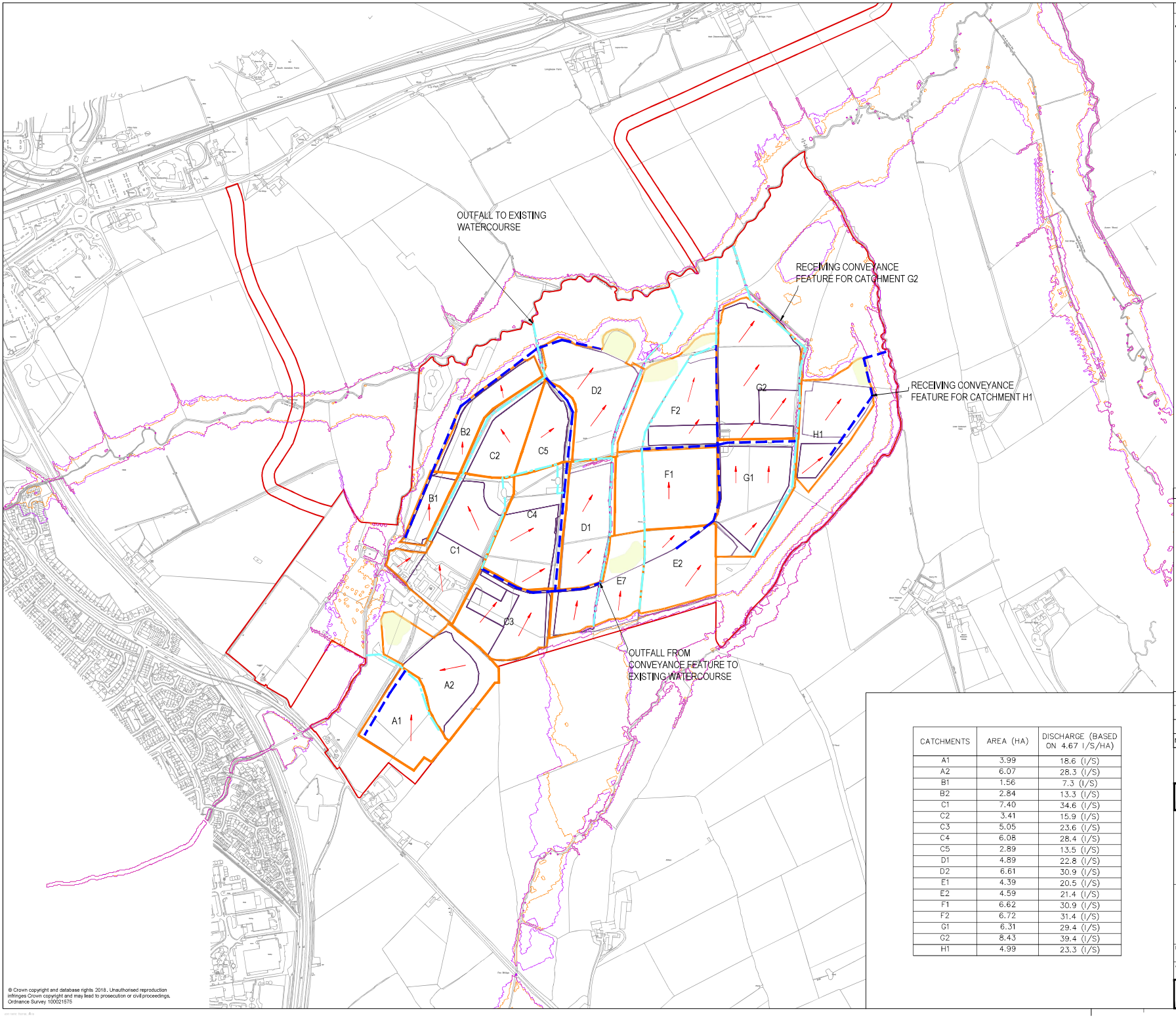

NOTES:

- THIS SURFACE WATER MANAGEMENT STRATEGY (SWMS) SETS OUT THE KEY ASSUMPTIONS AND CONSIDERATIONS THAT HAVE BEEN USED IN THE DESIGN AND INTEGRATION OF SUSTAINABLE DRAINAGE SYSTEMS (SUDS) WITHIN THE DEVELOPMENT PROPOSALS.
- THE FOLLOWING SITE CONSIDERATIONS HAVE BEEN USED TO PROVIDE THIS PRELIMINARY STRATEGY:
  1. TOPOGRAPHICAL SURVEY- GREENHATCH GROUP DRAWING 18422_OGL
  2. MASTERPLAN - PLANIT - IE LLP DRAWING PL1461.1-PLA-00-XX-DR-U-0008-S3-P03
- SUDS ARE TO BE PROVIDED IN ACCORDANCE WITH CIRIA C753 AND TO BE LOCATED OUTSIDE OF POST DEVELOPMENT 1% +CC FLOODPLAIN EXTENTS.
- ADOPTION AND MAINTENANCE TO BE UNDERTAKEN IN LINE WITH THE LONG TERM MANAGEMENT PLAN SET OUT IN THE FRA.
- THE FOLLOWING ASSUMPTIONS HAVE BEEN USED IN THE SWMS DESIGN
  1. EACH DEVELOPMENT PARCEL HAS BEEN ASSUMED TO BE 60% IMPERMEABLE FOR RESIDENTIAL AREAS AND 80% IMPERMEABLE FOR COMMERCIAL AREAS, WITH A TOTAL IMPERMEABLE AREA OF 39.3 HA
  2. NO INFILTRATION POTENTIAL AT SITE
  3. LIMITING DISCHARGE RATE OF 4.67l/s/ha (MEAN ANNUAL GREENFIELD RUNOFF RATE) FOR ALL EVENTS UP TO 1% AEP + CLIMATE CHANGE EVENT
  4. DESIGN UNDERTAKEN IN ACCORDANCE WITH BEST PRACTICE & NPPF
  5. ADDITIONAL ECOLOGICAL & BIODIVERSITY BENEFITS TO BE PROVIDED WITHIN SUDS SUCH AS PLANTING, REED BEDS, OR VARYING PERMANENT WATER DEPTHS WHERE FEASIBLE
  6. ADEQUATE ATTENUATION IS TO BE PROVIDED WITHIN EACH CATCHMENT TO MEET ALLOWABLE DISCHARGE RATES, FINAL FORM AND LOCATION OF ATTENUATION TO BE CONFIRMED AT RESERVED MATTER APPLICATION STAGE FOR EACH CATCHMENT.,
  7. EXACT DETAIL OF ONSITE DRAINAGE TO BE CONFIRMED THROUGH DETAILED DESIGN. THIS CAN BE ACHIEVED THROUGH PROVISION OF SWALES, DITCHES, PERMEABLE PAVING OR OTHER FORMS OF SUDS AND IN ACCORDANCE WITH THE SUDS VISION FOR NEW EASTERN VILLAGES (NEV) SUPPLEMENTARY PLANNING DOCUMENT (SPD) - FEBRUARY 2017
  8. INLINE NON RETURN CHAMBER SHALL BE FITTED TO ALL OUTFALLS POINTS TO THE RECEIVING WATERCOURSE TO PREVENT BACKFLOW INTO THE SWALE.
  9. ALL SUDS FEATURES WITHIN THE SITE SHALL BE LOCATED ABOVE THE 1:100 YEAR +CC FLOOD LEVEL.
  10. CATCHMENTS TO OUTFALL TO EXISTING FIELD DRAINS AND WATERCOURSES LOCATED WITHIN THE SITE BOUNDARY. INDICATIVE LOCATION OF ADDITIONAL CHANNELS OR SWALES REQUIRED FOR CONVEYANCE OF SURFACE WATER RUNOFF TO EXISTING FEATURES SHOWN.
  11. FINAL SIZE OF NEW FEATURES TO BE CONFIRMED AT RESERVED MATTER APPLICATION STAGE, IN ACCORDANCE WITH THE SUDS VISION FOR NEW EASTERN VILLAGES (NEV) SUPPLEMENTARY PLANNING DOCUMENT (SPD) - FEBRUARY 2017.

KEY:

- SITE BOUNDARY
- FLOOD PLAIN EXTENTS 1 IN 100 YEAR + 70% CC
- FLOOD PLAIN EXTENTS 1 IN 100 YEAR + 35% CC
- PROPOSED CATCHMENT AREAS
- INDICATIVE OVERLAND FLOW ROUTES
- OVERLAND CHANNEL FOR COLLECTION AND CONVEYANCE
- RETAINED WATERCOURSES
- CATCHMENT BOUNDARIES

XREFS:
x-OS Data
x-sw_drainage_strategy
x-red_line_boundary
x-Site Topo Survey
x-pba-100yr+35cc-floodplain
x-pba-100yr+70cc-floodplain
x-sw_catchments

CATCHMENTS	AREA (HA)	DISCHARGE (BASED ON 4.67 l/S/HA)
A1	3.99	18.6 (l/S)
A2	6.07	28.3 (l/S)
B1	1.56	7.3 (l/S)
B2	2.84	13.3 (l/S)
C1	7.40	34.6 (l/S)
C2	3.41	15.9 (l/S)
C3	5.05	23.6 (l/S)
C4	6.08	28.4 (l/S)
C5	2.89	13.5 (l/S)
D1	4.89	22.8 (l/S)
D2	6.61	30.9 (l/S)
E1	4.39	20.5 (l/S)
E2	4.59	21.4 (l/S)
F1	6.62	30.9 (l/S)
F2	6.72	31.4 (l/S)
G1	6.31	29.4 (l/S)
G2	8.43	39.4 (l/S)
H1	4.99	23.3 (l/S)

Mark	Revision	Date	Drawn	Chkd	Appd
B	DRAWING AMENDMENTS	17.07.19	OT	RL	ET
A	DRAWING AMENDMENTS	11.07.19	OT	RL	ET

SCALING NOTE: Do not scale from this drawing. If in doubt, ask.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status
FOR INFORMATION

LOTMEAD FARM VILLAGES, SWINDON

SURFACE WATER MANAGEMENT STRATEGY

Client
AINSCOUGH STRATEGIC LAND

Date of 1st Issue	Designed	Drawn
01.02.19	RP	RP
A1 Scale	Checked	Approved
1:5000	ET	ET

Drawing Number: 27970/4005/001
Revision: B

pba peterbrett
now part of Stantec
peterbrett.com
© Peter Brett Associates LLP
BIRMINGHAM
Tel 0121 633 2900

© Crown copyright and database rights 2018. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordinance Survey 100021575