

DESIGN & ACCESS STATEMENT

**PROPOSED DEVELOPMENT
THE OLD WOOD YARD,
CUTTY LANE, BARNLEY**

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7.0 Summary

This statement is submitted in support of a Planning Application for the construction of a development comprising 4 No new build flats on disused land between School Hill and Cutty Lane, Old Town, Barnsley and documents the process by which the final scheme was arrived at.

In drafting the proposals for the development, account has been taken of the site's history, its characteristics and its surroundings as well as Central Government guidance, local Planning Policy and other material considerations.

1.0 Location

The land, which is the subject of development proposals, comprises a parcel of derelict land lying between School Street and Cutty Lane accessed from Cutty Lane. Rights of access also exist from School Street.

A site location plan is attached at Appendix A.

2.0 Site Assessment

2.1 Background

The site, with an area of 599m² or 0.05 hectares, is bounded by tall brick walls on the Eastern and Southern boundaries and by timber and concrete fencing along its Western boundary and is surrounded by housing on three sides with a vehicle repair business to the east. Land within the site lies higher than adjacent land to the West and falls gently from the South to the North. Land adjacent to the East boundary has been built up higher than the site.

The site currently comprises derelict land occupied by the remains of joiners workshops substantially demolished at the start of 2007 ahead of proposed site clearance and development under a previously approved planning permission for five flats with associated parking Ref: B/04/1345/BA, granted on 13 August 2004. Work on the previously approved development was halted shortly after it was begun due to market conditions since which time the approval has lapsed.

Chris Carr Associates have been instructed by Mr W Padgett to submit a planning application for a revised scheme for four No flats with associated parking and amenity.

A photographic record of the site as existing is attached at Appendix B.

2.2 Trees

There is one large conifer just outside the site at the South Eastern corner. See Photo No 6.

It is proposed that a number of native specimen trees be planted as part of the landscaping works to be the subject of a detailed specification for approval.

2.3 Drainage and Flood Risk

A Drainage Statement and Flood Risk Assessment has been prepared by Stevenson Associates and a copy is attached at Appendix C.

2.4 The Site

A Phase 1 Environmental Report has been carried out by Eastwood and Partners consulting engineers and a copy is included as part of the application documents.

Historical maps confirm that the site was first developed between 1852 and 1906. By 1970 buildings existing primarily along the Eastern and Southern site boundaries are labelled as joinery workshops. It is understood that the buildings were used as joinery workshops until five years ago.

It is thought that made ground, comprising re-worked natural ground with brick rubble, is likely beneath former buildings over firm to stiff clay, possibly sandy, overlying sandstone.

A Coal Authority Mining Report has been obtained and confirms the site to be within the zone of likely physical influence from workings in four seams of coal at between 90 and 380m depth. It is thought that the Kent's Thick coal seam lies at approximately 4m beneath the site but that it is unlikely to have been worked due to its poor quality,

therefore precautions against the effects of shallow mining are not thought to be required.

An Envirocheck over-view has highlighted a minor aquifer beneath the site, however, it is not thought that the aquifer should be at risk from or to the development.

The Envirocheck states that the site lies within an area where no radon precautions are required.

2.5 Highways

Cutty Lane is a secondary residential road accessible both from School Street to the South and Greenfoot Lane to the West. Access to the site is established and these proposals will create an overall reduction in traffic movements compared with the former use of the site. Visibility at the junction with Cutty Lane is adequate where traffic speeds are very low due to the nature of the road layout.

The access road to the site at 3.2m wide with 0.6m wide hard margin to one side is to provide shared vehicular and pedestrian access.

2.6 Local Environment

The site stands in an existing residential neighbourhood comprising primarily two and three storey terraced and semi-detached properties. The proposed flats follow the dominant vernacular and have adequate off street parking. Ground floor flats have good gardens. Principal windows are located in the North and South elevations to maintain adequate privacy to all surrounding properties.

3.0 Involvement

Informal pre-planning discussions have been held with Mr Joe Jenkinson of the planning department, when it was confirmed that there would be no objection in principle to a new application for development of the site. Alternative forms of development were considered aimed at reducing the impact of the motor vehicle which was considered to be over dominant on the previously approved scheme. As a consequence of this a

decision was made to concentrate parking within the front of the flats and restrict flat numbers from 5 to 4.

4.0 Evaluation

The site has good access, is generously proportioned and easily capable of accommodating a two storey development of flats with associated parking and generous amenity. The flats, as designed, are considered to be wholly in keeping with their surroundings and would add value to the area given the site's obvious need for re-development.

5.0 Planning Policy

The site lies within an established residential area where new build residential development is an appropriate use. The site is a highly sustainable location with good access to local amenities, schools, shops and public transport services.

6.0 Proposals

6.1 Description of Use

Full Planning Permission is sought for the construction of a two storey development of four flats with off-road parking and private amenity. The flats would provide generous living accommodation including kitchen, dining and living space, two double bedrooms and a family bathroom.

6.2 Access

Access to the site from Cutty Lane is established and visibility from the access is thought to be adequate. The access road to the site at 3.2m wide with 0.6m wide hard margin to one side is to provide shared vehicular and pedestrian access. On-site parking with generous manoeuvring has been provided for each flat. A maximum gradient for access of 1 in 20 is to be implemented and level access provided to the two ground floor flats. Ambulant access is to be afforded to the two first floor flats.

6.3 Appearance and Materials

The two storey flats are to be constructed in approved facing brickwork under a dark grey concrete tile roof. Window and door openings generally reflect the proportions used in properties throughout the area and are to have brick soldier course heads and stone dressed sills. Pointing and rainwater goods are to be as specified on the attached drawings.

6.4 Layout

The development has been designed to take maximum advantage of the site's potential and to complement the existing vernacular of School Street, Cutty Lane and the area beyond.

6.5 Scale

The new dwellings are of a similar scale and height to existing housing within the immediate area.

6.6 Landscaping

Hard landscaping throughout the site is to include artificial stone setts to the parking area and a mix of flags and sharp gravel to paths and terraces. Existing high brick boundary walls are to be retained and made good where required. New brick boundary walls are to be constructed to marry in with existing to a minimum of 1.5m above the highest level where replacing timber and concrete fencing. Rear boundary walls between properties are to be a minimum of 1.5m above the highest level for 3m beyond the rear elevation, reducing to 1.2m to garden land beyond.

Soft landscaping is to consist primarily of heavily shrub borders, to approved specification, to the site frontage and of lawn to the rear garden land to allow purchasers of the flats to plant the gardens following occupation. New trees, as illustrated on attached plans, to be appropriate and approved specimen native species.

The existing conifer tree at the South Eastern corner just outside the site will be unaffected by the development.

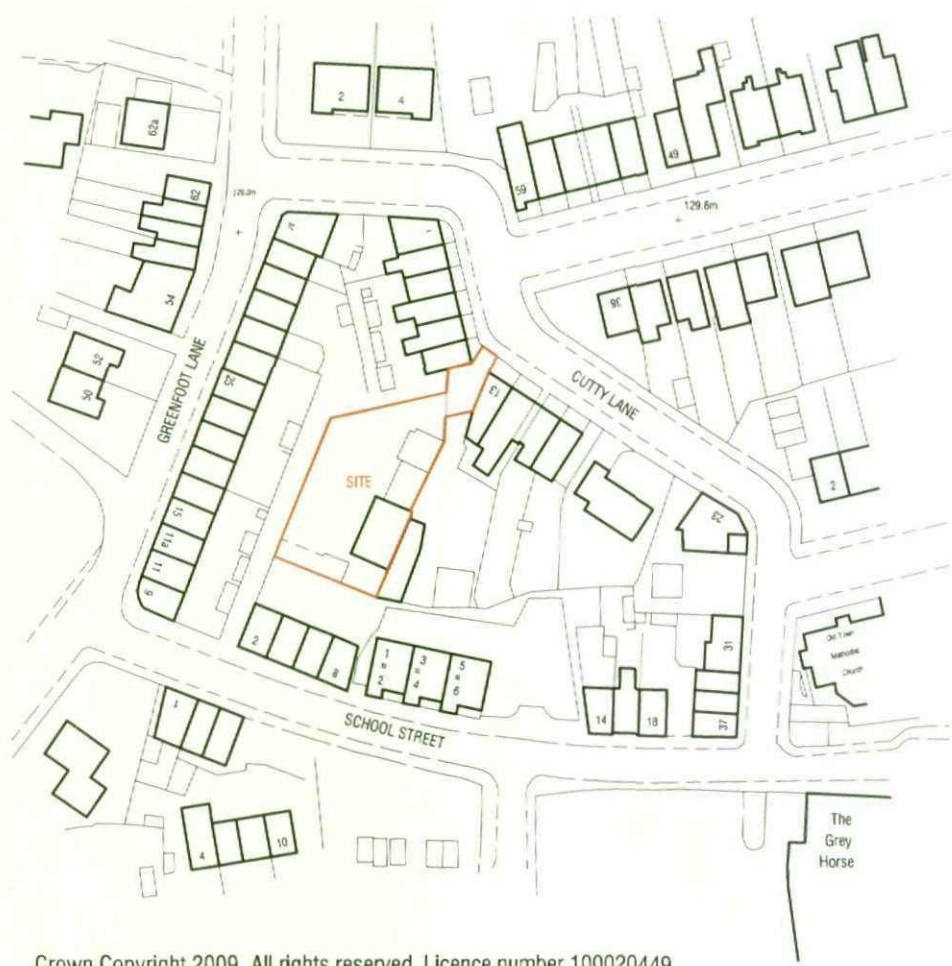
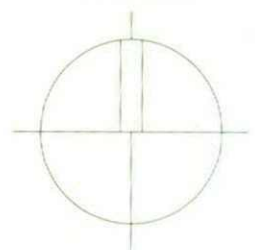
7.0 Summary

The small scale of development proposed will not have any significant social or economic impact and will not affect the privacy and amenity of adjoining dwellings. The design of the development has been carefully considered to complement and enhance its surroundings by use of local vernacular, scale and materials considered appropriate to the immediate residential surroundings. The reduction in numbers from 5 flats as previously approved to 4 allows for a significant reduction in hard surfacing with increased green space and avoids parking within gardens to the south of the flats which was discouraged during pre-application discussions with the planning department.

Signed
FOR CHRIS CARR ASSOCIATES

APPENDIX A
SITE LOCATION PLAN

North



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THE OLD WOOD YARD
CUTTY LANE
OLD TOWN
BARNESLEY

LOCATION PLAN

Scale 1:1250

Date Nov 09

Ref 24.64

Drwg No OS1



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APPENDIX B
PHOTOGRAPHIC SURVEY

Photographic Record
The Old Wood Yard
Cutty Lane/School Street
Old Town, Barnsley



1. Access from Cutty Lane



2. Existing access to former wood yard at North Eastern corner of the site



3. Access road and Northern boundary



4. Access road connecting to School Street and Western boundary



5. View into South Eastern corner of the site



6. Internal view of Southern boundary School Street. Terraced housing to rear



7. Internal view of South and Western boundary



8. Internal view of West and Northern boundary with terraced housing to rear

APPENDIX C
DRAINAGE AND FLOOD RISK ASSESSMENT

STEVENSON ASSOCIATES

CUTTY LANE, BARNESLEY

FLOOD RISK ASSESSMENT AND DRAINAGE STATEMENT

Po Box 58, Monk Fryston, Leeds, LS25 5WZ
E-mail: ls255wz@btinternet.com; Telephone 01977 682824

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THE OLD WOOD YARD, CUTTY LANE, BARNSELEY

INTRODUCTION

- 1 Planning Permission is sought to redevelop a small piece of land in the Greenfoot Lane area of Barnsley and this report has been commissioned to determine how the site will be drained and whether the site will be affected by flooding or if the development will cause others to flood.
- 2 This report should be read in conjunction with the design details prepared by Chris Carr Associates and the topographical survey prepared by Survey and Site Services (for explanatory purposes some reduced extracts are appended to this report).

EXISTING TOPOGRAPHY

- 3 The site is served from Cutty Lane and is regular in shape (predominantly a rectangle with an extended tapered access) covering an area of around 540 square metres. It is surrounded entirely by residential properties and it is believed that the site has been used for light commercial activities and previous buildings, as shown on Ordnance Survey maps, have now been demolished leaving only their bases.
- 4 The area is on a hillside, which falls towards the north and the site has a difference in level of 2.3m falling from the back towards the entrance at the front. Although the natural gradient of the site is around 7% (1 in 15) the front section of the site can be seen to be retained by the boundary way, varying in retained depth from 300mm to 1 metre.

EXISTING DRAINAGE

- 5 Generally, properties in the area are drained to combined foul / surface water sewers and there is a public sewer (Section 24) crossing the site, which drains numbers 2 to 8 School Street. This sewer passes centrally through the length of the site and emerges by the rear of number 11 Cutty Lane; a separate drain serving the site also connects to this external manhole.
- 6 There are shallow drains remaining on site that collected surface water from previous buildings and one serving an outside toilet. There does not appear to be any yard gullies but

equally, they could be buried beneath demolition rubble. Surface water draining on to the site would either be piped directly to sewer or, due to the gradient and surfacing of the yard, run off onto neighbouring concrete driveways and yards. Surface water flows from site are likely to be in the order of 7.5 litres per second (rainfall rate of 50mm/hr).

DESIGN CONSIDERATIONS AND PROPOSALS

- 7 The proposed development will consist of a single block of four flats with individual parking bays served from a new driveway. There will be a small terraced garden to the rear of the flats.
- 8 The new development will be drained with separate foul and surface water sewerage systems on site, which will join only at the final downstream manhole (adjacent to the site boundary) where the existing off-site sewer connection will be utilised.
- 9 Requirement H3 of the Building Regulations 2000 specifies a hierarchy for the disposal of surface water. In brief, this states that consideration should first be given to soakaways, infiltration systems and other Sustainable Drainage Systems (SUDS).
- 10 The layout, location and topography for this scheme prevent a natural SUDS solution apart from small rear garden area, which will need to be constructed down to original ground beneath using good quality topsoil.
- 11 It is therefore proposed to drain surface water from the new building, driveway and parking bays to the sewers via an attenuation scheme. Flows will be reduced using a 'Hydro-brake' flow control and excess water will be stored on site in over-size pipes.
- 12 It is requested by Yorkshire Water that surface water flows from redevelopment sites are reduced by 30% in an effort to increase capacity within the sewer network and reduce the risks of flooding. As such, flows from this development should be reduced so as not to exceed 5.2 litres per second.
- 13 In addition, when considering storms greater than 1 in 30-year – in particular 1 in 100-year when adjusted for climate change (PPS 25), it is thought that excess flood waters could not be adequately stored above ground on this site or discharged overland without causing hindrance or flooding to other properties. In the simplest of outcomes, excess floodwater would flow from the site entrance towards number 11 Cutty Lane and neighbouring properties, which would be considered unacceptable.

- 14 Therefore, it is proposed to balance surface water on site for storms of 1 in 100-year (1% chance of annual occurrence) when adjusted for climate change. In line with current Environment Agency guidelines an allowance for a 20% increase in rainfall intensities will be made.
- 15 Using a 94mm Md5 Hydro-brake to control flows, calculation shows that 5.3 cubic metres would need to be stored during a 1 in 100-year storm. The critical storm is shown to be that of 30 minutes during the winter with a rainfall of 61.3 mm/hr.
- 16 For comparison purposes a 1 in 225-year storm has a 20% greater rainfall intensity for the storm at 73.41mm/hr and during this storm, calculations show that 6.8 cubic metres will need to be stored; the outflow from the system will peak at 4.8 litres per second.
- 17 In order to avoid conflict with the existing public sewer crossing the site, surface water will be stored in a 10m length of 900mm pipe laid across the Parking Court to the side of the sewer; outfall will be to the existing inspection chamber on site.

FURTHER CONSIDERATIONS

- 18 The Environment Agency's Indicative Flood Zone Map shows the site to be in Zone 1 (not within a floodplain or areas know to flood) and there are no records of flooding on this site.

SUMMARY AND EFFECTS OF PROPOSALS

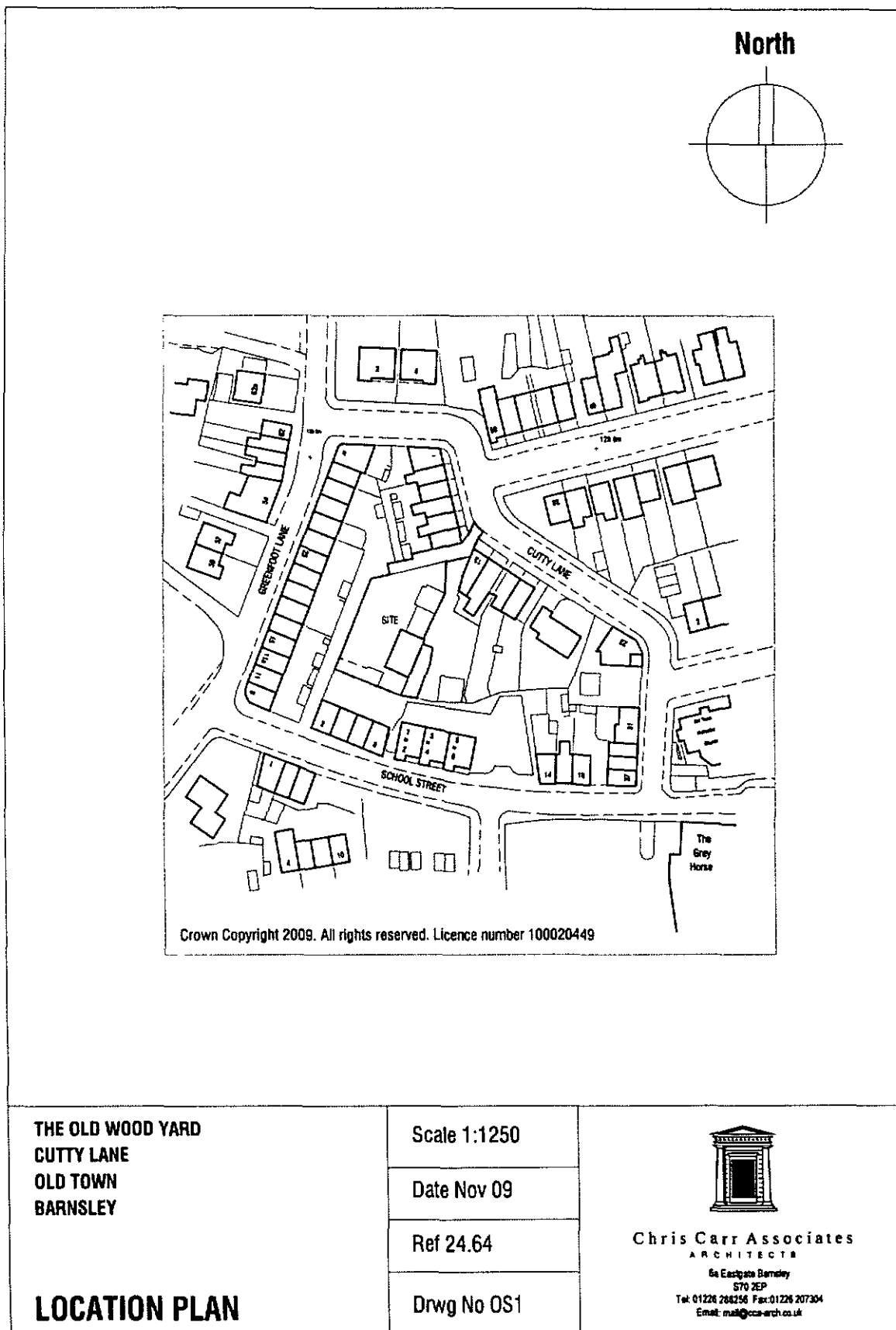
- 19 It is proposed to redevelop a small piece of land off Cutty Lane, Barnsley with a single block of flats and the site will continue to drain to a public sewer using an existing drain connection from site.
- 20 The site will be developed using separate foul and surface water sewers and surface water will be attenuated.
- 21 Due to the location and topography of the site, storms of 1 in 100-years when adjusted for climate change will be balanced on site in oversize pipes and the discharge rate from site will be reduced from around 7.5 litres per second to a maximum of 4.8 litres per second.
- 22 The site is not within or close to a floodplain area and currently does not flood.
- 23 If these measures are taken, the site will be adequately protected from flooding and the development will not cause other areas to flood.

M. Stevenson

Michael Stevenson

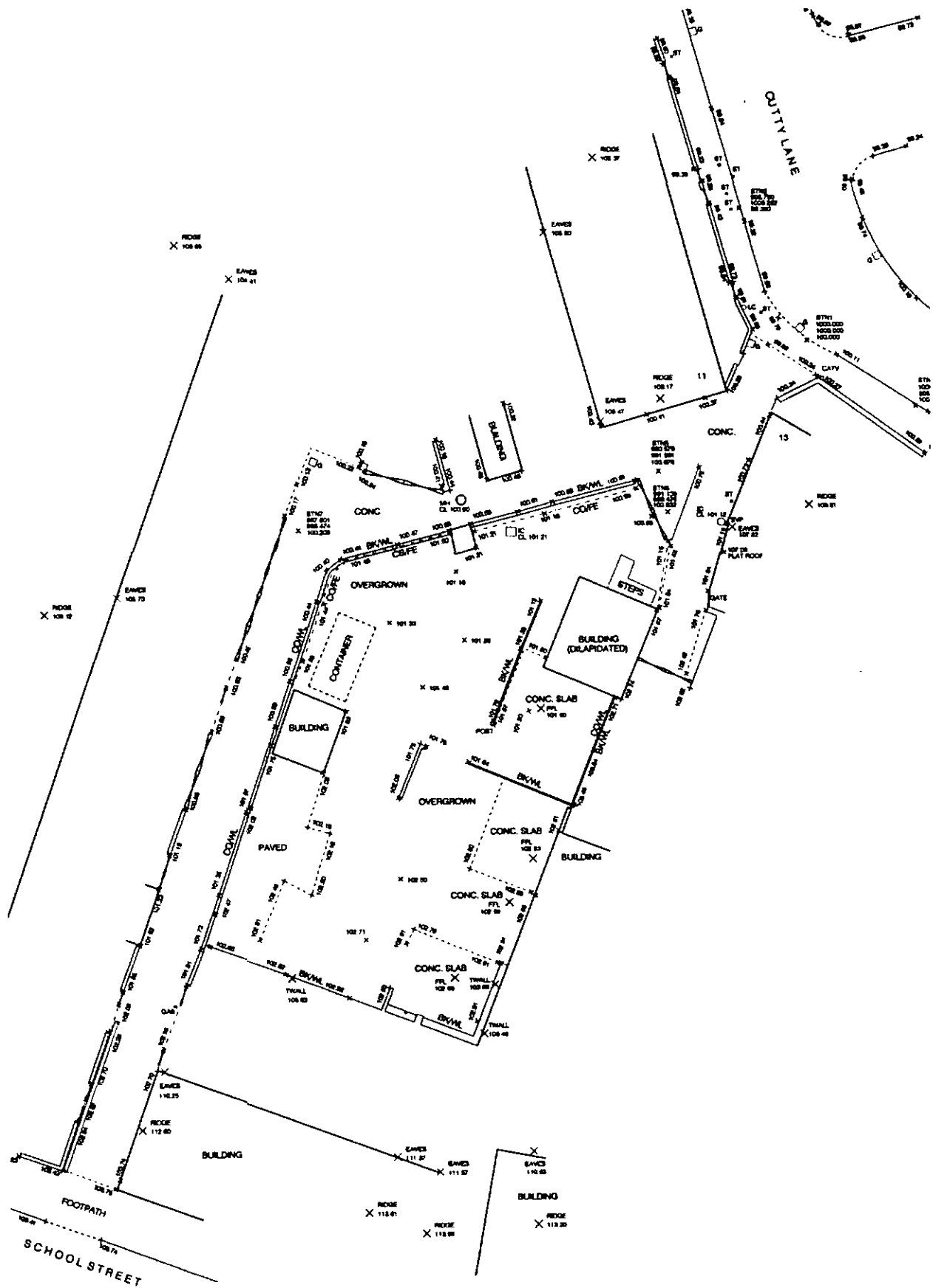
24th March 2010

APPENDIX 1 – SITE LOCATION



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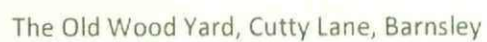
APPENDIX 3 – TOPOGRAPHICAL SURVEY



APPENDIX 4 – ENVIRONMENT AGENCY’S INDICATIVE FLOOD ZONE MAP



SITE LAYOUT PLAN



APPENDIX 6 – INDICATIVE DRAINAGE LAYOUT



APPENDIX 7 – 1 IN 100-YEAR CALCULATION

Stevenson Associates		Page 1				
PO Box 58 Monk Fryston Leeds LS25 5WZ	The Old Woodyard Cutty Lane Barnsley					
Date March 2010 File CUTTY LANE 100 YEA...	Designed By Stevenson Checked By					
Micro Drainage						
Storage Design W.11.3						
<u>Summary of Results for 100 year Return Period</u>						
Storm Duration (mins)	Maximum Control (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
15 Summer	3.9	3.9	100.5322	0.5322	4.4	O K
30 Summer	4.0	4.0	100.5622	0.5622	4.7	O K
60 Summer	3.9	3.9	100.5257	0.5257	4.3	O K
120 Summer	3.6	3.6	100.4137	0.4137	3.2	O K
180 Summer	3.4	3.4	100.3083	0.3082	2.1	O K
240 Summer	3.4	3.4	100.2213	0.2212	1.4	O K
360 Summer	2.9	2.9	100.1377	0.1378	0.7	O K
15 Winter	4.1	4.1	100.6018	0.6018	5.0	O K
30 Winter	4.2	4.2	100.6308	0.6308	5.3	O K
60 Winter	4.0	4.0	100.5597	0.5597	4.6	O K
120 Winter	3.5	3.5	100.3852	0.3852	2.9	O K
180 Winter	3.4	3.4	100.2272	0.2272	1.4	O K
240 Winter	3.0	3.0	100.1517	0.1517	0.8	O K
360 Winter	2.3	2.3	100.0898	0.0898	0.4	O K
Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)				
15 Summer	93.28	14				
30 Summer	61.30	23				
60 Summer	38.41	40				
120 Summer	23.28	72				
180 Summer	17.15	104				
240 Summer	13.73	130				
360 Summer	9.97	188				
15 Winter	93.28	15				
30 Winter	61.30	24				
60 Winter	38.41	42				
120 Winter	23.28	76				
180 Winter	17.15	104				
240 Winter	13.73	132				
360 Winter	9.97	186				
©1982-2008 Micro Drainage						

APPENDIX 8 – CLIMATE CHANGE CALCULATION

Stevenson Associates		Page 1				
PO Box 58 Monk Fryston Leeds LS25 5WZ	The Old Woodyard Cutty Lane Barnsley CLIMATE CHANGE					
Date March 2010 File CUTTY LANE 225 YEA...	Designed By Stevenson Checked By					
Micro Drainage	Storage Design W.11.3					
<u>Summary of Results for 225 year Return Period</u>						
Storm Duration (mins)	Maximum Control (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
15 Summer	4.3	4.3	100.6442	0.6443	5.4	O K
30 Summer	4.4	4.4	100.6983	0.6983	5.9	O K
60 Summer	4.3	4.3	100.6658	0.6658	5.6	O K
120 Summer	4.0	4.0	100.5433	0.5432	4.5	O K
180 Summer	3.6	3.6	100.4312	0.4312	3.4	O K
240 Summer	3.4	3.4	100.3322	0.3322	2.4	O K
360 Summer	3.3	3.3	100.1902	0.1902	1.1	O K
15 Winter	4.6	4.6	100.7403	0.7403	6.3	O K
30 Winter	4.8	4.8	100.8063	0.8063	6.8	O K
60 Winter	4.5	4.5	100.7268	0.7268	6.2	O K
120 Winter	3.9	3.9	100.5337	0.5337	4.4	O K
180 Winter	3.5	3.5	100.3702	0.3702	2.7	O K
240 Winter	3.4	3.4	100.2237	0.2237	1.4	O K
360 Winter	2.7	2.7	100.1148	0.1148	0.5	O K
Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)				
15 Summer	111.05	14				
30 Summer	73.41	23				
60 Summer	46.17	40				
120 Summer	28.00	74				
180 Summer	20.60	106				
240 Summer	16.46	136				
360 Summer	11.90	190				
15 Winter	111.05	15				
30 Winter	73.41	24				
60 Winter	46.17	44				
120 Winter	28.00	78				
180 Winter	20.60	110				
240 Winter	16.46	136				
360 Winter	11.90	190				
©1982-2008 Micro Drainage						

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PO Box 58 Monk Fryston Leeds LS25 5WZ	The Old Woodyard Cutty Lane Barnsley CLIMATE CHANGE	
Date March 2010 File CUTTY LANE 225 YEA...	Designed By Stevenson Checked By	
Micro Drainage		Storage Design W.11.3

Circular Pipe Details

Diameter (m) 0.900 Length (m) 10.000 Cover Level (m) 101.500
Slope (1:x) 500.0 Invert Level (m) 100.000

Hydro-Brake Outflow Control

Design Head (m) 0.900 Hydro-Brake Type MD5 Invert Level (m) 100.000
Design Flow (l/s) 5.0 Diameter (mm) 94

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.10	2.6	0.60	4.1	1.60	6.7	2.60	8.6	5.00	11.9	7.50	14.6
0.20	3.4	0.80	4.8	1.80	7.1	3.00	9.2	5.50	12.5	8.00	15.1
0.30	3.4	1.00	5.3	2.00	7.5	3.50	10.0	6.00	13.0	8.50	15.5
0.40	3.5	1.20	5.8	2.20	7.9	4.00	10.7	6.50	13.6	9.00	16.0
0.50	3.8	1.40	6.3	2.40	8.3	4.50	11.3	7.00	14.1	9.50	16.4

©1982-2008 Micro Drainage

Stevenson Associates		Page 1	
PO Box 58 Monk Fryston Leeds LS25 5WZ	The Old Woodyard Cutty Lane Barnsley CLIMATE CHANGE		
Date March 2010 File CUTTY LANE 225 YEA...	Designed By Stevenson Checked By		
Micro Drainage		Storage Design W.11.3	
<u>Rainfall Details</u>			
Region	ENG+WAL	Cv (Summer)	0.750 Summer Storms Yes
Return Period (years)	225	Cv (Winter)	0.840 Winter Storms Yes
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio-R	0.400	Longest Storm (mins)	360
<u>Time / Area Diagram</u>			
Total Area (ha) = 0.040			
Time (mins)	Area (ha)		
from:	to:		
0	4	0.040	
©1982-2008 Micro Drainage			