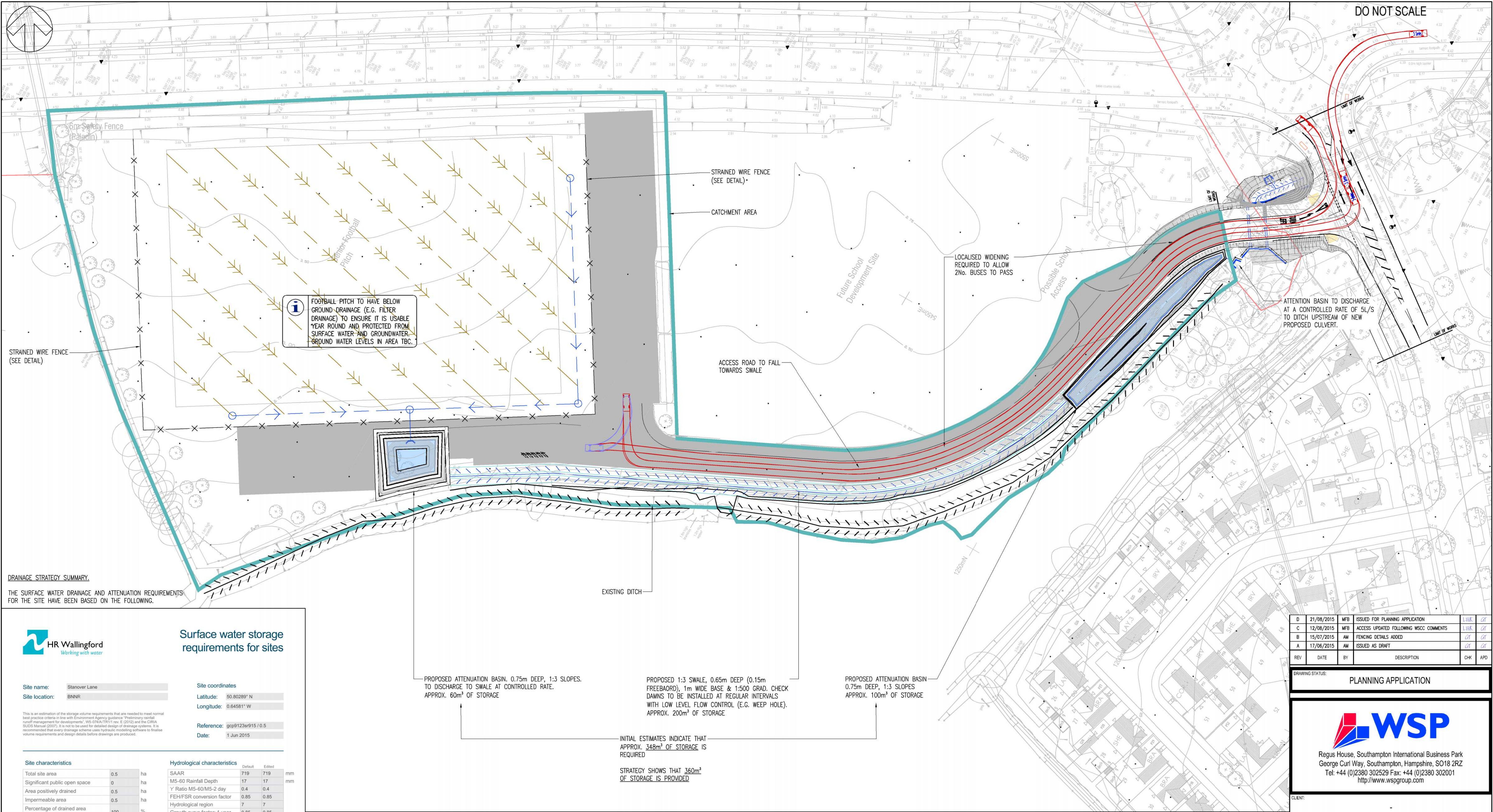


\\SERO1EXE1UK.UK\WSPGROUP\COM\PROJECTS\11030854_FELPHAM_BOGNOR\DRAWINGS\AUTOCAD\AA_SPORTS_PITCH_ACCESS\D-701.DWG 21/08/2015 10:37:21 Bdy. Mark



DRAINAGE STRATEGY SUMMARY

THE SURFACE WATER DRAINAGE AND ATTENUATION REQUIREMENTS FOR THE SITE HAVE BEEN BASED ON THE FOLLOWING.



Surface water storage requirements for sites

Site name: Stanover Lane
Site location: BNNR
Site coordinates
Latitude: 50.80289° N
Longitude: 0.84581° W

Reference: gcp9123sr915 / 0.5
Date: 1 Jun 2015

Site characteristics

Total site area	0.5	ha
Significant public open space	0	ha
Area positively drained	0.5	ha
Impermeable area	0.5	ha
Percentage of drained area that is impermeable	100	%
Impervious area drained via infiltration	0	ha
Return period for infiltration system design	10	year
Impervious area drained to rainwater harvesting systems	0	ha
Return period for rainwater harvesting system design	10	year
Compliance factor for rainwater harvesting system design	66	%
Net site area for storage volume design	0.5	ha

Hydrological characteristics

	Default	Edited	
SAAR	719	719	mm
M5-60 Rainfall Depth	17	17	mm
'r' Ratio M5-60/M5-2 day	0.4	0.4	
FEH/FSR conversion factor	0.85	0.85	
Hydrological region	7	7	
Growth curve factor: 1 year	0.85	0.85	
Growth curve factor: 10 year	1.62	1.62	
Growth curve factor: 30 year	2.3	2.3	
Growth curve factor: 100 year	3.19	3.19	

Design criteria

Climate change allowance factor	1.3
Urban creep allowance factor	1
Interception rainfall depth	5

Greenfield runoff rates

	Default	Edited	
Qbar	1.48	1.48	l/s
1 in 1 year	5.00	5.00	l/s
1 in 30 years	5.00	5.00	l/s
1 in 100 years	5.00	5.00	l/s

Estimated storage volumes

	Default	Edited	
Interception storage	20.00	20.00	m³
Attenuation storage	210.36	210.36	m³
Long term storage	118.25	118.25	m³
Treatment storage	60.00	60.00	m³
Total storage	348.61	348.61	m³

HR Wallingford Ltd, the Environment Agency and any local authority are not liable for the performance of a drainage scheme which is based upon the output of this report.

www.hrwallingford.com

This is an estimation of the storage volume requirements that are needed to meet normal best practice criteria in line with Environment Agency guidance 'Provisionary rainfall runoff management for developments' WS-076A/TPR11 rev. E (2012) and the CIRIA GUID Manual (2007). It is not to be used for detailed design of drainage systems. It is recommended that every drainage scheme uses hydraulic modelling software to finalise volume requirements and design details before drawings are produced.

Methodology

Greenfield runoff method	IH124
Volume control approach	Use Long Term Storage
Qbar estimation method	Calculate from SPR and SAAR
SPR estimation method	Calculate from SOIL type
SOIL type	3
HOST class	N/A
SPR	0.37

Reproduced from the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office. Licence no. 100048735. Crown copyright reserved.

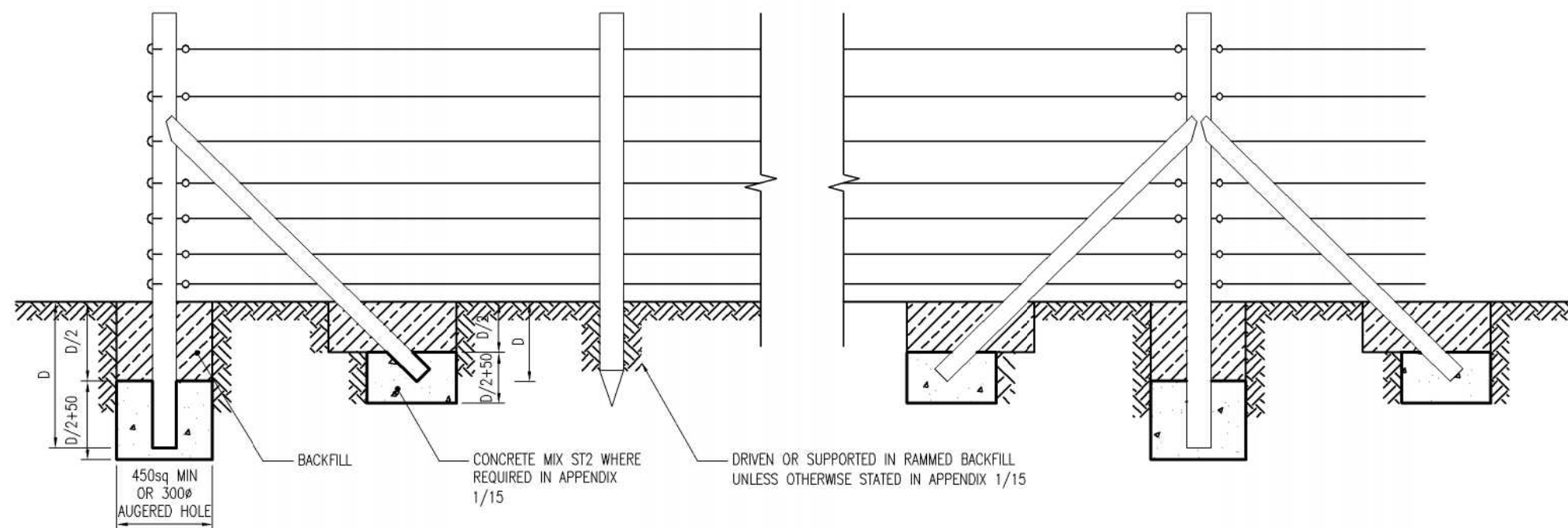
PROPOSED ATTENUATION BASIN, 0.75m DEEP, 1:3 SLOPES. TO DISCHARGE TO SWALE AT CONTROLLED RATE. APPROX. 60m³ OF STORAGE

PROPOSED 1:3 SWALE, 0.65m DEEP (0.15m FREEBOARD), 1m WIDE BASE & 1:500 GRAD. CHECK DAMS TO BE INSTALLED AT REGULAR INTERVALS WITH LOW LEVEL FLOW CONTROL (E.G. WEEP HOLE). APPROX. 200m³ OF STORAGE

PROPOSED ATTENUATION BASIN 0.75m DEEP, 1:3 SLOPES APPROX. 100m³ OF STORAGE

INITIAL ESTIMATES INDICATE THAT APPROX. 348m³ OF STORAGE IS REQUIRED

STRATEGY SHOWS THAT 360m³ OF STORAGE IS PROVIDED



DETAIL FOR TIMBER POSTS
NOT TO SCALE

REV	DATE	BY	DESCRIPTION	CHK	APD
D	21/08/2015	MFB	ISSUED FOR PLANNING APPLICATION	LWR	GT
C	12/08/2015	MFB	ACCESS UPDATED FOLLOWING WSCC COMMENTS	LWR	GT
B	15/07/2015	AM	FENCING DETAILS ADDED	GT	GT
A	17/06/2015	AM	ISSUED AS DRAFT	GT	GT

DRAWING STATUS: PLANNING APPLICATION



Regus House, Southampton International Business Park
George Curl Way, Southampton, Hampshire, SO18 2RZ
Tel: +44 (0)2380 302529 Fax: +44 (0)2380 302001
<http://www.wspgroup.com>

CLIENT:

ARCHITECT:

PROJECT: BOGNOR NORTHERN RELIEF ROAD

TITLE: SPORTS PITCH DRAINAGE AND ACCESS STRATEGY

SCALE @ A1: 1:500
CHECKED: GT
APPROVED: GT

CAD FILE: D-701
DESIGN-DRAWN: AM
DATE: May 2015

PROJECT No: 11030854
DRAWING No: 0854/GA/701
REV: D

© WSP Group Ltd