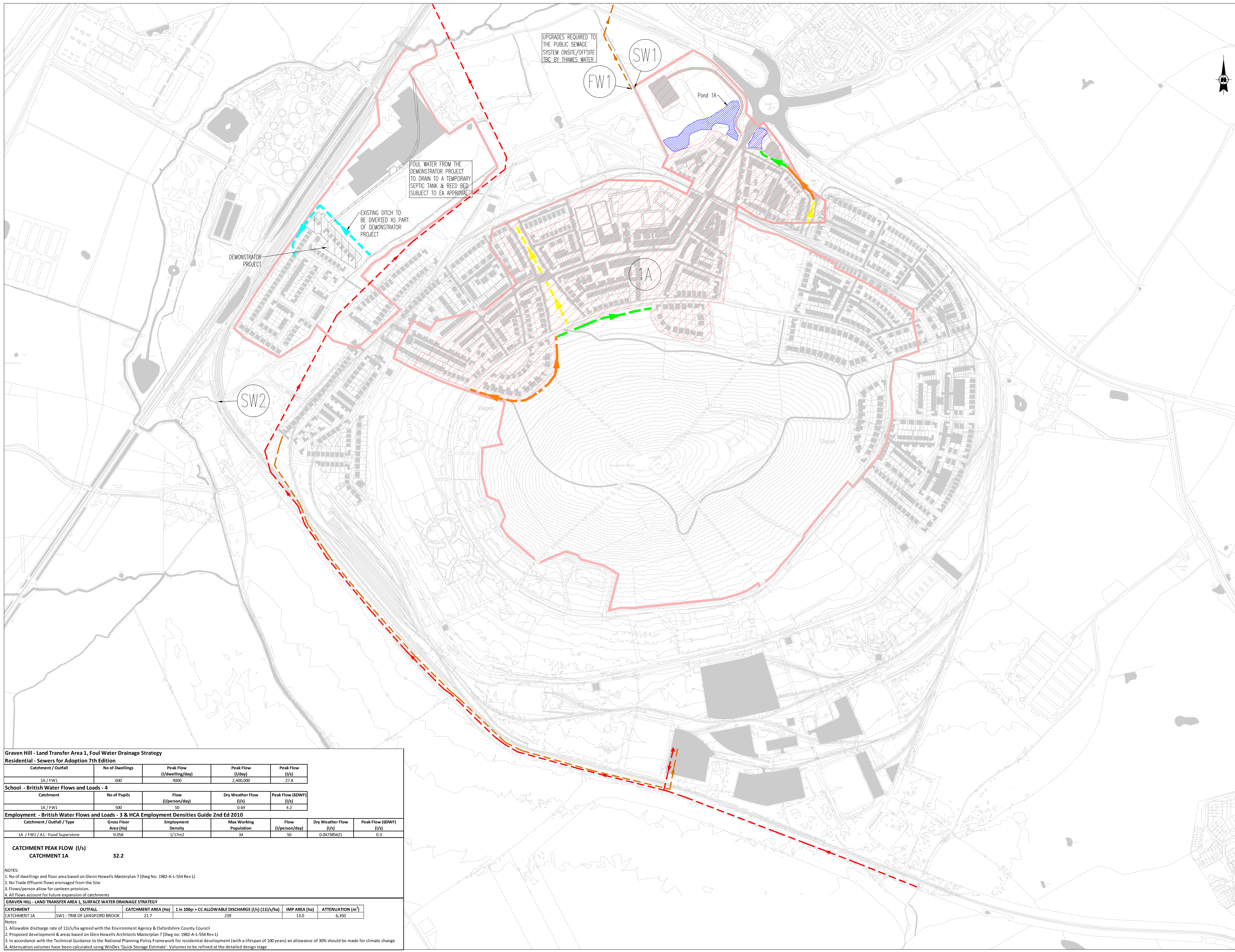


E. Waterman Drawings



This drawing should not be scaled. Dimensions to be verified on site.
 Any discrepancies should be referred to the Engineer prior to work being put in hand.
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GENERAL NOTES
 1. OS DATA, TOPOGRAHICAL SURVEY AND LEVEL DATA PROVIDED BY GLENN HOWELLS ARCHITECTS ON 30/0 OCTOBER 2013
 2. ADDITIONAL DRAINAGE SURVEY INFORMATION PROVIDED BY MK SURVEYS ON 05TH DECEMBER 2014.
 3. LAND TRANSFER AREA 1 BOUNDARY BASED ON GLENN HOWELLS ARCHITECTS DRAWING NO. 1982-A-L-554 REV L
 4. UPGRADES REQUIRED TO THE ONSITE & OFFSITE PUBLIC SEWERS, RISING MAINS AND SEWAGE TREATMENT WORKS TO BE CONFIRMED BY THAMES WATER
 5. DEVELOPMENT TO BE CONSTRUCTED IN LAND TRANSFER AREA 1 BASED ON GLENN HOWELLS ARCHITECTS DRAWING NO. 1982-A-L-551 REV K

- KEY:**
- LAND TRANSFER AREA 1 BOUNDARY
 - CATCHMENT 1A
 - DEMONSTRATOR PROJECT
 - ATTENUATION POND
 - OUTFALL
 SW1 - TRIBUTARY OF THE LANGFORD BROOK
 SW2 - TRIBUTARY OF THE LANGFORD BROOK
 - OUTFALL TO FOUL SEWERS
 - PROPOSED DITCH
 - EXISTING DITCH
 - SWALES
 - STEEP SWALES (REQUIRING CHECK DAMS)
 - EXISTING PUBLIC FOUL SEWER
 - EXISTING PUBLIC RISING MAIN
 - PROPOSED F/W RISING STATION
 - PROPOSED F/W RISING MAIN
 - PROPOSED SW RISING STATION
 - PROPOSED SW RISING MAIN

Graven Hill - Land Transfer Area 1, Foul Water Drainage Strategy
Residential - Sewers for Adoption 7th Edition

Catchment / Outfall	No of Dwellings	Peak Flow (l/dwelling/day)	Peak Flow (l/s)	Peak Flow (l/s)
1A / FW1	600	4000	2,400,000	27.8

Catchment	No of Pupils	Flow (l/person/day)	Dry Weather Flow (l/s)	Peak Flow (GDWF) (l/s)
1A / FW1	500	50	0.69	4.2

Catchment / Outfall / Type	Gross Floor Area (Ha)	Employment Density	Max Working Population	Flow (l/person/day)	Dry Weather Flow (l/s)	Peak Flow (GDWF) (l/s)
1A / FW1 / A1 - Food Superstore	0.058	1/17m2	34	50	0.047385621	0.3

CATCHMENT PEAK FLOW (l/s)
CATCHMENT 1A 32.2

NOTES:
 1. No of dwellings and floor area based on Glenn Howells Masterplan 7 (Dwg No: 1982-A-L-554 Rev L)
 2. No Trade Effluent flows envisaged from the Site
 3. Flows/person allow for canteen provision.
 4. All flows account for future expansion of catchments

CATCHMENT	OUTFALL	CATCHMENT AREA (Ha)	1 in 100yr + CC ALLOWABLE DISCHARGE (l/s) (11l/s/ha)	IMP AREA (ha)	ATTENUATION (m³)
CATCHMENT 1A	SW1 - TRIB OF LANGFORD BROOK	21.7	239	13.0	6,350

NOTES:
 1. Allowable discharge rate of 11l/s/ha agreed with the Environment Agency & Oxfordshire County Council
 2. Proposed development & areas based on Glen Howells Architects Masterplan 7 (Dwg no: 1982-A-L-554 Rev L)
 3. In accordance with the Technical Guidance to the National Planning Policy Framework for residential development (with a lifespan of 100 years) an allowance of 30% should be made for climate change
 4. Attenuation volumes have been calculated using WinDes 'Quick Storage Estimate'. Volumes to be refined at the detailed design stage

Rev	Date	Description	By
A03	30.01.13	UPDATED FOR MASTERPLAN 7 & LATEST SURVEY INFO	PJ
A02	18.11.13	UPDATED TO ACCOMMODATE LATEST LAND TRANSFER AREAS AND DEVELOPMENT LAYOUT	DGN
A01	05.11.13	ISSUED	DGN

Project: **GRAVEN HILL**
 Title: **LAND TRANSFER AREA 1 OUTLINE DRAINAGE STRATEGY**
 Client: **CHERWELL DISTRICT COUNCIL**



Designed by	Checked by	DGN	Project	
PJ	DGN		CIV15119	
Drawn by	Date	Scale	Revision	
PJ	NOV 2013	1:1	0	
Author	Zone	Category	Number	Revision
SA	92	201	A03	