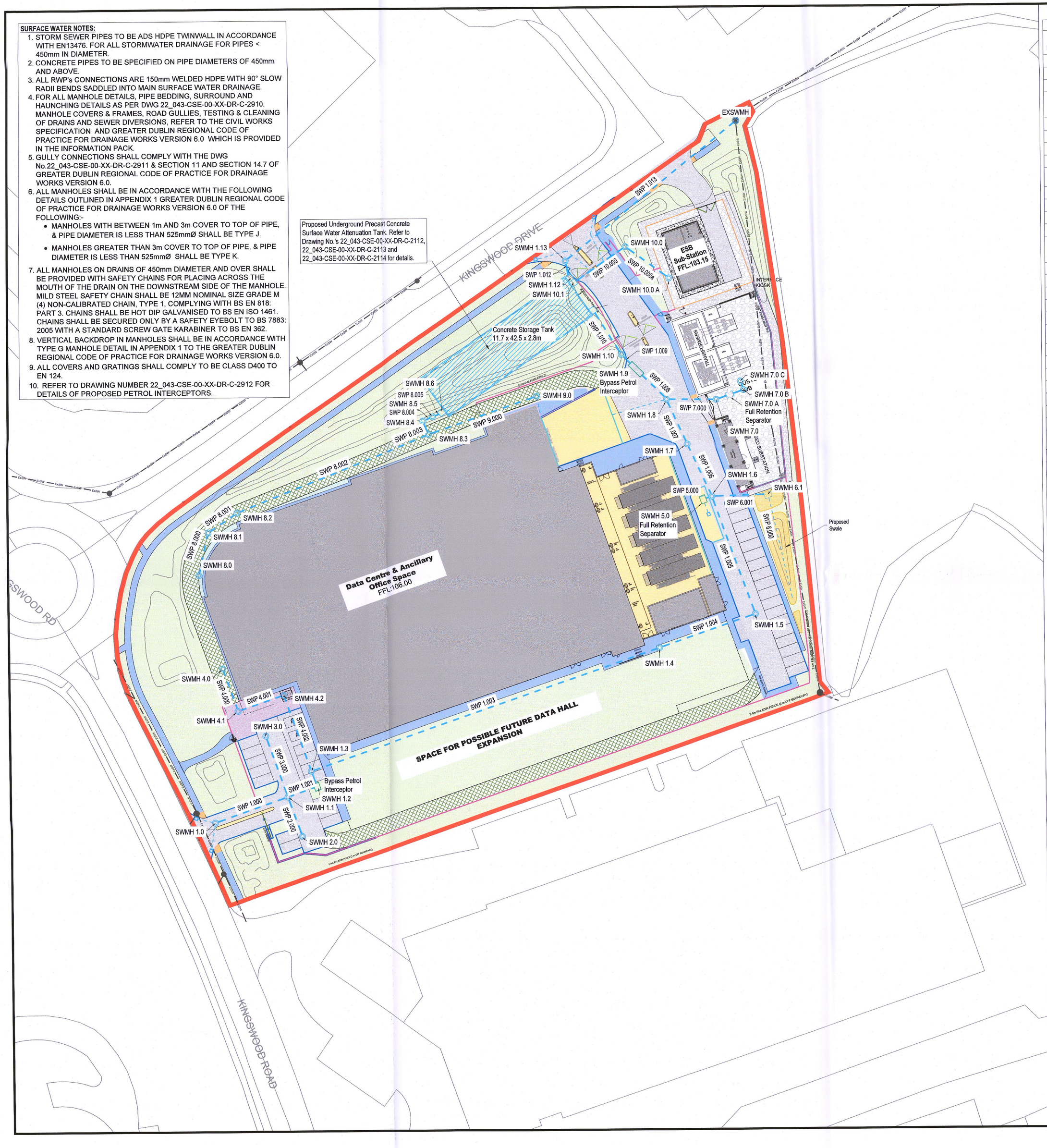
SURFACE WATER NOTES:

1. STORM SEWER PIPES TO BE ADS HDPE TWINWALL IN ACCORDANCE WITH EN13476. FOR ALL STORMWATER DRAINAGE FOR PIPES < 450mm IN DIAMETER.
2. CONCRETE PIPES TO BE SPECIFIED ON PIPE DIAMETERS OF 450mm AND ABOVE.
3. ALL RWP's CONNECTIONS ARE 150mm WELDED HDPE WITH 90° SLOW RADII BENDS SADDLED INTO MAIN SURFACE WATER DRAINAGE.
4. FOR ALL MANHOLE DETAILS, PIPE BEDDING, SURROUND AND HAUNCHING DETAILS AS PER DWG 22_043-CSE-00-XX-DR-C-2910. MANHOLE COVERS & FRAMES, ROAD GULLIES, TESTING & CLEANING OF DRAINS AND SEWER DIVERSIONS, REFER TO THE CIVIL WORKS SPECIFICATION AND GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0 WHICH IS PROVIDED IN THE INFORMATION PACK.
5. GULLY CONNECTIONS SHALL COMPLY WITH THE DWG No.22_043-CSE-00-XX-DR-C-2911 & SECTION 11 AND SECTION 14.7 OF GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0.
6. ALL MANHOLES SHALL BE IN ACCORDANCE WITH THE FOLLOWING DETAILS OUTLINED IN APPENDIX 1 GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0 OF THE FOLLOWING:-
   - MANHOLES WITH BETWEEN 1m AND 3m COVER TO TOP OF PIPE, & PIPE DIAMETER IS LESS THAN 525mmØ SHALL BE TYPE J.
   - MANHOLES GREATER THAN 3m COVER TO TOP OF PIPE, & PIPE DIAMETER IS LESS THAN 525mmØ SHALL BE TYPE K.
7. ALL MANHOLES ON DRAINS OF 450mm DIAMETER AND OVER SHALL BE PROVIDED WITH SAFETY CHAINS FOR PLACING ACROSS THE MOUTH OF THE DRAIN ON THE DOWNSTREAM SIDE OF THE MANHOLE. MILD STEEL SAFETY CHAIN SHALL BE 12MM NOMINAL SIZE GRADE M (4) NON-CALIBRATED CHAIN, TYPE 1, COMPLYING WITH BS EN 818: PART 3. CHAINS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461. CHAINS SHALL BE SECURED ONLY BY A SAFETY EYEBOLT TO BS 7883: 2005 WITH A STANDARD SCREW GATE KARABINER TO BS EN 362.
8. VERTICAL BACKDROP IN MANHOLES SHALL BE IN ACCORDANCE WITH TYPE G MANHOLE DETAIL IN APPENDIX 1 TO THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS VERSION 6.0.
9. ALL COVERS AND GRATINGS SHALL COMPLY TO BE CLASS D400 TO EN 124.
10. REFER TO DRAWING NUMBER 22_043-CSE-00-XX-DR-C-2912 FOR DETAILS OF PROPOSED PETROL INTERCEPTORS.



Surface Water Manhole Schedule							
Manhole Name	Cover Level	Upstream Invert Level	Downstream Invert Level	Manhole Type	Manhole Diameter (mm)	Manhole Depth	Comments
SWMH 1.0	CL = 106.534		SWP 1.000 = 104.760	J	1.2	1.774	
SWMH 2.0	CL = 105.785		SWP 2.000 = 104.548	J	1.2	1.237	
SWMH 3.0	CL = 105.784		SWP 3.000 = 104.559	J	1.2	1.225	
SWMH 1.1	CL = 105.954	SWP 3.000 = 104.480 SWP 1.000 = 104.480 SWP 2.000 = 104.480	SWP 1.001 = 104.480	J	1.2	1.509	
SWMH 1.2	CL = 105.881	SWP 1.001 = 104.442	SWP 1.002 = 104.322	J		1.539	Klargester Bypass Separator - NSBP003
SWMH 4.0	CL = 105.810		SWP 4.000 = 104.535	J	1.2	1.275	
SWMH 4.1	CL = 105.808	SWP 4.000 = 104.479	SWP 4.001 = 104.479	J	1.2	1.329	
SWMH 4.2	CL = 105.814	SWP 4.001 = 104.421	SWP 4.002 = 104.421	J	1.2	1.393	
SWMH 1.3	CL = 105.737	SWP 4.002 = 104.322 SWP 1.002 = 104.322	SWP 1.003 = 103.247	J	1.2	1.490	
SWMH 1.4	CL = 104.789	SWP 1.003 = 103.347	SWP 1.004 = 103.272	J	1.2	1.517	
SWMH 1.5	CL = 104.625	SWP 1.004 = 103.108	SWP 1.005 = 103.108	J	1.2	1.517	
SWMH 6.1	CL = 103.400	SWP 6.000 = 103.187	SWP 6.001 = 103.187				Catchpit
SWMH 5.0	CL = 104.421		SWP 5.000 = 103.054			1.349	Klargester Full Retention Separator - NSFP003
SWMH 1.6	CL = 103.734	SWP 1.005 = 102.904 SWP 6.001 = 103.054 SWP 5.000 = 103.054	SWP 1.006 = 102.904	J	1.2	1.536	
SWMH 1.7	CL = 103.754	SWP 1.006 = 102.809	SWP 1.007 = 102.734	J	1.2	1.540	
SWMH 7.0 C	CL = 104.000		SWP 7.000c = 103.060	J	1.2	0.995	
SWMH 7.0 B	CL = 104.000	SWP 7.000c = 103.049	SWP 7.000b = 103.049	J	1.2	0.995	
SWMH 7.0 A	CL = 104.000	SWP 7.000b = 103.031	SWP 7.000a = 102.956			1.048	Klargester Full Retention Separator - NSFP003
SWMH 7.0	CL = 104.000	SWP 7.000a = 103.938	SWP 7.000 = 102.938	J	1.2	1.066	
SWMH 1.8	CL = 104.213	SWP 1.007 = 102.654 SWP 7.000 = 102.879	SWP 1.008 = 102.654	J	1.2	1.560	
SWMH 1.9	CL = 104.270	SWP 1.008 = 102.526	SWP 1.009 = 102.426			1.822	Klargester Bypass Separator - NSBE020
SWMH 1.10	CL = 104.435	SWP 1.009 = 102.362	SWP 1.010 = 102.362			2.136	Hydrodynamic Separator CDS 0806
SWMH 1.11	CL = 104.090	SWP 1.010 = 102.201	SWP 1.011 = 102.201	K	1.2	3.409	Tank Inlet 1
SWMH 8.0	CL = 105.815		SWP 8.000 = 104.590	J	1.2	1.225	
SWMH 8.1	CL = 105.784	SWP 8.000 = 104.510	SWP 8.001 = 104.510	J	1.2	1.274	
SWMH 8.2	CL = 105.783	SWP 8.001 = 104.425	SWP 8.002 = 104.350	J	1.2	1.468	
SWMH 9.0	CL = 105.785		SWP 9.000 = 104.095	J	1.2	1.690	
SWMH 8.3	CL = 105.758	SWP 8.002 = 103.831 SWP 9.000 = 103.831	SWP 8.003 = 103.831	J	1.2	1.982	
SWMH 8.4	CL = 105.486	SWP 8.003 = 103.790	SWP 8.004 = 103.790	J	1.2	1.696	
SWMH 8.5	CL = 105.319	SWP 8.004 = 103.765	SWP 8.005 = 102.421			2.898	Hydriodynamic Separator CDS 0606
SWMH 8.6	CL = 103.151	SWP 8.005 = 102.396	SWP 8.005 = 102.396	J	1.2	2.505	Tank Inlet 2
SWMH 10.0 A	CL = 103.000		SWP 10.000a = 101.841	J	1.2	1.159	
SWMH 10.0	CL = 103.000	SWP 10.000a = 101.775	SWP 10.000 = 101.775	J	1.2	1.225	Tank Inlet 3
SWMH 10.1	CL = 103.793	SWP 10.000 = 101.706	SWP 10.001 = 101.706	K	1.2	3.147	
SWMH 1.12	CL = 103.781		SWP 1.012 = 100.631	K	1.2	3.184	Tank Outlet & Hydrobrake Manhole - Refer to drawing number 22_043-CSE-00-XX-C-2911
SWMH 1.13	CL = 103.685	SWP 1.012 = 100.592	SWP 1.013 = 100.592	K	1.2	3.146	
EXSWMH	CL = 102.330	SWP 1.013 = 100.110	ExSWP = 99.810			2.520	

Surface Water Pipe Schedule							
Pipe Number	Pipe Diameter (mmØ)	Length (m)	Upstream Invert Level	Downstream Invert Level	Slope	Pipe Backfill / Surround Information	Pipe Materials
SWP 1.000	225	18.711	104.760	104.480	1:67	DG 2	HDPE TWINWALL
SWP 2.000	225	10.197	104.548	104.480	1:150	DG 3	HDPE TWINWALL
SWP 3.000	225	15.853	104.559	104.480	1:200	DG 3	HDPE TWINWALL
SWP 1.001	225	7.469	104.480	104.442	1:200	DG 2	HDPE TWINWALL
SWP 1.002	225	4.066	104.342	104.322	1:200	DG 2	HDPE TWINWALL
SWP 4.000	225	11.095	104.535	104.479	1:200	DG 3	HDPE TWINWALL
SWP 4.001	225	11.727	104.479	104.421	1:200	DG 3	HDPE TWINWALL
SWP 4.002	225	19.785	104.421	104.322	1:200	DG 3	HDPE TWINWALL
SWP 1.003	300	90.000	104.247	103.347	1:100	DG 3	HDPE TWINWALL
SWP 1.004	375	24.568	103.272	103.108	1:150	DG 2	HDPE TWINWALL
SWP 1.005	375	30.612	103.108	102.904	1:150	DG 2	HDPE TWINWALL
SWP 6.000	225	26.625	103.453	103.187	1:100	DG 4	HDPE TWINWALL
SWP 6.001	225	13.354	103.187	103.054	1:100	DG 2	HDPE TWINWALL
SWP 5.000	225	2.243	103.069	103.054	1:150	DG 2	HDPE TWINWALL
SWP 1.006	375	11.169	102.883	102.809	1:150	DG 2	HDPE TWINWALL
SWP 1.007	450	12.035	102.734	102.654	1:150	DG 2	CONCRETE
SWP 7.000c	225	2.250	103.060	103.049	1:200	DG 3	HDPE TWINWALL
SWP 7.000b	225	3.543	103.049	103.031	1:200	DG 3	HDPE TWINWALL
SWP 7.000a	225	3.500	102.956	102.938	1:200	DG 3	HDPE TWINWALL
SWP 7.000	225	11.153	102.938	102.879	1:200	DG 3	HDPE TWINWALL
SWP 1.008	450	10.434	102.654	102.526	1:80	DG 2	CONCRETE
SWP 1.009	450	5.095	102.426	102.362	1:80	DG 2	CONCRETE
SWP 1.010	450	12.844	102.362	102.201	1:80	DG 2	CONCRETE
SWP 8.000	225	8.028	104.590	104.510	1:100	DG 3	HDPE TWINWALL
SWP 8.001	225	8.472	104.510	104.425	1:100	DG 2	HDPE TWINWALL
SWP 8.002	300	51.908	104.350	103.831	1:100	DG 2	HDPE TWINWALL
SWP 9.000	300	26.384	104.095	103.831	1:100	DG 2	HDPE TWINWALL
SWP 8.003	300	4.082	103.831	103.790	1:100	DG 2	HDPE TWINWALL
SWP 8.004	300	2.500	103.790	103.765	1:100	DG 1	HDPE TWINWALL
SWP 8.005	300	2.504	102.421	102.396	1:100	DG 1	HDPE TWINWALL
SWP 10.000a	225	13.106	101.841	101.775	1:200	DG 2	HDPE TWINWALL
SWP 10.000	225	13.851	101.775	101.706	1:200	DG 2	HDPE TWINWALL
SWP 1.012	225	4.046	100.631	100.595	1:111	DG 2	HDPE TWINWALL
SWP 1.013	225	53.594	100.595	100.110	1:111	DG 2	HDPE TWINWALL

SURFACE WATER SCHEDULE NOTE:

1. REFER TO DRAWING 22_043-CSE-00-XX-DR-C-2910 FOR STANDRARD TRENCH DETAILS.
2. REFER TO SURFACE WATER NOTE 6 REGARDING MANHOLE TYPES.

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DRAWING IS PRODUCED USING THE IRISH TRANSVERSE MERCATOR (ITM) GEOGRAPHIC COORDINATE SYSTEM

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SURFACE WATER LEGEND

- Proposed Surface Water
- Proposed Surface Water Manhole
- Proposed Road Gully
- Existing Surface Water
- Existing Surface Water Manhole
- ACO Drain
- Proposed Swale
- Proposed Surface Water Attenuation Tank

SITE LEGEND

- Proposed Soft Landscape
- Proposed Concrete Pavement
- Proposed Footpath
- Proposed Roads
- Proposed Building
- Granite Paving (Refer to Architects Details)
- Space for Future Data Hall Expansion
- Grasscrete (Permeable Surface)
- Proposed Gravel Surface
- Outline of the Site Subject to this application
- Proposed 2.6 m Palisade Fence
- Proposed 2.4 m Paladin Fence
- Proposed Security Gates/Barriers to Architects Details
- Proposed Kerb
- Proposed Retaining Wall
- Proposed Tactile Paving & Drop Kerb. Refer to Drawing No. 2900 for Details.

Rev	Description	Drawn	Checked	Date
P02	PLANNING ISSUE	LT	CD	14/07/22
P01	FOR INFORMATION	KB	CD	23/05/22

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Client: K2 STRATEGIC INFRASTRUCTURE IRELAND LTD.

Project: K2 DATACENTRE

Dwg. Title: PROPOSED SURFACE WATER DRAINAGE LAYOUT PLAN

Drawn By: LT | Date: 09/05/22 | CSEA Job No.: 22_043

Checked By: CD | Scale: 1:500 @ A1

Project Code	Originator	Zone/ Phase	Level	Type	Role	Dwg. No.
22_043	CSE	00	XX	DR	C	2110

Status Code: S0 — Suitability Description: WORK IN PROGRESS

Revision: P02 — Project Status: PRELIMINARY