	GPR buried structure	
Rising Main	GPR Reinforced Slab	
Water	GPR interface layer (change in material)	
Fire Water	Other	
Water Main	District Heat	
Water Service	Fuel Pipe	
Decommissioned/Abandoned	Manhole Chamber	
Manhole ID	Manhole ID	
Pot End	Pot End	
Scope of Works	Scope of Works	

PAS128 Quality Levels		
(Consult document PAS128-2014.pdf for full details)		
XX - A - Quality Level A	XX - B3 - Quality Level B3	
XX - B1 - Quality Level B1	XX - B3P - Quality Level B3P	
XX - B1P - Quality Level B1P	XX - B4 - Quality Level B4	
XX - B2 - Quality Level B2	XX - C - Quality Level C	
XX - B2P - Quality Level B2P	XX - D - Quality Level D	

Special Survey Features		
E-XXXX-XXX	ES-XXXX-XXX	
ID N-YYYY-YYY Survey Station	ID N-YYYY-YYY Scan Target	
HZZZ ZZZ	HZZZ ZZZ	

Utility Survey Abbreviations		
AB Abandoned	CSER Confirmed Space Entry Required	
AR Assumed Route	MH Manhole	
BI Illuminated Bollard	NVO Not Visible Outlet	
BLD Blocked	OE Overhead Electric	
CPD Capped	OT Overhead Telecom	
CL Cover Level	SOF Soffit Level	
CPD Capped	TFR Taken From Rafters	
CUT Disconnected Utility	TVM Ticket Vending Machine	
EOCCTV End of CCTV Survey	UTO Unable to Open	
EOG End of GPR Signal	UTS Unable to Survey	
EOT End of Trace	UTT Unable to Trace	
EOS End of Survey	UKN Unknown	
IC Inspection Cover	WL Water Level	
IL Invert Level	XXS Service Depth	

Utility Material Abbreviations		
AC Asbestos Cement	CO Concrete	SI Spun Iron
BC Brick Chamber	DI Ductile Iro	ST Steel
CI Cast Iron	PE Polyethylene	WTR Water

Level Measured For		
Ducts/Pipes At Pits To Top of The Service	At Pits To Invert Level Of The Service	

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Location Plan		

Revisions				
Rev	Description	Surveyed by	Drawn by	Checked by
A	First Issue	DA - 16/11/24	CN - 20/11/24	DS - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24	CN - 29/11/24	DS - 03/12/24

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PLEASE NOTE:

Previous topographic and utility survey done in 2018. Old utility survey can be found in gray color.



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Description	Underground Utility Survey(PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
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RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	GS60622-U-RevB-All-Combined-07

PLEASE NOTE:

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LEGEND			
Utility Survey Point Features			
AV	Air Valve	IC	Gully Round
BB	Beltisha Beacon	IC	Gully
CC	CCP Camera Pole	IC	- Conic
CP	Cable Rise	ICE	IC - Electric
DP	Down Pipe	ICR	IC - Round
DPC	Down Pipe To Ground	IC	IC - Telecom
EP	Electrical Pole	IC	IC - TCS/UTFL
EP	Earth Rod	IC	IC - CATV
FR	Fire Hydrant	LP	Lamp Post
GM	Gas Meter	MH	MH
GV	Gas Valve	MH	MH - District Heat
GV	Gully	MH	MH - Foul
		MH	MH - Surface Water
		MK	Marker Post
		12.24	
		FA	
		RL	Raised Light
		SC	Stoodey Eye
		TF	Traffic Light
		TP	Telegraph Pole
		V	Valve General
		W	Water Meter
		WV	Water Valve

Utility Service Linework Features			
BT	British Telecom	EHV	Electrical - Extra High Voltage
CA	Cable TV	EHV	Electrical - High Voltage
COM	Comcast/Cable TV	SL	Structural - Steel
COMV	Communications	SL	Electrical - TFL
FOL	Fibre Optic Line	SL	Street Lighting
FOLC	Fibre Optic Line - Coll.	TSU	Traffic Control System Unit
FOLG	Fibre Optic Line - Energies		
FOLH	Fibre Optic Line - High Voltage	GS	Gas Service
FOLJ	Fibre Optic Line - Level 3	GLP	Gas Low Pressure
FOLK	Fibre Optic Line - Medium	GLP	Gas Intermediate Pressure
FOLL	Fibre Optic Line - MISC	GLP	Gas High Pressure
FOLM	Fibre Optic Line - Tanet	GLP	Gas High Pressure
FOLN	Fibre Optic Line - TFL	GLP	Gas High Pressure
FOLV	Fibre Optic Line - Vodafone	ED	Empty Duct
FOLW	Fibre Optic Line - Verizon	GA	Gas Anomaly
FOLX	Fibre Optic Line - WCOM	UA	Unk Anomaly
TS	Telematic Service	UAPS	UAP Passive Sweep
		UCL	Unknown Cable
			GPR Slab
			GPR Survey Area
			GPR buried structure
			GPR Reinforced Slab
			GPR interface layer (change in material)
Drainage			
CMW	Combined Water		
SW	Sanitary Waste		
SM	Surface Water		
RM	Rising Main		

FRW	Water	Other	
FW	Fire Water	DH	District Heat
WM	Water Main	FU	Fuel Pipe
WS	Water Service	XX	Decommissioned/Abandoned
			Manhole Chamber
			Manhole ID
E	Electrical Service	PEO	Pot End
EE	Electrical Earth		Scope of Works
P	Electrical Pilot Cable		

PAS128 Quality Levels			
(Consult document 'PAS128:2014.pdf' for full details)			
—XX - A—	Quality Level A	—XX - B3—	Quality Level B3
—XX - B1—	Quality Level B1	—XX - B3P—	Quality Level B3P
—XX - B1P—	Quality Level B1P	—XX - B4—	Quality Level B4
—XX - B2—	Quality Level B2	—XX - C—	Quality Level C
—XX - B2P—	Quality Level B2P	—XX - D—	Quality Level D

Special Survey Features

ID E=XXXX.XXX N=YYYYY.YYY H=777.777	Survey Station	ID E=XXXX.XXX N=YYYYY.YYY H=777.777	Scan Target
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Utility Survey Abbreviations			
AB	Abandoned	CSER	Confined Space Entry Required
AR	Assumed Route	MH	Manhole
BI	Illuminated Borehole	NVO	Not Visible Outlet
BLD	Blocked	OE	Overhead Electric
CPD	Capped	OT	Overhead Telecom
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ES	End of Survey	UNK	Unknown
IC	Inspection Cover	WL	Water Level
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Utility Material Abbreviations					
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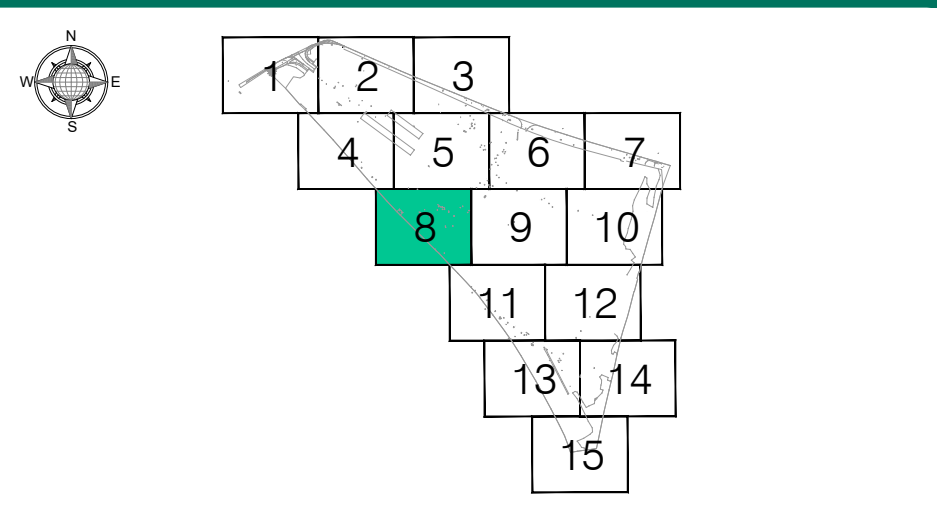
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Location Plan



Revisions				
Rev	Description	Surveyed by	Drawn by	Checked by
A	First Issue	DA - 16/11/24	CN - 20/11/24	DS - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24	CN - 29/11/24	DS - 02/12/24



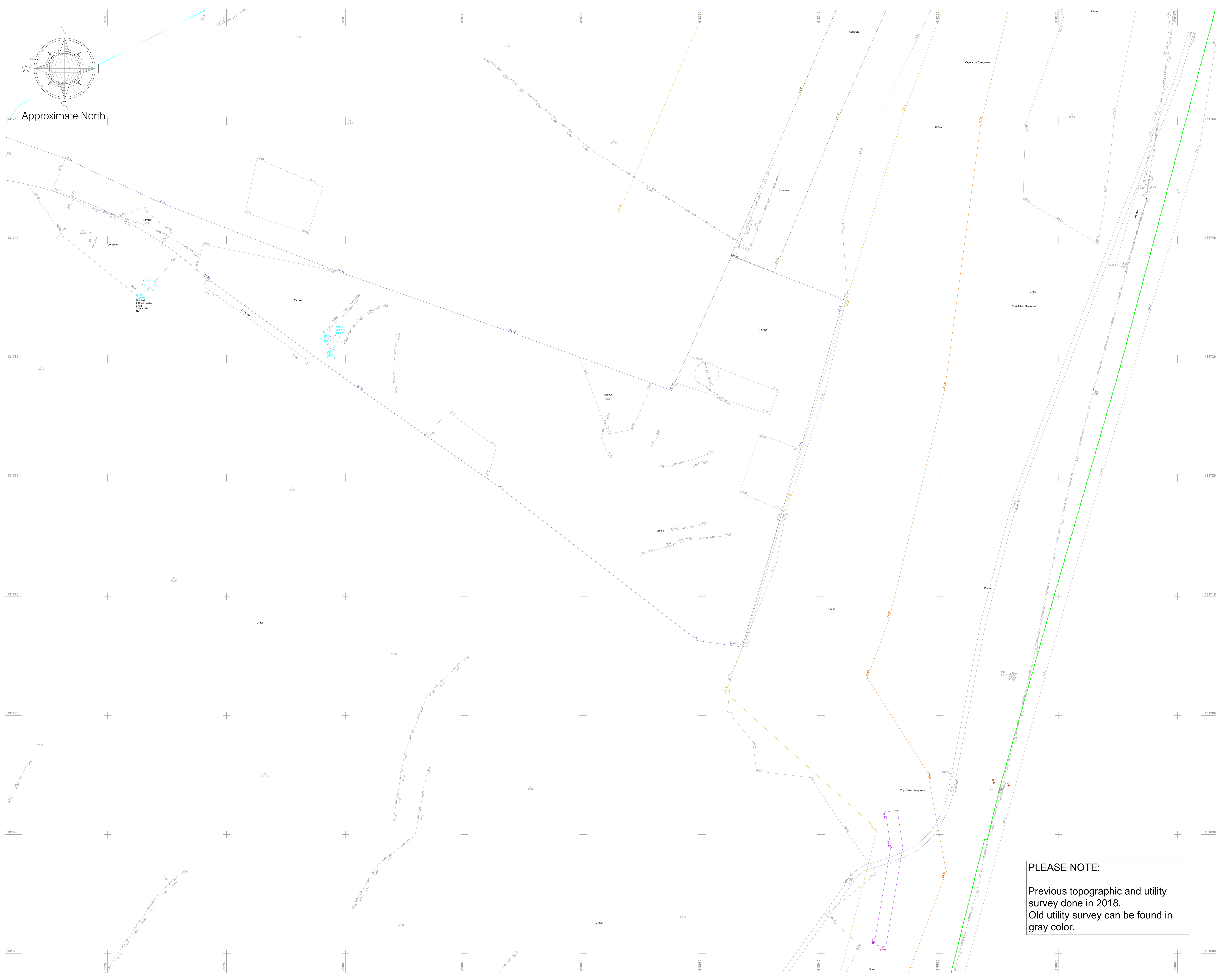
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Phone: (+44) 0192 362 4800
Email: info@murphphys.com

London Manchester Birmingham Glasgow Belfast Cork Kildare

Client	TPS Management
Project	Novartis site Horsham - GPR Survey
Site Address	32 Wimbleshurst Rd Horsham RH12 2ED
Description	Underground Utility Survey (PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
Survey Datum	GNSS - Ordnance Datum Newlyn (ODN)
RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	GS60622-U-RevB-All-Combined-

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LEGEND		
Utility Survey Point Features		
AV Air Valve	GR Gully Round	MH - Round
BB Belisha Beacon	IC IC	MH - Surface Water
CP CCTV Camera Pole	IC - Comm	MK Marker Post
CR Cable Riser	IC - Electric	12.24 Pipe Riser
DP Down Pipe	IC - Round	RE Recessed Light
DPC Down Pipe To Ground	IC - Telecom	RE Rodding Eye
EP Electrical Pole	IC - TCSU/TFL	SC Stop Cock
ER Earth Rod	IC - CATV	TL Traffic Light
FP Fire Hydrant	LP Lamp Post	TP Telegraph Pole
GM Gas Meter	MH	V Valve General
GV Gas Valve	MH - District Heat	WM Water Meter
G Gully	MH - Foul	WV Water Valve

Utility Survey Linework Features		
Communications	EHV Electrical - Extra High Voltage	
BT British Telecom	EHV Electrical - High Voltage	
CATV Cable TV	EHV Electrical - Low Voltage	
CCTV Closed Circuit TV	TFL Electrical - TFL	
COMMS Communications	SL Street Lighting	
FOL Fibre Optic Line	TCSU Traffic Control System Unit	
FOLC Fibre Optic Line - Cof	Gas	
FOLE Fibre Optic Line - Energis	G Gas Service	
FOLF Fibre Optic Line - Fibernet	GP Gas Low Pressure	
FOLM Fibre Optic Line - Mercury	GP Gas Intermediate Pressure	
FOLN Fibre Optic Line - MFS	GP Gas Medium Pressure	
FOLT Fibre Optic Line - Tanet	GP Gas High Pressure	
FOLV Fibre Optic Line - Virgin	GP Gas Unknown	
FOLVF Fibre Optic Line - Vodafone	ED Empty Duct	
FOLVN Fibre Optic Line - Verizon	GP GPR Anomaly	
FOLVW Fibre Optic Line - WCOM	UA Unknown Asset	
IS Telecom Service	UA UA Passive Sweep	
Drainage	UCL Unknown Cable	
FW Combined Water	GPR Slab	
FW Foul Water	GPR Survey Area	
SW Surface Water	GPR buried structure	
RM Rising Main	GPR Reinforced Slab	
Water	GPR Interface layer (change in material)	
FRW Fire Water	Other	
WM Water Main	DH District Heat	
WS Water Service	FU Fuel Pipe	
Electrical	XX Decommissioned/Abandoned	
E Electrical Service	Manhole Chamber	
EE Electrical Earth	Manhole ID	
P Electrical Pilot Cable	PEO Pot End	
	Scope of Works	

PAS128 Quality Levels		
(Consult document PAS128-2014.pdf for full details)		
XX - A - Quality Level A	XX - B3 - Quality Level B3	
XX - B1 - Quality Level B1	XX - B3P - Quality Level B3P	
XX - B1P - Quality Level B1P	XX - B4 - Quality Level B4	
XX - B2 - Quality Level B2	XX - C - Quality Level C	
XX - B2P - Quality Level B2P	XX - D - Quality Level D	

Special Survey Features		
E-XXXX-XXX	ES-XXXX-XXX	
ID A NYYYYY YYY Survey Station	ID N NYYYYY YYY Scan Target	
HZZZ ZZZ	HZZZ ZZZ	

Utility Survey Abbreviations		
AB Abandoned	CSER Confined Space Entry Required	
AR Assumed Route	MH Manhole	
BI Illuminated Bollard	NVO Not Visible Outlet	
BLD Blocked	OE Overhead Electric	
CPD Capped	OT Overhead Telecom	
CL Cover Level	SOF Soffit Level	
CPD Capped	TFR Taken From Records	
CUT Disconnected Utility	TVM Ticket Vending Machine	
EOCCTV End of CCTV Survey	UTO Unable to Open	
EOC End of GPR Signal	UTT Unable to Trace	
EOT End of Trace	UTT Unable to Trace	
EDS End of Survey	UKN Unknown	
IC Inspection Cover	WL Water Level	
IL Invert Level	XXS Service Depth	

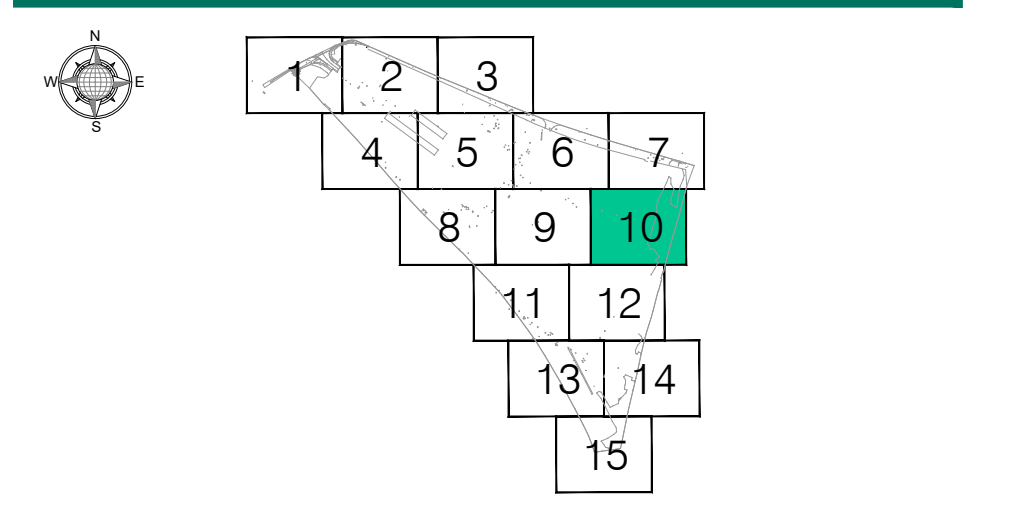
Utility Material Abbreviations		
AC Asbestos Cement	CO Concrete	SI Spun Iron
BC Brick Chamber	DI Ductile Iro	ST Steel
CI Cast Iron	PE Polyethylene	WTR Water

Level Measured For Ducts/Pipes At Pits Is To Top of The Service	0.80d	Level Measured For Drainage At Pits Is To Invert Level Of The Service	0.80d
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Revisions				
Rev	Description	Surveyed by	Drawn by	Checked by
A	First Issue	DA - 16/11/24	CN - 20/11/24	DS - 20/11/24
B	CCTV drainage survey added	DA - 16/11/24	CN - 29/11/24	DS - 03/12/24



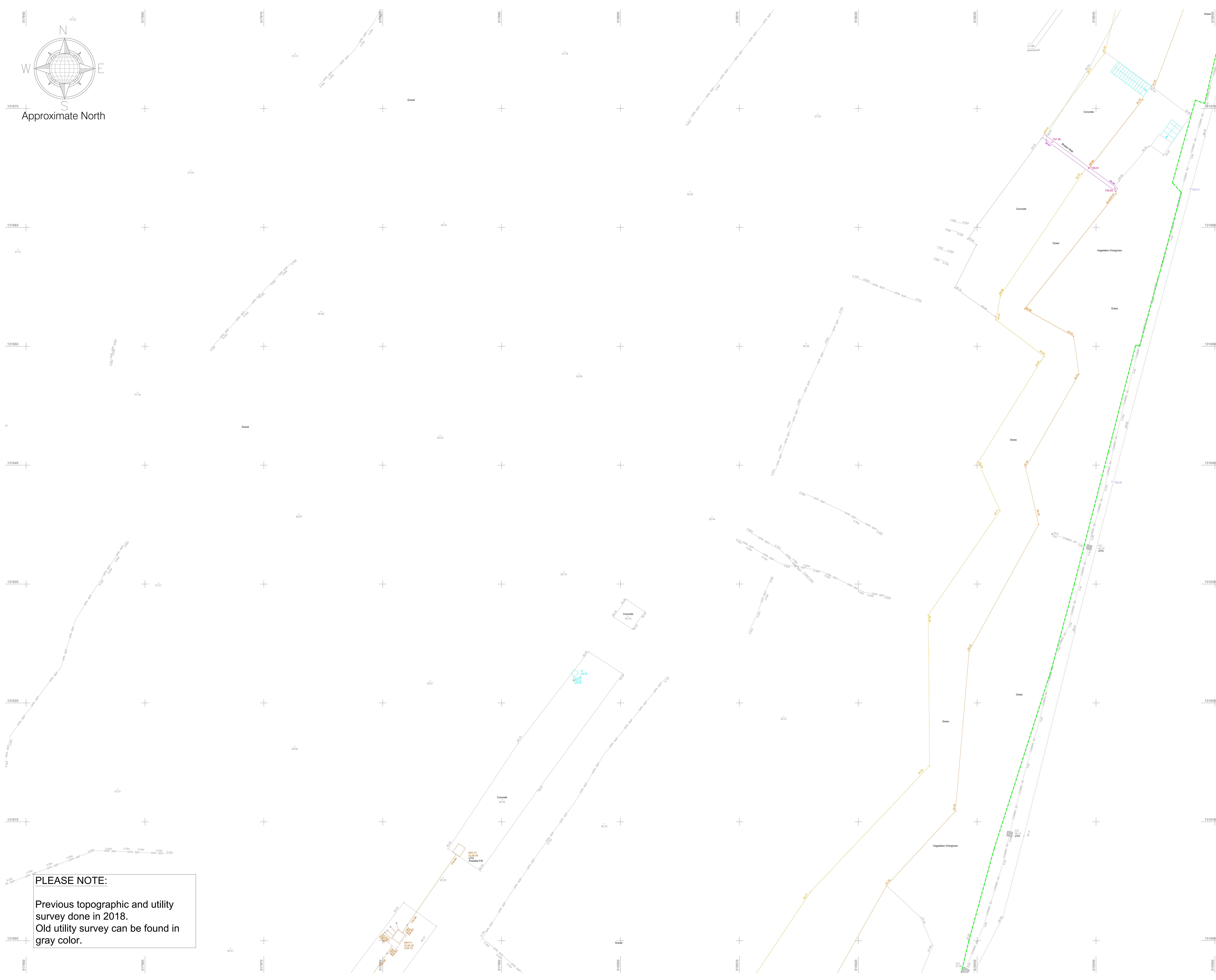
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London Manchester Birmingham Glasgow Belfast Cork Kildare

Client	TPS Management
Project	Novartis site Horsham - RDR Survey
Site Address	32 Wimblehurst Rd Horsham RH12 2ED
Description	Underground Utility Survey(PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
Survey Datum	GNSS - Ordnance Datum Newlyn (ODN)
RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	GS60622-U-RevB-All-Combined-10

PLEASE NOTE:
Previous topographic and utility survey done in 2018.
Old utility survey can be found in gray color.



Approximate North

PLEASE NOTE:

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LEGEND		
Utility Survey Point Features		
AV Air Valve	IC Gully Round	MH MH - Round
BB Belisha Beacon	IC IC	MH MH - Surface Water
CP CCTV Camera Pole	IC - Comms	MK Marker Post
CR Cable Riser	IC - Electric	12.24 Pipe Riser
DP Down Pipe	IC - Round	RE Recessed Light
DPG Down Pipe To Ground	IC - Telecom	RE Rodding Eye
EP Electrical Pole	IC - TCSU/TFL	SC Stop Cook
ER Earth Rod	IC - CATV	TL Traffic Light
FR Fire Hydrant	LP Lamp Post	TP Telegraph Pole
GM Gas Meter	MH MH	V Valve General
GV Gas Valve	MH - District Heat	WM Water Meter
G Gully	MH - Foul	WV Water Valve

Utility Survey Linework Features		
BT British Telecom	EHV Electrical - Extra High Voltage	
CATV Cable TV	HV Electrical - High Voltage	
CCTV Closed Circuit TV	LV Electrical - Low Voltage	
COMMS Communications	TFL Electrical - TFL	
FOL Fibre Optic Line	SL Street Lighting	
FOLC Fibre Optic Line - Cot	TCSU Traffic Control System Unit	
FOLE Fibre Optic Line - Energis	Gas	
FOLF Fibre Optic Line - Fibernet	Gas Service	
FOLM Fibre Optic Line - MFS	Gas Low Pressure	
FOLN Fibre Optic Line - Nant	Gas Intermediate Pressure	
FOLV Fibre Optic Line - Virgin	Gas Medium Pressure	
FOLW Fibre Optic Line - Vodafone	Gas High Pressure	
FOLX Fibre Optic Line - X	GPR - Unknown	
FOLY Fibre Optic Line - Y	GPR Anomaly	
FOLZ Fibre Optic Line - Z	Empty Duct	
UAAPS UAAPS	GPR Asset	
TS Telecom Service	UA Unknown Asset	
	UCL Unknown Cable	
	Drainage	
	CW Combined Water	
	FW Foul Water	
	SW Surface Water	
	RM Rising Main	
	Water	
	FRW Fire Water	
	WM Water Main	
	WS Water Service	
	Electrical	
	E Electrical Service	
	EE Electrical Earth	
	P Electrical Pilot Cable	
	Other	
	DH District Heat	
	FU Fuel Pipe	
	XX Decommissioned/Abandoned	
	Manhole Chamber	
	Manhole ID	
	PEO Pot End	
	Scope of Works	

PAS128 Quality Levels		
(Consult document 'PAS128-2014.pdf' for full details)		
XX - A - Quality Level A	XX - B3 - Quality Level B3	
XX - B1 - Quality Level B1	XX - B3P - Quality Level B3P	
XX - B1P - Quality Level B1P	XX - B4 - Quality Level B4	
XX - B2 - Quality Level B2	XX - C - Quality Level C	
XX - B2P - Quality Level B2P	XX - D - Quality Level D	

Special Survey Features		
E-XXXX-XXX	ES-XXXX-XXX	
ID A NYYYYYYY Survey Station	ID N NYYYYYYY Scan Target	
HZZZ ZZZ	HZZZ ZZZ	

Utility Survey Abbreviations		
AB Abandoned	CSER Confined Space Entry Required	
AR Assumed Route	MH Manhole	
BI Illuminated Bollard	NVO Not Visible Outlet	
BLD Blocked	OE Overhead Electric	
CPD Capped	OT Overhead Telecom	
CL Cover Level	SOF Soffit Level	
CPD Capped	TFR Taken From Raucous	
CUT Disconnected Utility	TVM Ticket Vending Machine	
EOCCTV End of CCTV Survey	UTO Unable to Open	
EOC End of GPR Signal	UTS Unable to Survey	
EOT End of Trace	UTT Unable to Trace	
EOS End of Survey	UKN Unknown	
IC Inspection Cover	WL Water Level	
IL Invert Level	XSS Service Depth	
AC Asbestos Cement	CO Concrete	SI Spun Iron
BC Brick Chamber	DI Ductile Iro	ST Steel
CI Cast Iron	PE Polyethylene	WTR Water

Utility Material Abbreviations		
Level Measured For	Level Measured For Drainage	
Ducts/Pipes At Pits Is To	At Pits Is To Invert Level	
Top of The Service	Of The Service	

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Location Plan		

Revisions		
Rev	Description	Surveyed by
A	First Issue	DA - 16/11/24
B	CCTV drainage survey added	DA - 16/11/24

Revisions		
Rev	Description	Surveyed by
A	First Issue	DA - 16/11/24
B	CCTV drainage survey added	DA - 16/11/24

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A	First Issue	DA - 16/11/24
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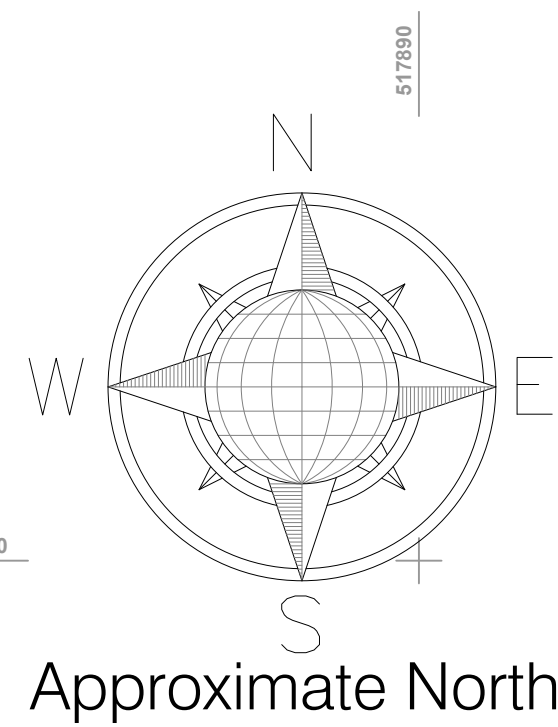
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Rev	Description	Surveyed by
A	First Issue	DA - 16/11/24
B	CCTV drainage survey added	DA - 16/11/24



PLEASE NOTE:

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Old utility survey can be found in gray color.

LEGEND			
Utility Survey Point Features			
AV	Air Valve	GC	Gully Round
BB	Belisha Beacon	IC	MH - 6"
CC	CCTV Camera Pole	IC	MH - Surface Water
CP	Chamber	IC	Comms
CR	Cable Riser	ICE	Marker Post
DP	Down Pipe	IC	Electric
DPG	Down Pipe to Ground	IC	Recessed Light
ER	Electrical Pole	IC	Telematic
ER	Earth Rod	IC	TSU/UTFL
ER	Earth Rod	IC	CATV
FR	Fire Hydrant	LP	Lamp Post
GM	Gas Meter	MH	Telegraph Pole
GV	Gas Valve	MH	Valve General
GV	Gas Valve	MH	District Heat
GV	Gully	MH	Foul
GV		MH	Water Meter
GV		MH	Water Valve

Utility Service Linework Features			
BT	Communications	EHV	Electrical
BT	British Telecom	EHV	Electrical - Extra High Voltage
CATV	Cable TV	HLV	Electrical - High Voltage
CATV	Closed Circuit TV	LV	Electrical - Low Voltage
COMMS	Communications	TEL	Electrical - TEL
FOL	Fiber Optic Line	ST	Street Lighting
FOL	Fiber Optic Line - Coit	TCSU	Trunk Control System Unit
FOL	Fiber Optic Line - Energy		Gas
FOL	Fiber Optic Line - FiberNet	GLD	Gas Service
FOL	Fiber Optic Line - Level 3	GLD	Gas - Pressure
FOL	Fiber Optic Line - Mercury	GP	Gas Intermediate Pressure
FOL	Fiber Optic Line - MFS	GP	Gas Medium Pressure
FOL	Fiber Optic Line - Tandem	GP	Gas Pressure
FOL	Fiber Optic Line - Virgin	GP	Gas - Unknown
FOL	Fiber Optic Line - Verizon	EM	Empty Duct
FOL	Fiber Optic Line - Verizon	EM	Empty Duct - Normal
FOL	Fiber Optic Line - WCOM	UW	Unknown Asset
FOL	Telecom Service	UW	Unknown Asset
		UW	Unknown Cable
	Drainage	GPS	GPS Splat
	Combined Water	GPS	GPS Survey Area
	FW	GPS	GPS buried structure
	Foul Water	GPS	GPS Reinforced Slab
	Rising Main	GPS	GPS interface layer (change in material)
	Water		Other
	Fire Water	DH	Duct in Duct
	FW	FU	Fuel
	Water Service	XA	Decommissioned/Abandoned
		XA	Manhole Chamber
	Electrical		
	Electrical Service	PEO	Manhole ID
	Electrical Service		Port End
	Electrical - Pict Cable		Range of Works

PAS128 Quality Levels			
(Consult document 'PAS128:2014.pdf' for full details)			
--X - A-	Quality Level A	--X - B3-	Quality Level B3
--X - B1	Quality Level B1	--X - B3P-	Quality Level B3P
--X - B1P	Quality Level B1P	--X - B4-	Quality Level B4
--X - B2	Quality Level B2	--X - C-	Quality Level C
--X - B2P-	Quality Level B2P	--X - D-	Quality Level D

Special Survey Features			
E=XXXX.XXX		E=XXXX.XXX	
ID  N=YYYY.YYY	Survey Station	ID  N=YYYY.YYY	Scan Target
H=ZZZ.ZZZ		H=ZZZ.ZZZ	

Utility Survey Abbreviations			
AB	Abandoned	CSEF	Confined Space Entry Required
AI	Assumed Route	MH	Manhole
BI	Illuminated Bollard	NVO	No Visible Outlet
BL	Blind End	OE	Overhead Electric
CPD	Capped	OT	Overhead Telecom
CL	Cover Level	SOF	Soft Level
CPD	Capped	TFR	Taken From Records
CT	Disconnected Utility	TVM	Ticket Venting Machine
EOCCTV	End of CCTV Survey	UTO	Unable to Open
EOG	End of GPR Signal	UTS	Unable to Survey
EOT	End of Tracer	UTT	Unable to Trace
EOS	End of Survey	UNK	Unknown
IC	Inspection Cover	WL	Water Level
IL	Invert Level	XXg	Service Depth

Utility Material Abbreviations					
AC	Asbestos Cement	CO	Concrete	SI	Spun Iron
BC	Brick Chamber	DI	Ductile Iro	ST	Steel
CI	Cast Iron	PE	Polyethylene	WTR	Water
Level Measured For Ducts/Pipes At Pits To Top Of The Service			Level Measured For Drainage At Pits Is To Invert Level Of The Service		

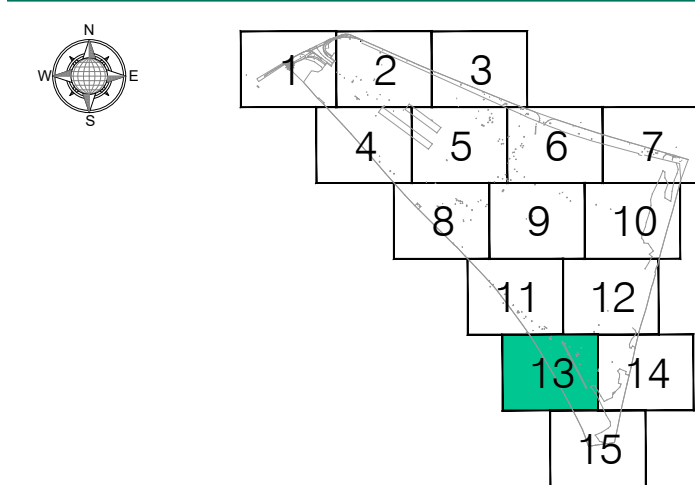
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Location Plan



Revisions				
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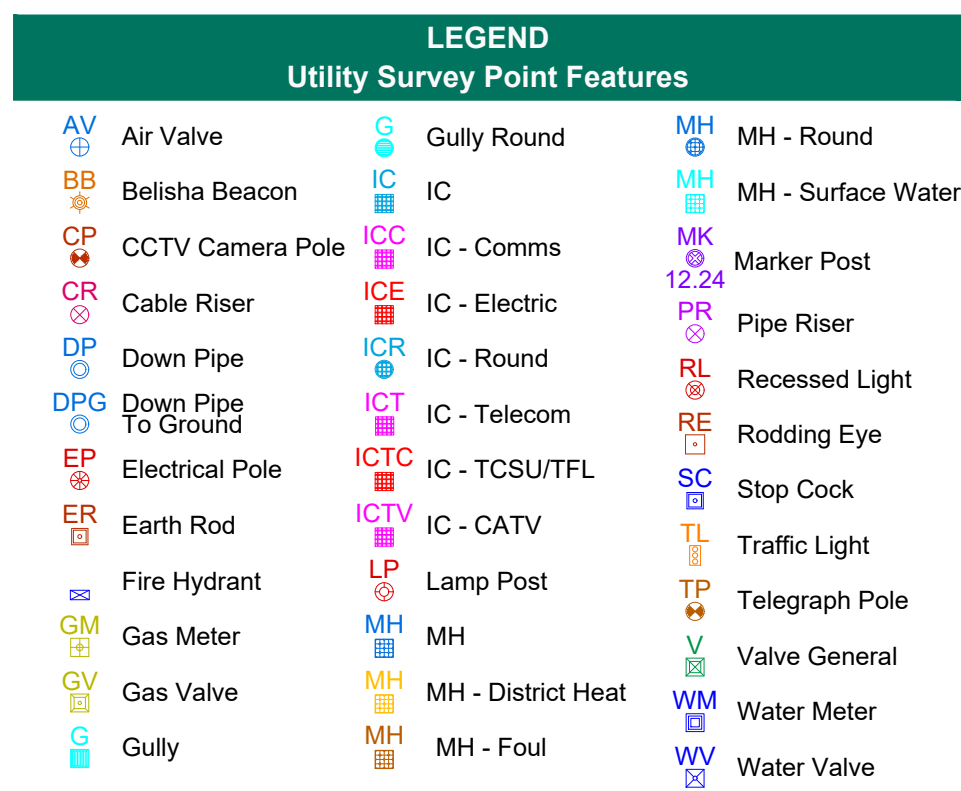
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London Manchester Birmingham Glasgow Belfast Cork Kildare

Client	TPS Management
Project	Novartis site Horsham - GPR Survey
Site Address	32 Wimbleshurst Rd Horsham RH12 2ED
Description	Underground Utility Survey(PAS128)
Survey Grid	Localised OSGB36(15) - Scale Factor 1.0
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RICS Band	Band E
Drawing Scale	1:100 @A0
Drawing Number	MS6062Z-U-RevB-All-Combined-

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Utility Service Linework Features		
BT	Communications	Electrical
BT	British Telecom	Electrical - Extra High Voltage
CATV	Cable TV	Electrical - HV
CATV	Closed Circuit TV	Electrical - High Voltage
CC	Communications	Electrical - TFL
FOL	Fiber Optic Line	Steel Lighting
FOL	Fiber Optic Line - Coit	Telemeter Control System Unit
FOL	Fiber Optic Line - Enersis	Gas
FOL	Fiber Optic Line - Fibernet	Gas
FOL	Fiber Optic Line - Level 5	Gas Service Pressure
FOL	Fiber Optic Line - Mercury	Gas Intermediate Pressure
FOL	Fiber Optic Line - MPSC	Gas Medium Pressure
FOL	Fiber Optic Line - Tandem	Gas Low Pressure
FOL	Fiber Optic Line - Virgin	GPS + Unknown
FOL	Fiber Optic Line - Vizion	ED
FOL	Fiber Optic Line - Vizion	ED
FOL	Fiber Optic Line - Verizon	GPR
FOL	Fiber Optic Line - WCOM	Unknown Alarm
TEL	Telephone Service	UA
		UA Passive Sensor
		Unknown Cable
		GPR Sibs
		GPR Surface Area
		GPR buried structure
		GPR Reinforced Concrete Slab
		GPR interface layer (change in material)
		Water
		Water
		DH
		Distriect Heat
		FU
		Fuel Pipe
		Decommissioned/Abandoned
		Manhole Chamber
		Manhole ID
		Part End
		Scope of Works

PAS128 Quality Levels			
(Consult document 'PAS128:2014.pdf' for full details)			
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--X - B1P	Quality Level B1P	--X - B4	Quality Level B4
--X - B2	Quality Level B2	--X - C	Quality Level C
--X - B2P	Quality Level B2P	--X - D	Quality Level D

Special Survey Features			
ID		E=XXXX.XXX N=YYYY.YYY H=ZZZ.ZZZ	Survey Station
ID		E=XXXX.XXX N=YYYY.YYY H=ZZZ.ZZZ	Scan Target

Utility Survey Abbreviations			
AB	Abandoned	CSER	Confined Space Entry Required
AR	Assumed Route	MH	Manhole
BI	Illuminated Bollard	NVO	Not Visible Outlet
BLD	Blocked	OE	Overhead Electric
CPD	Capped	OT	Overhead Telecom
CL	Cover Level	SOF	Soft Level
CPD	Capped	TRF	Taken From Records
DCU	Disconnected Utility	TVM	Ticket Vending Machine
EOC2V	End of CCTV Survey	UTG	Unable to Open
EOG	End of GPR Signal	UTS	Unable to Survey
EOT	End of Trace	UTT	Unable to Trace
ES	End of Survey	UNK	Unknown
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IL	Invert Level	XXd	Service Depth

Utility Material Abbreviations					
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BC	Brick Chamber	DI	Ductile Iro	ST	Steel
CI	Cast Iron	PE	Polyethylene	WTR	Water

Level Measured For Ducts/Pipes At Pits Is To Top Of The Service	Level Measured For Drainage At Pits Is To Invert Level Of The Service
_____	_____

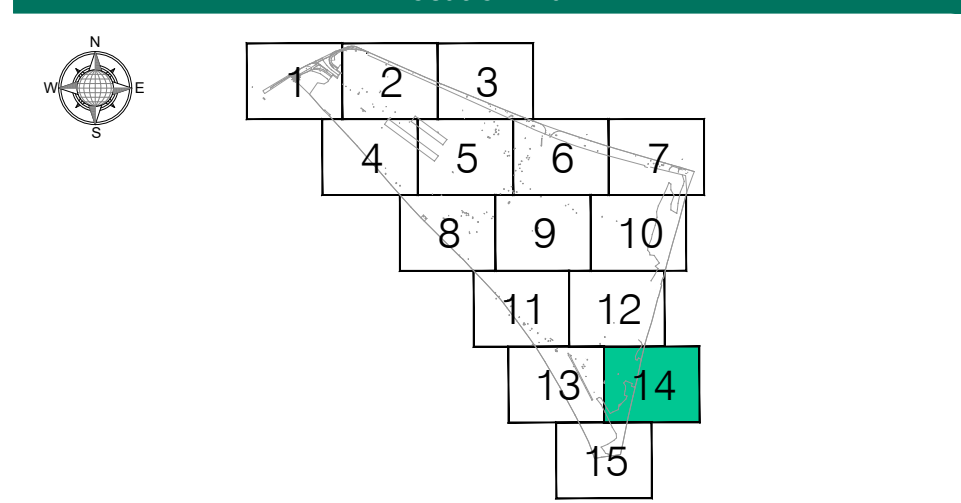
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Location Plan



Revisions				
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Approximate North

131510

131500

131490

131480

131470

131460

131450

131440

131430

131420

131410

131400

131390

131380

131370

131360

131350

131340

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