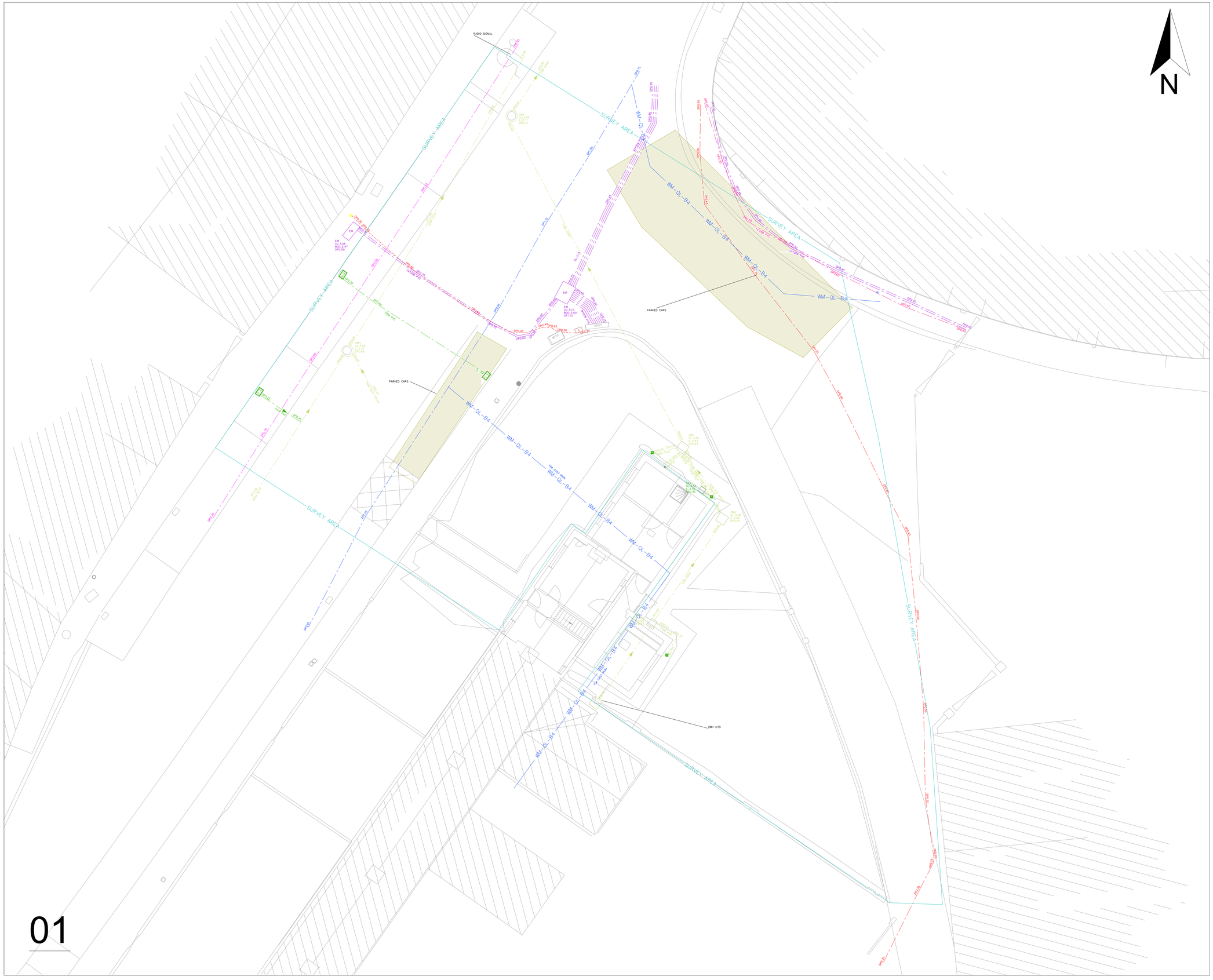

01

SERVICES LEGEND

- UNDERGROUND ELECTRICITY LINE
- ELECTRICAL MANHOLE
- OVERHEAD LINE WITH POLE
- OVERHEAD ELECTRIC
- UNDERGROUND HV ELECTRICITY LINE
- PUBLIC LIGHTING ELECTRICITY LINE
- 6M HIGH STREET LIGHT
- MINI PILLAR
- UIG ELECTRIC TRAFFIC CONTROL
- TRAFFIC CONTROL MYHOLE
- EIR
- EIR CHAMBER
- OVERHEAD LINE WITH POLE
- ENET
- ENET CHAMBER
- COMMS
- COMMS CHAMBER
- VIRGIN
- VIRGIN CHAMBER
- FIBRE
- FIBRE CHAMBER
- AURORA TELECOM
- AURORA TELECOM CHAMBER
- CATV
- CATV CHAMBER
- BT/ESAT
- BT/ESAT CHAMBER
- SIRO FIBRE
- SIRO CHAMBER
- UNIDENTIFIED SERVICE
- UNIDENTIFIED CHAMBER
- EARTH LINE AND RODS
- TRAFFIC SENSORS
- CCTV POLE
- UTILITIES CABINET
- FOUL DRAINAGE
- FOUL MANHOLE
- STORM DRAINAGE
- STORM DRAINAGE MANHOLE
- COMBINED DRAINAGE
- COMBINED DRAINAGE MANHOLE
- PRODUCT DRAINAGE
- PRODUCT DRAINAGE MANHOLE
- CHEMICAL LINE
- CHEMICAL MANHOLE
- ROAD GULLY
- GULLY TRAP
- WATER MAIN
- SLUICE VALVE
- FIRE HYDRANT
- WATER METER
- SCOUR VALVE
- PRESSURE RELEASE VALVE
- AIR VALVE
- NON-RETURN VALVE
- FUEL LINE/TANK
- GAS SV
- GAS LINE
- GAS HIP GAS HIGH PRESSURE LINE
- GL 00.00 GROUND LEVEL (METRES - OS DATUM)
- CL 10.00 COVER LEVEL (METRES - OS DATUM)
- IL 10.00 INVERT LEVEL (METRES - OS DATUM)
- DP1.50 DEPTH TO TOP OF SERVICE DUCT OR CABLE
- DP ON MANHOLES = INVERT LEVEL OF CHAMBER
- DP ON DRAINAGE = INVERT LEVEL OF PIPE
- UTO UNABLE TO OPEN
- OSA OUTSIDE SURVEY AREA
- UTT UNABLE TO TRACE
- (E) EMPTY DUCT
- (CD) CLOSED DUCT
- SURVEY AREA SURVEYED AREA

SITE LOCATION

Please note that the absence of services on this drawing is not solid proof that these services are not present in the ground.
While every method of underground utility locating has been adhered to in this survey, some services may lie outside the range of the GPR and electro-magnetic locator signal. Poor ground conditions and or services situated underneath other services can also prove impossible to locate. Due to the fact that not all Utility Service Plans were provided to Metroscan by the contractor,Metroscan cannot be held responsible for any services that have not been identified. The contractor should not assume that all services have been identified and must exercise a duty of care when excavating.
Hand / vacuum excavation is advised to determine exact depth and position of service prior to excavation commencing.
Please note that the drawing provided is valid for 60 days from date stated below.
Drawing is intended solely for use of the contractor named below.

Accuracy Levels

In ideal conditions the accuracy levels of the EML is +/-5% whilst the GPR outputs accuracy levels of 10% up to 2.5m depth.
These accuracy levels can vary depending on ground conditions, depths of services, congestion of services (may cause signal to bleed on to other services).
Depths noted on drawings should be taken as indicative and hand / vacuum excavation is advised where exact depth are required.
Diameter of services will be given where direct access is available through visual inspection, eg manhole.
All Cover level elevations for Manholes / Inspection Chambers will be taken from topographical survey if supplied

Survey Limitations
Non-conductible services pose a difficult task to identify. Direct buried fibre optic cables are difficult to identify with GPR.
They can easily be traced when placed in a conduit by the means of a sonde or cobra reel.
PE gas mains can also prove difficult to identify.

If Metroscan cannot get an accurate signal from a service, it will be noted on the drawing that the service is 'Taken from records QL-B4'.
If manholes cannot be opened on site, they with be marked on the drawing as UTO (unable to open).
Excluded from the survey unless otherwise stated :
Domestic services, Services above ground, Disconnected services where no signal can be obtained.

Notes

1. GPR equipment :
   Detector Duo, DS2000,
   Stream C, Mala EL Core
   scanning frequency 250 and 700 mhz
   Depth of investigation 2.5m, self calibrating.
2. Radio detection equipment:
   Vivax Metrotech VLoc Pro3 / RD7000
3. GPR scanning limited to smooth surfaces only no obstruction.
   Survey area marked on drawing
4. All depths stated are an indication of depth
   caution required when excavating.
5. All Utilities are classified QL- B2 unless noted otherwise.

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Survey Type		Quality Level	Location Accuracy		Supporting Data
			Horizsonal	vertical	
D	Desktop utility record search	QL-D	Undefined	Undefined	
C	Site Reconnaissance	QL-C	Undefined	Undefined	A segmant of utility whose location is demonstrated by visual reference to street furniture, topographical features or evidence of previous street works.
B	Detection	QL-B4	Undefined	Undefined	A utility segmant which is suspected to exist but has not been detected and is therefor shown as an assumed route
		QL-B3 QL-B3P	plus/minus 500mm	Undefined (no reliable depth)	Horizontal location only of the utility detected by one of the geophysical techniques used
		QL-B2 QL-B2P	plus/minus 250mm of the detected depth	Plus/minus 40% of the detected depth	Horizontal and vertical location of the utility detected by one of the geophysical techniques used
		QL-B1 QL-B1P	plus/minus 150mm of the detected depth	plus/minus 15% of the detected depth	Horizontal and vertical location of the utility detected by multiple geophysical techniques used
A	Verification	QL-A	plus/minus 50mm	plus/minus 15mm	Horizontal and vertical location of the top and/or bottom of the utility through trial holes/slit trench method

Client: Glenn Nunan Consulting Engineers

Site Address: Munster Ave.
Galway

Drawing Title:
MUL1686_Galway City Council_ Galway

Drwg No: 1
Sheet No: 01
Rev No:

Site Completion Date: 15th Febuary 2024
Scale: 1:100 @ A1
Coordinates: ITM

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