Volunteer Inspection of Main Roads in Brackley

Dave Gaster

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Introduction and Summary

Councillor Sue Sharps has expressed a strong interest in improving safety in Brackley, particularly for cyclists and pedestrians. Following a discussion with Dave Gaster, she proposed that a detailed inspection of local roads would be valuable, especially in comparison with the Section 58 (S58) inspections carried out by West Northamptonshire Council (WNC).

Although Mark Morrell was unavailable for the initial phase, two local volunteers quickly stepped forward: Christine Coleman, a retired insurance director, and Dr Steve Jeffery, a cyber-security engineer.

The surveys focused on main roads, which were previously subject to monthly driven inspections by WNC, alongside six-monthly walked inspections. These roads are illustrated in the accompanying map. In addition, the rural sections of Halse Road and Radstone Road were surveyed by bicycle to better understand issues affecting cyclists.

In total, over 300 issues were identified, including:

- 121 reportable potholes
- 55 significantly overgrown hedges
- 31 blocked gullies

Urgent hazards were immediately reported via Street Doctor, WNC's adaptation of the FixMyStreet system. Many of these have already been repaired, including a 20 cm deep trench failure, a small sinkhole, a road classified as "out of repair," and

a 10 cm deep pothole on Banbury Road. Councillor Anthony Bagot-Webb ensured prompt action in all reported cases.

Details and Process

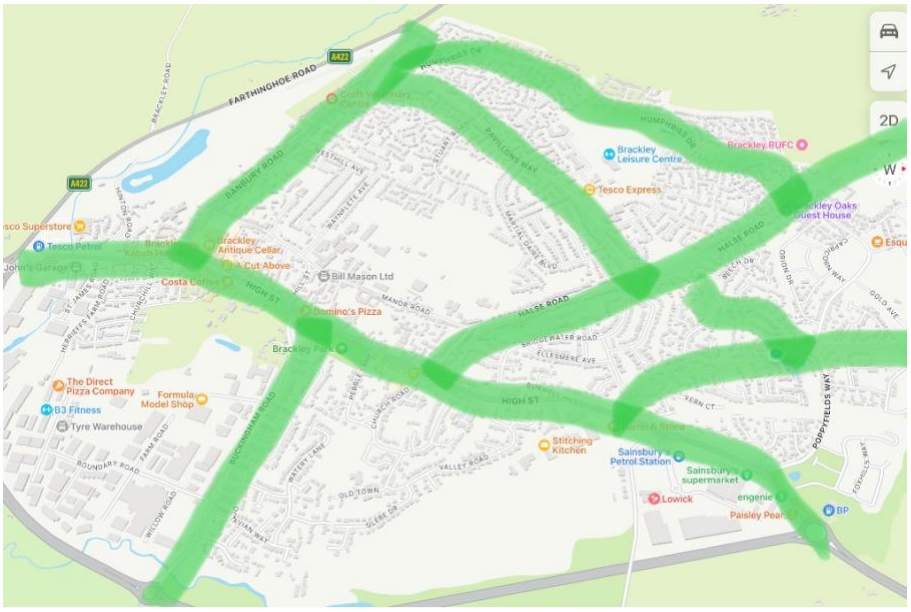
Dave Gaster, a highly experienced highways engineer with extensive knowledge of highway law and inspection procedures, designed a simplified A4 inspection form. This was tested and refined to ensure ease of use during surveys. Dave has also taught civil engineering at university level and delivered numerous training seminars and workshops.

Before undertaking surveys, Christine and Steve received detailed desktop training covering safety, highway terminology, and inspection techniques. This was followed by a practical trial inspection on roads with known issues. It was emphasised that this was a walked inspection only, with no entry onto carriageways or detailed measurement of potholes.

The surveyed roads included:

- Northampton Road – High Street – Market Place – Bridge Road – Oxford Road
- Banbury Road
- Buckingham Road
- Pavillons Way
- Halse Road
- Humphries Drive
- Radstone Road
- Oak Road

All of these roads are, or recently have been, bus routes and are at least 25 years old. Many show clear signs of deterioration. The first group were formerly trunk roads of regional importance before the A43 and A422 partially bypassed the town.



Scope of Findings

These inspections took a broader approach than WNC surveys, which primarily focus on potholes, kerbs, and trip hazards, relying on public reports for other issues. Our findings therefore represent only a summary of the most significant problems observed.

Summary of Brackley S58 Inspections July to September 2023

Road Name	Date Inspected	Reportable	Potholes	Kerb trips	Hedges 25%+	Hedges 50% +	Obstructed St Lts	Illegal Crossings	Scree	Iron Work	Blocked Gullies	Total Defects
Oak Road	23/08/2023	18	3	2	6	4	6	0	0	0	0	21
Pavillons Way	23/08/2023	31	14	1	4	7	3	4	2	5		40
Buckingham Road	30/08/2023	23	3				3			3	16	25
Radstone Road (Rural)	11/09/2023	13	10	1			1		1			13
High St to Oxford Road	15/08/2023	23	18	2		2	5				7	34
Northampton Rd (north)	17/08/2023	19	6	1			1		6		3	17
Northampton Rd (south)	28/07/2023	8	10	1	1	2					3	17
Radstone Rd Nn Rd - JCC	28/07/2023	23	3	3	4	8	3		2		1	24
Radstone Rd JCC - North	16/07/2023	21	9		4		2		3		1	19
Banbury Road	24/08/2023	21	25	2	1				1			29
Halse Road - Town	09/09/2023	31	8	2	2	3	4	17				36
Halse Road - Rural	22/09/2023	10	10				1					11
Humphries Drive	09/09/2023	16	2		6	1			2	1		12
Totals		257	121	15	28	27	29	21	17	9	31	298

NOTE: Reportable counts the number of locations exceeding council limits, while Total Defects are the number of defects exceeding Policy limits.
In addition we assessed Road Condition, Road Markings Condition, Footway Trips, Utilities damage and Hedges obstructing 10 to 25% of footways.

“Reportable” issues were grouped by location, with some sites containing multiple defects. Potholes were recorded where they exceeded 30 x 30 x 4 cm on major roads, and kerb trip hazards were noted where they exceeded 2 cm.

Additional issues included:

- Obstructed street lighting (often due to tree growth)
- Illegal crossings from private drives without proper dropped kerbs
- Loose gravel (“scree”) forming on deteriorating surfaces
- Failing ironwork (gullies and manholes)
- Blocked gullies where debris restricts drainage

We also assessed utilities damage, road markings (rated 1–5), overall road condition (rated 1–10), vegetation, cyclist hazards, footway trips, and signage.

HIGHWAYS INSPECTION - S58	Insp. Initials	DEG	ROAD:	Pavillons Way	Page No.	1	Date:	23/8/23	Weather:	Fine - Dry	

	Location	Pothole WxLxD cm. Measure / Estimate	Report Y/N	Kerb trip cm.	F'way trip cm.	Hedge H Tree T %age obstruct.	Street Light Tree / Other	Road lines 5 to 1	Illegal crossing?	Utility damage?	Road condition 10 to 1	Notes - Other issues or description? Gullies, Root trips %age severe, Floods, Road line details?	Council?
1	20 PW		Y			40% Tree		4			7	Many years untouched!	
2	Magd Meadows Junction		Y					2			4	2 Manholes failed	C
3	By shops & zebra		Y				Sign 70%	4			7	Zebra ahead'	
4	Martial Dare Junction		Y					3			7	6cm of scree	C
5	Opp 19		Y			55% Tree		4			6		
6	Opp Tudor Way		Y			60% Tree		3			3		
7	Sommerville Junction		Y			80% H		3			4	Wheelchairs blocked	
8	Sommerville Junction	60x40x4 Est	Y			45% H		3			3		C
9	Lathbury Junction		Y			50% H		4			5		
10	Lathbury Junction	170x20x4 Est	Y					2			3	Cycling bad risk	C
11	Humphries play park	8 defects marked for repairs	Y				100% Tree	3			2	Hump sign invisible	C
12	Zebra Crossing	3 x 2cm + trips	Y					2			2	2 marked for repairs	C
13	Banbury Road Roundabout		Y					3			3	4cm scree into junction	
14	Cartwright Junction		Y			70% H						Wheelchairs blocked	
15	Woods Road Junction	20m x 20cm						3			4	Edge failure - cycling risk	C
16	Cartwright 2	40x200x4	Y			40% H		4			5	Junction failed	C
17	44 PW	Centre line failure	Y			50% H & Tr							C
18	Opp Lathbury Junction	30m x 3cm	Y					1			3		C
19	Opp Lathbury Junction	3m x 60cm x 4 Est	Y					1			1	Road totally failed	C
20	Opp Lathbury Junction	250x60x5Cm	Y					2			1	Road totally failed	C
21			Y			40% Nettles		4			5	Failed Gully	
22	Stuart Junction		Y			50% Hedge							
23	Zebra	30x20x3	Y					2			5		C
24	Opp Somerville	90x40x5 Cm Est	Y					2			5	Gully surround	C
25	Tudor Way Junction	500x80x4 Est	Y					2			3	Junction failure	C
26	Tudor Way Junction		Y					2			4	Failed Gully	
27	71 PW		Y					4	Yes		6	Failing Cross Over	
28	Opp Springfields Way		Y	2cm								Utility boxes	
29	By zebra crossing		Y			80% Hedge							

The RAG (Red-Amber-Green) rating system proved particularly effective in highlighting areas of concern at a glance, while detailed notes captured additional risks such as dangerous loose gravel and inaccessible pavements due to overgrown hedges.

Data Collection and Technology

The team used a shared Dropbox folder to manage templates, spreadsheets, and results. Christine transferred handwritten survey data into Excel for analysis, while Steve used the Geotracker app to record locations. This prompted further use of What3words for precise geolocation.

Future improvements may include trialling additional apps recommended by Mark Morrell. Ideally, a highways authority would use real-time, map-based systems to visualise defects and prioritise repairs.

HIGHWAYS INSPECTION - S58	Insp. Initials	DEG ROAD: Radstone Rural	Page No. 1	Date: 11/9/23	Weather: Damp

	Location - What three words	Pothole WxLxD cm. Measure / Estimate	Report Y/N	Kerb trip cm.	F'way trip cm.	Hedge H Tree T %age obstruct.	Street Light Tree / Other	Road lines 5 to 1	Illegal crossing?	Utility damage?	Road condition 10 to 1	Notes - Other issues or description? Gullies, Root trips %age severe, Floods, Road line details?	Council?
1	farm.enrolling.search	140x70x5	Y					3			6		C
2	classmate.swooning.steaming	small pothole						3			5		C
3	model.imply.revolts	80x40x6	Y					2			7		C
4	rapport.contained.inferior	170x50x6	Y					2			3	Centre line failure	C
5	blip.bunkers.rods	80x40x6	Y					0			4	Edge failure	C
6	bland.landscape.womb		Y					1				10m x 0.6m scree	C
7	branching.carpeted.planet	200x65x7	Y					2			4	Edge failure	C
8	miles.bordering.shade	800x120x20cm	Y					3			2	Trench failure (St Doc report)	C
9	roosts.ineterest.crucially	900x70x15cm	Y					2			4	Trench failure (St Doc report)	C
10	spite.incurring.cable	30x30x4	Y					1			6		C
11	mandates.yacht.mushroom	50x40x5	Y					3			6		C
12	mandates.yacht.mushroom	30x30x7	Y										C
13	finely.evoke.february		Y			Sign 50% obs		2			7	Give Way sign obscured	C
14	canyons.guarded.mystified		Y	Yes				3			8	Kerbs totally wrecked	C

Limitations of Existing Inspections

“Coarse visual inspections” conducted by vehicle typically involve an observer travelling at speed (often around 45 mph) in a single direction. These are widely recognised within the profession as inadequate, as visibility is affected by direction, lighting, weather, and traffic conditions.

In WNC, inspection vehicles rarely stop, and defects are counted without recording precise locations or dimensions. Road markings are assessed once per road on a simple 1–5 scale.

By contrast, the cycled survey of Radstone Road covered both directions at lower speeds, yet still highlighted how easily defects can be missed. For example, an 8 m long, 20 cm deep trench failure, missed during regular inspections, was identified and repaired within two weeks after being reported.

Significant degradation of road markings was also observed, with over two-thirds worn away. This reduces safety, particularly at night, and accelerates road edge deterioration due to vehicle overrunning.

Potential Way Forward

This project aimed to demonstrate two key points:

1. Current WNC inspection methods do not fully ensure highway safety.
2. Volunteer inspections can provide substantial additional value through greater detail and coverage.

Following a team meeting, a second phase of inspections is planned. This will incorporate improved techniques, better use of technology, and comparisons with initial findings. Additional volunteers are expected to join, enabling wider coverage across the town.

While reporting every defect via Street Doctor was considered, it is recognised that WNC may not have the capacity to respond to such volumes.

A potential long-term solution would involve formally integrating trained volunteers into the inspection process. Rural inspections, for example, could be carried out by inspectors using e-bikes, improving both coverage and responsiveness.