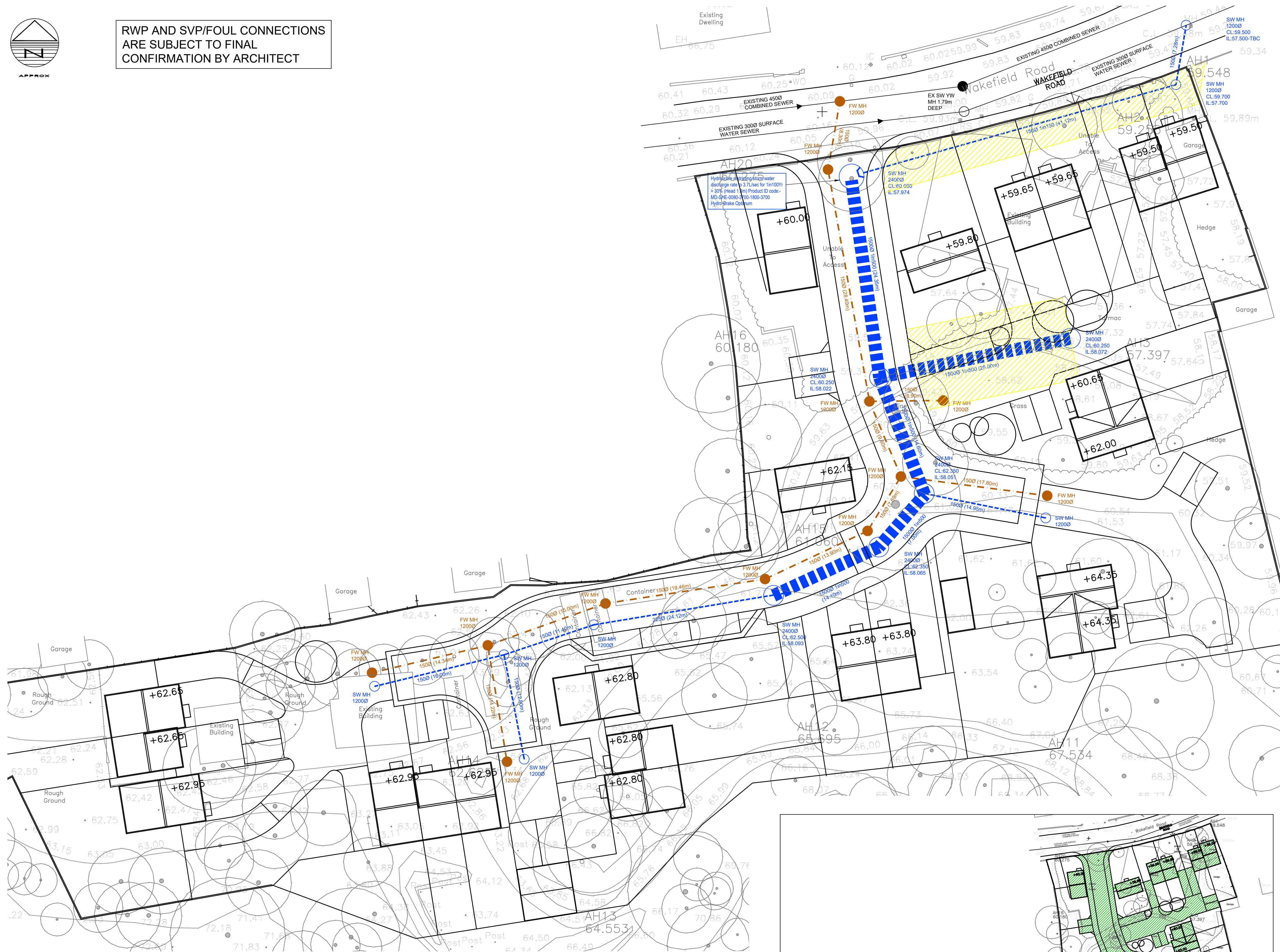


RWP AND SVP/FOUL CONNECTIONS  
ARE SUBJECT TO FINAL  
CONFIRMATION BY ARCHITECT



Proposed Drainage Strategy (1:250)

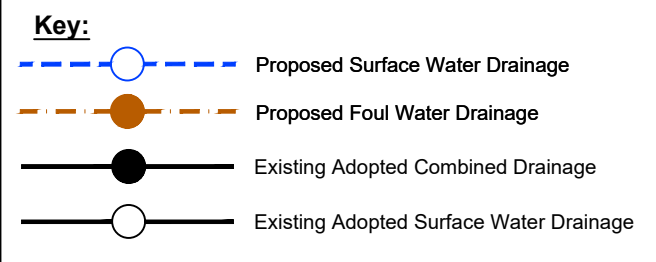


Proposed Impermeable Area = 3340m<sup>2</sup>

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Notes:

1. This drawing is to be read in conjunction with all relevant architect's and engineer's drawings.
2. It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.



Drainage Strategy

The site is located within flood zone 1 with a low risk of flooding from rivers or the sea and is less than 1 hectare, therefore a site specific flood risk assessment should not be required.

The site is currently Greenfield and has an area of 9886m<sup>2</sup>. Calculations using IH124 methods indicate the Greenfield run off based on the site area is 3.7L/sec.

Under SuDs guidance the first point of discharge for surface water is percolation via soakaway. Site percolation testing was carried out 20th November 2019, and is proven that soakaways via infiltration is not to be viable.

NPPF guidelines require that surface water arising from a developed site should as far as practicable be managed in a sustainable manner to mimic the surface water flows arising from the site prior to development.

Surface Water:

Flow restriction 3.7l/s


The proposed impermeable area is 3340m<sup>2</sup>. Based on a flow restriction of 3.7l/s and modelling using Micro Drainage software the attenuation requirement for a peak return period of 1 in 100year plus 40% climate change is **150m<sup>3</sup>**.

Attenuation to be provided via **85m of 1500Ø Concrete Pipe**. The flows will be attenuated using a 80mm Hydrobrake control device ref MD-SHE-0080-3700-1800-3700.

Foul Water:

Foul water from the proposed new site will connect into the existing existing 450mm diameter combined sewer in Wakefield Road subject to a Section 106 agreement with Yorkshire Water.

THE DRAINAGE WILL BE MAINTAINED BY THE DEVELOPER UNTIL THE 12 MONTH MAINTENANCE PERIOD IS COMPLETE. THE SEWER WILL THEN BE OWNED BY YORKSHIRE WATER UNDER A SECTION 104 AGREEMENT.

P1	PRELIMINARY ISSUE	27.11.19	TM
No.	Revision	Date	Drawn
Status		PRELIMINARY	
<div><div><div><div><b>TOPPING</b></div><div><b>ENGINEERS</b></div><div>CONSULTING CIVIL &amp; STRUCTURAL ENGINEERS</div></div></div><div><div>Aire House 12 Victoria Avenue Harrogate HG1 1ED</div><div>t: 01423 522 293 w: <a href="http://www.topping-engineers.com">www.topping-engineers.com</a> e: <a href="mailto:info@topping-engineers.com">info@topping-engineers.com</a></div></div></div>			
Client		FRONTLINE ESTATES LTD	
Project		Land off Wakefield Road Pontefract	
Drawing title		Drainage Strategy	
Drawn	TM	Chkd	Date
Contract No.	19269	Drw No.	DR-C-0100
		Scale	As Shown @ A1
		Revision	P1