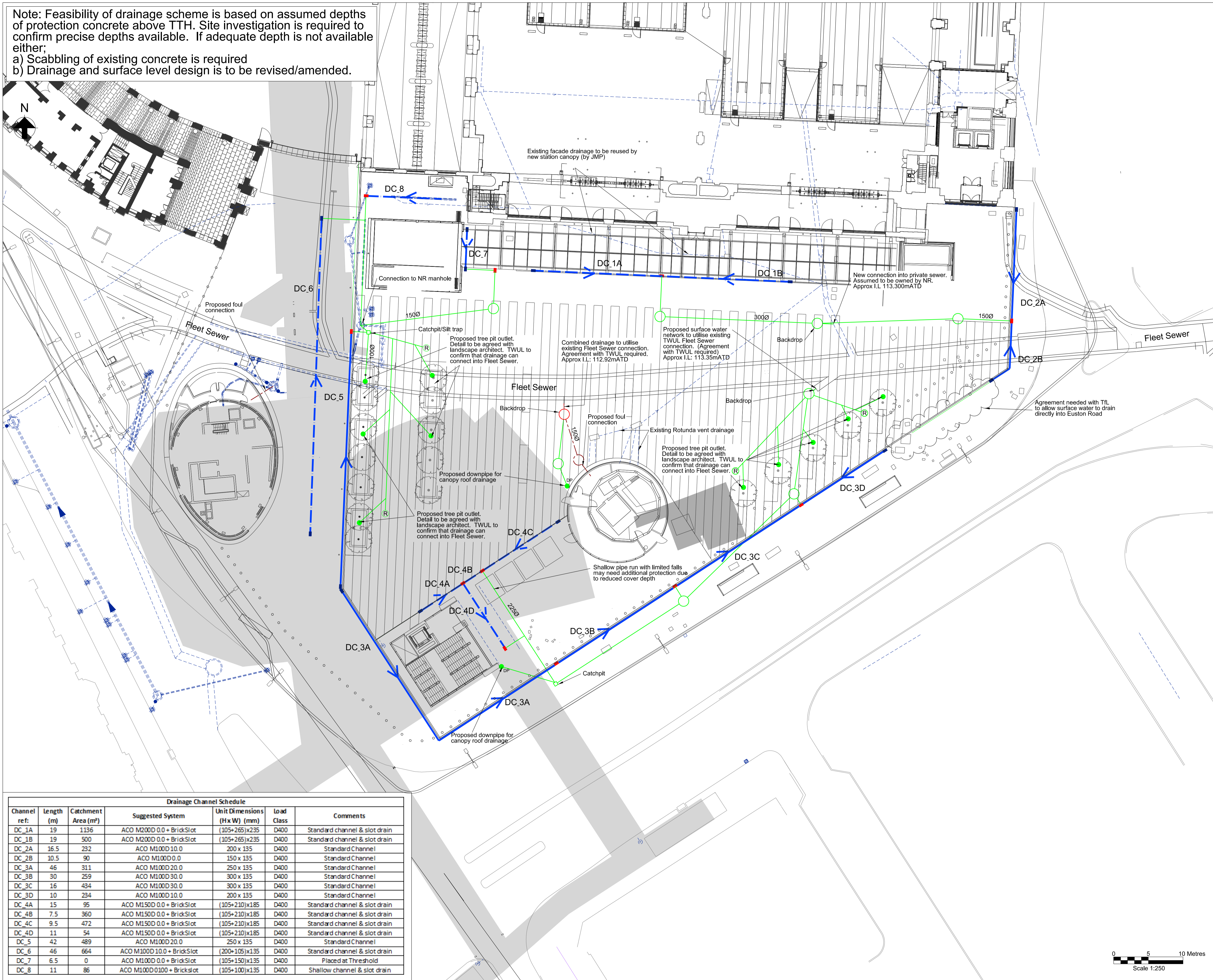


Note: Feasibility of drainage scheme is based on assumed depths of protection concrete above TTH. Site investigation is required to confirm precise depths available. If adequate depth is not available either;
a) Scabbling of existing concrete is required
b) Drainage and surface level design is to be revised/amended.



- General Notes:**
- Do not scale from this drawing. All dimensions are to be checked on site and any discrepancies noted in writing to the Employer's Representative. All dimensions are in millimetres unless noted otherwise.
 - Where indicated, all levels are in metres above tunnel datum (ATD), Tunnel Datum (TD) = Ordnance Datum Newlyn (ODN) +100m.
 - Drawings are based on survey data and may not accurately represent what is physically present.
 - Drawing to be read in conjunction with Architectural Specification and other relevant information, including the schedules and Engineer's documents.

- Notes:**
- The drainage strategy presented on this drawing has been designed to accommodate a Category 2 Storm to BS EN 752:2008, with a return period of 1 in 5yrs. A climate change factor of 10% has been added.
 - The drainage layout, has been designed to suit Stanton Williams architectural design as received 26th May 2011.
 - Discussions with Network Rail will be required regarding maintenance strategies for slot drains and channels.
 - The primary drainage layout has been designed to suit a 135mm wide channel by ACO Technologies PLC. Intermediate slot drains have been designed upon the 'BrickSlot' unit also by ACO.
 - Site investigation required to confirm available depth above sub-station structure.
 - For all drainage construction details refer to drawings 021 & 022.
 - All levels are in metres Above Track Datum (ATD).

- Key:**
- Proposed Linear Drainage Channel. Outlet shown in red. (ACO unit M100D or similar approved)
 - Proposed Linear Slot Drain. Outlet shown in red. (ACO "BrickSlot" or similar approved)
 - Proposed "Dummy" Drainage Channel. (Grate to match ACO unit M100D linear drainage channel)
 - Proposed surface water drainage network
 - DP Proposed surface water downpipe/inlet
 - R Proposed rodding eye
 - Proposed foul drainage network
 - Proposed combined manhole/sewer
 - Existing Network Rail owned stormwater drainage (To be retained)
 - Existing underground structure

04	09.09.2011	MJH	ADP	CNR
Issued for Planning				
03	26.07.2011	MJH	ADP	CNR
Issued to SW for Grip 4 & Planning submission				
02	04.07.2011	MJH	ADP	CNR
Grip 4, work in progress, for costing purposes only				
01	22.06.2011	MJH	ADP	CNR
Issued for Discussion				
Issue	Date	By	Chkd	Appd
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ARUP

Job Title
King's Cross Station
Redevelopment Programme
Package 7

Drawing Title
Proposed Surface & Foul Water Drainage

Scale at A1
1:250
Document Reference No
ENG-DWG-SWA
Drawing Status
For Planning

OAP Job No	Drawing No	Rev.
216560-00	SSQ-CLG-0006	04

Drainage Channel Schedule						
Channel ref:	Length (m)	Catchment Area (m²)	Suggested System	Unit Dimensions (HxW) (mm)	Load Class	Comments
DC_1A	19	1136	ACO M200D 0.0 + BrickSlot	(105+265)x235	D400	Standard channel & slot drain
DC_1B	19	500	ACO M200D 0.0 + BrickSlot	(105+265)x235	D400	Standard channel & slot drain
DC_2A	16.5	232	ACO M100D 10.0	200 x 135	D400	Standard Channel
DC_2B	10.5	90	ACO M100D 0.0	150 x 135	D400	Standard Channel
DC_3A	46	311	ACO M100D 20.0	250 x 135	D400	Standard Channel
DC_3B	30	259	ACO M100D 30.0	300 x 135	D400	Standard Channel
DC_3C	16	434	ACO M100D 30.0	300 x 135	D400	Standard Channel
DC_3D	10	234	ACO M100D 10.0	200 x 135	D400	Standard Channel
DC_4A	15	95	ACO M150D 0.0 + BrickSlot	(105+210)x185	D400	Standard channel & slot drain
DC_4B	7.5	360	ACO M150D 0.0 + BrickSlot	(105+210)x185	D400	Standard channel & slot drain
DC_4C	9.5	472	ACO M150D 0.0 + BrickSlot	(105+210)x185	D400	Standard channel & slot drain
DC_4D	11	54	ACO M150D 0.0 + BrickSlot	(105+210)x185	D400	Standard channel & slot drain
DC_5	42	489	ACO M100D 20.0	250 x 135	D400	Standard Channel
DC_6	46	664	ACO M100D 10.0 + BrickSlot	(200+105)x135	D400	Standard channel & slot drain
DC_7	6.5	0	ACO M100D 0.0 + BrickSlot	(105+150)x135	D400	Placed at Threshold
DC_8	11	86	ACO M100D 0100 + Brickslot	(105+100)x135	D400	Shallow channel & slot drain

