

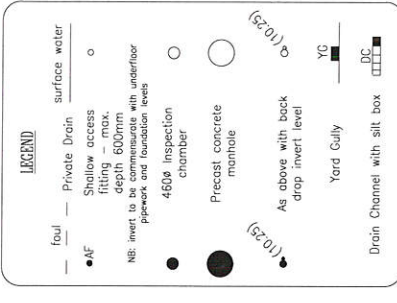
APPENDIX K

SCHEMATIC DRAINAGE PROPOSALS

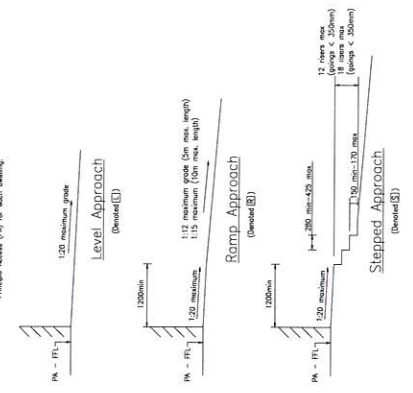


Notes

- All private drainage works are to be constructed in accordance with the relevant provisions of BS EN 752 including by reference BS 8301.
- Manhole invert levels relate to the downstream pipe. Pipes at manholes to be laid with soffits level.
- Unless otherwise shown, foul pipes to be 100mm dia laid at 1 in 40 minimum gradient, unless one w.c. connected where gradient may be 1 in 80 minimum.
- Unless otherwise shown, surface water pipes to be 100mm dia laid at 1 in 100 minimum gradient.
- Where cover to top of pipe barrel is less than 600mm, pipe to have minimum 150mm S74 concrete surround.
- The Contractor is to check invert levels and details of outfall sewers prior to commencing drainage works and the Clients Representative informed of any difference to those shown.
- Manhole cover levels are indicative and should be adjusted to suit finished levels. Covers are to be fixed to a profile corresponding to the surrounding pavement surface.
- Manhole covers:
 - B825 for car park/drives areas all areas subjected to heavy vehicular access in Areas B and C.
 - A15 for pedestrian and landscape areas.
 - All in accordance with BS EN 124:1994.



Part 'M' Access Requirements
 Refer to report for proposed means of approach to the structure (see Part 'M' of this drawing).



SAFETY, HEALTH AND ENVIRONMENTAL (SHE) INFORMATION

- In addition to hazard/risk normally associated with the types of work detailed on this drawing, use the following:
- Construction:**
- Advise site of trenching
 - Open trenches to be fenced off
 - Heavy and bulky items to be mechanically positioned
 - Use of heavy machinery to be noted
 - Appropriate mechanical excavation plant to be used
- Maintenance/Cleaning:**
- None
 - Decommissioning/Remediation:
 - One Meter, electric and BT apparatus below ground and entering building
 - Concrete and masonry could be created and re-used as bulk fill
 - Concrete masonry could be re-used as bulk fill.

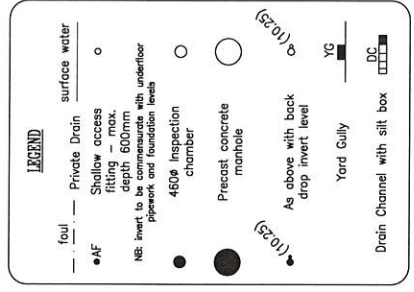
Rev.	Content	Date
P2	As updated on subject, spot level to Plot 47 amended	18.09.18
P1	Layout & Levels updated	17.12.18
	Preliminary Issue	17.12.18

Client	Maple Grove / Eric Wright		
Project	Whalley, Clitheroe		
Title	External Works Layout (1 of 5)		
Drawn	Date	Drawn No.	Rev.
MT	18.09.18	7847/020	P3
Scale	1:250 @ A1	Checked	JL

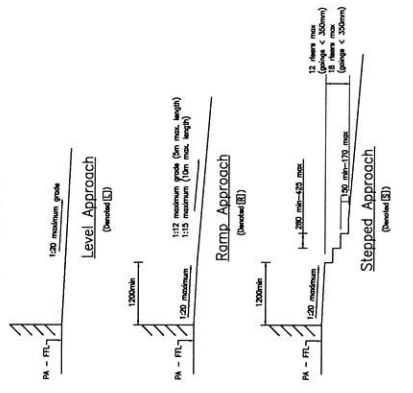
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Notes

- All private drainage works are to be constructed in accordance with the relevant provisions of BS EN 752 including by reference BS 8001.
- Manhole invert levels inside to the downstream pipe. Pipes at manholes to be laid with vertical joints.
- Unless otherwise shown, foul pipes to be 100mm dia laid at 1 in 40 minimum gradient. Downfall pipes can be 75mm dia where gradient may be 1 in 60 minimum.
- Unless otherwise shown surface water pipes to be 100mm dia laid at 1 in 100 minimum gradient.
- Where cover to top of pipe barrel is less than 600mm, pipe to have minimum 100mm 5% concrete surround.
- The Contractor is to check invert levels and details of catch basins prior to commencing drainage works and the Client Representative agreement of any difference to those shown.
- Manhole cover levels are indicative and should be adjusted to suit finished levels. Covers are to be fixed to a profile corresponding to the surrounding pavement surface.
- Manhole covers B125 for car parks/drives areas and areas subjected to heavy vehicular access. B125 for pedestrian and landscape areas. All in accordance with BS EN 124 :1994



Part 'M' Access Requirements
Refer to report for proposed means of approach to the Principal Access (PA) for each building.



SAFETY, HEALTH AND ENVIRONMENTAL (SHE) INFORMATION

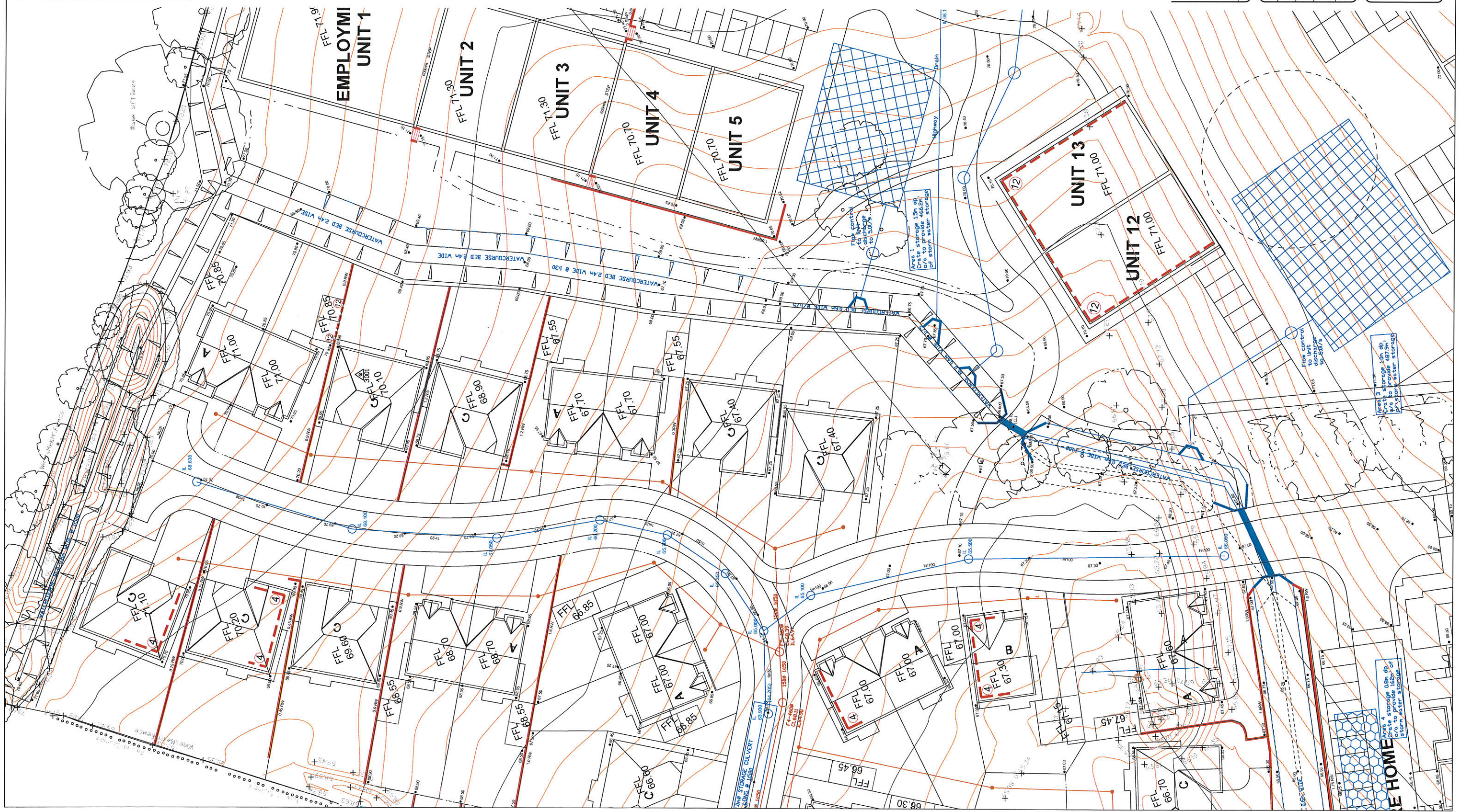
In addition to hazard/health generally associated with the types of work detailed on this drawing, note the following:

Construction:

- Adequate shoring of trenches
- Shoring and trench boxes to be adequately positioned
- Hand protection against wet concrete
- Appropriate excavation protection plan to be used
- Appropriate excavation protection plan to be used

Maintenance/Overhaul:

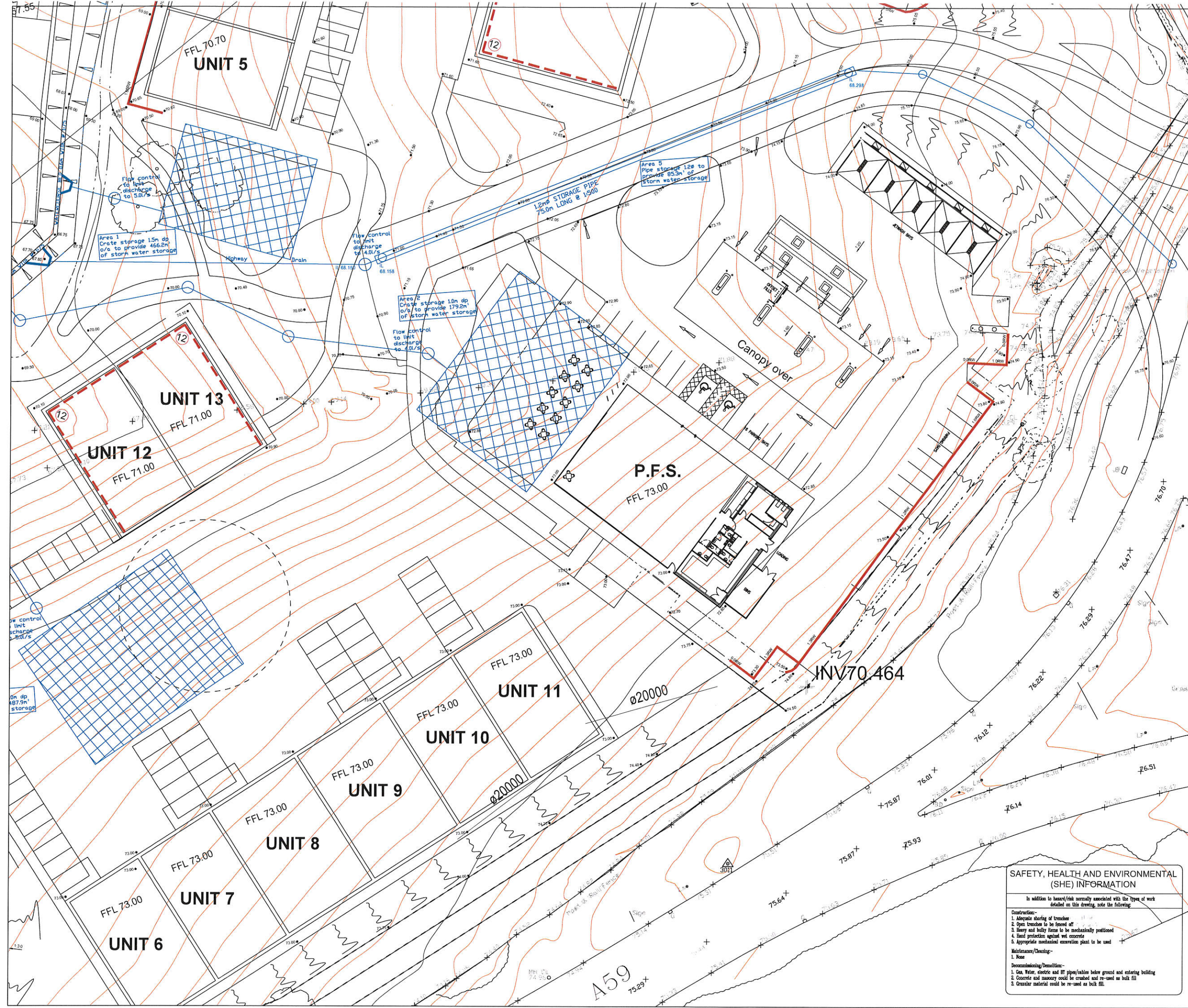
- Use appropriate safety signs
- Concrete and masonry could be washed and used as ballast
- Concrete material could be re-used as ballast



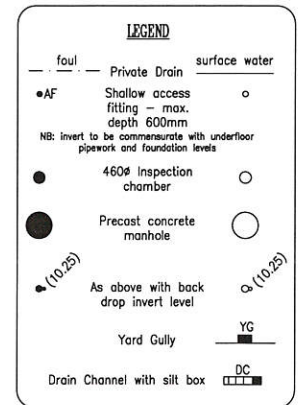
Rev.	MT	Checked	JL	Content	Date
P5				Layout updated & levels finalised	31.05.19
P4				Layout updated	25.04.19
P3				As corrected, areas not added adjacent Plot 25-30. P5, revised to P4	19.03.19
P2				Layout & levels updated	17.12.18
P1				Preliminary Issue	17.12.18

Client	Maple Grove / Eric Wright
Project	Thalley, Clitheroe
Title	External Works Layout (2 of 6)
Drawn	MT
Date	18.09.18
Scale	1:250 @ A1
Checked	JL
Drwg. No.	7847/021
Rev.	P5

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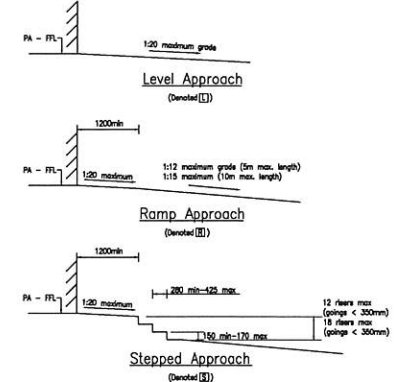


- Notes**
- All private drainage works are to be constructed in accordance with the relevant provisions of BS EN 752 including by reference BS 8301.
 - Manhole invert levels relate to the downstream pipe. Pipes at manholes to be laid with soffits level.
 - Unless otherwise shown, foul pipes to be 100mm dia laid at 1 in 40 minimum gradient unless one w.c. connected where gradient may be 1 in 60 minimum.
 - Unless otherwise shown surface water pipes to be 100mm dia laid at 1 in 100 minimum gradient.
 - Where cover to top of pipe barrel is less than 600mm, pipe to have minimum 150mm 374 concrete surround.
 - The Contractor is to check invert levels and details of outfall sewers prior to commencing drainage works and the Clients Representative informed of any difference to those shown.
 - Manhole cover levels are indicative and should be adjusted to suit finished levels. Covers are to be fixed to a profile corresponding to the surrounding pavement surface.
 - Manhole covers R125 for car park/drives areas not areas subjected to heavy vehicular access. Use Access Road A15 for pedestrians and landscape areas. All in accordance with BS EN 124:1994



Part 'M' Access Requirements

Refer to layout for proposed means of approach to the Private Access (PA) for each building.



Rev.	Content	Date
P4	Layout updated & levels finalised	31.05.19
P3	Layout updated	25.04.19
P2	Area 4 SW storage & discharge clarified	19.05.19
P1	Layout & Levels updated	17.12.18

Client	Maple Grove / Eric Wright		
Project	Whalley, Clitheroe		
Title	External Works Layout (Sheet 3 of 6)		
Drawn	MT	Date	18.09.18
Scale	1:250 @ A1	Checked	JL
Dr. No.	7847/022		Rev.
			P4

SAFETY, HEALTH AND ENVIRONMENTAL (SHE) INFORMATION

In addition to hazard/risk normally associated with the type of work detailed on this drawing, note the following:

Construction:-

- Adequate shoring of trenches
- Open trenches to be fenced off
- Heavy and bulky items to be mechanically positioned
- Hand protection against wet concrete
- Appropriate mechanical excavation plant to be used

Maintenance/Cleaning:-

- None

Deconstruction/Demolition:-

- Gas, Water, electric and BT pipes/cables below ground and entering building
- Concrete and masonry could be crushed and re-used as bulk fill
- Crushed material could be re-used as bulk fill

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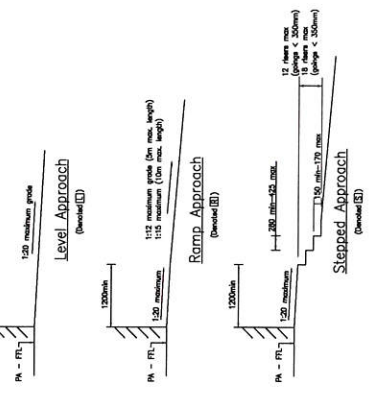
Notes

- All private drainage works are to be constructed in accordance with the relevant provisions of BS EN 752 including by reference BS 8001.
- Manhole invert levels relate to the downstream pipe. Pipes at manholes to be laid with surface level.
- Unless otherwise shown, fall pipes to be 100mm dia laid at 1 in 40 minimum gradient unless otherwise specified. Where gradient may be 1 in 60 minimum.
- Unless otherwise shown surface water pipes to be 100mm dia laid at 1 in 100 minimum gradient.
- Where cover to top of pipe barrel is less than 600mm, pipe to have minimum 150mm S14 concrete surround.
- The Contractor is to check invert levels and details of catchfall sewers prior to commencing drainage works and the Client Representative informed of any difference to those shown.
- Manhole cover levels are indicative and should be adjusted to suit finished levels. Covers are to be fixed to a profile corresponding to the surrounding pavement surface.
- Manhole covers
 B125 for car park/drive areas and areas subjected to heavy vehicle access. A Access Road
 A15 for pedestrian and landscape areas.
 All in accordance with BS EN 124 :1994

LEGEND	
—	Private Drain
○	Surface water
○	Shallow access fitting - max. depth 600mm with underfloor pipework and foundation levels
○	450ø inspection chamber
○	Precast concrete manhole
○	As above with back drop invert level
○	Yard Gully
□	DC
□	Drain Channel with silt box

Part 'W' Access Requirements

Note to layout for proposed covers of approach to the Manhole Access (PA) for each manhole.



SAFETY, HEALTH AND ENVIRONMENTAL (SHE) INFORMATION

In addition to hazard/risk normally associated with the types of work detailed on this drawing, note the following:

Construction:

- Work to be carried out in accordance with the relevant provisions of BS EN 752.
- Work to be carried out in accordance with the relevant provisions of BS EN 752.
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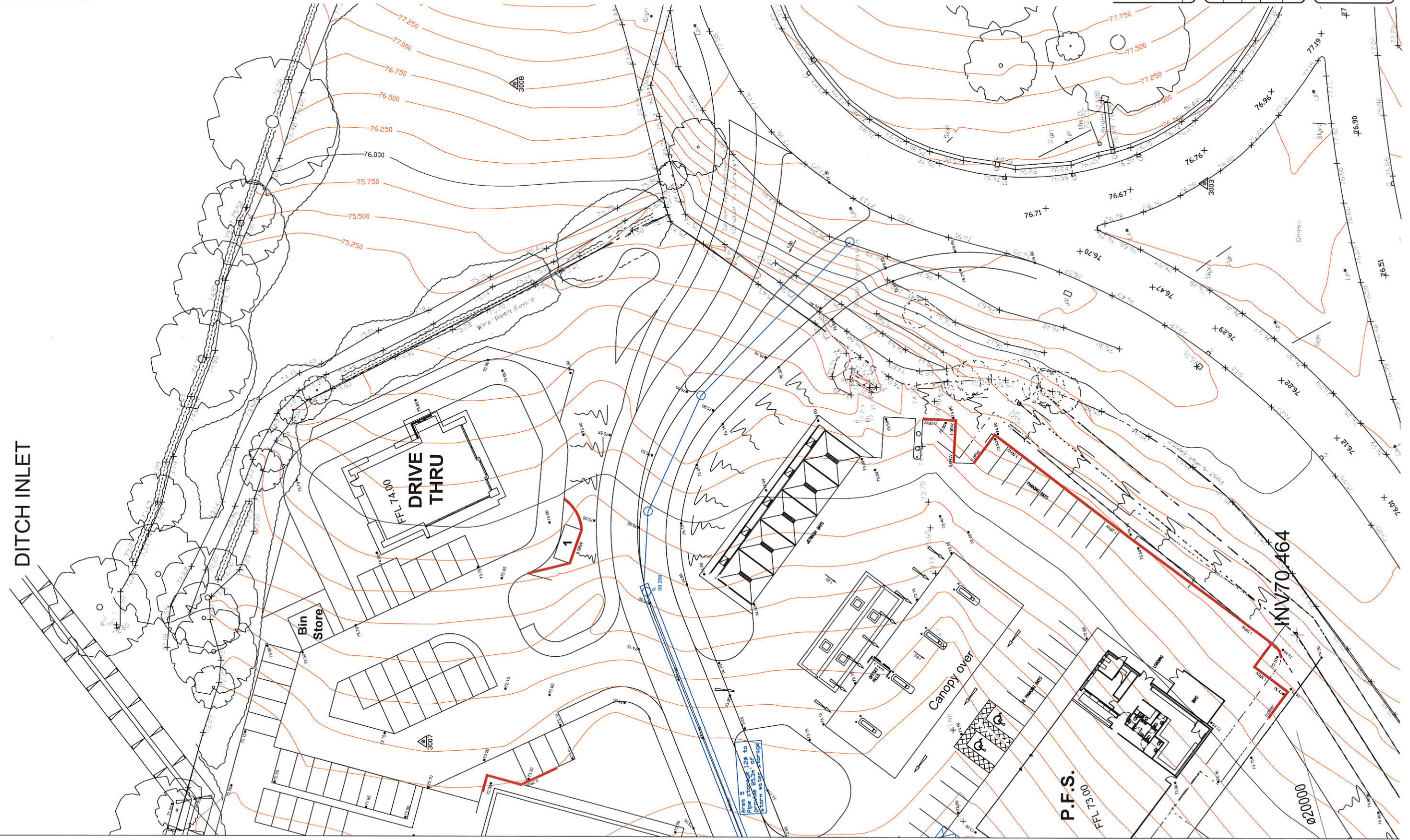
Materials/Chemicals:

- See Materials Schedule and Bill of Materials for details of materials to be used.
- Concrete and masonry work to be carried out in accordance with BS EN 12618.
- Concrete materials could be re-used as ballast.

Rev.	Content	Date
01	Layout updated & levels finalised	31.08.19
02	Layout updated & levels finalised	22.04.19
03	Layout updated & levels finalised	17.12.18

Client	Maple Grove / Eric Wright		
Project	Whalley, Clitheroe		
Title	External Works Layout (Sheet 4 of 6)		
Drawn	MT	Date	18.09.18
Scale	1:250 @ A1	Checked	JL
Rev.		Dwg. No.	7847/023
		Sheet	P3

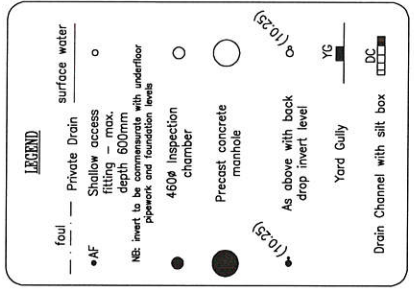
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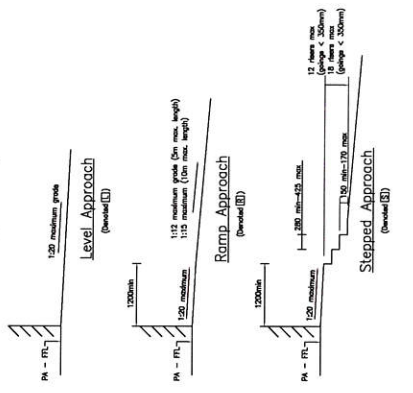


Notes

- All private drainage works are to be constructed in accordance with the relevant provisions of BS EN 752 including by reference BS 8001.
- Manhole invert levels relative to the downstream pipe. Pipes at manholes to be laid with sufficient level.
- Unless otherwise shown, floor pipes to be 100mm dia laid at 1 in 40 minimum gradient unless otherwise specified. Pipes at manholes may be 1 in 80 minimum.
- Unless otherwise shown, surface water pipes to be 100mm dia laid at 1 in 100 minimum gradient.
- Where cover to top of pipe barrel is less than 600mm, pipe to have minimum 150mm 5% concrete surround.
- The Contractor is to check invert levels and details of catchfall covers prior to commencing drainage works and the Client Representative informed of any difference to those shown.
- Manhole cover levels are indicative and should be adjusted to suit finished levels. Covers are to be fixed to a profile corresponding to the surrounding pavement surface.
- Manhole covers:
 - 125 for car park/drain areas and areas subjected to heavy vehicular access in Access Road
 - A15 for pavements and landscape areas.
 - All in accordance with BS EN 124 :1994



Part 'M' Access Requirements
Refer to layout for proposed covers of approach to the Property House (PH) for each building.



SAFETY, HEALTH AND ENVIRONMENTAL (SHE) INFORMATION

In addition to hazards/risks normally associated with the types of work detailed on this drawing, note the following:

Construction:

- Deep excavation of trenches
- Heavy and bulky items to be unconditionally positioned
- Hand projection against wet concrete
- Appropriate excavation protection must be used
- Maintenance/Cleaning

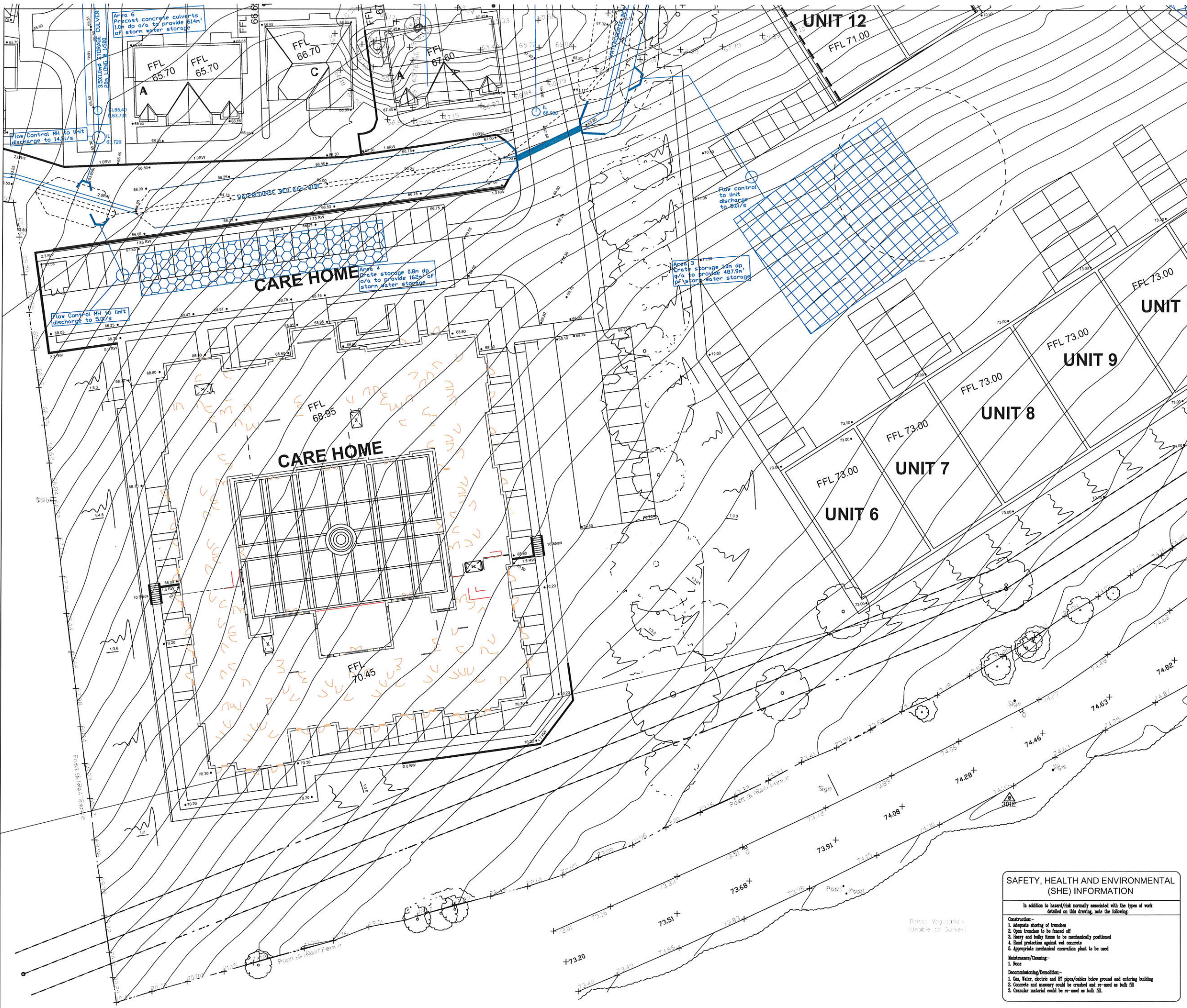
Use:

- Slip
- Tripping/Falls
- Overhead power lines/cables being present and existing building
- Concrete and masonry could be crushed and rebound as ball if
- Crushed material could be re-used as ball if

Rev.	Content	Date
01	Layout updated & items finalized	03.08.18
02	Covers to be installed	17.12.18
03	Layout & levels updated	17.12.18

Client	Maple Grove / Eric Wright		
Project	Whalley, Clitheroe		
Title	External Works Layout (Sheet 5 of 6)		
Drawn	MT	Date	18.09.18
Scale	1:250 @ A1	Checked	JL
Rev.		Dwg. No.	7847/024
			P3

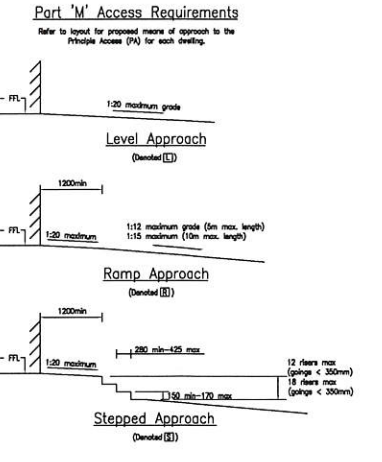
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- Notes**
- All private drainage works are to be constructed in accordance with the relevant provisions of BS EN 752 including by reference BS 8301.
 - Manhole invert levels relate to the downstream pipe. Pipes at manholes to be laid with soffit level.
 - Unless otherwise shown, foul pipes to be 100mm dia laid at 1 in 40 minimum gradient unless otherwise connected where gradient may be 1 in 80 minimum.
 - Unless otherwise shown surface water pipes to be 100mm dia laid at 1 in 100 minimum gradient.
 - Where cover to top of pipe barrel is less than 600mm, pipe to have minimum 150mm S14 concrete surround.
 - The Contractor is to check invert levels and details of outfall sewers prior to commencing drainage works and the Client Representative informed of any difference to those shown.
 - Manhole cover levels are indicative and should be adjusted to suit finished levels. Covers are to be fixed to a profile corresponding to the surrounding pavement surface.
 - Manhole covers
 B125 for car park/drives areas not areas subjected to heavy vehicular access, ie Access Road
 A15 for pedestrians and landscape areas.
 All in accordance with BS EN 124 :1994

LEGEND

—	foul	—	Private Drain	—	surface water
• AF	Shallow access fitting - max. depth 600mm	○		○	
NB: Invert to be commensurate with underfloor pipework and foundation levels					
●	460# inspection chamber	○		○	
●	Precast concrete manhole	○		○	
● (10.25)	As above with back drop invert level	○ (10.25)		○	
	Yard Gully	YG			
	Drain Channel with silt box	DC			



PI	Layout & Levels updated	17.12.18
Rev.	Content	Date

Client	Maple Grove / Eric Wright		
Project	Whalley, Clitheroe		
Title	External Works Layout (Sheet 7 of 7)		
Drawn	MT	Date	18.09.18
Scale	1:250 @ A1	Checked	JL
Drg. No.	7847/026		Rev.
			P1

SAFETY, HEALTH AND ENVIRONMENTAL (SHE) INFORMATION

In addition to hazard/risk normally associated with the types of work detailed on this drawing, note the following:

Construction:-

- Adequate shoring of trenches
- Open trenches to be fenced off
- Heavy and bulky items to be mechanically positioned
- Hand protection against wet concrete
- Appropriate mechanical excavation plant to be used

Maintenance/Cleaning:-

- None

Decontamination/Demolition:-

- Gas, Water, electric and BT pipes/cables below ground and entering building
- Concrete and masonry could be crushed and re-used as bulk fill
- Cremator material could be re-used as bulk fill

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