TECHNICAL NOTE

Corner Water Consulting

Project Title:	Our Lady's Our Lady's RC High School, Manchester M9 0RP	**Job Number:**	CWC338
		Date:	19/7/2024
Subject:	Sports Pitches SuDS		

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1. INTRODUCTION

1.1. Background

This Technical Note seeks to explain in overall terms how the sports pitches SuDS drainage at the Our Lady's RC High School, Manchester M9 0RP meets National plus Local SuDS policy plus guidance. Also to detail that the scheme discharges at Greenfield Rates and is not reliant on any other previous SuDS scheme or storage. The only interaction with previous drainage designs on the school site is the proposal to connect into an existing pipe inside the school to outfall into the United Utilities public sewer network.

1.2. SuDS Design

The sports pitches discharge at less than the Greenfield Rates.

For the larger storm events, i.e. 1 in 30-year and 1 in 100-year, that cause flooding the betterment is a minimum of 60% **flow rate** reduction, see Clause 3.3.6 of the full SWMP report.

Previous construction schemes on the site also discharge at Greenfield **flow rates**. These other schemes are all fully built, implemented and in use. These other schemes are not part of this planning application and are not going to be altered in any way.

The sports pitches discharge at Qbar (approximately the 1 in 2 year Greenfield **flow rate**). This will occur for all storm events up to the NPPF limit of 1 in 100-year plus a 45% Climate Change allowance.

By discharging at Qbar the design proposal ensures that the **volume** of rainwater discharged in the 6-hour long 1 in 100-year plus CC storm event is no greater than the current pre-development Greenfield volume. This is a Manchester SuDS requirement, plus National SuDS Standards clause S4.

1.3. SuDS Outfall

The sports pitches are proposed to connect into the existing school drainage network close to the school boundary and also the Red-Line boundary for this planning application, see Figure 1.

In 2021 there was an additional building added to the school and the drainage from that scheme was controlled and outfalls via a new chamber downstream of the previous school control chamber S34, see Figure 2.

As shown in Figure 3 the only interaction proposed in this planning application with any previous drainage or SuDS designs and pipework on the school premises is the proposal to connect into an existing pipe inside the school to utilise this as an outfall into the United Utilities public sewer network.

As shown in Figure 3 the connection is proposed into existing chamber number S33, as the existing drainage makes it difficult to excavate any further southwards. If it was essential to have the system completely separate from the 2007 SuDS system the more difficult option, due to the limited space, to build a new connection into the 2021 chamber could be assessed. As this chamber is lower than S33 there is no problem making a gravity connection.

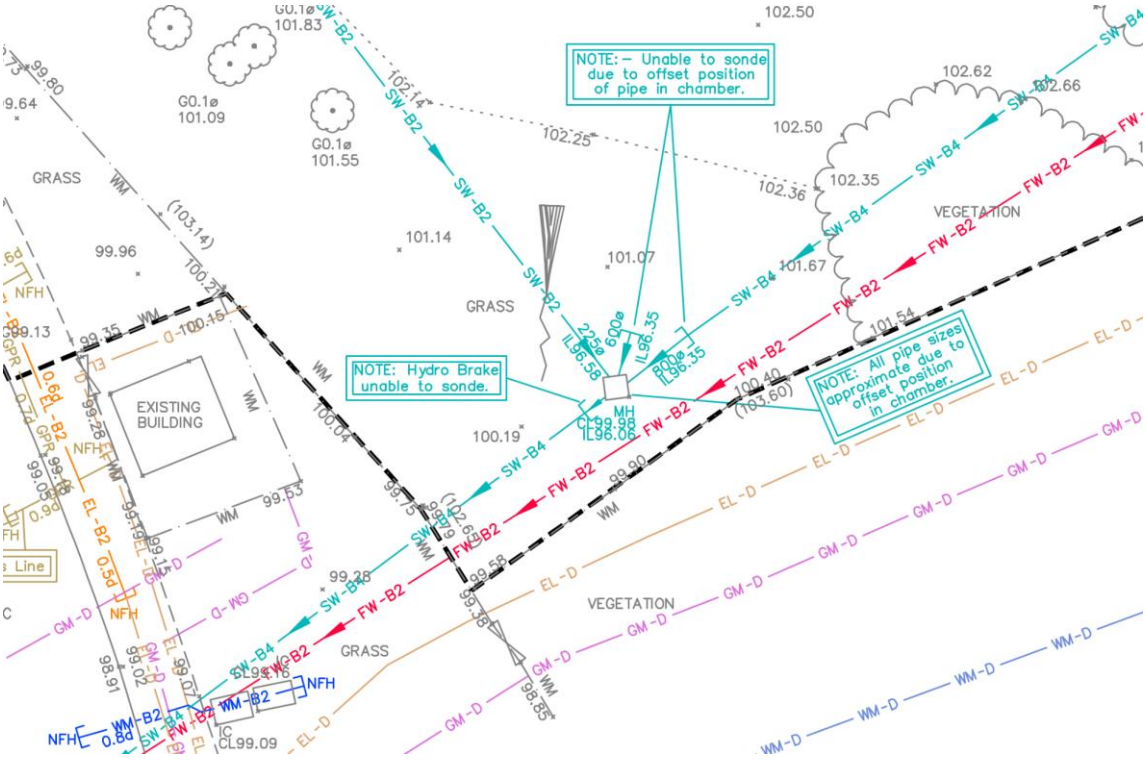

Figure 1: Topographic and Utilities Survey – Chamber S34 has a Hydro-Brake to meet Greenfield flow rates

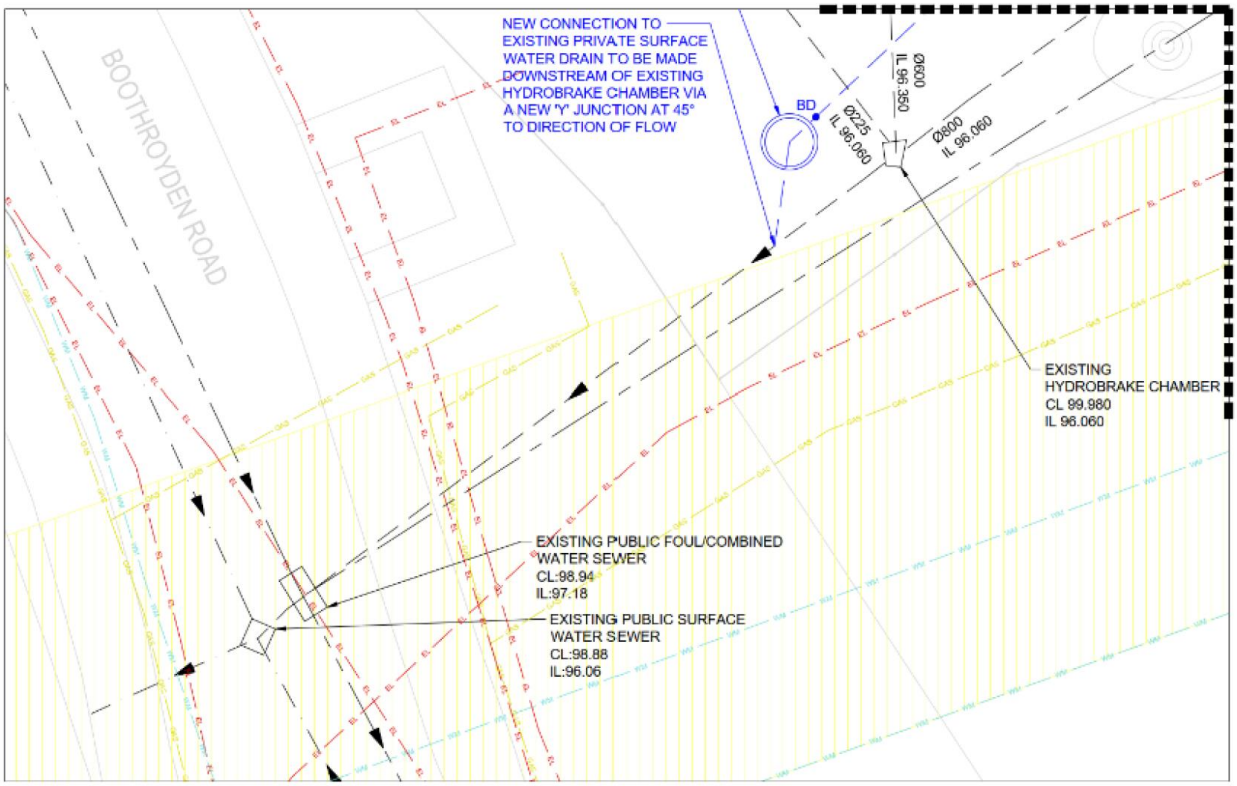

Figure 2: In 2021 a new chamber was added downstream of S34

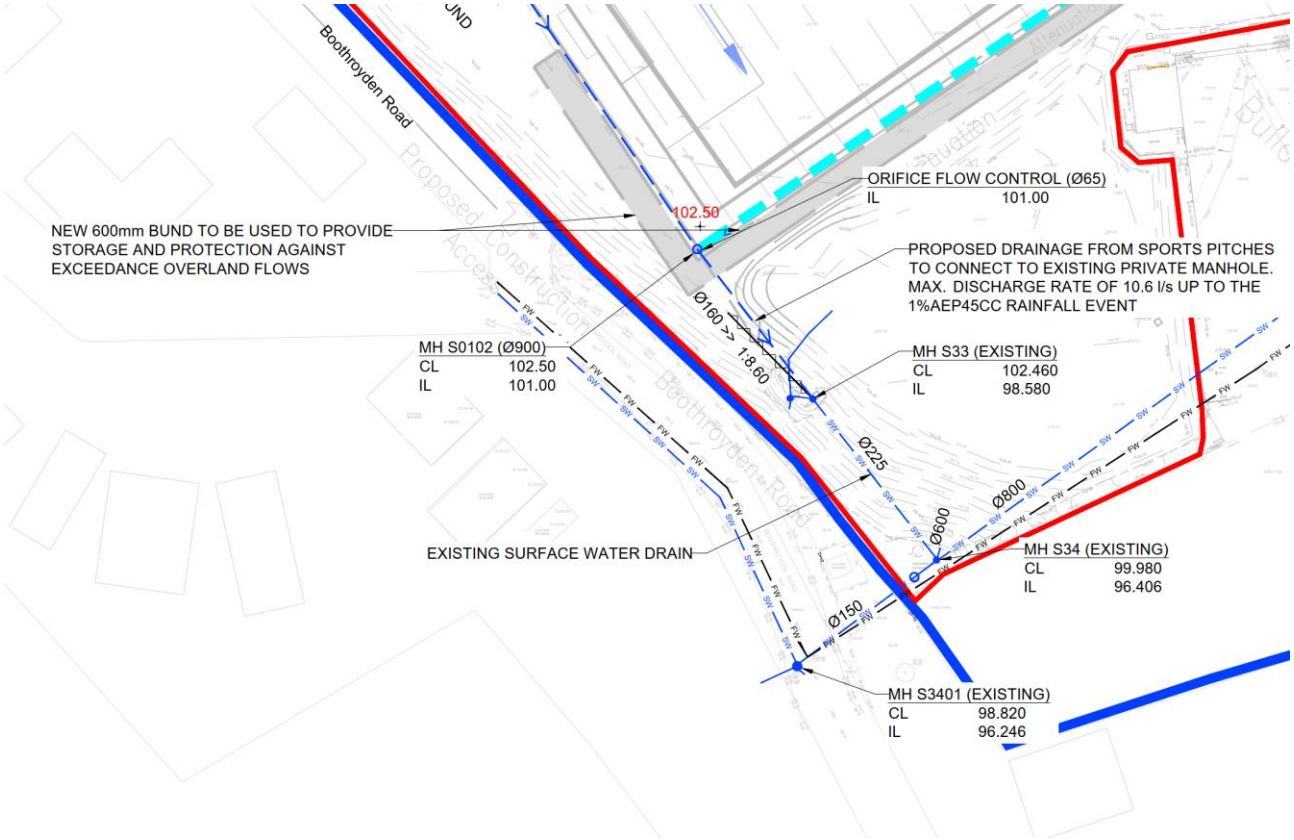

Figure 3: Connection Proposal is to Existing Chamber S33

2. SUMMARY

The SuDS scheme proposed is better than Greenfield flow rates. Thus it meets National SuDS standard S2. This also meets the 2019 Manchester SuDS requirements.

The SuDS scheme proposed meets the requirement to control the volume of runoff to the current amounts. Thus it meets National SuDS standard S4. This also meets the 2019 Manchester SuDS requirements.

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