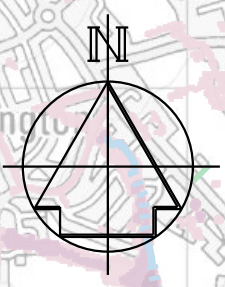
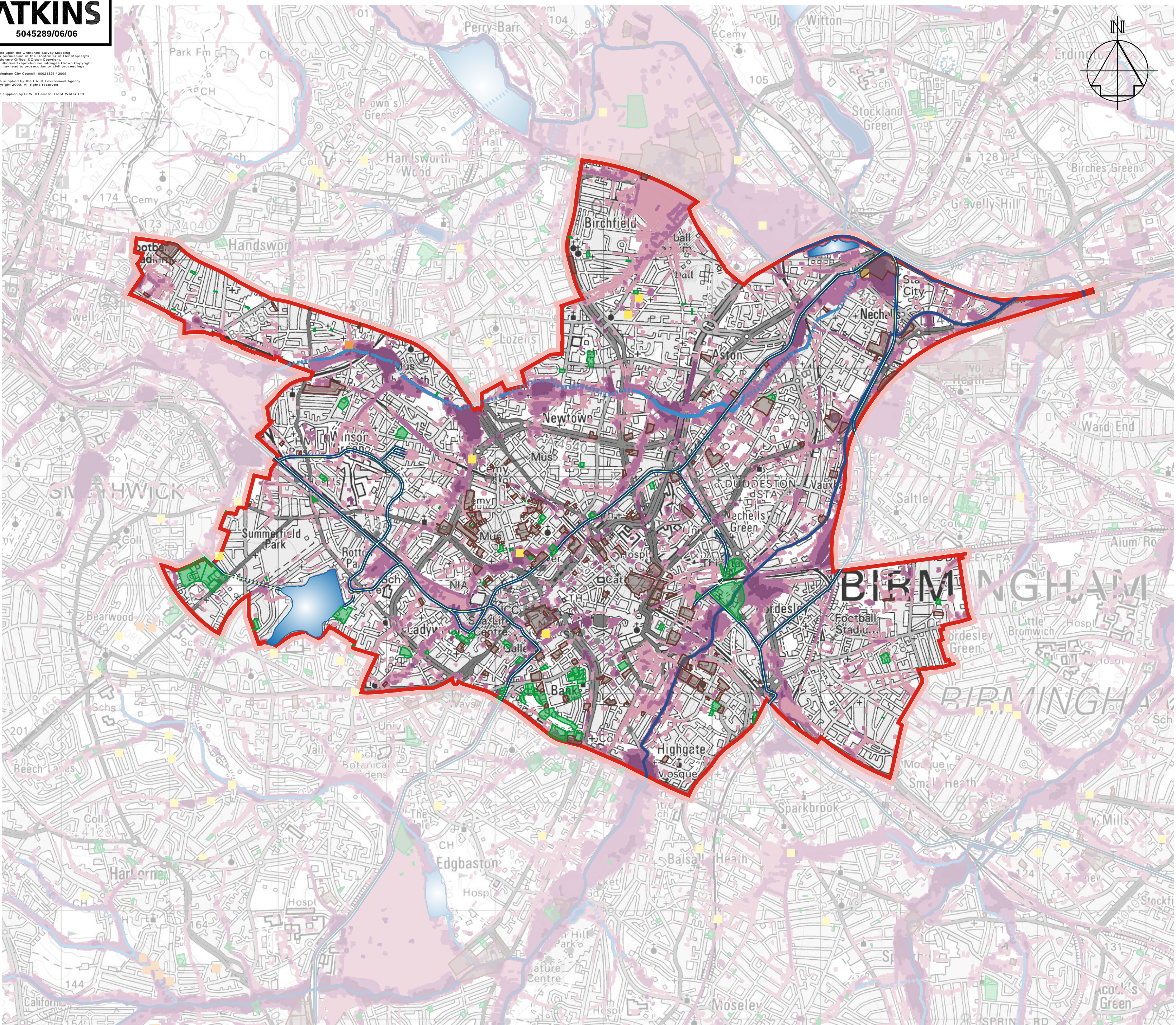


Based upon the Ordnance Survey Mapping
with permission of the Controller of Her Majesty's
Stationery Office. © Crown Copyright.
Unauthorised reproduction infringes Crown Copyright
and may lead to prosecution or civil proceedings.
Birmingham City Council 100021326 / 2009
Data supplied by the EA. © Environment Agency
copyright 2008. All rights reserved.
Data supplied by STW. © Severn Trent Water Ltd



Legend	
	Land Available for Development - Residential
	Land Available for Development - Non Residential
	Main Rivers
	Ordinary Watercourses (dashed where culverted)
	Canals (dashed where culverted or tunnelled)
	Reservoirs (dashed where underground)
	Constituency Boundary
	Land More Susceptible to Surface Water Flooding
	Land Intermediately Susceptible to Surface Water Flooding
	Land Less Susceptible to Surface Water Flooding
	Historic Flooding Record - Surface Water
	Historic Flooding Record - Sewer

Atkins Ltd

Consulting Engineers
The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF

Tel 0121 483 5000
Fax 0121 483 5252

THIS DRAWING IS NOT TO BE SCALED

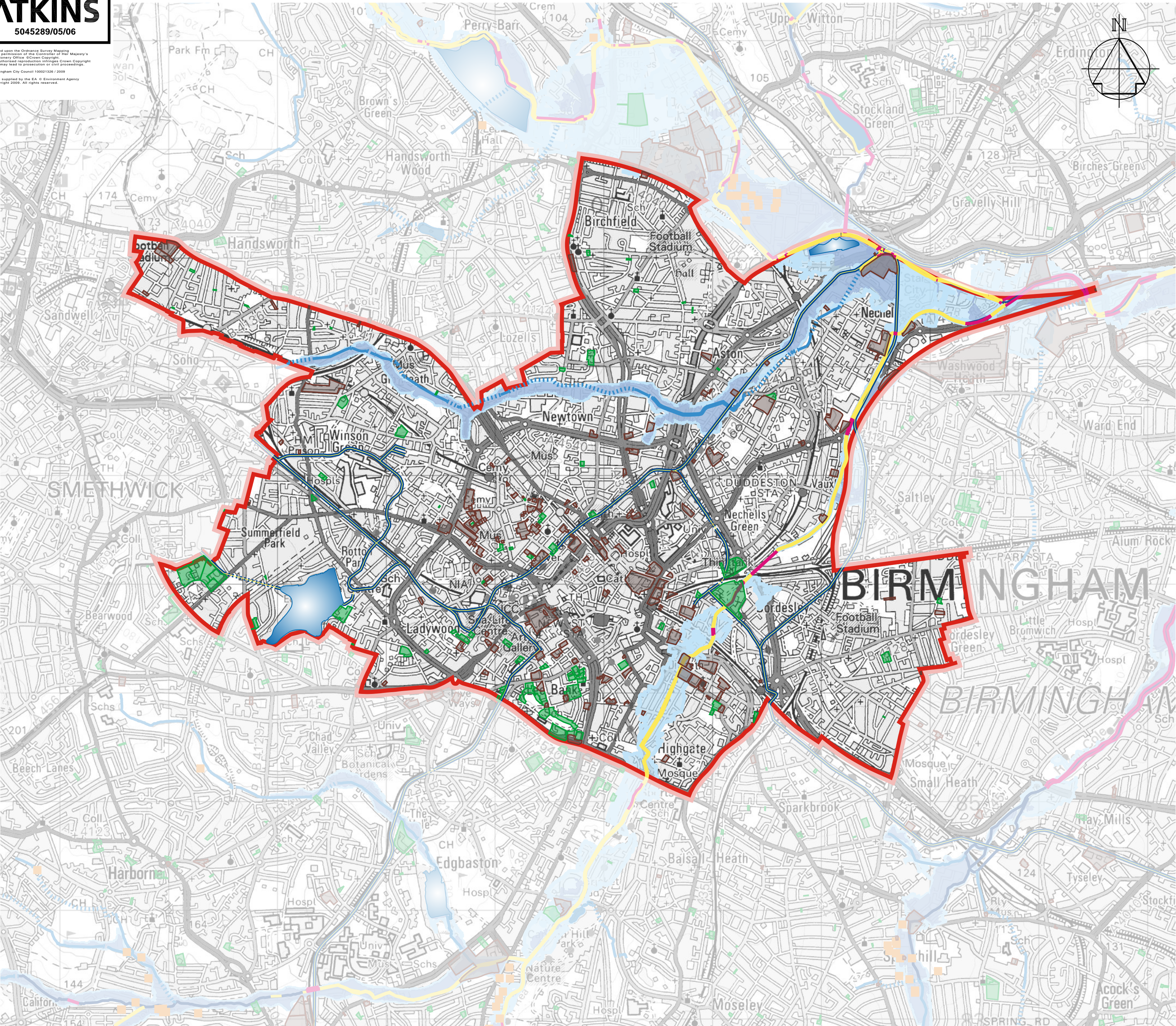


PROJECT
**Strategic Flood Risk Assessment
Level 1**

DRAWING TITLE
**Surface Water Flooding Susceptibility
Ladywood Constituency**

SCALES	1:25000	DRAWN	PK	CHECKED		C0-ORD CHECK	
		DATE	24/08/09	DATE		DATE	
0				SHEET	A2	PLOT DATE	15/09/09
DRAWING NO						REV	

5045289/06/06



Land Available for Development - Residential

Land Available for Development - Non Residential

Main Rivers

Ordinary Watercourses (dashed where culverted)

Canals (dashed where culverted or tunnelled)

Reservoirs (dashed where underground)

Constituency Boundary

Flood Zone 3 - 1 in 100 year return period flood outline (1% AEP)

Flood Zone 2 - 1 in 1000 year return period flood outline (0.10% AEP)

NFCDD - Formal/Informal Defences

NFCDD - Maintained Channel

Historic Flooding Record - Watercourse

Legend

Atkins Ltd


Consulting Engineers

The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF

Tel 0121 483 5000
Fax 0121 483 5252

THIS DRAWING IS NOT TO BE SCALED

CLIENT

 **Birmingham City Council**

PROJECT

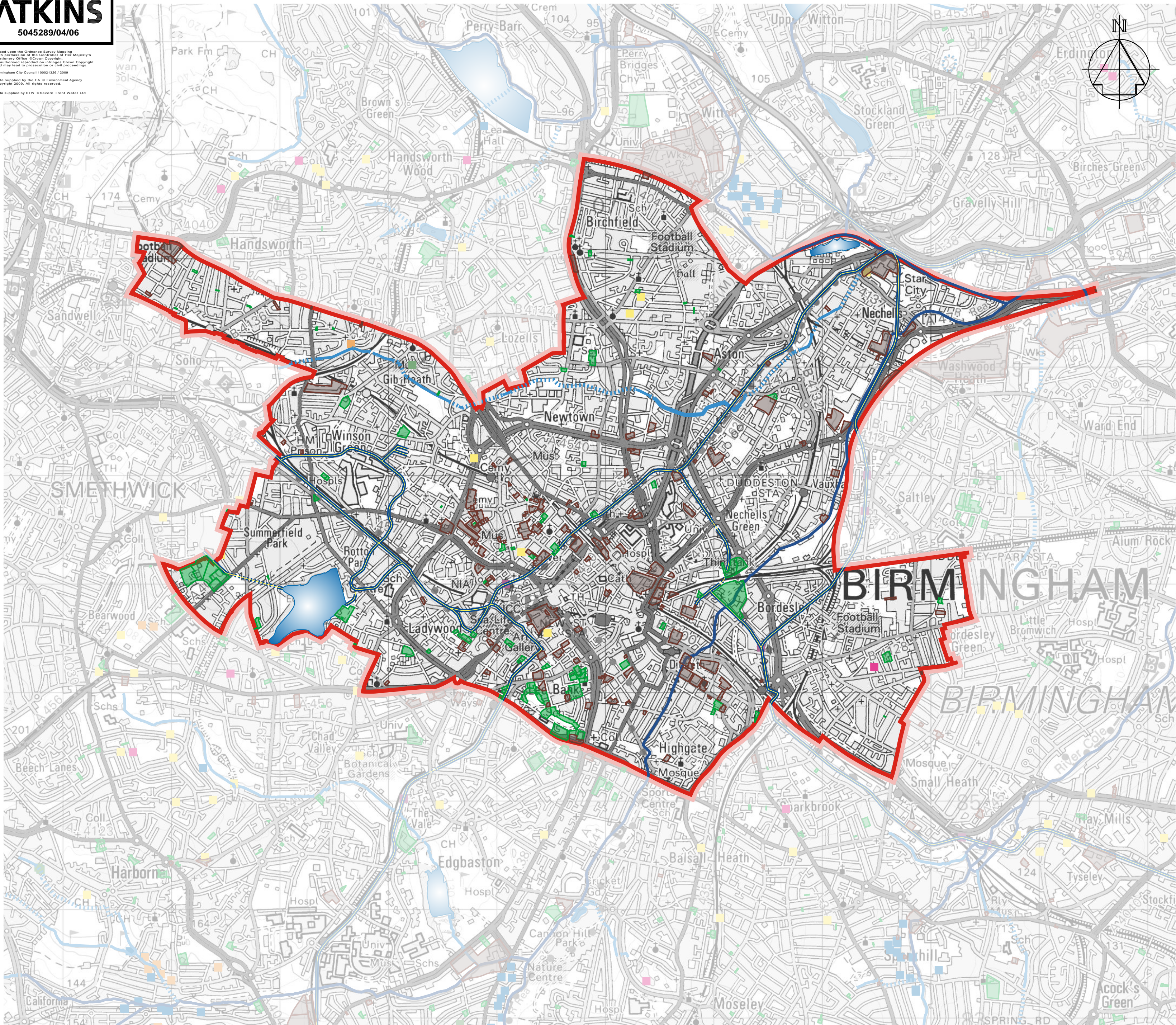
Strategic Flood Risk Assessment
Level 1

DRAWING TITLE

EA Flood Zones and NFCDD Assets
Ladywood Constituency

SCALES	1:25000	DRAWN	PK	CHECKED		CO-ORD CHECK	
		DATE	24/08/09	DATE		DATE	
0			SHEET		A2	PLOT DATE	
DRAWING NO			5045289/05/06				REV

Based upon the Ordnance Survey Mapping
with permission of the Controller of Her Majesty's
Stationery Office. Crown Copyright.
Unauthorised reproduction infringes Crown Copyright
and may lead to prosecution or civil proceedings.
Birmingham City Council 100021026 / 2009
Data supplied by the EA. © Environment Agency
copyright 2008. All rights reserved.
Data supplied by STW. © Severn Trent Water Ltd



Legend	
	Land Available for Development - Residential
	Land Available for Development - Non Residential
	Main Rivers
	Ordinary Watercourses (dashed where culverted)
	Canals (dashed where culverted or tunnelled)
	Reservoirs (dashed where underground)
	Constituency Boundary
	Historic Flooding Record - Watercourse
	Historic Flooding Record - Surface Water
	Historic Flooding Record - Groundwater
	Historic Flooding Record - Sewer
	Historic Flooding Record - Canal Breach
	Historic Flooding Record - Unknown

Atkins Ltd

Consulting Engineers

The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF

Tel 0121 483 5000
Fax 0121 483 5252

THIS DRAWING IS NOT TO BE SCALED

CLIENT



PROJECT

**Strategic Flood Risk Assessment
Level 1**

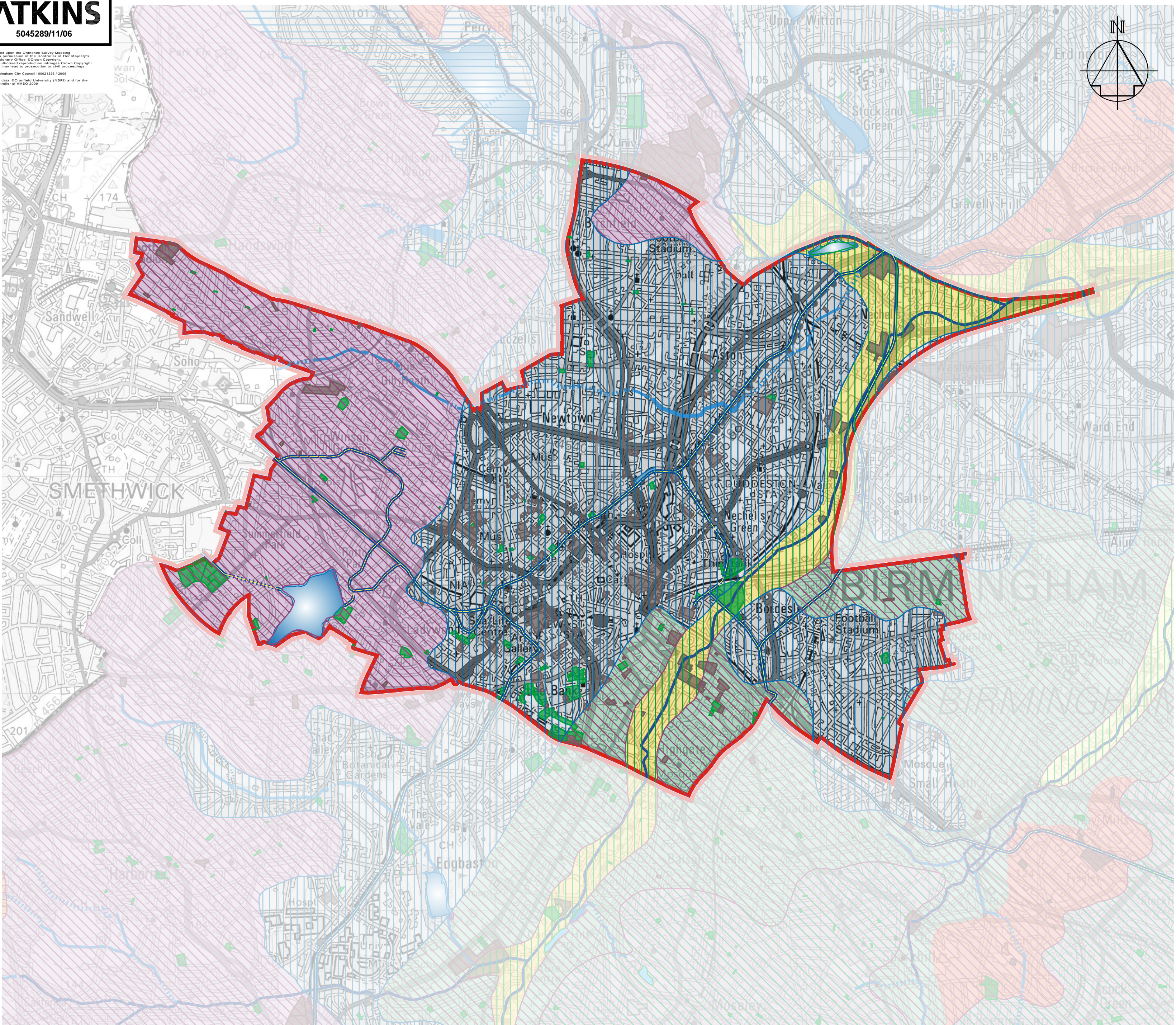
DRAWING TITLE

**Locations of Historic Flooding
Ladywood Constituency**

SCALES	1:25000	DRAWN	PK	CHECKED		CO-ORD CHECK	
		DATE	24/08/09	DATE		DATE	
0				SHEET	A2	PLOT DATE	15/09/09
DRAWING NO						REV	

5045289/04/06

Based upon the Ordnance Survey Mapping with permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings.
Birmingham City Council 100021326 / 2009
Soil data: © Cranfield University (NSRI) and for the Controller of HMSO 2008



Legend

Land Available for Development - Residential
Land Available for Development - Non Residential
Main Rivers
Ordinary Watercourses (dashed where culverted)
Canals (dashed where culverted or tunnelled)
Reservoirs (dashed where underground)
Constituency Boundary

Fertility
Very Low
Low
Moderate
Low to High
Moderate to High
High

Drainage
Freely draining
Slightly impeded drainage
Impeded drainage
Variable
Naturally wet
Surface Wetness

Superficial Deposits
Freely draining slightly acid loamy soils
Freely draining slightly acid sandy soils
Freely draining very acid sandy and loamy soils
Loamy and clayey floodplain soils with naturally high groundwater
Loamy and sandy soils with naturally high groundwater and a peaty surface
Loamy soils with naturally high groundwater
Naturally wet very acid sandy and loamy soils
Shallow very acid peaty soils over rock
Slightly acid loamy and clayey soils with impeded drainage
Slowly permeable seasonally wet acid loamy and clayey soils
Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Fertility
Very Low
Low
Moderate
Low to High
Moderate to High
High

Drainage
Freely draining
Slightly impeded drainage
Impeded drainage
Variable
Naturally wet
Surface Wetness

Geology
Drift over Permo-Triassic and Carboniferous reddish mudstone
Glaciofluvial drift
Glaciofluvial drift and peat
Glaciofluvial or river terrace drift
Palaeozoic gritstone and sandstone
Permo-Triassic and Carboniferous reddish mudstone, siltstone and sandstone
Permo-Triassic and Carboniferous sandstone and siltstone
Permo-Triassic and Devonian reddish conglomerate and sandstone
Permo-Triassic reddish mudstone
Permo-Triassic reddish mudstone and till
Permo-Triassic reddish mudstone and alluvium
Reddish till
River alluvium
River alluvium over peat
Lake and Waterbody

Atkins Ltd
Consulting Engineers
The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF
Tel 0121 483 5000
Fax 0121 483 5252

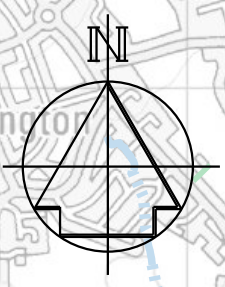
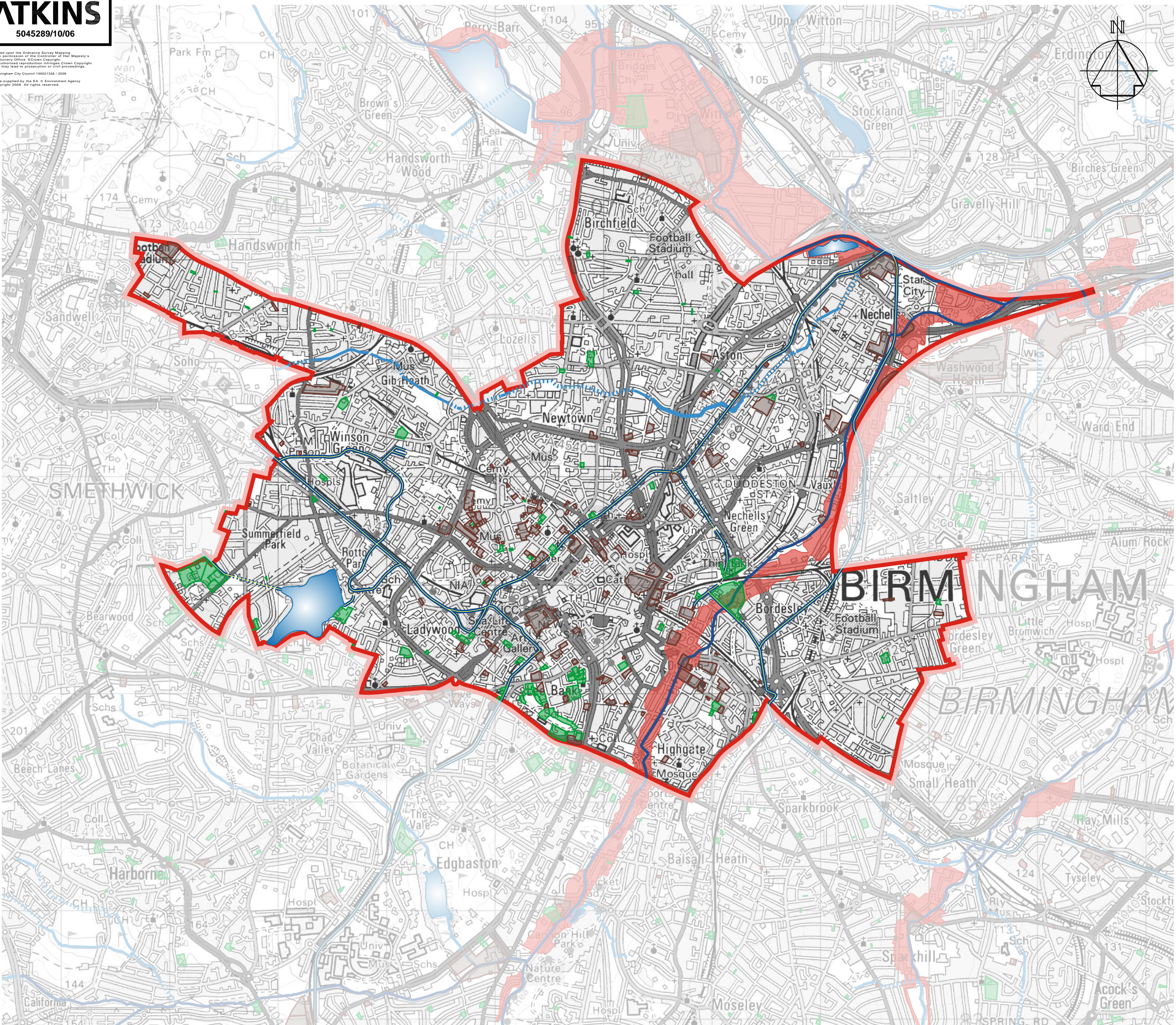
©
THIS DRAWING IS NOT TO BE SCALED

CLIENT **Birmingham City Council**

PROJECT
**Strategic Flood Risk Assessment
Level 1**

DRAWING TITLE
**Geology and Superficial Deposits
Ladywood Constituency**

SCALES 1:25000	DRAWN PK	CHECKED	CO-ORD CHECK
	DATE 24/08/09	DATE	DATE
0		SHEET A2	PLOT DATE 15/09/09
DRAWING NO 5045289/11/06			REV



Legend

Land Available for Development - Residential

Land Available for Development - Non Residential

Main Rivers

Ordinary Watercourses (dashed where culverted)

Canals (dashed where culverted or tunnelled)

Reservoirs (dashed where underground)

Constituency Boundary

Flood Warning Zones

Atkins Ltd

Consulting Engineers
The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF

Tel 0121 483 5000
Fax 0121 483 5252

THIS DRAWING IS NOT TO BE SCALED

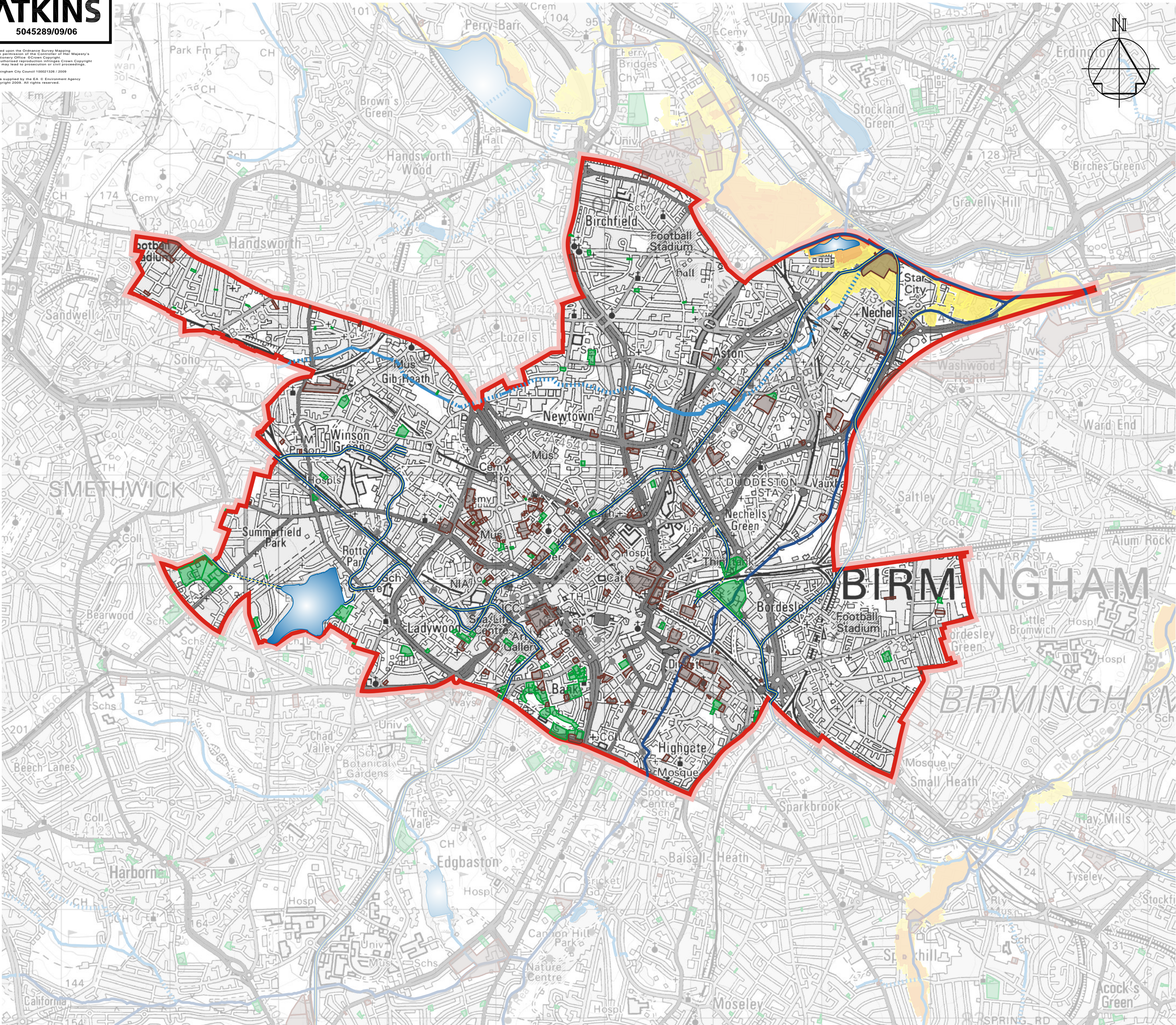
CLIENT

 **Birmingham City Council**

PROJECT
**Strategic Flood Risk Assessment
Level 1**

DRAWING TITLE
**Flood Warning Zones
Ladywood Constituency**

SCALES	1:25000	DRAWN	PK	CHECKED		C0-ORD CHECK	
		DATE	24/08/09	DATE		DATE	
0				SHEET	A2	PLOT DATE	15/09/09
DRAWING NO						REV	



Legend

Land Available for Development - Residential

Land Available for Development - Non Residential

Main Rivers

Ordinary Watercourses (dashed where culverted)

Canals (dashed where culverted or tunnelled)

Reservoirs (dashed where underground)

Constituency Boundary

Climate Change Fluvial Model Outline

Fluvial Functional Floodplain

Atkins Ltd

Consulting Engineers

The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF

Tel 0121 483 5000
Fax 0121 483 5252

©
THIS DRAWING IS NOT TO BE SCALED

CLIENT



PROJECT

Strategic Flood Risk Assessment
Level 1

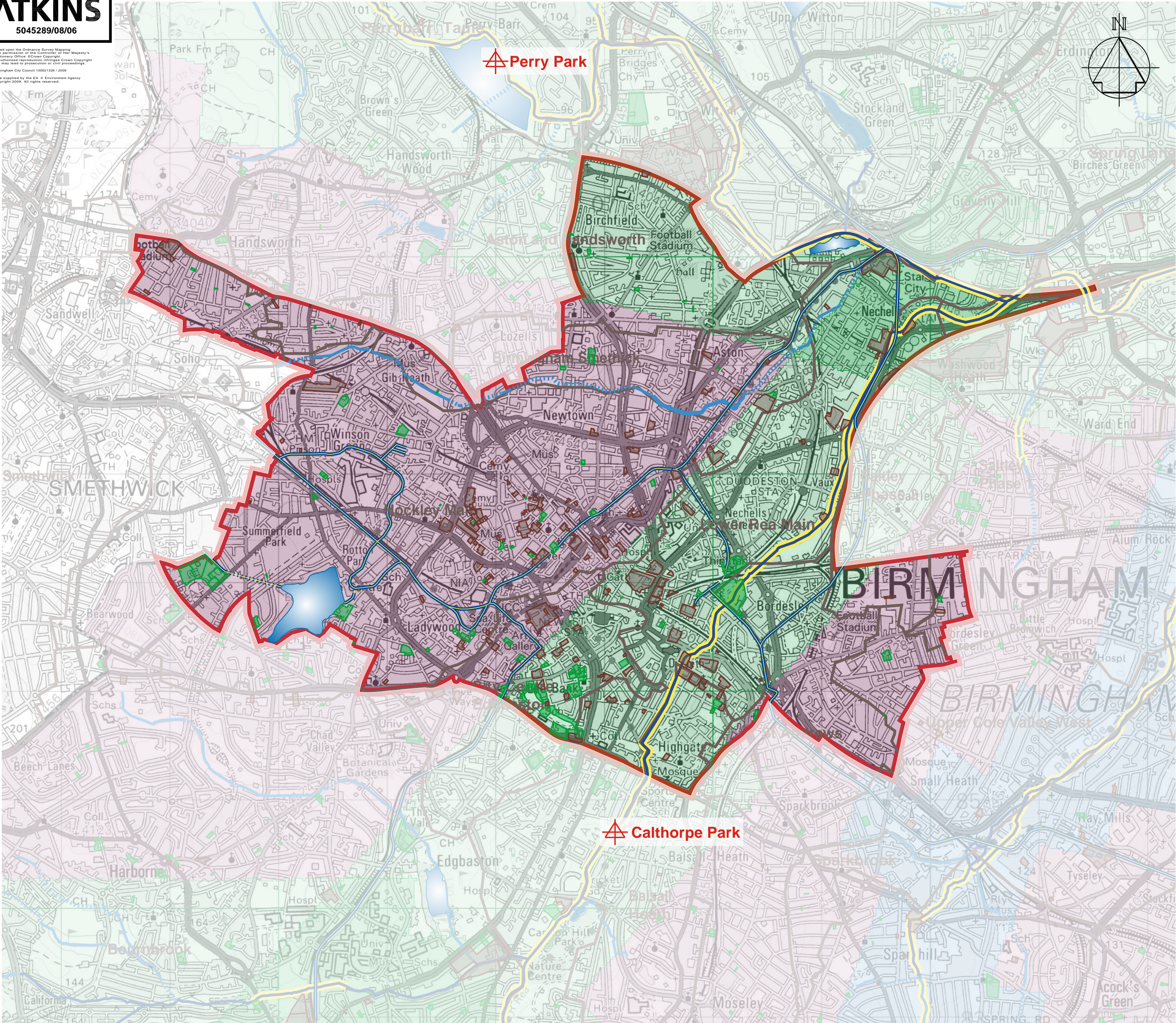
DRAWING TITLE

Climate Change and Functional Floodplain
Ladywood Constituency

SCALES	1:25000	DRAWN	PK	CHECKED		CO-ORD CHECK	
		DATE	24/08/09	DATE		DATE	
0				SHEET	A2	PLOT DATE	16/09/09
DRAWING NO						REV	

5045289/09/06

Based upon the Ordnance Survey Map with permission of the Controller of Her Majesty's Stationery Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings.
Birmingham City Council 100021326 / 2009
Data supplied by the EA. © Environment Agency copyright 2008. All rights reserved.



Atkins Ltd

Consulting Engineers

The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF

Tel 0121 483 5000
Fax 0121 483 5252

THIS DRAWING IS NOT TO BE SCALED

CLIENT



PROJECT

**Strategic Flood Risk Assessment
Level 1**

DRAWING TITLE

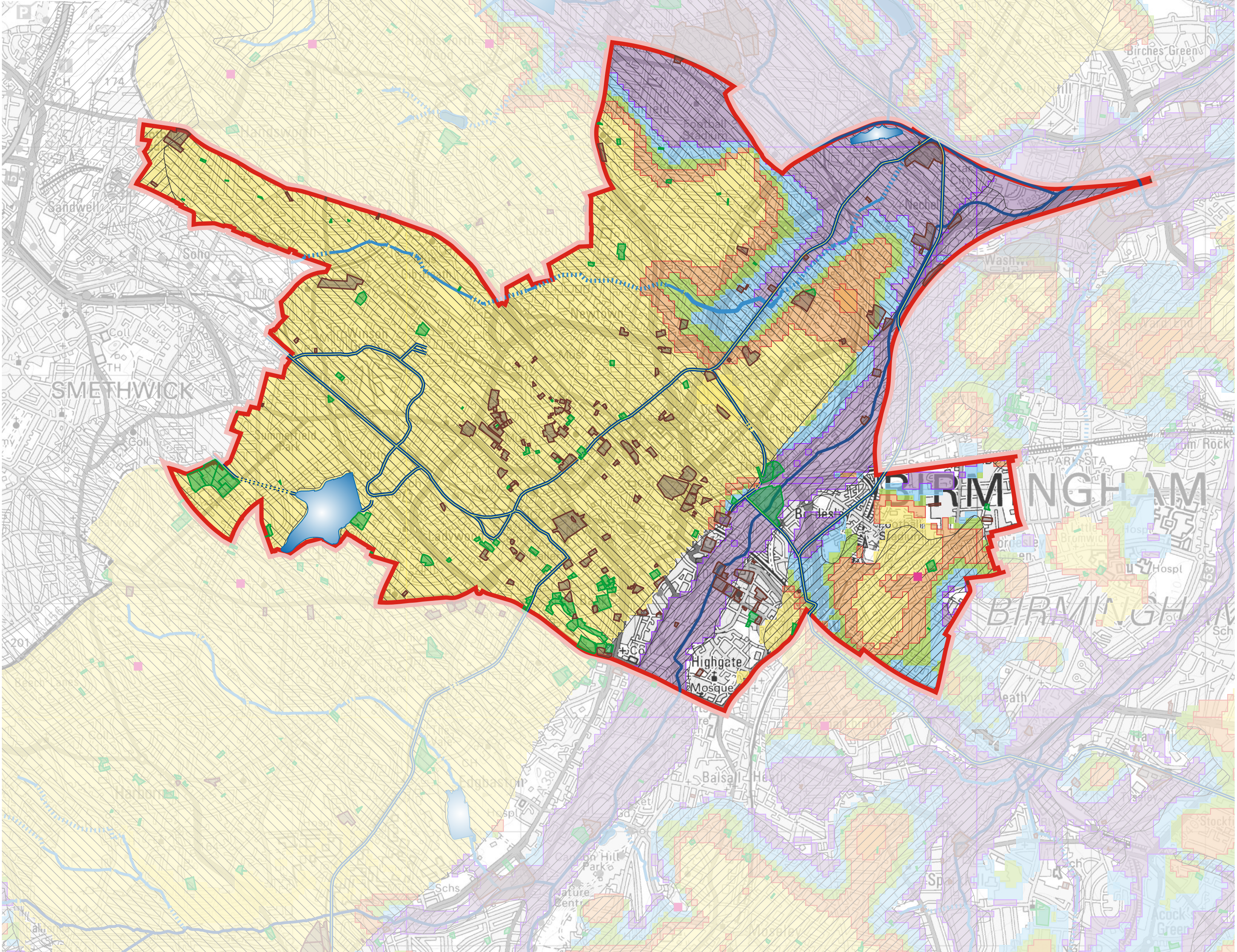
**Hydraulic Models and LiDAR Coverage
Ladywood Constituency**

SCALES	1:25000	DRAWN	PK	CHECKED		C0-ORD CHECK	
		DATE	24/08/09	DATE		DATE	
	0				SHEET	A2	PLOT DATE
							15/09/09
DRAWING NO	5045289/08/06						REV

Based upon the Ordnance Survey Mapping with permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Birmingham City Council 100021326 / 2009

Data supplied by the EA. © Environment Agency copyright 2008. All rights reserved.

Reproduced from the British Geological Survey Map data at the original scale of 1:50000. Licence 2008/001 British Geological Survey (NERC). All rights reserved.



Legend

- Land Available for Development - Residential
- Land Available for Development - Non Residential
- Main Rivers
- Ordinary Watercourses (dashed where culverted)
- Canals (dashed where culverted or tunnelled)
- Reservoirs (dashed where underground)
- Constituency Boundary
- Historic Flooding Record - Groundwater
- Minor Aquifer
- Major Aquifer
- BGS Groundwater Flooding VERY HIGH Susceptibility
- BGS Groundwater Flooding HIGH Susceptibility
- BGS Groundwater Flooding MODERATE Susceptibility
- BGS Groundwater Flooding LOW Susceptibility
- BGS Groundwater Flooding VERY LOW Susceptibility

Atkins Ltd
Consulting Engineers
The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF

Tel 0121 483 5000
Fax 0121 483 5252

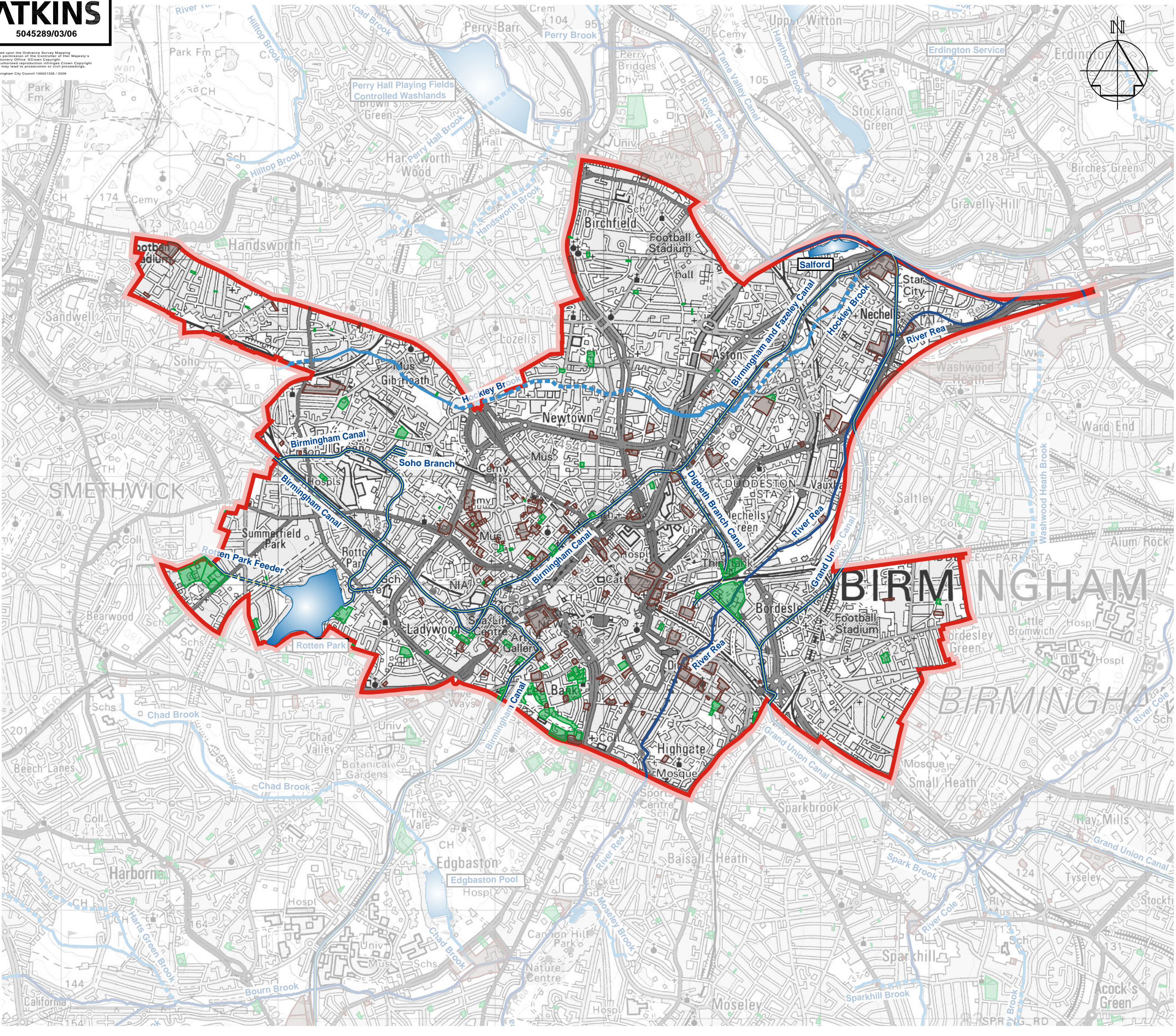
©
THIS DRAWING IS NOT TO BE SCALED

CLIENT **Birmingham City Council**

PROJECT
**Strategic Flood Risk Assessment
Level 1**

DRAWING TITLE
**Groundwater Flooding Susceptibility
Ladywood Constituency**

SCALES 1:25000	DRAWN PK	CHECKED	C0-ORD CHECK
	DATE 24/08/09	DATE	DATE
0		SHEET A2	PLOT DATE 15/09/09
DRAWING NO 5045289/07/06			REV



Legend

- Land Available for Development - Residential
- Land Available for Development - Non Residential
- Main Rivers
- Ordinary Watercourses (dashed where culverted)
- Canals (dashed where culverted or tunnelled)
- Reservoirs (dashed where underground)
- Constituency Boundary

Atkins Ltd
Consulting Engineers
The Axis, 10 Holliday Street
Birmingham West Midlands B1 1TF
Tel 0121 483 5000
Fax 0121 483 5252

©
THIS DRAWING IS NOT TO BE SCALED

CLIENT **Birmingham City Council**

PROJECT
**Strategic Flood Risk Assessment
Level 1**

DRAWING TITLE
**Water Features
Ladywood Constituency**

SCALES 1:25000	DRAWN PK	CHECKED	CO-ORD CHECK
	DATE 24/08/09	DATE	DATE
0		SHEET A2	PLOT DATE 14/09/09
DRAWING NO 5045289/03/06			REV