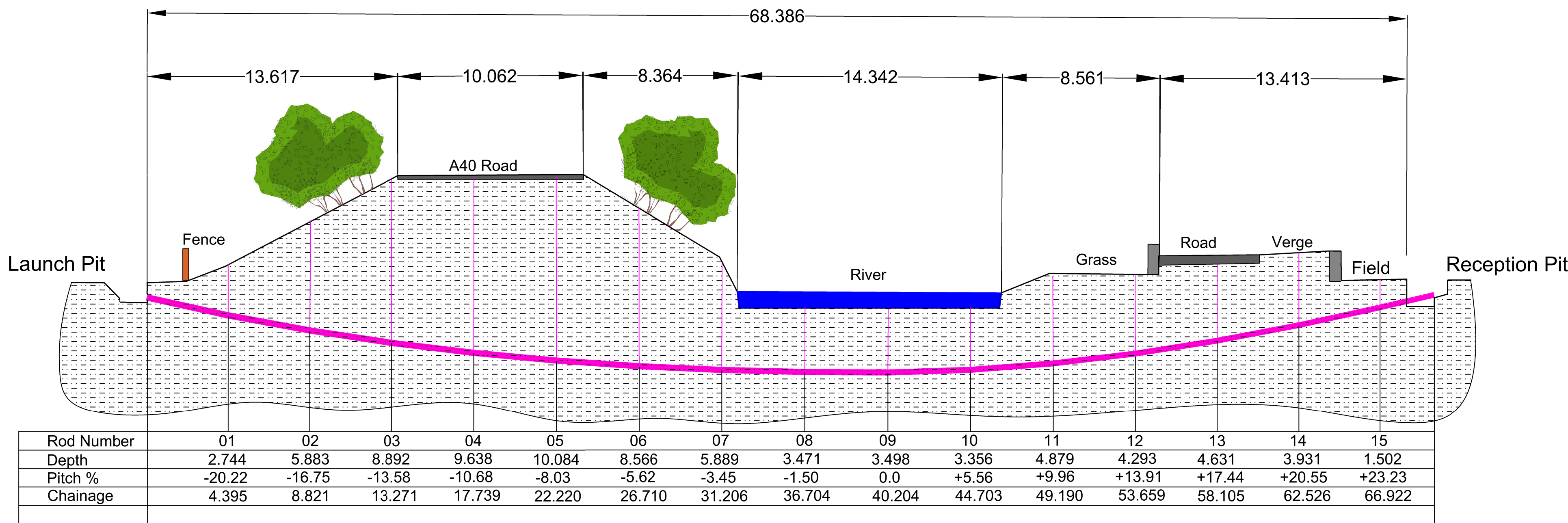


SCALE: 1:200



NOT TO SCALE

Notes:

Abbreviations for underground services

AL	Asbestos cement	MR	Marker post
ALK	Alkaline	NI	No further information
AV	Air valve	NI-A	Not located - route assumed
BD	Back drop	NI-L	Not located - route plotted from on-site information
BH	Bore hole	NI-R	Not located - route plotted from records
BTIC	British Telecom Inspection chamber	NI-T	Not located - plotted from visible trench near detail
BTMH	British Telecom manhole	NRV	Non return valve
CA	Compressed air	NS	No signal
CATV	Cable tv	OP	Overhead
CCV	Closed circuit television	PE	Polyethylene
CH	Coal hole	PR	Pipe riser
CI	Civil iron	PRV	Pressure reducing valve
CL	Cable level	PVC	Polyvinyl chloride
CH	Cable marker	RE	Rodding eye
CNC	Concrete	RG	Road gully
C/PIT	Catch pit	RS	Road sign
CU	Copper	RWP	Rain water pipe
CR	Cable riser	S/A	Sewerage
DB	Direct buried	SC	Stop cock
D	Ductile iron	SE	Side entry
ECP	Electric cable pit	SI	Spun iron
EHV	Extra high voltage	SL	Soil level
EB	Electric joint box	ST	Street
EP	Electricity pole	SV	Stop valve
ES	Earthing strap	SVP	Soil vent pipe
FN	Fire hydrant	SW	Sink waste
FL	Floor level	TBR	Telephone call box
FLH	Flood light	TI	Trapped inlet
FQ	Fibre optic	T/O	Trapped outlet
FP	Fender pillar	TP	Telephone pole
G	Gully	UL	Up light
GM	Gas meter	UST	Underground storage tank
GV	Gas valve	UTL	Unable to lift
HV	High voltage	UTF	Unable to find
IC	Inspection chamber	UTGA	Unable to gain access
IL	Invert level	UTS	Unable to survey
Kv	Kilo volts	UTT	Unable to trace
LD	Land drain	VC	Vitrified clay
LH	Lamp hole	VP	Vent pipe
LP	Lamp post	WL	Water level
LPG	Liquid petroleum gas	WT	Water meter
LV	Low voltage	WO	Wash out
MDPE	Medium density polyethylene		
ME	Manhole		

Notes for underground services

I.A combination of electromagnetic techniques & ground penetrating radar have been used, as appropriate, in the location of underground services and drains. The results are not infallible and trial excavations should be carried out to confirm service identification, position and particularly depths, where these are critical. Although all reasonable effort has been made in preparing available record drawings, the completeness of the underground services information cannot be guaranteed.

II. Where no cover level is available, depths to pipe inverts are shown thus: **IL**

III. Depths of services at inspection chambers, where possible, are shown thus: **IL**

IV. Depths obtained electronically are generally to the centre of the service and are shown thus: **(IL)**

V. Number of ducts/wires, where known, shown thus: **2x**

VI. Pipe sizes, which cannot be obtained by visual survey, are taken from record drawings/manufacturer's data where available.

VII. Cable routes shown as a single line may actually consist of many cables. Electric cable routes shown are assumed to be 11kV unless otherwise annotated. Information taken from records is sufficed thus: **(R)**

VIII. Drainage pipe sizes & invert levels have been determined without man entry into chambers. Every effort has been made to correctly obtain this information, however, accuracy is dependent on visibility from the surface.

To assist with clarity of presentation, services and drains have been extended within buildings.

Key for underground services

Four/combined	
Surface water	
Drain	
drain	
Trade effluent drain	
3000 and above	
Purging tank	
End of trace	
End of trench scar	
Lv cables	
Electric cables	
HV cables	
Band of electric cables	
Air conditioning pipes	
BT/telephone	
Cctv	
Compressed air	
Characteristic change	
Data cabling	
Mercury	
Earthing strap	
Empty ducts	
Fire alarm	
Gas-low pressure	
Gas-medium pressure	
Gas-redundant	
Heating pipes	
Heating pipe-redundant	
Multi-user ducts	
Nitrogen pipes	
Overhead service	
Service duct	
Water	
Unidentified	
Steel Grid Drain	

NOT FOR CONSTRUCTION



CLIENT:

National Grid

CONTRACTOR:

DRAWN: SCG

CHECKED: SCG

DATE: 15/04/24

REVISION:

PROJECT NAME:

Wolf Castle HDD

DRAWING TITLE:

Horizontal Directional Drill

SCALE:

As above

SHEET SIZE:

A1

SHEET NO:

PROJECT NO:

STATUS:

DRAWING NO:

197334-nationalgrid-000