

**UTILITY LINETYPES**

Gas	G
HV Cables	HV
Multiple Services Route	
Water	W
Drainage - Foul Water	
Drainage - Storm Water	
Electric	E
Existing drainage features	
Assumed drainage catchment	

Rev	Date	Description	By	Chk
P01	11.01.23	ISSUED	SW	BM

Project: **Canford EfW Facility**

Title: **Existing Drainage and Utilities**

Client: **MVV**

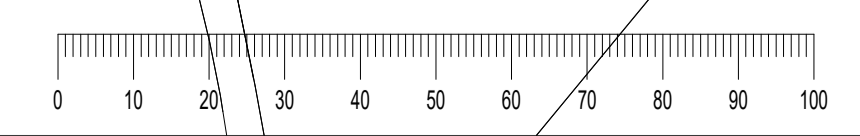


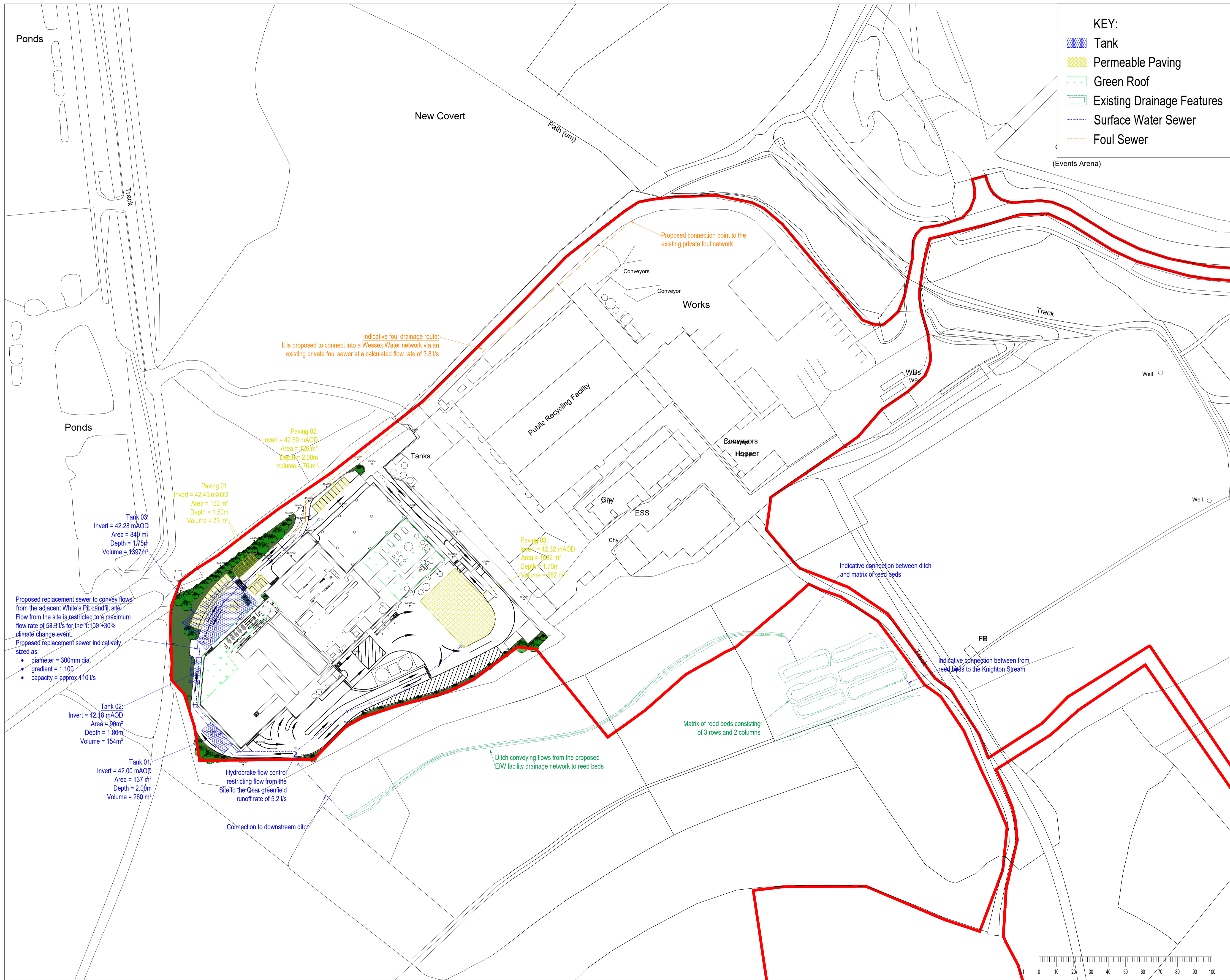
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Subsidiary: **COORDINATION** S1

Designed By: S Whelan	Director: B McCarthy	Waterman Ref: WIE18278
Drawn By: S Whelan	Date: 11/01/2023	Scale: @ A1
Project - Originator - Volume - Level - Type - Role - Number		Revision

18278-WIE-ZZ-XX-DR-D-92001 P01





**KEY:**

- Tank
- Permeable Paving
- Green Roof
- Existing Drainage Features
- Surface Water Sewer
- Foul Sewer

- NOTES:**
- 1) The drainage network has been sized using FEH rainfall data.
  - 2) Surface water runoff will be restricted to the QBAR greenfield rate of 2.2 l/s/ha.
  - 3) A surface water storage volume of c.2,500 m<sup>3</sup> will be provided to ensure the capacity of the drainage network is not exceeded for the 1:100 +45% climate change event.
  - 4) Roof areas will drain via the proposed network. The roof drainage and its contributing areas are to be refined at detailed design stage.
  - 5) Permeable paving will be lined with an impermeable geotextile to ensure no infiltration through the base.
  - 6) Areas of hardstanding will drain away from the proposed EFW facility towards grass verges along the Site boundary. SuDS features such as swales/filter drains are proposed within the verges to intercept runoff, provide water quality treatment before conveying flow to the piped drainage network.
  - 7) An automatic shut off valve will be provided upstream of the hydrobrake flow control.

Proposed replacement sewer to convey flows from the adjacent White's Pit Landfill site. Flow from the site is restricted to a maximum flow rate of 58.3 l/s for the 1:100 +30% climate change event.  
 Proposed replacement sewer indicatively sized as:  
 • diameter = 300mm dia.  
 • gradient = 1:100  
 • capacity = approx. 110 l/s

Indicative foul drainage route: It is proposed to connect into a Wessex Water network via an existing private foul sewer at a calculated flow rate of 3.8 l/s

**Paving 01:**  
 Invert = 42.45 mAOD  
 Area = 163 m<sup>2</sup>  
 Depth = 1.50m  
 Volume = 73 m<sup>3</sup>

**Paving 02:**  
 Invert = 42.69 mAOD  
 Area = 126 m<sup>2</sup>  
 Depth = 2.00m  
 Volume = 76 m<sup>3</sup>

**Paving 03:**  
 Invert = 42.32 mAOD  
 Area = 1062 m<sup>2</sup>  
 Depth = 1.70m  
 Volume = 552 m<sup>3</sup>

**Tank 02:**  
 Invert = 42.18 mAOD  
 Area = 90m<sup>2</sup>  
 Depth = 1.86m  
 Volume = 154m<sup>3</sup>

**Tank 01:**  
 Invert = 42.00 mAOD  
 Area = 137 m<sup>2</sup>  
 Depth = 2.00m  
 Volume = 269 m<sup>3</sup>

Hydrobrake flow control restricting flow from the Site to the Qbar greenfield runoff rate of 5.2 l/s  
 Connection to downstream ditch

Ditch conveying flows from the proposed EFW facility drainage network to reed beds

Matrix of reed beds consisting of 3 rows and 2 columns

Indicative connection between ditch and matrix of reed beds

Indicative connection between from reed beds to the Knighton Stream

PO2	10.01.23	UPDATE BASED ON CLIENT COMMENTS	SW	BM
P01	16.12.22	ISSUED	SW	BM
Rev	Date	Description	By	Chk

Project: **Canford EfW Facility**

Title: **Proposed Surface Water Drainage Strategy**

Client: **MVV**



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Submittal: **COORDINATION** S1

Designed By	S Whelan	Director	B McCarthy	Waterman Ref	WIE18278
Drawn By	S Whelan	Date	16/12/2022	Scales @ A1	1:1000

Project - Originator - Volume - Level - Type - Role - Number  
**18278-WIE-ZZ-XX-DR-D-92002** P02