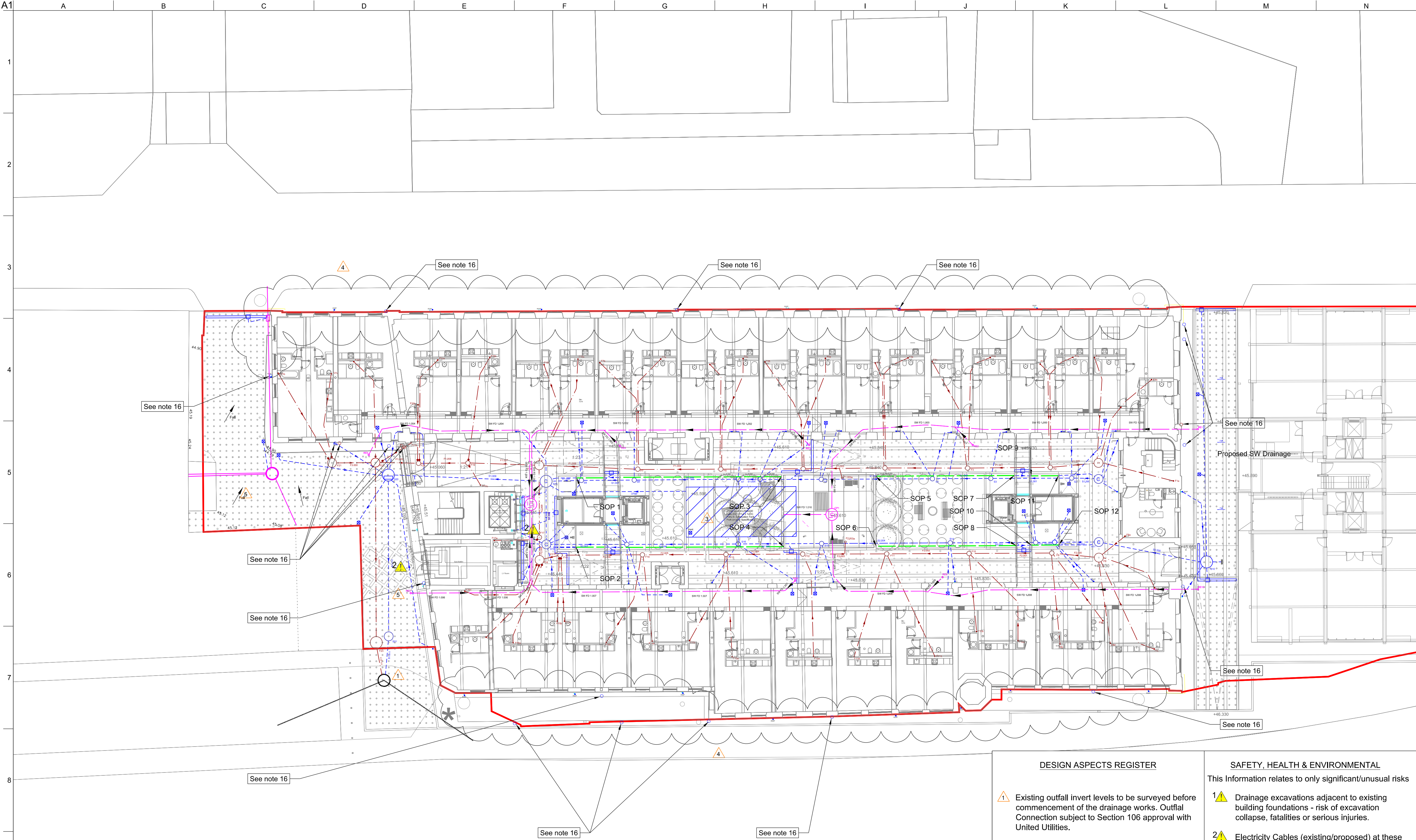




	Northing	Easting
SOP 1	398008204	385114408
SOP 2	398001909	385117286
SOP 3	398016984	385132877
SOP 4	398010734	385136059
SOP 5	398021008	385141389
SOP 6	398014677	385144401
SOP 7	398026933	385153923
SOP 8	398020659	385157055
SOP 9	398027609	385155459
SOP 10	398021341	385158391
SOP 11	398028772	385157918
SOP 12	398022515	385160877

Do not scale

Key	
	Site Boundary
	Proposed SW Drainage
	Proposed FW Drainage
	Long Radius Bends (45, 22.5, 11.25 degrees)
	Backdrop / Ramp
	Proposed SW Manhole
	Proposed FW Manhole
	Proposed Catchpit
	Proposed SW Gully
	Proposed Slot Drain ACO MD100 or Similar
	Existing Drainage
	Proposed Filter Drain
	Proposed Services
	Proposed Ground Floor Filter Drain
	Proposed Ground Floor Catch Pit
	Proposed Ground Floor Rodding Eye

- DESIGN ASPECTS REGISTER
- 1

Existing outfall invert levels to be surveyed before commencement of the drainage works. Outfall Connection subject to Section 106 approval with United Utilities.
- 2

Existing Building connections to be picked up by new drainage system. Diameters and Levels of existing connections to be surveyed before commencement of the works. Existing flows to be maintained and managed as part of temporary works.
- 3

Attenuation Tank design to allow for Construction Traffic Loading - To be confirmed by Contractor and Tank Supplier/Designer.
- 4

In Abeyance. Perimeter drainage design strategy yet to be agreed with Manchester City Council.
- 5

Final Gully positions to be coordinated with Landscape Levels
- 6

Lift Sump/Trap Details to be coordinated with Lift Specialist

- SAFETY, HEALTH & ENVIRONMENTAL
- This Information relates to only significant/unusual risks
- 1

Drainage excavations adjacent to existing building foundations - risk of excavation collapse, fatalities or serious injuries.
- 2

Electricity Cables (existing/proposed) at these locations. Risk of cable strike causing explosion, electrocution, fatalities or serious injuries.

- Notes
1. All dimensions are in mm, all levels in mAOD unless specified otherwise.
2. This map is reproduced from Ordnance Survey Material with the permission of the Ordnance Survey on behalf of the controller of her Majesty's Stationary Office (c) Crown Copyright. License Number 0100031673 (2016).
3. This drawing is copyright and if for use at the permission of Arup. This drawing should be read in conjunction with all relevant consultants drawings and specifications.
4. To be read in conjunction with all project specifications and drawings.
5. Layout is based on drawing CW SKM (SO) 900 svp gully coordinates rev c.
6. All gully and linear drainage connections are to be 150mm diameter vitrified clay pipe.
7. Final gully and channel locations to be verified on site by contractor taking into account final architect's paving layout and installation details.
8. Building Connections are based on drawing CW SKM (00) 120125 pro level 00 GA.
9. Rain Water Pipe Connection are based on drawing CW SKM (00) 120125 pro level 00 GA.
- 10.Specifications: All external drainage to be in accordance with the Civil Engineering Specification for the Water Industry (CESWI) 7th Edition and Sewers for Adoption 7th Edition.
- 11.Pipe Materials: Solid Wall PVC-U (BS EN 1401); Vitrified Clay (BS 65 and BS EN 5911); Concrete (BS EN 1916 and BS EN 5911);
- 12.Existing Foundations layout is based on Joule drawings 100 to 115 - Ext Plans and Trial Pits
- 13.All SVP to have Invert Level 1.0m below FFL. Refer to Standard Details.
- 14.FW pipes to be Ø100 installed at 1:40 unless otherwise specified on the plans or schedules. SW pipes to be Ø100 installed at 1:60 unless otherwise specified on the plans or schedules.
- 15.Services Layout based on BSD Drawing dated 26/04/2018
- 16.Surveys required to confirm existing outlets and conditions. Refer to drawing: CW-ARUP-ZZ-XX-SK-C-2401 for scope of survey.

C09	11/10/19	CD	AR	AR
Tank Room Gullies added to the drainage external gullies relocated				
C08	18/06/19	CD	AR	AR
Update to Proposed Ground Floor Filter Drain				
Rev	Date	By	Chkd	Appd

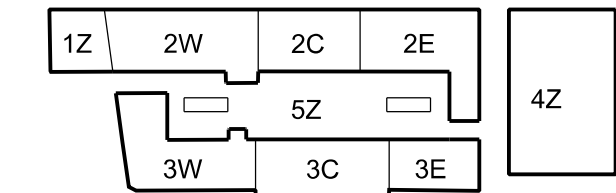
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Client
Capital & Centric

Project Title
Crusader Works

Key Plan



Drawing Title
Proposed Drainage Layout Plan

Scale at A1	1:200		
Role	Civils		
Suitability	A1 - Fit for Construction		
Arup Job No	260470-00	Rev	C09
Name	CW-ARUP-ZZ-XX-DR-C-2401		