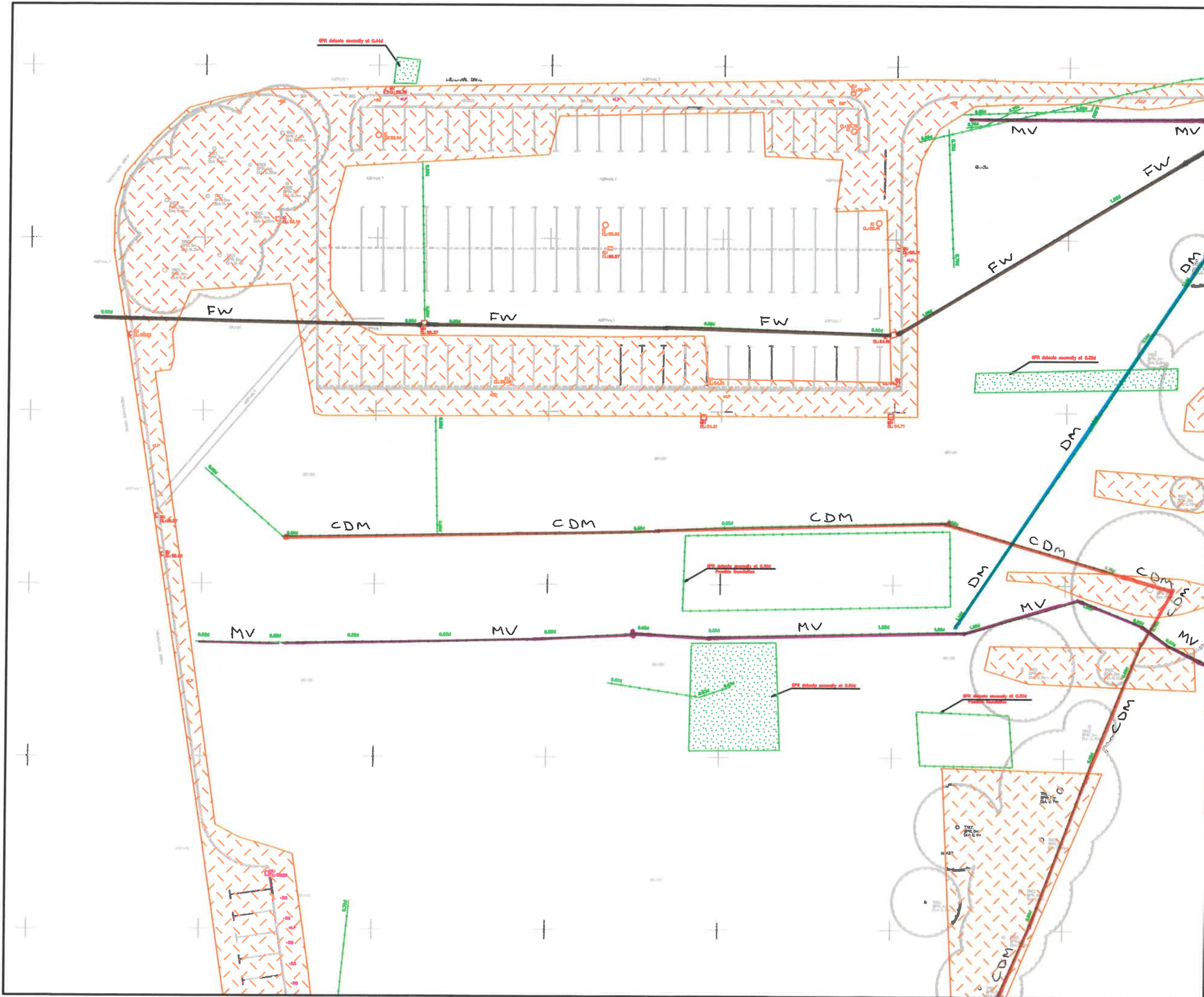




OS NORTH

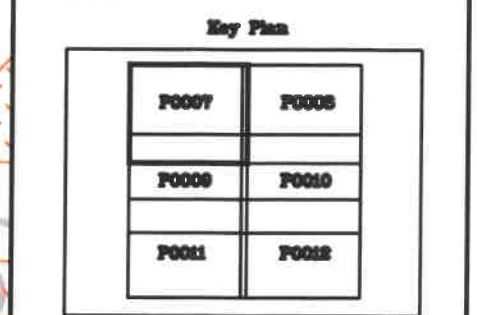
Underground Services Abbreviations

A	Approach	OP	Offset PB Point
AR	Assumed Route	OSA	Outside Survey Area
BD	Back Drop	PE	Polyethylene Pipe
B	Box	PI	Pipe
CO	Cable	PS	Pipe Street
CP	Cable Pit	SA	Survey Abandoned
CPL	Cable PE Base Level	SI	Span (Grip) Iron
CR	Cable Rise	SL	SL Level
D	Depth to surface (in metres)	T	Taken From Records
DI	Double Iron	UR	Unable to Read
ED	Empty Duct	UT	Unable to Find
ET	End of Trunk	UTB	Unable to Get Access
FW	Ground Penetrating Radar	UTL	Unable to L/R
GPR	Ground Penetrating Radar	UTS	Unable to Survey
H	High Voltage	UTT	Unable to Trench
I	Intercept	VC	Vertical Clay
INT	Intercept	VR	Vapor Recovery
MV	No Visible Ducts	VL	Water Level
NVP	No Visible Pipes		

Legend

—	Cable TV	—	LP6
—	Communications	—	Offset PB Pipe
—	Compressed Air	—	OS Pipe
—	Drainage - Combined	—	Radar Trace
—	Drainage - Fuel	—	Survey Boundary
—	Drainage - Surface	—	Telephone
—	Ducting	—	Trench Control
—	Earth Cable	—	Trench Bar
—	Electric	—	Unidentified
—	Fuel Pipe	—	Vapor Recovery
—	Gas	—	Vent Pipe
—	Gas Gauge Line	—	Water
—	Heating Pipe	—	Assumed Route
—		—	Taken from Records

Chamber Estimate Radar Area Assembly
Unknown Chamber Estimate Area unable to survey



Notes

The survey has been carried out to Ordnance Survey (OS) National Grid (OSN23) using Industry Standard Network RTK GPS equipment setting the OS Active Network (OS Net). A true OSN23 coordinate has been established on site using the OSN23 (transformer) & OSN23 (gate) models.

The survey detail has been correlated to this point and a further one (or more) OSN23 points established to produce a true OS bearing for angle operations.

Scale factor 1.0 has been applied therefore the survey coordinates are shown on a pseudo OS grid.

All levels are in metres unless otherwise specified

All heights are in millimetres unless otherwise specified

5	-	-	-	-
4	-	-	-	-
3	-	-	-	-
2	-	-	-	-
1	-	-	-	-
0	MW	First Complete Issue		16/03/2020
Prelim	-	Preliminary - Not Complete		
Rev	Svyr	QA Check	Description	Date

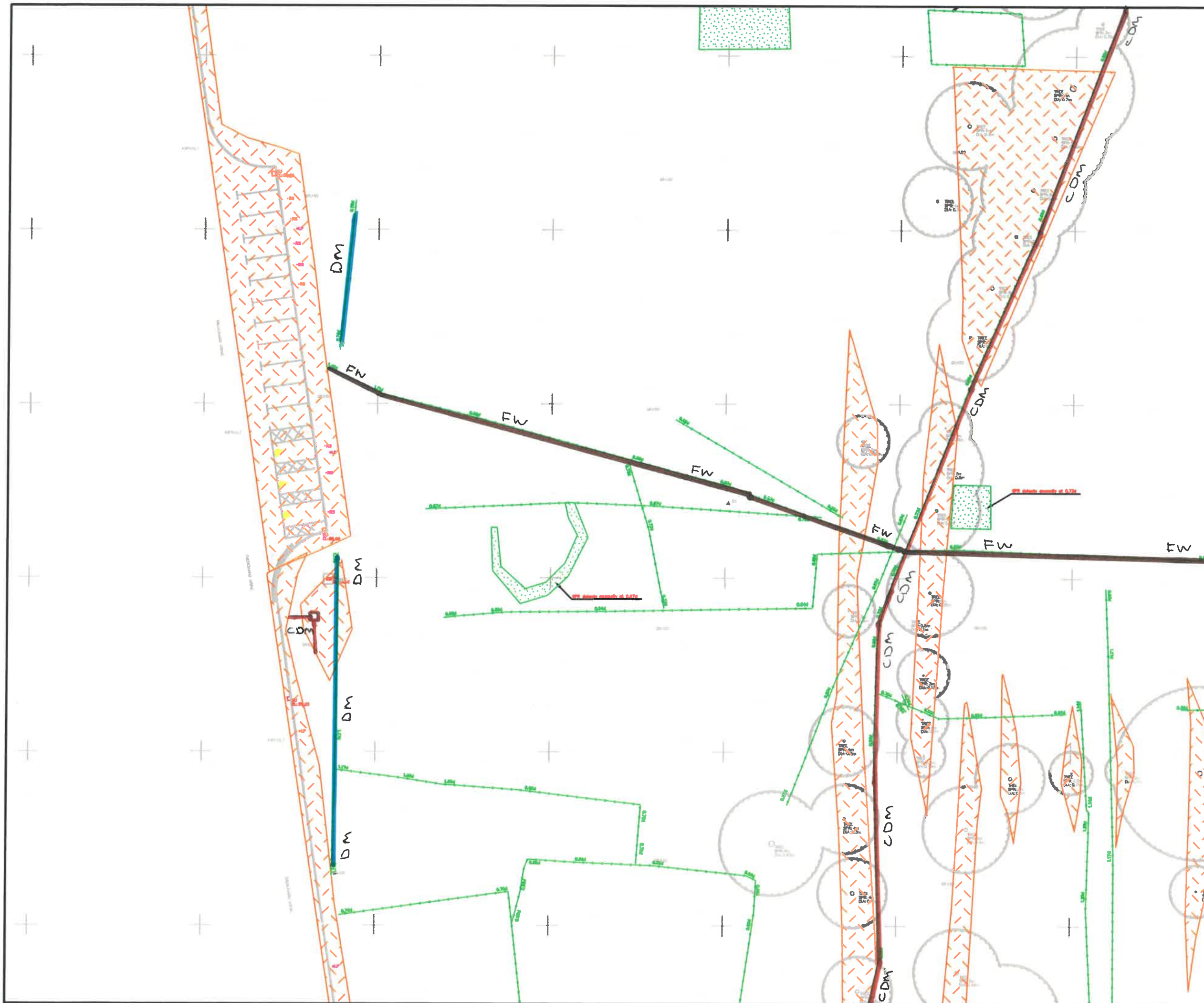
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OS NORTH

Underground Services Abbreviations

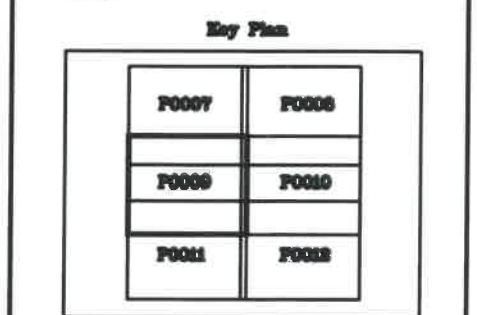
A	Approach	OF	Offset F8 Point
AR	Assumed Route	OSA	Outside Survey Area
BD	Back Drop	PE	Polyethylene Pipe
CD	Cable Drop	PF	Pipe Floor
CP	Cable Pit	PS	Pipe Signal
CPL	Cable Pit Base Level	SA	Survey Abandoned
CR	Cable Room	SE	Span (Long) Iron
CT	Cable to service (in metres)	SL	SL Level
DI	Drainage from	SR	Taken From Records
ED	Empty Drain	UR	Unable to Read
ET	End of Trunk	UT	Unable to Test
GP	Ground Penetrating Radar	UTDA	Unable to Data Access
GR	Ground Reinforced Plastic	UL	Unable to LRI
HV	High Voltage	UTS	Unable to Survey
IL	Intercept	UTV	Unable to Trace
INT	No Visible Pipes	VC	Verified Clay
INT	No Visible Pipes	VR	Vapor Recovery
INT	No Visible Pipes	WL	Water Level

Legend

—	Cable TV	—	LPS
—	Communication	—	Offset F8 Pipe
—	Compressed Air	—	Oil Pipe
—	Drainage - Combined	—	Radar Trace
—	Drainage - Fuel	—	Survey Boundary
—	Drainage - Surface	—	Telephone
—	Ducting	—	Trench Control
—	Earth Cable	—	Trench Seal
—	Electric	—	Unidentified
—	Fuel Pipe	—	Vapor Recovery
—	Gas	—	Vent Pipe
—	Fuel Gauge Line	—	Water
—	Heating Pipe	—	Assumed Route
—	—	—	Taken from Records

Chamber Extents Radar Area Assembly

Unknown Chamber Extents Area unable to survey



Notes

The survey has been related to Ordnance Survey (OS) National Grid (OSN23) using Industry Standard Network RTK GPS equipment using the OS Active Network (OS Net).

A true OSN23 coordinate has been established on site using the OSN23 (Transformation) to OSN23 (grid) mode.

The survey detail has been correlated to this point and a further one (or more) OSN23 points established to produce a true OS bearing for angle orientation.

Scale factor 1.0 has been applied therefore the survey coordinates are shown on a pseudo OS grid.

All levels are in metres unless otherwise specified.

All heights are in millimetres unless otherwise specified.

5	-	-	-	-
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2	-	-	-	-
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0	MW	First Complete Issue	16/03/2020	
Prelim	OA	Preliminary - Not Complete	-	
Rev	Svyr	Check	Description	Date

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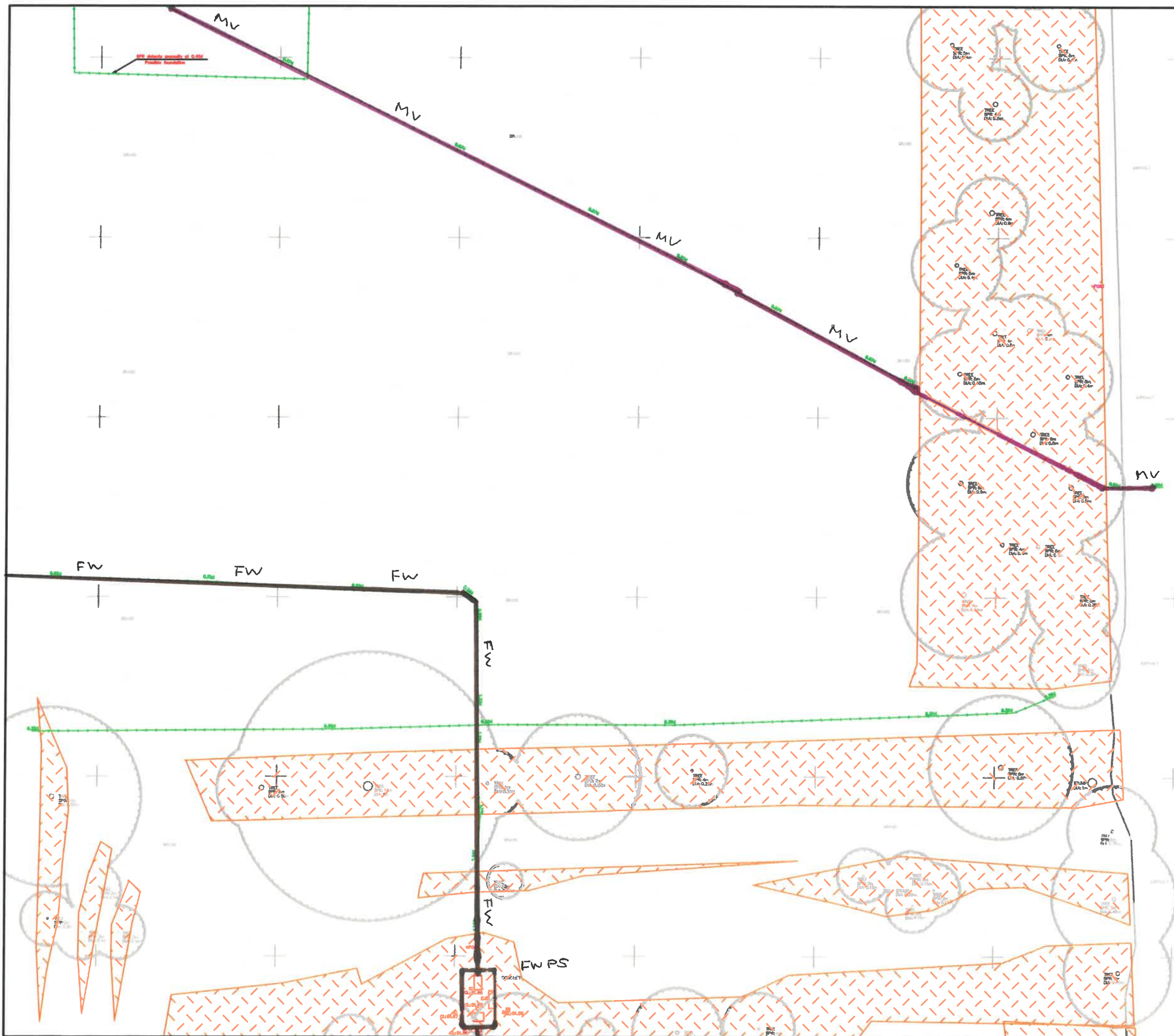
RAF Cranwell

RAF CAM Relocation Project

Utilities Survey and Review

Appendix D

Site Survey Plan P0009



OS NORTH

Underground Services Abbreviations

A	Approach	OF	Offset FB Point
AR	Assumed Route	OSA	Outside Survey Area
BD	Bank Drop	PE	Polyethylene Pipe
CD	Catch Pipe	PF	Pipe Flag
CO	Concrete	PS	Pipe Signal
CP	Catch Pit	SA	Survey Abandoned
CPL	Catch Pit Base Level	SI	Sham (Iron) Iron
CR	Cable Run	SL	Shit Level
CS	Depth to service (in metres)	TL	Taken From Records
D	Ductile Iron	UR	Unable to Read
ED	Empty Duct	UP	Unable to Find
ET	End of Trace	UPL	Unable to Get Access
GP	Ground Penetrating Radar	UL	Unable to Lift
GR	Green Reinforced Plastic	US	Unable to Survey
HV	High Voltage	UT	Unable to Trace
IL	Iron Level	VC	Virtual Clay
IS	Interceptor	VR	Vapor Recovery
IV	No Visible Ducts	WL	Water Level
IVP	No Visible Pipes		

Legend

TV	Cable TV	LPS	LPS
CM	Communications	OP	Offset FB Pipe
CA	Compressed Air	OS	Oil Pipe
CS	Drainage - Combined	RT	Ruler Trace
FD	Drainage - Fuel	SB	Survey Boundary
SS	Drainage - Surface	TC	Telcocon
CS	Cooling	TC	Trunk Control
EC	Earth Cable	TS	Trunk Seal
ES	Electric	UL	Unidentified
FP	Fuel Pipe	VR	Vapor Recovery
GS	Gas	VP	Vent Pipe
GL	Gas Gauge Line	W	Water
HP	Heating Pipe	AR	Assumed Route
		TL	Taken from Records

CE	Chamber Extends	RA	Radar Area Assembly
UE	Unknown Chamber Extends	AA	Area unable to survey

Key Plan

P0007	P0008
P0009	P0010
P0011	P0012

Notes
The survey has been carried out to Ordnance Survey (OS) National Grid (OSNG) using industry standard National RTK GPS equipment utilizing the OS Active Network (OS AN).
A true OSNG coordinate has been established on site using the OSNG (Transformation) to OSNG (grid) method.
The survey data has been correlated to this point and a further one (or more) OSNG points established to produce a true OS bearing for angle orientation.
Scale bar: 1:0 has been applied therefore the survey coordinates are shown on a pseudo OS grid.
All levels are in metres unless otherwise specified.
All heights are in millimetres unless otherwise specified.

5	-	-	-	-
4	-	-	-	-
3	-	-	-	-
2	-	-	-	-
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0	MW	First Complete Issue	16/03/2020	
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Rev	Svr	Check	Description	Date

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Appendix D
Site Survey Plan P0010

