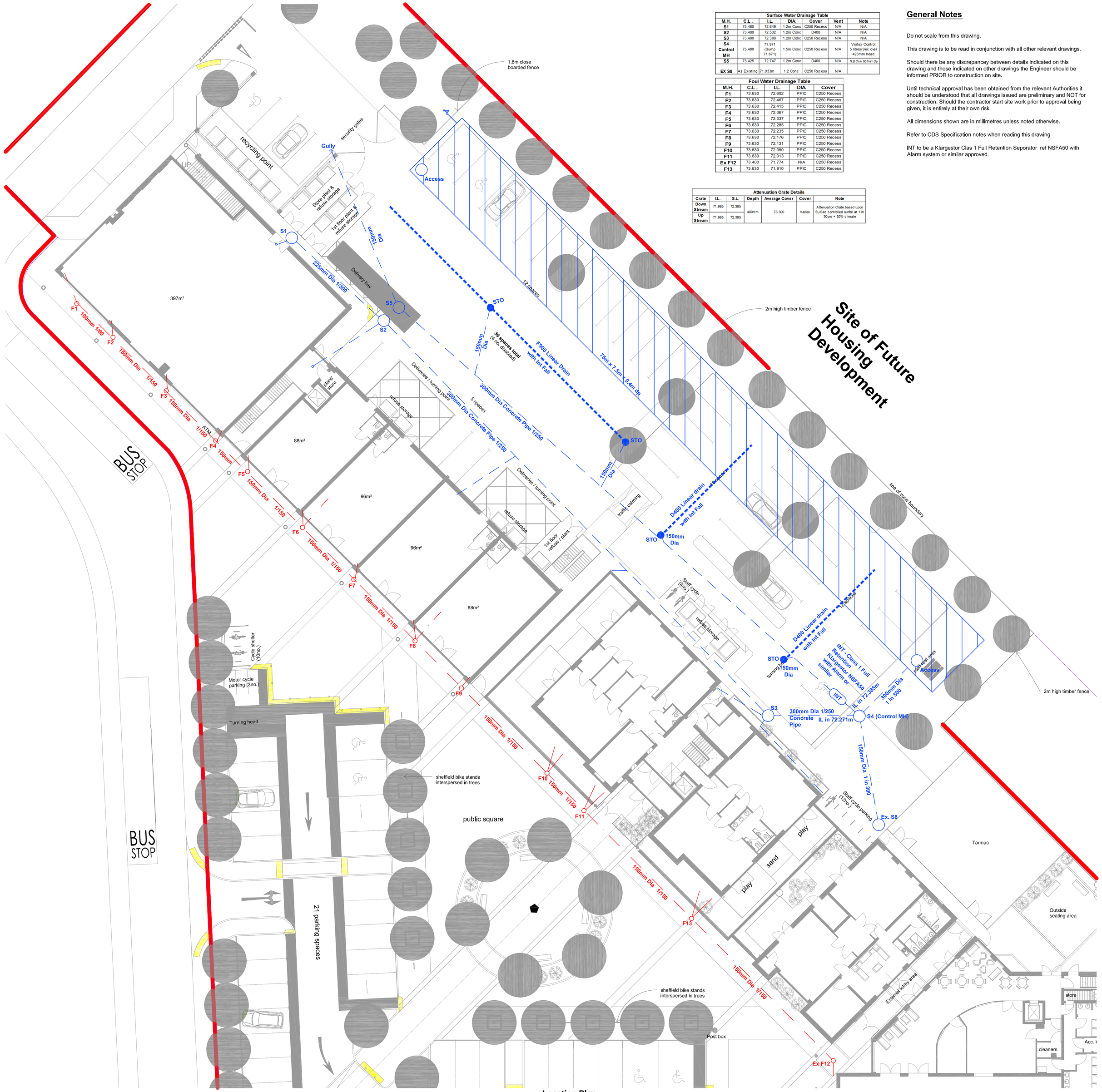
A1



Location Plan
(1:200)

Surface Water Drainage Table

M.H.	C.L.	I.L.	DIA	Cover	Vent	Note
S1	73.480	72.649	1.2m Conc	C250 Recess	N/A	N/A
S2	73.480	72.532	1.2m Conc	D400	N/A	N/A
S3	73.480	72.308	1.2m Conc	C250 Recess	N/A	N/A
S4 Control MH	73.480	71.971 (Sump 71.671)	1.5m Conc	C250 Recess	N/A	Vortex Control 5 litres/Sec over 423mm head
S5	73.425	72.747	1.2m Conc	D400	N/A	N.B Only 667mm Dp
EX S8	As Existing	71.933m	1.2 Conc	C250 Recess	N/A	

Foul Water Drainage Table

M.H.	C.L.	I.L.	DIA	Cover
F1	73.630	72.602	PPIC	C250 Recess
F2	73.630	72.467	PPIC	C250 Recess
F3	73.630	72.415	PPIC	C250 Recess
F4	73.630	72.367	PPIC	C250 Recess
F5	73.630	72.337	PPIC	C250 Recess
F6	73.630	72.285	PPIC	C250 Recess
F7	73.630	72.235	PPIC	C250 Recess
F8	73.630	72.176	PPIC	C250 Recess
F9	73.630	72.131	PPIC	C250 Recess
F10	73.630	72.050	PPIC	C250 Recess
F11	73.630	72.013	PPIC	C250 Recess
Ex F12	73.400	71.774	N/A	C250 Recess
F13	73.630	71.910	PPIC	C250 Recess

Attenuation Crate Details

Crate	I.L.	S.L.	Depth	Average Cover	Cover	Note
Down Stream	71.985	72.385	400mm	73.300	Varies	Attenuation Crate based upon 5L/Sec controlled outfall at 1 in 30yrs + 30% climate
Up Stream	71.985	72.385				

General Notes

Do not scale from this drawing.

This drawing is to be read in conjunction with all other relevant drawings.

Should there be any discrepancy between details indicated on this drawing and those indicated on other drawings the Engineer should be informed PRIOR to construction on site.

Until technical approval has been obtained from the relevant Authorities it should be understood that all drawings issued are preliminary and NOT for construction. Should the contractor start site work prior to approval being given, it is entirely at their own risk.

All dimensions shown are in millimetres unless noted otherwise.

Refer to CDS Specification notes when reading this drawing

INT to be a Klargestor Clas 1 Full Retention Seporator ref NSFA50 with Alarm system or similar approved.

CDS Standard Drainage Notes

Do not scale this drawing. All dimensions must be checked / verified on site. If in doubt ask.

ALL DISCREPANCIES NOTED ON SITE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise

This drawing to be read in conjunction with all other relevant Engineers and Architects details and CDS Drawings.

All work is to be carried out in accordance with the current British Standards, Codes of Practice and Building Regulations.

The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the Engineer PRIOR TO COMMENCEMENT OF WORKS.

All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.

Proposed drainage passing through new foundations to be sleeved with cast-in oversized pipework.

Exact location line and level of existing stubs to existing manholes in the road to be confirmed on site prior to construction.

Cover levels shown are approximate only, subject to the finalised external works and landscaping scheme.

The number and location of all RWP's is shown indicative only, all to be confirmed by Architect / M&E Contractor prior to commencement of works.

Pop-up positions for foul water appliances are shown approximate only for the purposes of underslab drainage. Exact locations to Archt's setting out to suit interior layouts etc.

All above ground and internal Surface and Foul Water pipework to specialist's design / detail. Not shown here.

Where no WC's are connected upstream, underslab FW drainage to be laid at 1:40 min. After the connection of at least 1No WC, a min. fall of 1:80 applies.

Water seal on Foul Water traps receiving condensate from freezers and other very low flow appliances, to be maintained on a regular basis to avoid drying out and subsequent passage of foul air to internal premises.

See Architect's details for all setting out dimensions to buildings and boundaries etc

All RWP's and SVP's to be fitted with roddable access plates. All foul drains to have roddable access.

All connections to road gullies and channels shall be 150mm nominal bore pipework. Connections to RWP's to be 100mm nominal bore pipework subject to confirmation of RWP sizes and/or design flow. No pipe work to be downsized in the direction of flow.

Connections to foul terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be downsized in the direction of flow.

All foul connections to be vented to atmosphere. All pop-up's located at the head of drains to be vented above ground. Above ground drainage details to be confirmed by the M+E contractor.

All un-noted buried foul pipework to be 100mm dia. unless subject to the notes above. All un-noted Storm buried pipework to be 150mm dia.

All buried pipework to be U-PVC type in accordance with WIs 4-35-01 unless otherwise noted.

As an alternative to U-PVC, buried pipework up to and including 150mm dia. may be 28KN/m strength clayware to BS EN 295; 1991.

As an alternative to U-PVC, buried pipework above 150mm dia. up to and including 300mm dia. may be 36KN/m strength clayware to BS EN 295; 1991.

As an alternative to U-PVC, buried pipework above 300mm dia. may be Class 120 (SRPC) concrete pipes to BS 5911 with spigot and socket flexible joints

All pipework entering and exiting manholes to be connected with pipe soffits level.

Pre-formed channels to be used at all manholes.

High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the Specification.

Pipe bends to be provided to suit direction of flow.

All manhole covers and frames to be Ductile Iron Heavy Duty Grade D400 double triangular to BS EN 124 unless otherwise noted.

Gully tops and manhole covers to be provided in accordance with BS EN124...

Group 1 (min. class A15).
Areas used and accessible by pedestrians and cyclists only. NO EMERGENCY VEHICLES.

Group 2 (min. class B125).
Footways, pedestrian areas, car parks. NO HGV's.

Group 4 (min. class D400).
All other areas including carriageways and HGV trafficked areas.

All manhole covers located internally, to be recessed, double seal, airtight type, aluminium or steel. Recess depth to Archt's requirements to suit finishes etc.

First flexible joint in pipes adjacent to a manhole shall be 600mm max. from inside face of manhole, connecting to rocker pipe. For pipe diameters 150mm - 450mm the rocker pipe length shall be 500mm - 750mm and for pipe diameters 451mm - 675mm the rocker pipe length shall be 750mm - 1000mm.

Manholes with outgoing pipes greater than 600mm Dia. shall be fitted with guard bars, safety chains or other approved safety devices.

All soft spots encountered in the trench formation to be removed and replaced with graded granular material unless instructed otherwise.

All pipework below road and car parking with less than 700mm cover (private) shall be protected with a 150mm min FND2 concrete surround with flexell isolation joints @ 2.0m max. centres to coincide with pipe joints.

All Specialist attentuation tanks, soakaways and water treatment units to be installed as per manufacturers installation details and specifications. Contractor to liase with specialist suppiers for confirmation of bedding and surround requirements.

All buried concrete must cater for class 2 sulphates conditions in accordance with table 1 of BRE digest 363.

The design of any temporary works required shall be the responsibility of the Contractor.

Rev.	By	Date	Details	Chkd

Drawing Status: Tender

Construction Design Solutions
Consulting Civil, Structural, Highway & Drainage Engineers
78 Wollaton Road,
Beeston,
Nottingham,
NG9 2NZ.
Tel: 0115 922 9491
Fax: 0115 922 7451
General E-mail : design @ cdsconsulting . co . uk
Web Site: www . cdsconsulting . co . uk

Client
X-Cel Construct

Project
Proposed Kingsmere Local Centre
Kingsmere Bicester

Title
Drainage Layout Plan
Pavement Sub-base Attenuation

Scale (A1)	Drawn by.	Drg. No.
As Shown	MLE	2017 7040 26F
Date. 08/05/17	Checked by. NJW	