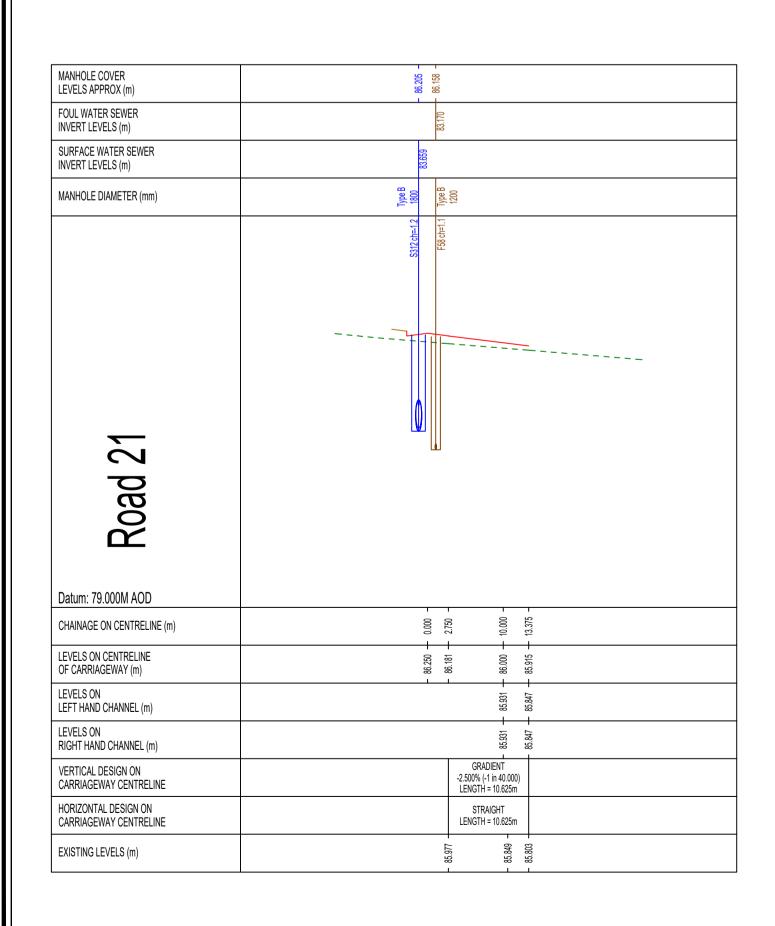
MANHOLE COVER LEVELS APPROX (m)	90.477 -
FOUL WATER SEWER INVERT LEVELS (m)	87.243
SURFACE WATER SEWER INVERT LEVELS (m)	81.728
MANHOLE DIAMETER (mm)	17pe B 1500 1700 17pe A
Road 18	S003 ch-12
Datum: 84.000M AOD	
CHAINAGE ON CENTRELINE (m)	- 0.000 - - 2.750 - - 10.000 -
LEVELS ON CENTRELINE OF CARRIAGEWAY (m)	- 90.467 + - 90.217 + - 90.132 +
LEVELS ON LEFT HAND CHANNEL (m)	90.148
LEVELS ON RIGHT HAND CHANNEL (m)	90.148 + 90.063 +
VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE	GRADIENT -2.500% (-1 in 40.000) LENGTH = 10.625m
HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE	STRAIGHT LENGTH = 10.625m
	90.024 + 89.607 + 89.607

MANHOLE COVER LEVELS APPROX (m)	- 90,699 -
FOUL WATER SEWER INVERT LEVELS (m)	87.075
SURFACE WATER SEWER INVERT LEVELS (m)	87.450
MANHOLE DIAMETER (mm)	1706 A 17209 1500
Road 19	80-do-688
Datum: 84.000M AOD	
CHAINAGE ON CENTRELINE (m)	+ 00000 + 10,000 + 13,000
LEVELS ON CENTRELINE OF CARRIAGEWAY (m)	90.725 - 90.656 - 90.837 - 90.912 - 90.912 -
LEVELS ON LEFT HAND CHANNEL (m)	- 90.768 + - 90.843 + -
LEVELS ON RIGHT HAND CHANNEL (m)	- 90.768
VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE	GRADIENT 2.500% (1 in 40.000) LENGTH = 10.250m
HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE	STRAIGHT LENGTH = 10.250m
EXISTING LEVELS (m)	90.265 + 90.925 +

	86.417
SURFACE WATER SEWER INVERT LEVELS (m)	86.785
MANHOLE DIAMETER (mm)	17pe B 1800 1800
	F54 ch=-1.4
Road 20	
)a(
Datum: 82.000M AOD	- 0000 - 0000 - 0000 - 0000
Datum: 82.000M AOD CHAINAGE ON CENTRELINE (m) LEVELS ON CENTRELINE	1,148 + 0,000 - 1,780 + 2,750 - 1,000 - 1,113 + 16,079 -
Datum: 82.000M AOD CHAINAGE ON CENTRELINE (m) LEVELS ON CENTRELINE OF CARRIAGEWAY (m) LEVELS ON	- 88.780 - 88.780 - 89.113 + 89.961
Datum: 82.000M AOD CHAINAGE ON CENTRELINE (m) LEVELS ON CENTRELINE OF CARRIAGEWAY (m) LEVELS ON LEFT HAND CHANNEL (m) LEVELS ON	+ + +
Datum: 82.000M AOD CHAINAGE ON CENTRELINE (m) LEVELS ON CENTRELINE OF CARRIAGEWAY (m) LEVELS ON LEFT HAND CHANNEL (m) LEVELS ON RIGHT HAND CHANNEL (m) VERTICAL DESIGN ON	- 88 386 - 4004 - 89 1113 - 88 380 - 4004 - 89 1004 - 80
Datum: 82.000M AOD CHAINAGE ON CENTRELINE (m) LEVELS ON CENTRELINE OF CARRIAGEWAY (m) LEVELS ON LEFT HAND CHANNEL (m) LEVELS ON RIGHT HAND CHANNEL (m)	- 88.348 - - 88.780 - - 89.044 + 89.113 -

MANHOLE COVER

LEVELS APPROX (m)



MANHOLE COVER LEVELS APPROX (m)	- 87.523 -
FOUL WATER SEWER INVERT LEVELS (m)	84.891
SURFACE WATER SEWER INVERT LEVELS (m)	65,413
MANHOLE DIAMETER (mm)	1500 1500 1709 1709 B
Road 22	S318 ch=10
Datum: 81.000M AOD	
CHAINAGE ON CENTRELINE (m)	- 0.000 - 2.750 - 10.000
LEVELS ON CENTRELINE OF CARRIAGEWAY (m)	- 87.495 - - 87.426 - - 87.245 -
LEVELS ON LEFT HAND CHANNEL (m)	87.176 - 87.092 -
LEVELS ON RIGHT HAND CHANNEL (m)	- 87.314
VERTICAL DESIGN ON CARRIAGEWAY CENTRELINE	GRADIENT -2.50% (-1 in 40.000) LENGTH = 10.621m
HORIZONTAL DESIGN ON CARRIAGEWAY CENTRELINE	STRAIGHT LENGTH = 10.621m
EXISTING LEVELS (m)	86.467 +

STRUCTURAL DESIGN OF PIPELINES

Pipelines have been designed based on Simplified Tables of External Loads of Buried Pipelines. Pipes under Main Roads with the depth of cover related to finished construction level of road. The contractor shall ensure that overload of pipes does not occur during construction. The following precautions shall be adopted.

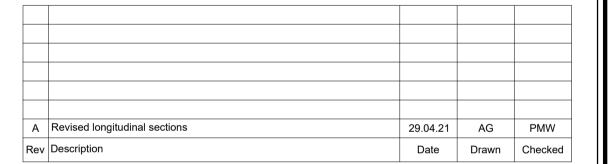
- Prohibit the movement of construction plant over that part of the pipeline who verloading would occur.
- 2. Confine the passage of such plant to suitably bridged crossing points.
- 3. Temporarily deposit (or leave in place) fill over that part of the pipeline and adopt precautions when the fill is finally removed.
- 4. Restrict the load of vehicles to a safe load.
- 5. Redesign the affected part of the pipeline to carry the additional external loa

CDM REGULATIONS 2015

- If you do not fully understand the risks involved during the construction of th items indicated on this drawing ask your manager, health and safety advisor o a member of the design team before proceeding.
- 2. Existing services may exist on site. The contractor shall liaise with all relevance service companies and arrange for all services to be located, marked and protected.
- 3. Drainage works may involve deep excavations and/or heavy plant/materials
- 4. The contractor shall read and understand the Ground investigation Report and be aware of any potential variations in soil conditions over the site.
- 5. The potential for danger to the general public and site personnel exists from works in the public highway. The contractor shall liaise with the highway authority and ensure safe method of working is maintained at all times.
- 6. Existing drainage pipes may be asbestos cement or fibre reinforced pipes,o concrete pipes containing asbestos fibre. Contractor to ensure that competent adequately trained staff are are engaged in the works, and disposal of any affected material is undertaken in line with current legislation and good practic guidelines.
- 7. The contractor is to be aware that overhead cables may cross the site.
- 8. The contractor is to be aware that works may involve working adjacent to or in existing watercourses.
- 9. Works may involve working in close proximity to an existing water main. The contractor is to ensure that this is fully located and protected during the works.

DRAINAGE PIPEWORK AND BEDDING DETAILS

- 1. All foul water sewers shall be Extra Strength Clayware to BS EN 295
- 2. All 150-300mm surface water sewers shall be Extra Strength Clayware to BS EN 295. All surface water sewers of 375mm or greater shall be Concrete Class 120 to BS 5911-1:2002.
- 3. All pipe bedding shall be Class S, (FM 2.2), unless otherwise stated.



Drawing Approval Status:-

N/A Section 104

ion 104 N/A Section 38

N/A Section 278

FOR TENDER



Project:

Haverhill, Boyton Place - Phases 2-6

Checked By:

Drawing Description:

Longitudinal Sections - Sheet 6



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Designed By:
TJW
Date:
11.03.21

Drawn By:
JMW
Date:
01.04.21

afaQ ISO 9001 Quality

Client Reference:

0 Certified by Afnor UK

UKAS

1:500 @ A1

1:1000 @ A3

E3838/540/A