

Manual for Streets

The Prince's Foundation for the Built Environment
Congress for New Urbanism
Transportation Summit

Andrew Cameron
12 November 2007





Department of the Environment
Department of Transport

RESIDENTIAL ROADS AND FOOTPATHS

Layout considerations

Design Bulletin 32

Second Edition

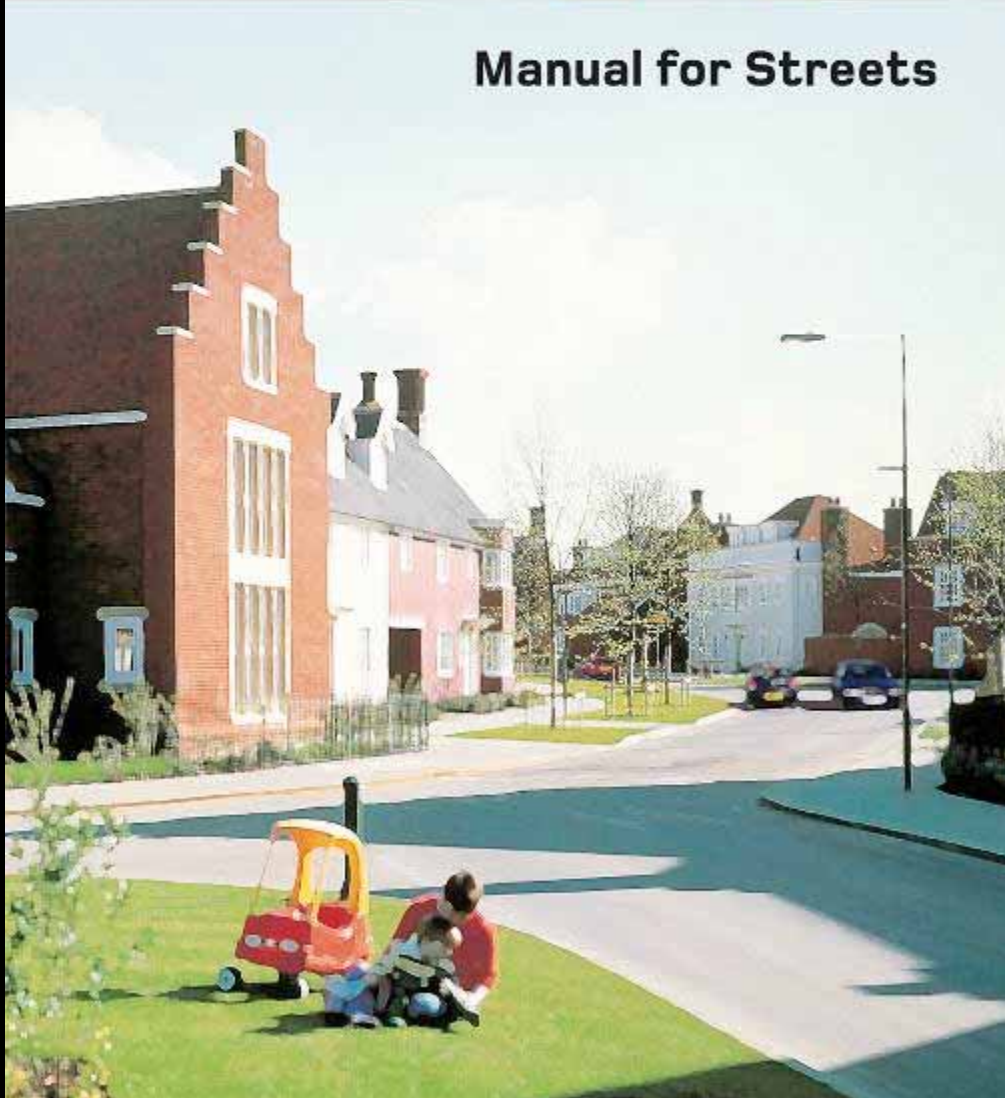
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Manual for Streets

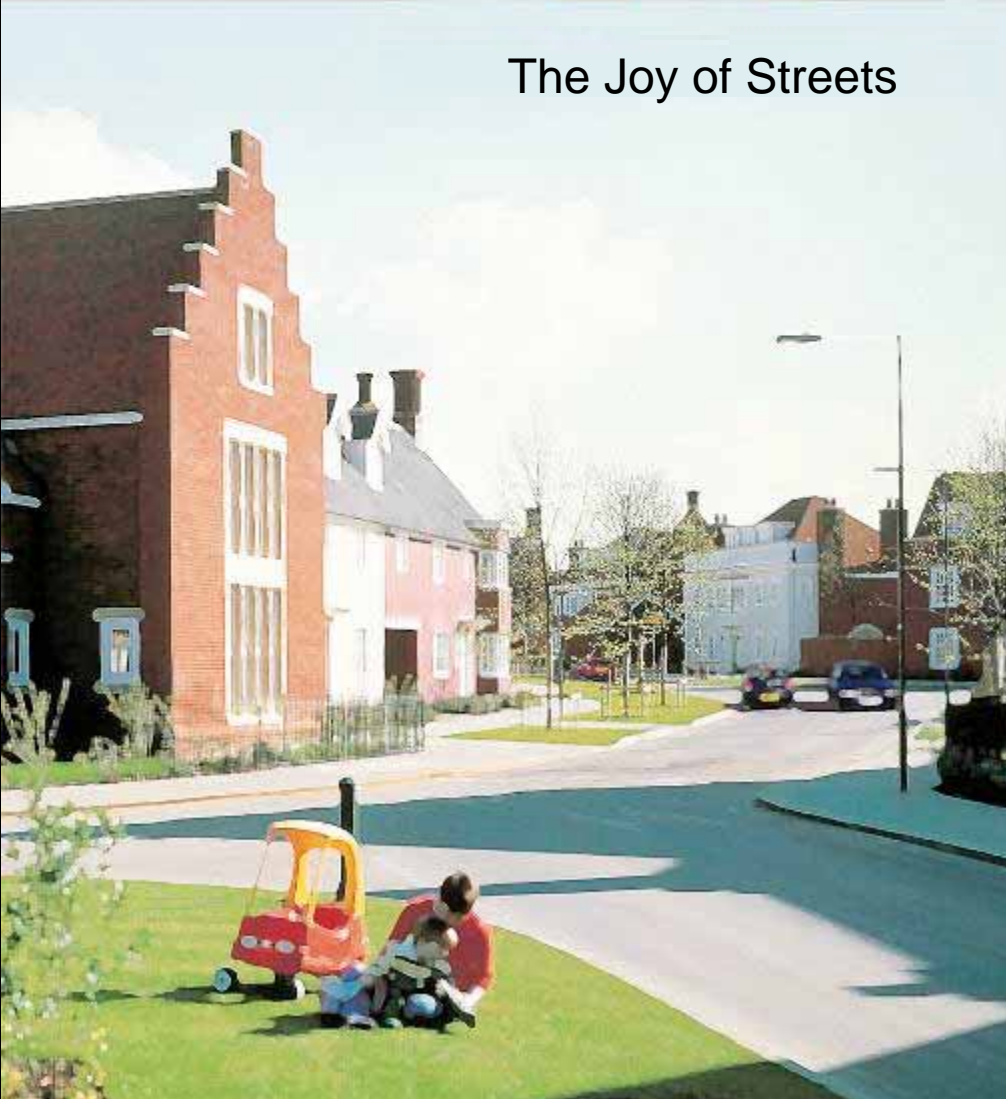




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The Joy of Streets



Good streets need to be like a good relationship

1. The beginning

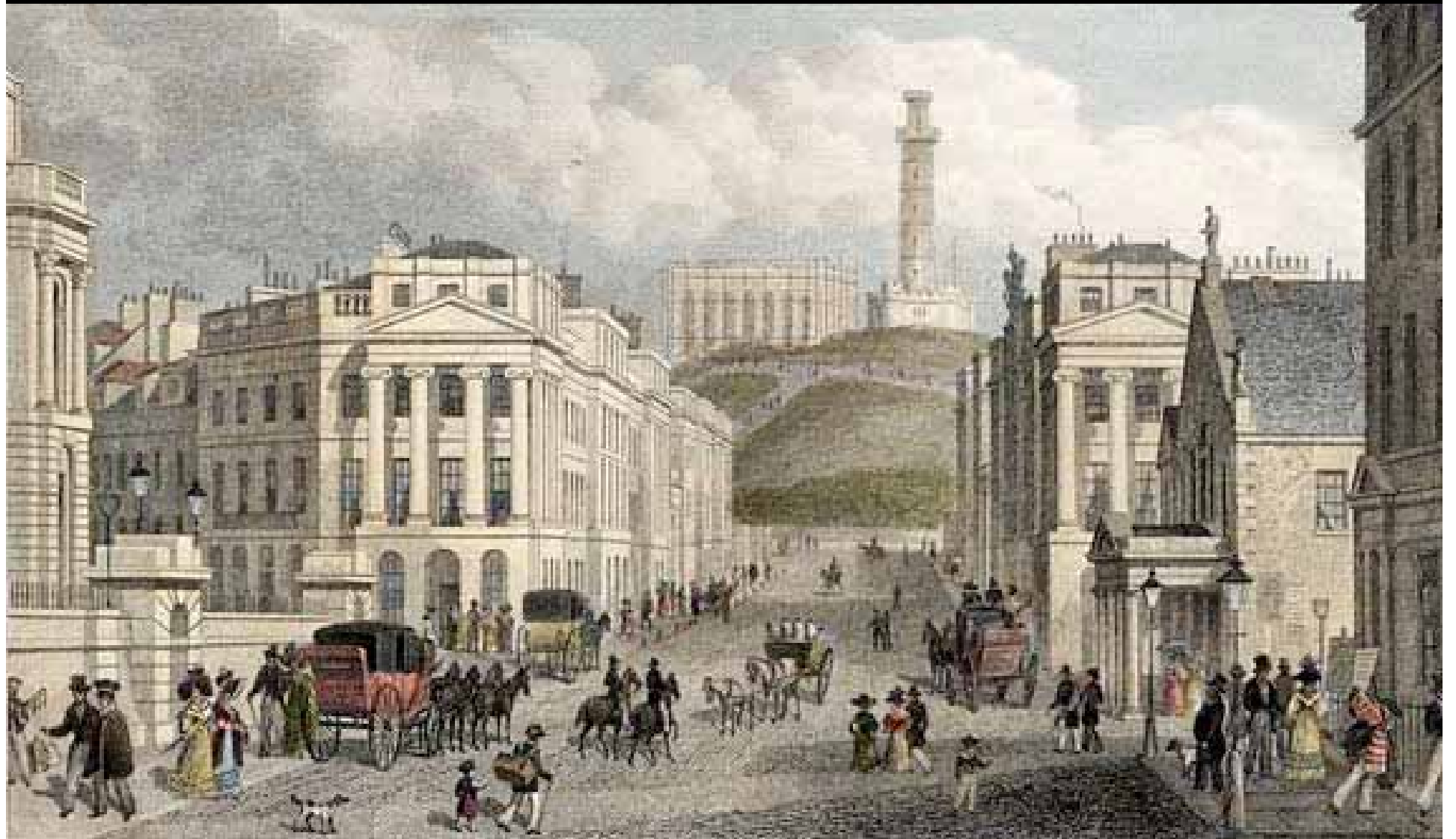
(the evolution of highways design)

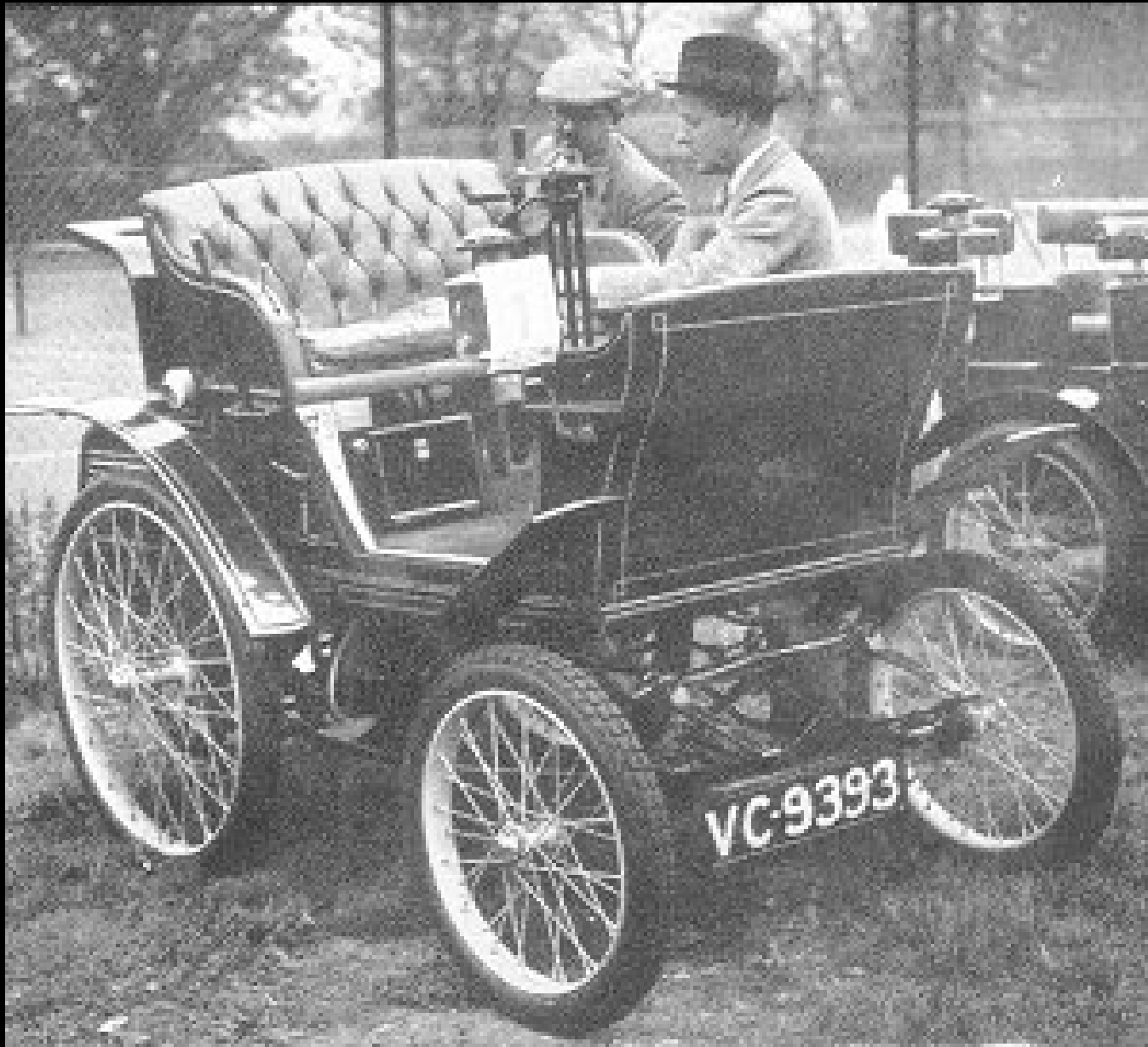
before there were rules – drivers had to respect others on the street



FUN
Mansion.com

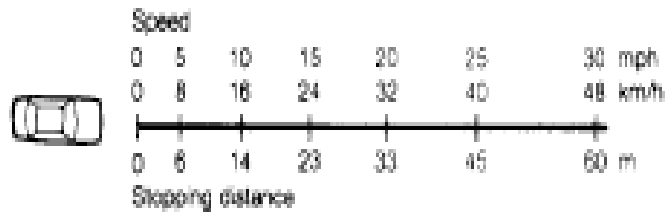
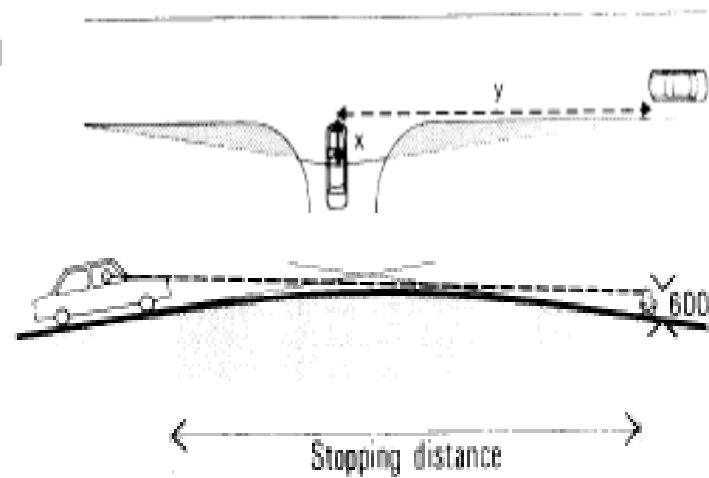






standardised geometric criteria...

	Around	Around	Up to around
No. dwellings served	50-300	25-50	25
Carriageway width (m)	5.5	4.8	4.1



... lead to standardised layouts







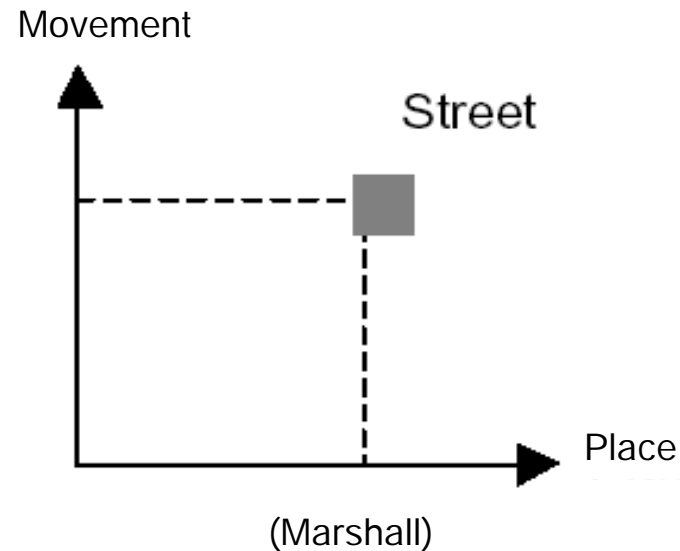
Street functions

What is a street?

- a highway that by its nature has important functions beyond just the movement of people and traffic.

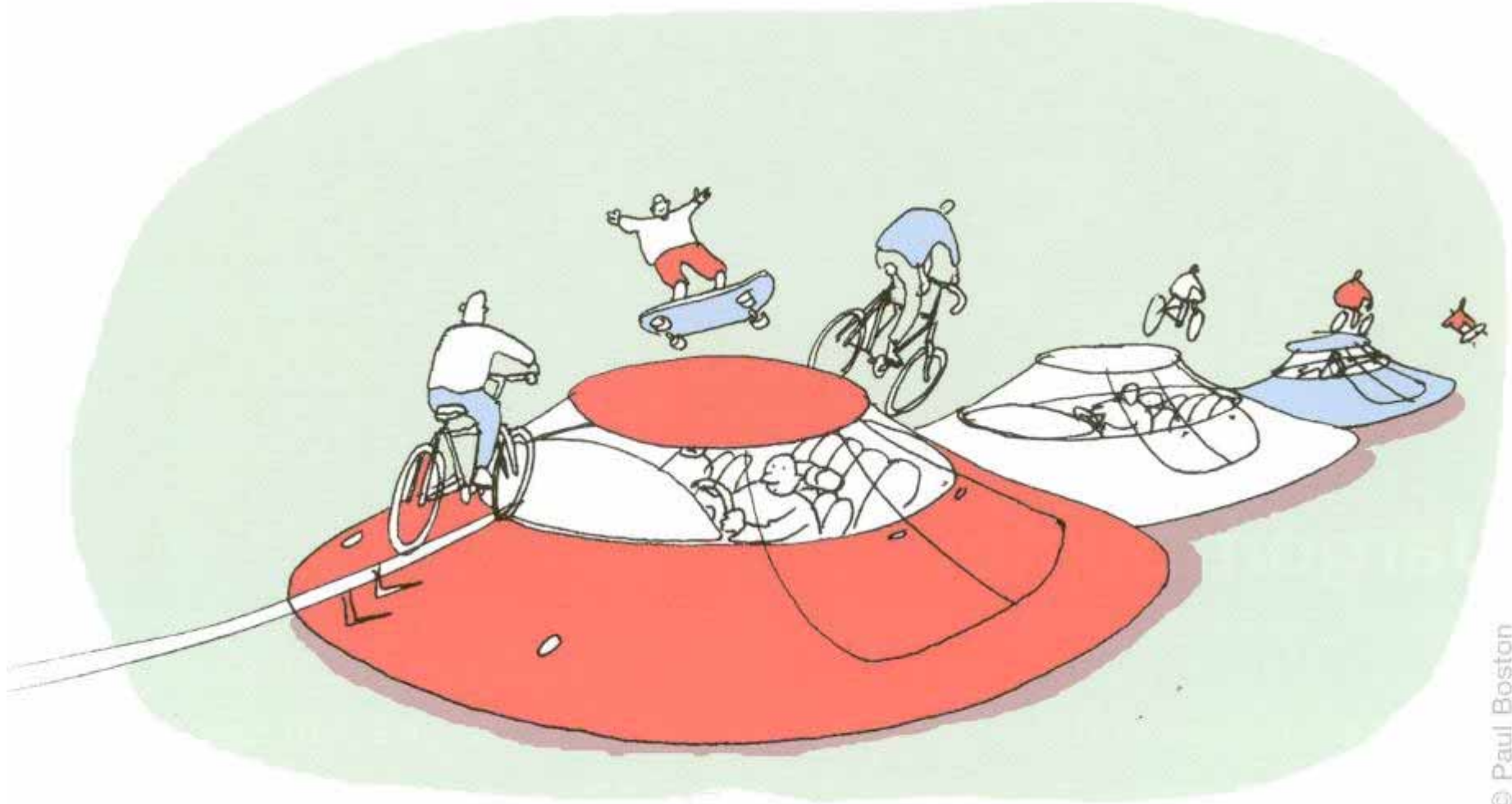
Functions of streets

- place
- movement
- access
- parking
- drainage and utilities



mode hierarchy





© Paul Boston

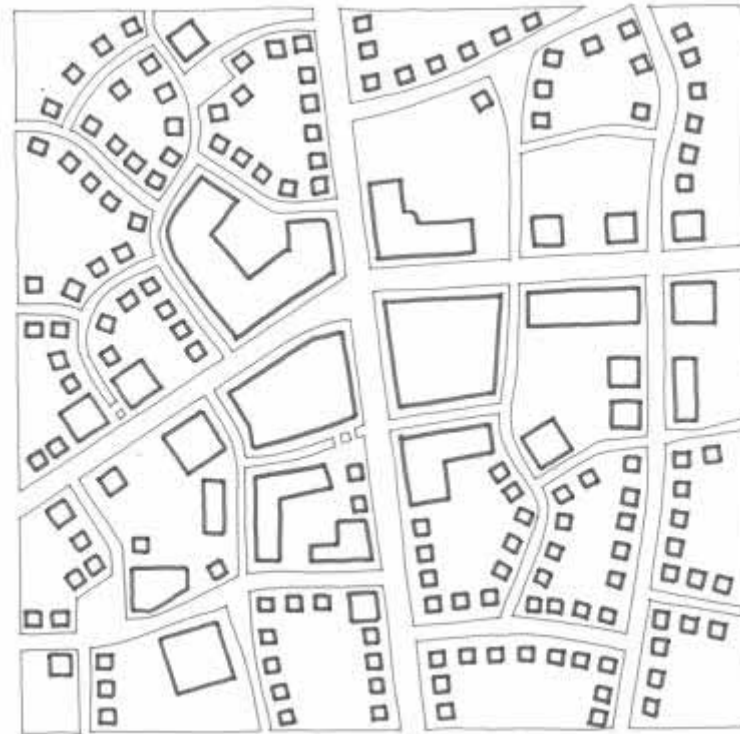
2. Let's meet up

(networks and junctions)



suburban sprawl

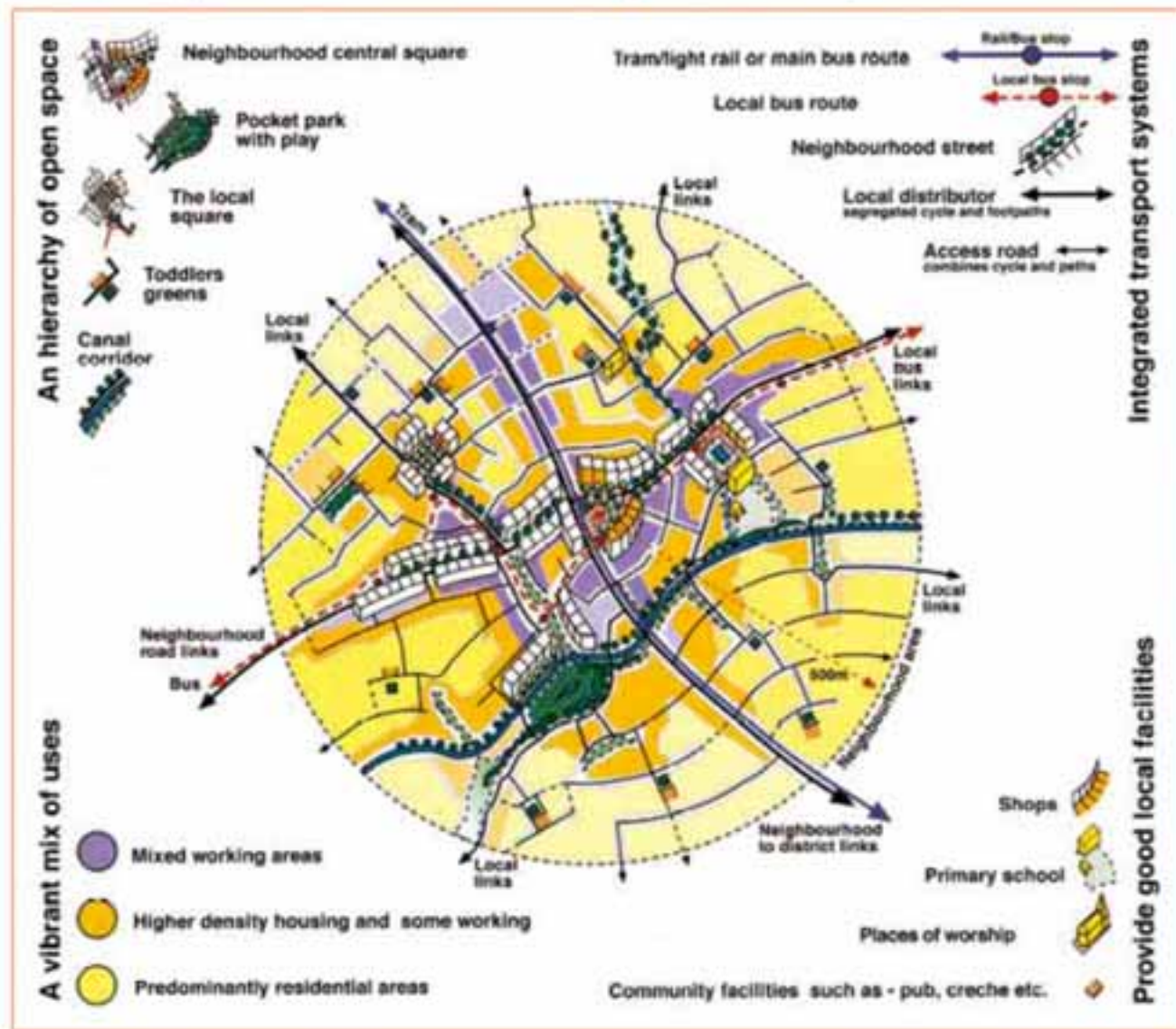




traditional neighbourhood



The key components of a mixed use and integrated urban neighbourhood

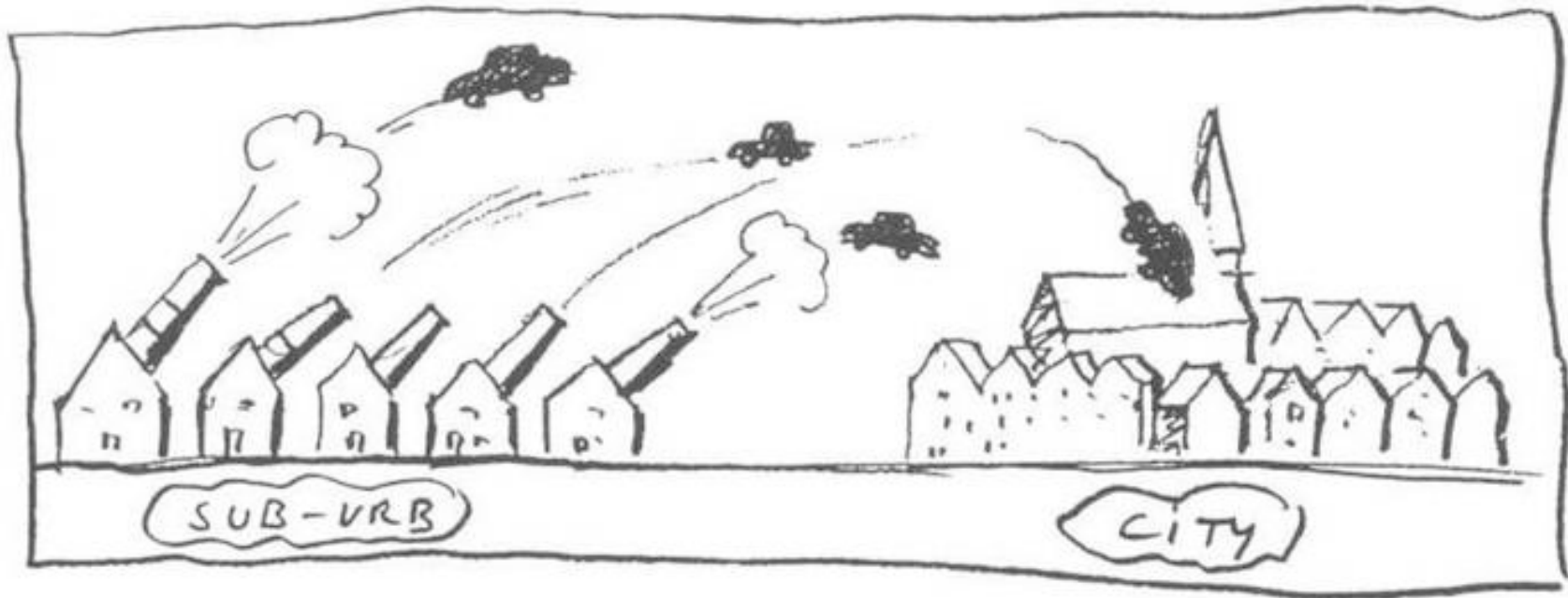


Source: Andrew Wright Associates, the Urban Task Force, 1999 (Lord Rogers)

people living in cul-de-sac environments weigh on average 6lb more than those living in connected neighbourhoods

Richard Jackson MD

NOT THE CAR BUT THE SUBURBAN HOME IS THE DEADLY WEAPON



DAILY SUBURBAN MORTARFIRE AGAINST URBAN CENTERS

Leon Krier



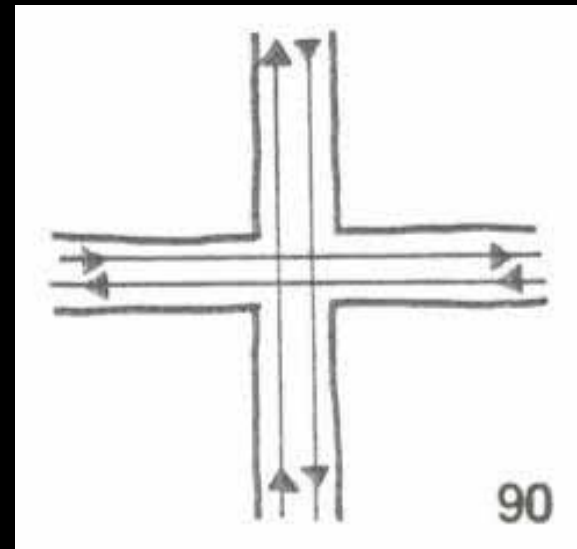
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3.38 Cross roads: Cross roads are generally regarded as the most dangerous form of junction, largely because they imply cross traffic movement (figure 90). They should therefore normally be avoided.



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YORK STREET

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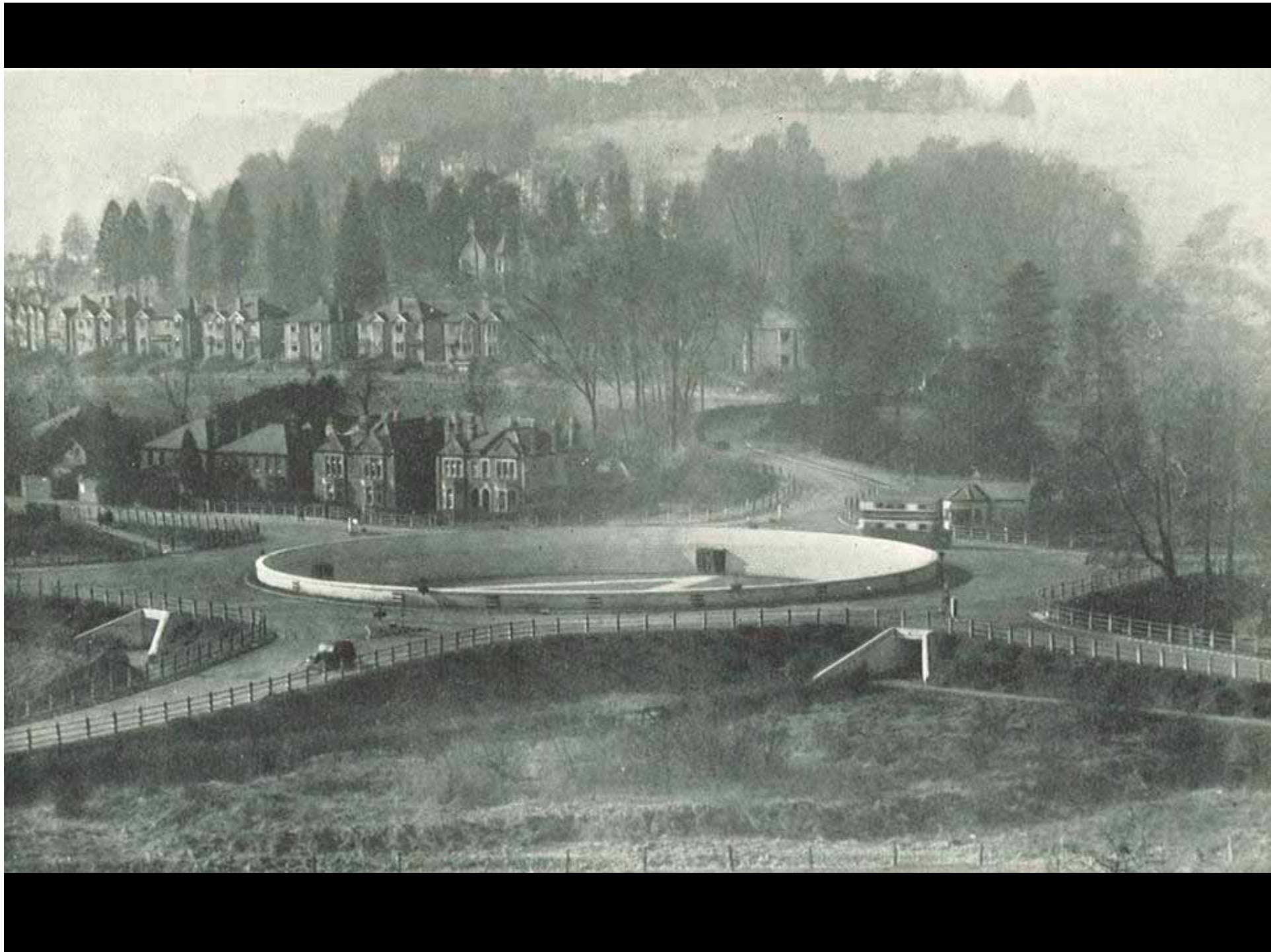
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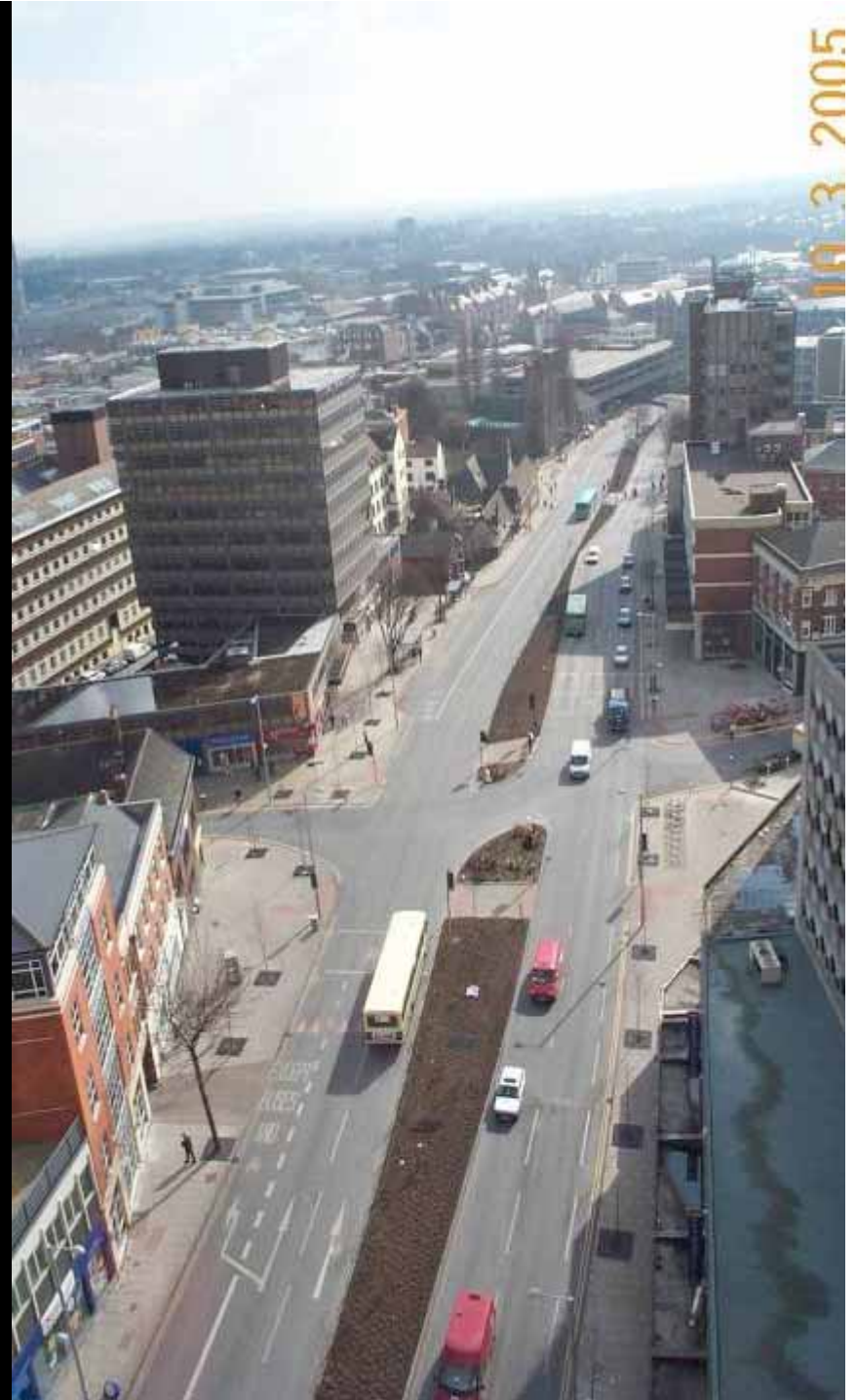
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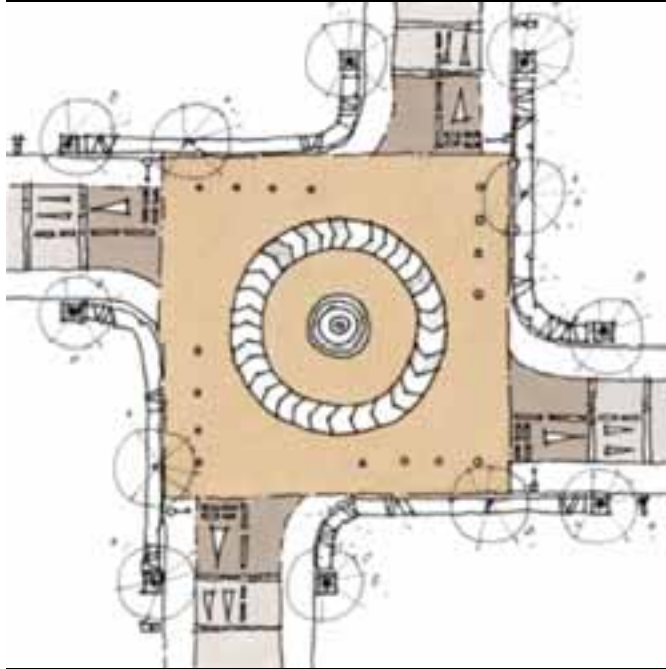
IMAX



urban streets – time to rethink?







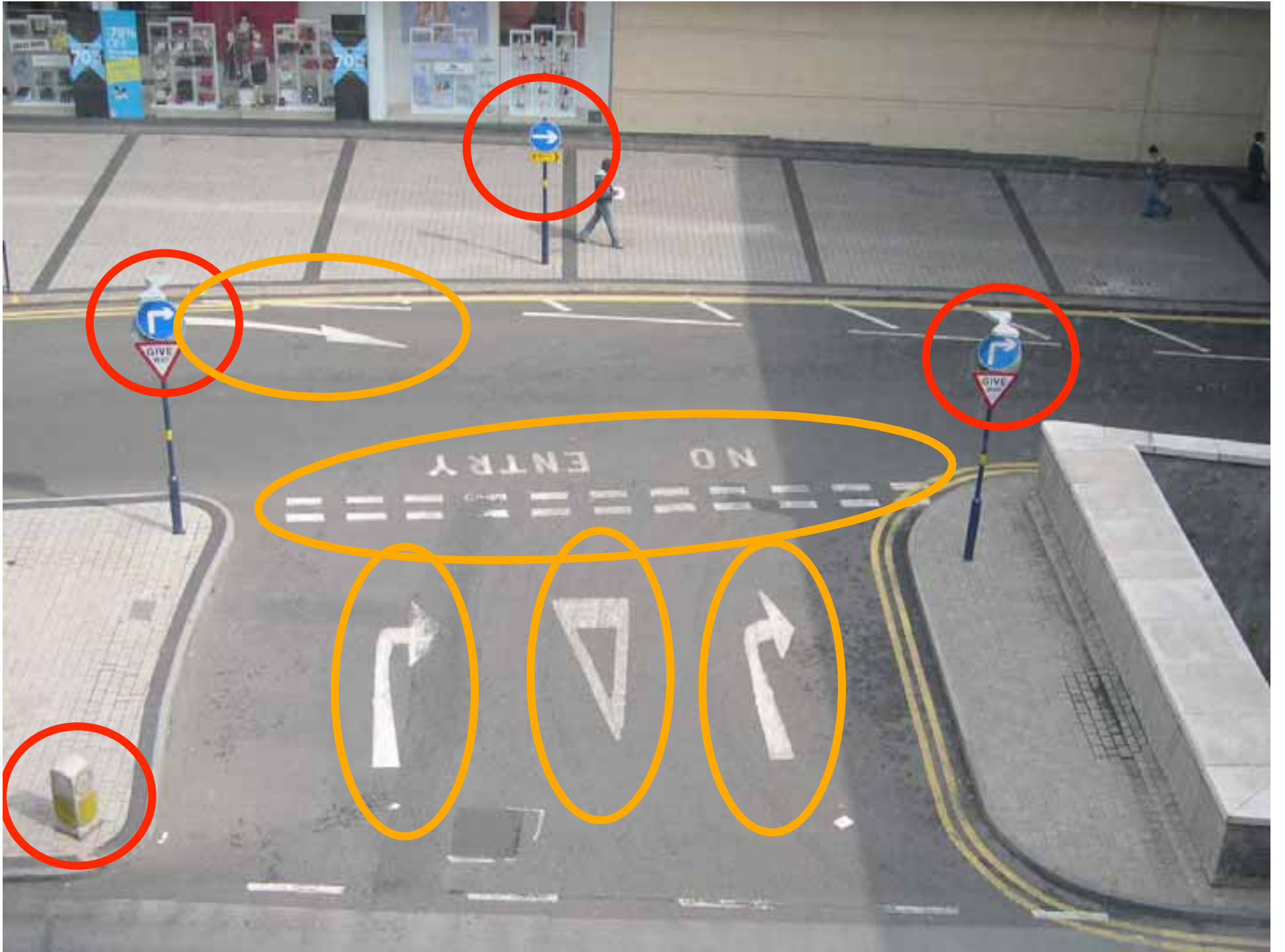




3. All the signs are there

(signage)











Caution

Seats may become wet



Boats
Crossing



**attention
Tree !!!**



The House of Lords

Judgments - Gorringe (Appellant) v. Calderdale Metropolitan Borough Council (Respondents) (2004)

LORD STEYN

...the courts must not contribute to the creation of a society bent on litigation, which is premised on the illusion that for every misfortune there is a remedy.

LORD HOFFMANN

People must accept responsibility for their own actions and take the necessary care to avoid injuring themselves or others.

The users of the highway were expected to look after themselves.

Drivers of vehicles must take the highway network as they find it.

[Crown Copyright Reserved.]



Ministry of Transport.

THE
HIGHWAY CODE

Issued by the Minister of Transport
with the authority of Parliament in
pursuance of Section 45 of the
Road Traffic Act, 1930.

LONDON:

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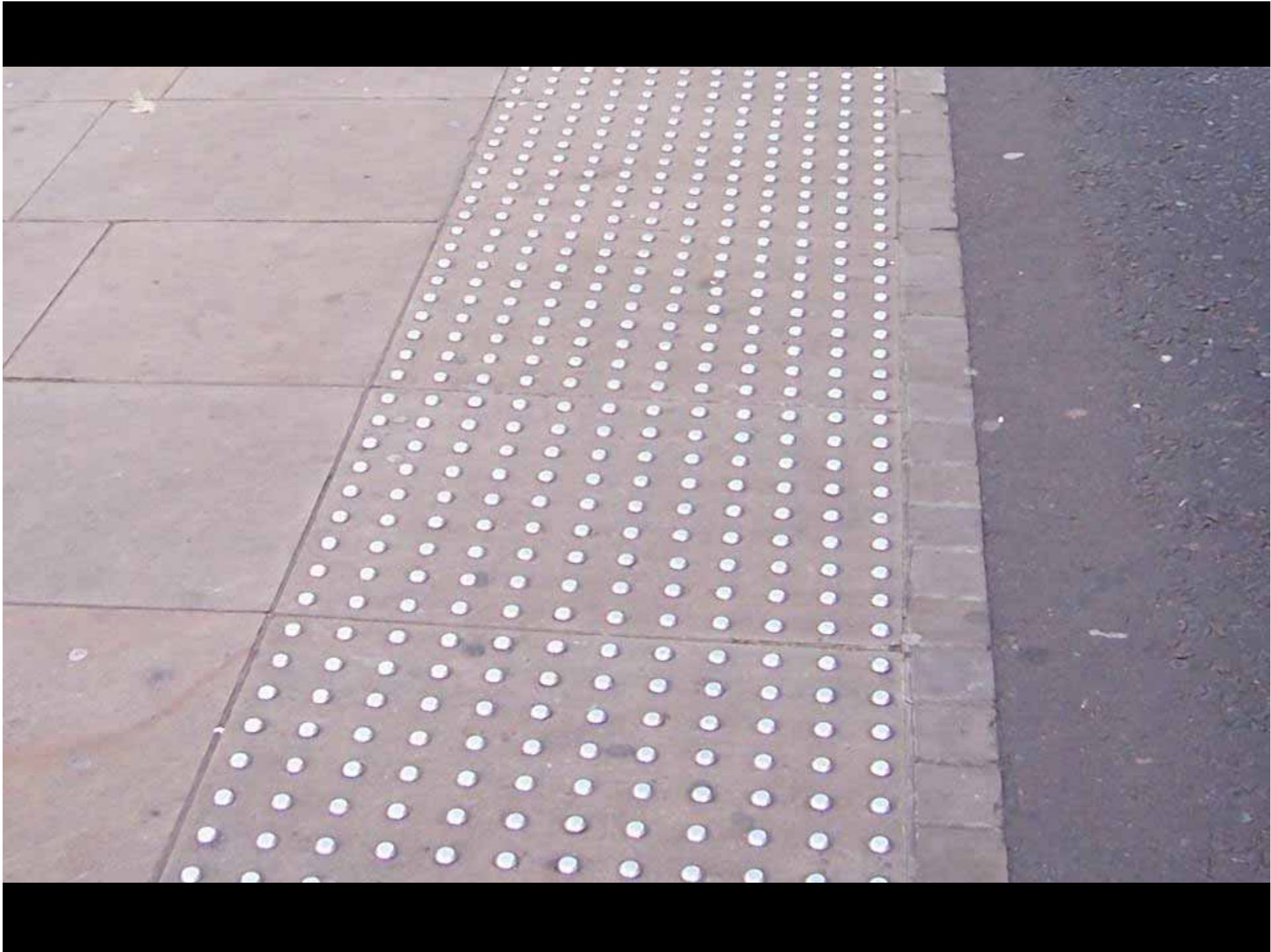
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55-166

4. Feelings

(tactile paving)





LOOK RIGHT



The Economists' Bookshop







Are the blind and partially sighted really getting a fair deal?

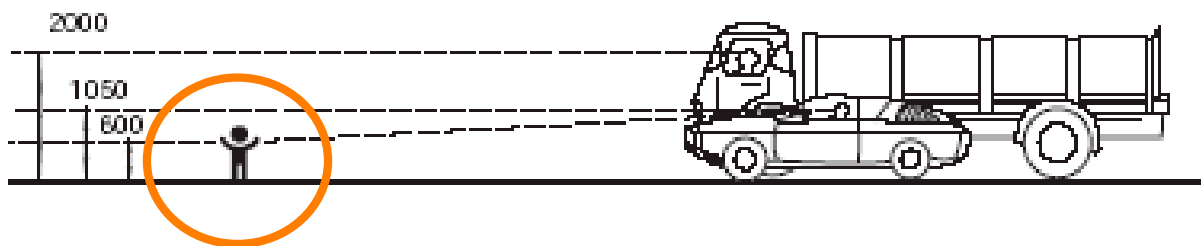
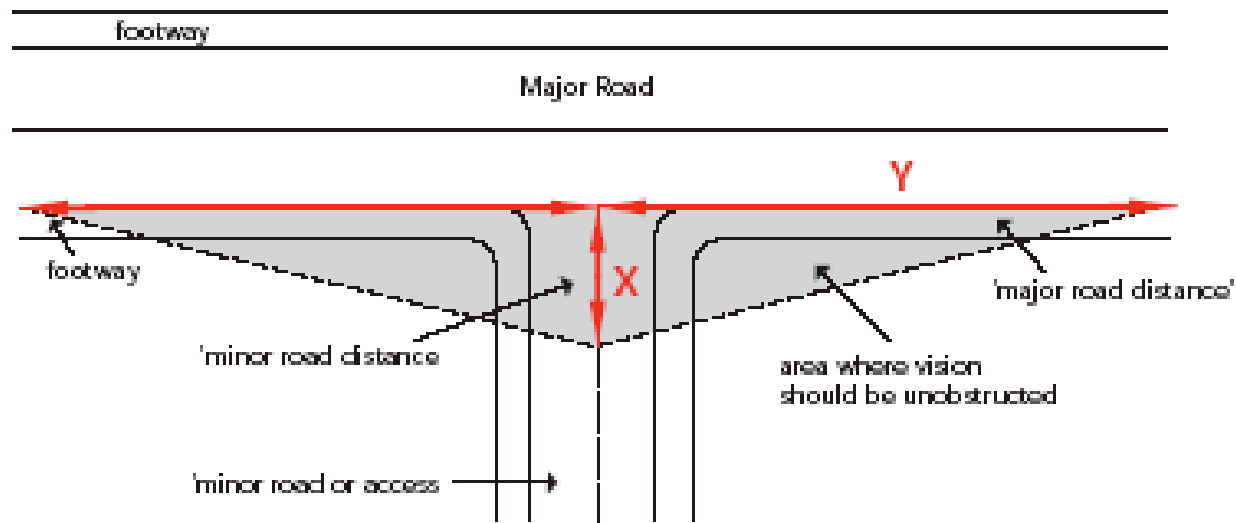




The Tokyo Ubiquitous Technology Project, University of Tokyo

5. Seeing each other

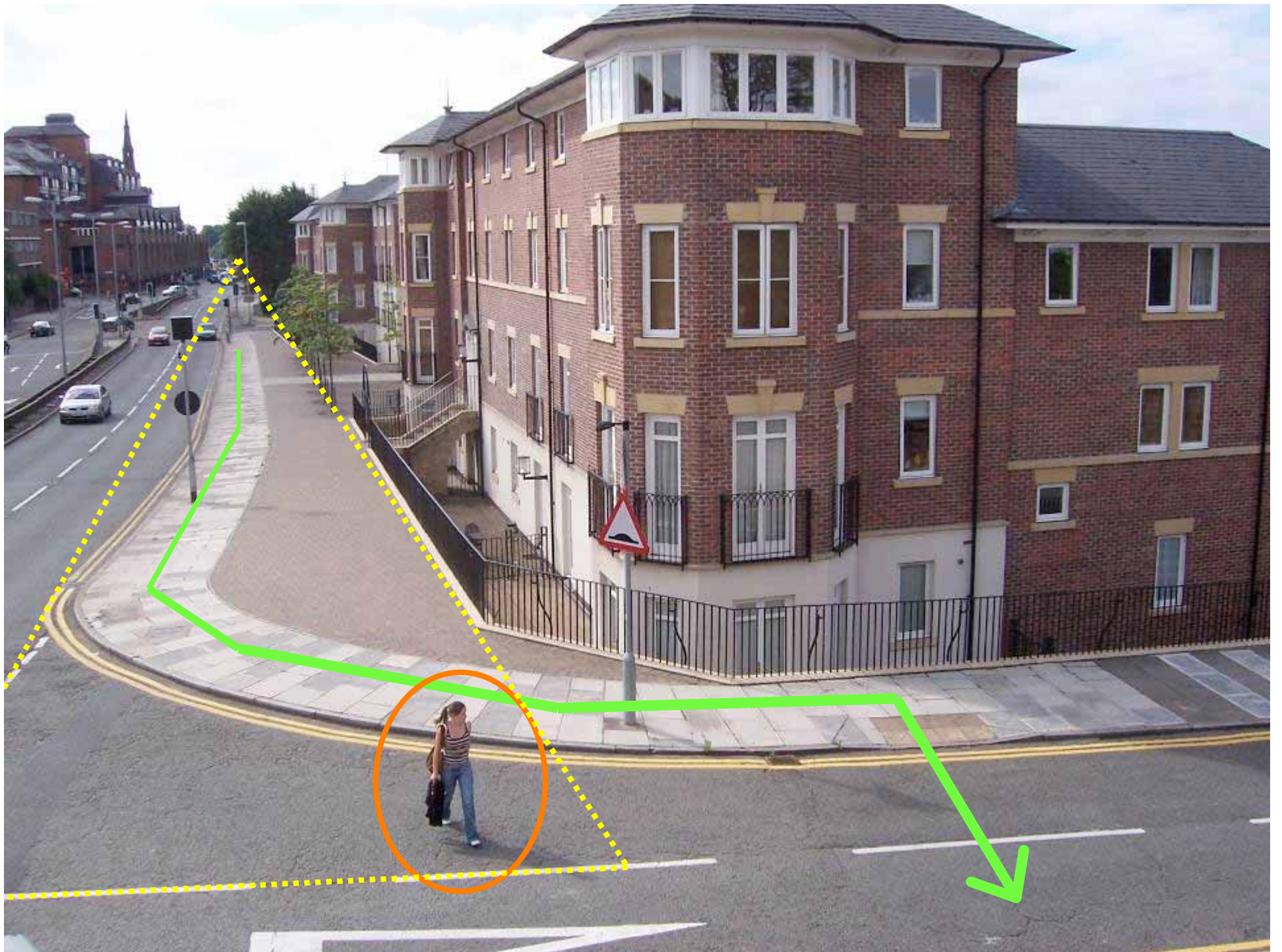
(visibility)



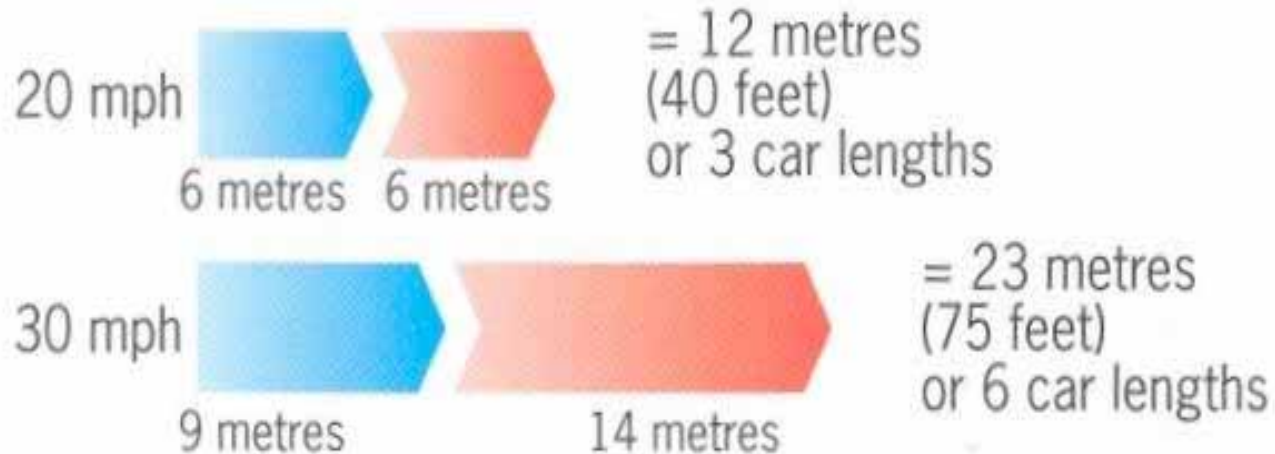
Note:

Clear horizontal sightlines should take account of both what the driver can see and what pedestrians (especially children) can see. Sightlines need to be determined from an eye height of 1.05m - 2m, to an object height of 0.6m - 2m



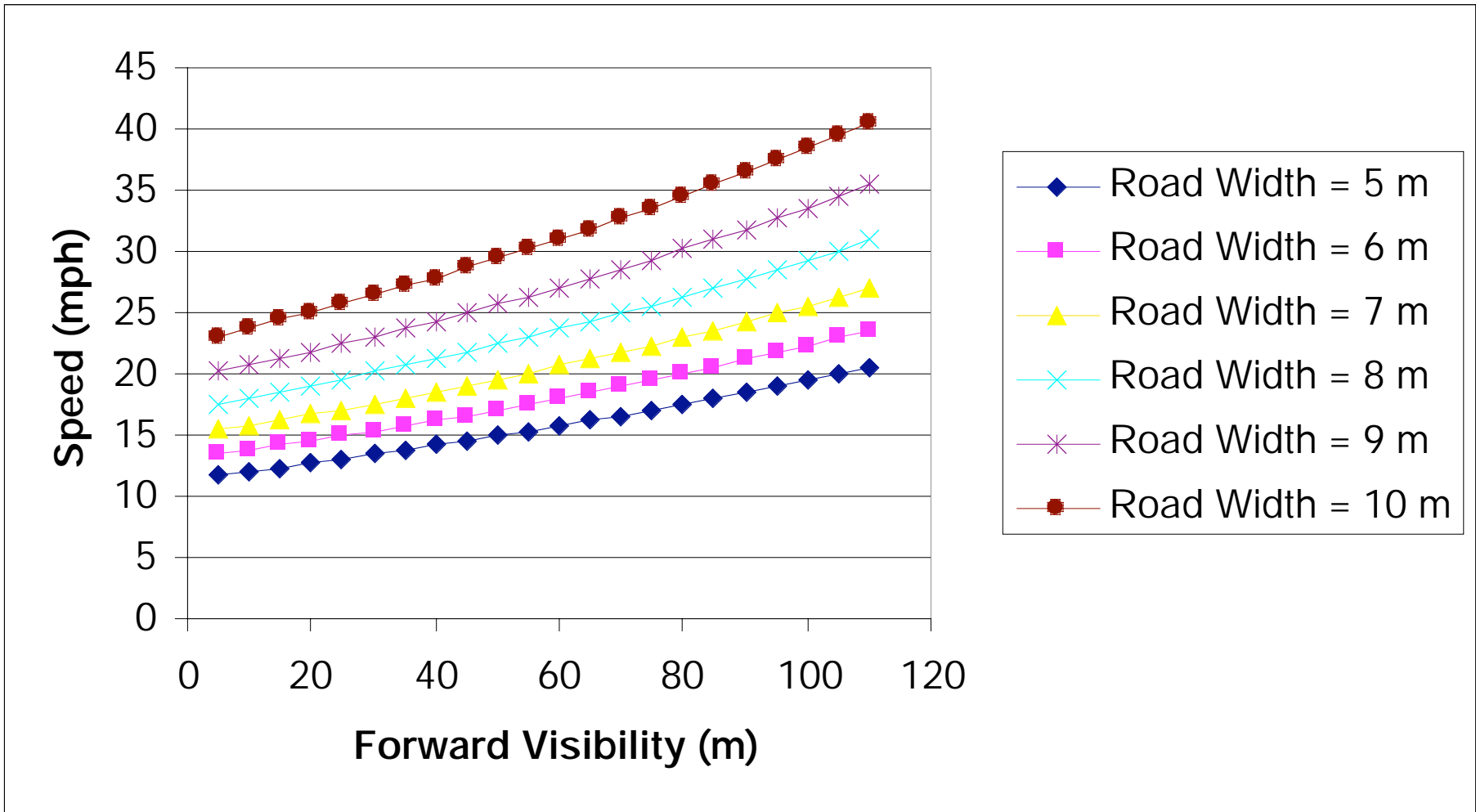


Typical Stopping Distances



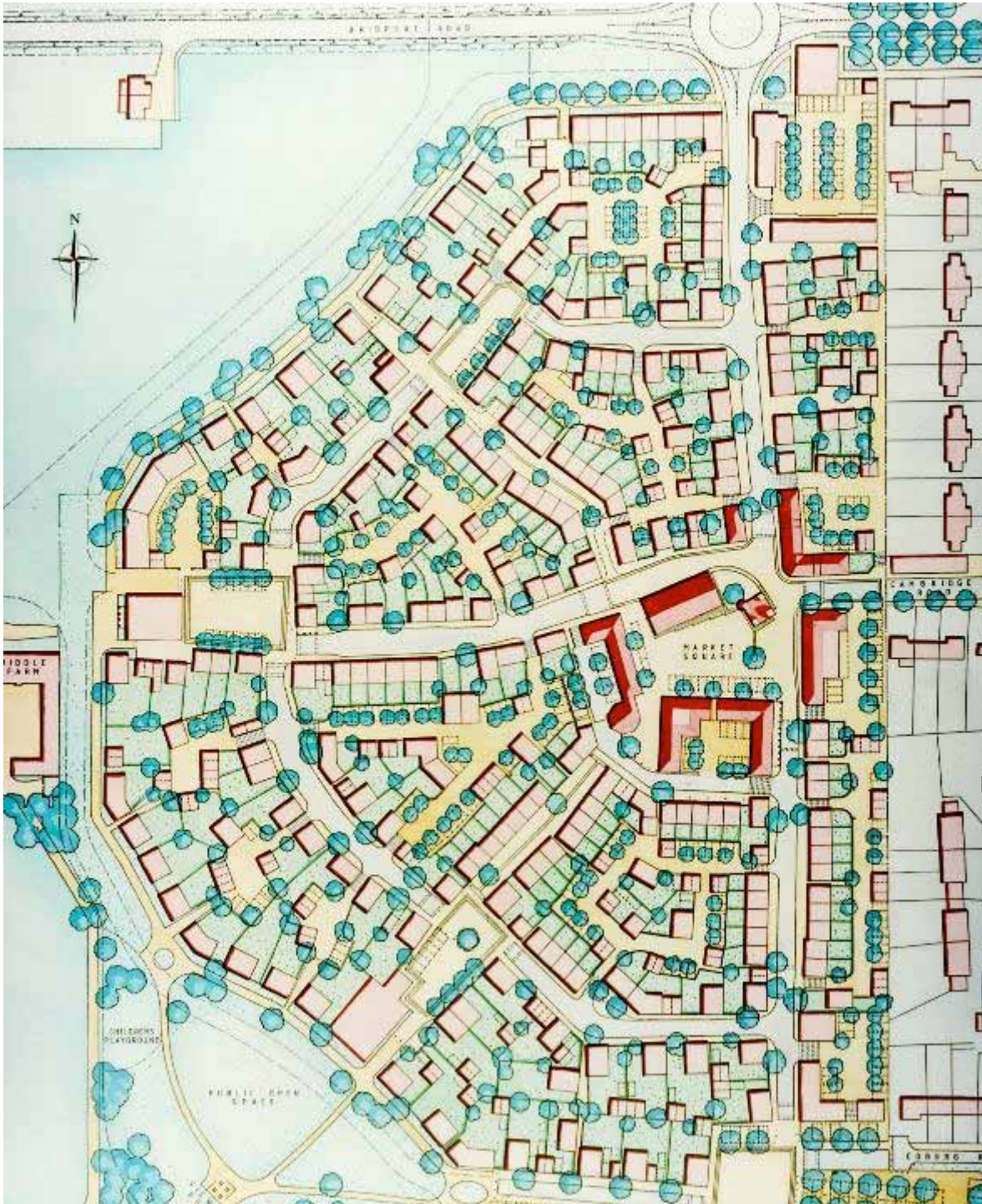
Sight Distance Requirements at 50kph (30mph)

- USA = 63m
- Netherlands = 40m
- Australia = 40m
- UK visibility splay = 70m (90m)
(Evidence base from DB32?)



TRL Research: the site survey data shows that **speed increases with road width and visibility for both links and junctions**

Design Speed	Miles per hour	30	20	15	10	5
	Kilometres per hour	48	32	24	16	8
SSD (metres)	Zero gradient	40	22	15	9	4

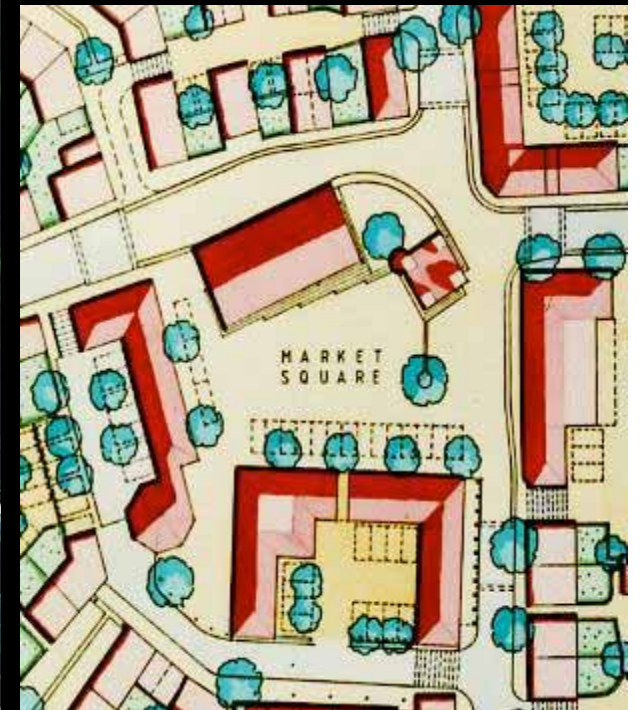


Poundbury Phase 1

- Permeable layout
- Network of spaces
- Vehicles have access, but focus is on the pedestrian
- Primacy is given to the creation of a sense of place



The Market Square



Mixed use









6. Take me higher!

(the high street)



road safety audit

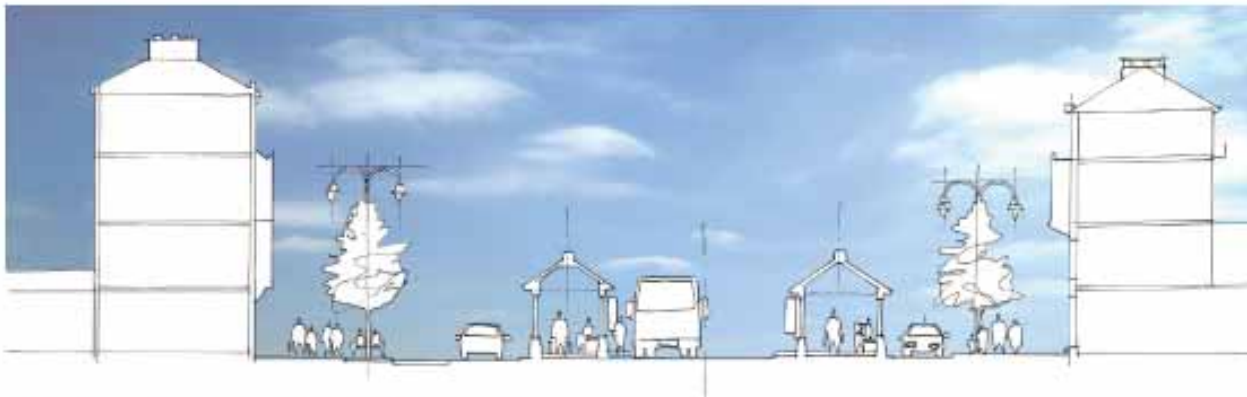




high street: view looking south



high street: view looking east



detailed area c: 'the high street'
main street design & character setting



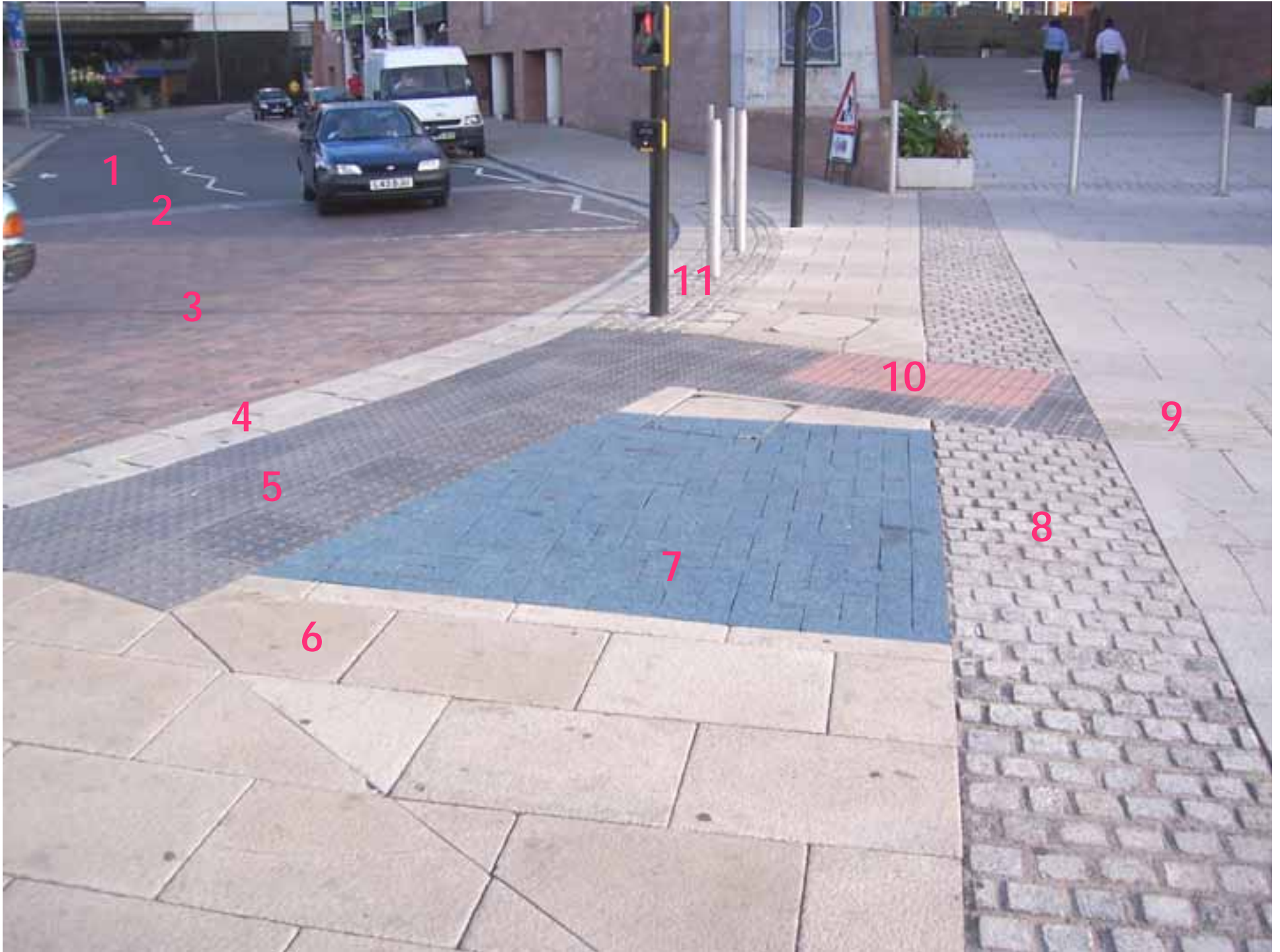
marketborough: town hall



7. Long term relationship

(maintenance)



















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Manual for Streets



go and have a good
relationship with good streets
experience the joy of streets



