

HIGHWAYS MAINTENANCE AND FLOODING

Committee name	Residents, Education and Environmental Services Policy Overview Committee
Officer reporting	Perry Scott, Residents Services
Papers with report	None
Wards	All

HEADLINES

The Committee have requested an update on a broad range of highway maintenance, flooding and associated topics.

This report covers the following subjects:

Highways Maintenance

- How the Council determines which roads and pavements are to be repaired
- Safety Inspections and Potholes

Flooding

- Roles and Responsibilities
- Actions during a major flood event
- Council learning from previous major flood events

Parking, Traffic & Enforcement

- Parking on roads with grass verges
- Traffic calming signage
- Pedestrian accessibility on roads & pavements
- Dropped kerb enforcement

RECOMMENDATION:

That the Committee notes the information presented in the report.

SUPPORTING INFORMATION

Highways Maintenance

How the Council determines which roads and pavements are to be repaired

Roads are constructed in layers, with a sub-base, further asphalt “base” courses (layers) and a top “wearing course” layer, which is relatively thin and is of a higher quality. It is the wearing course that protects against skidding and prevents water getting into the subsurface road layers and damaging them.

The structure of the road is therefore all of the layers that make up that road, but particularly the lower layers, which must be in good condition to keep the road level and safe. There are therefore two broad categories of road that need repair:

- A. Those that are structurally unsound, i.e. where the sub-surface is collapsing causing major slumps and tell-tale surface cracking – these need major resurfacing or reconstruction.
- B. Those where the surface is aging and brittle and needs to be water sealed and/or needs improved skid resistance – these can be given a preventative treatment using a thin surface overlay.

In the latter case, the road condition beneath the surface may actually be good, but to the road user's perspective these are often considered to be the poorest roads.

Roads and pavements for inclusion in planned annual resurfacing programmes are prioritised primarily based on their condition. In 2017, independent consultants undertook condition surveys of the entire highway network in the Borough, in accordance with the UKPMS national standard (United Kingdom Pavement Management System).

Engineering assessments are also made to determine the most appropriate type of surface treatment. Other factors taken into consideration are usually identified from the results of highway inspectors routine safety inspections (for example potholes, trip hazards and wear/loss of surface material); service requests or defect reports from councillors or residents; road hierarchy and insurance claims. The above factors are taken into consideration to inform what roads and pavements are included in planned works programmes.

We propose to increase the life span of our roads and reduce the percentage of roads in need of repair by moving from a "worst first" approach and implementing a programme of preventative maintenance. This will form the basis of our developing Highways Asset Management Plan to reduce costs in the long term.

Safety inspections and potholes

Safety inspections are undertaken on all roads and pavements in the Borough in accordance with the Council's new Highway Safety Inspection Policy, which introduces a more risk-based approach to categorising the road hierarchy, carrying out inspections, and assessing and prioritising defects. Previously, our procedures considered defects to have the same priority and response time regardless of location on the road or footway. So, for example, a pothole adjacent to the kerbline within parking bays accrued the same priority as an equivalent pothole on the wheel track of a busy A-road.

The new Policy gives additional consideration to adopting consistent practices with our neighbouring authorities with adjoining highway networks and introduces a flexible risk based approach that considers a variety of factors to determine the priority of any identified defect. These factors include: road hierarchy, traffic flows and usage, physical dimensions of the defect, location of the defect, inspection history, condition

assessments etc. When a defect has been identified the determined priority (risk-factor) allows the highway service to respond within a proportionate timescale.

It is recognised that on any highway network, a multitude of minor defects will exist which do not pose any risk to either the safety or the integrity of the highway and for which it may be impractical and inefficient to expend limited financial resources to undertake repairs. Investigatory levels provide guidelines to highways inspectors, as to which defects should be considered for treatment or repair. The key to selecting the appropriate action for a defect is the risk assessment process. All defects that meet investigatory level are evaluated and the likelihood of injury or damage to a highway user assessed.

The current investigatory levels are 40mm for potholes and 20mm for footway defects.

Defects are categorised as either Category 1 - defects presenting the highest risk of harm to the public, thus requiring immediate attention to secure, guard, warn, or make safe. These are responded to within 4 hours by our Rapid Response Team; or Category 2 - these are defects that require some further action and are divided into high, medium and low by the risk assessment score and require a permanent repair within 14 days, 28 days or 3 months.

Parking, Traffic & Enforcement

Parking on roads with grass verges

Inconsiderate parking on grass verges is unfortunately a common problem, and frequently results in complaints, especially during periods of inclement weather, where grass may be churned into mud through selfish and insensitive behaviour by a minority. The reasons are various, and can be exacerbated by temporary issues such as construction work leading to parking by vans and construction plant, or even by events of a transient nature such as big family gatherings. Many roads in Hillingdon, as elsewhere, are quite narrow and often date from the time before the advent of the motor vehicle, not to mention the modern phenomenon of multi-car households.

This can lead to parking pressure and in some cases the destruction of some of the grass verges which actually lend character to residential roads. Sometimes, the Council receives requests for some of these verges to be 'converted' to hard standing, often with an incorrect assumption that the task of converting grass to a hard surface suitable to park on will be a simple and cheap process. The fact is, however, that the process of conversion from a soft organic surface (soil with grass or other vegetation) involves a lot more work than may be supposed.

There are sometimes buried services to be considered, along with drainage and kerb lines, and the proximity of trees, lamp columns and other street features. In order to create a sufficiently strong surface that can accommodate parking on it by vehicles of anything up to 7.5 tonnes in gross weight, there will be a need to excavate the section concerned to a depth of at least half a metre (possibly more) and tie in the new foundations with those of the adjacent road and pavement. The costs and disruption of all this work can be considerable and it is partly for this reason, along with a

reluctance to destroy green verges, that the Council generally refuses requests to convert residential grass verges to hard standing.

In some cases, pragmatic solutions may include the introduction of yellow lines on one side of the road in question (ensuring better through access, especially for emergency services) but such a solution may be resisted by residents who may not welcome the consequent loss of parking. Another solution in some cases may be the careful use of street furniture to protect the verge, such as steel or timber bollards or fencing. Each case has to be considered on its own merits and subject to the availability of a budget alongside local support.

Traffic calming signage

Signage warning of traffic calming - such as, for example, a series of raised tables or humps, is defined (as is all traffic signage on the public highway) by national design standards. Historically, there was a challenge in the formal introduction of some kinds of traffic calming because technically they could be seen as obstructions on the public highway (under the Highways Act 1980). This was later addressed by subsequent legislation, such as various iterations of the 'Road Humps Regulations'. Schemes which involve raised traffic calming generally need to be appropriately signed with traffic signs which are defined in the 'Traffic Signs Regulations and General Directions, 2016' with further guidance set out in technical guidelines (the Traffic Signs Manual, in eight chapters) and Traffic Advisory Notes. Where the traffic calming is in the form of a '20 mph Zone', the need for signage within the scheme is reduced, provided there is clear and unambiguous signage at the periphery (again, the type and sizes of these signs are set out in the various documents already mentioned).

Pedestrian accessibility on roads and pavements

It is recognised that where there are formal pedestrian crossing points - in particular ones with a method of 'control', such as Zebra Crossings and the various types of traffic signal controlled crossings) there is a need for carefully sized and profiled dropped crossing points with special tactile paving used to assist pedestrians with mobility problems or sensory limitations. Many traffic signal controlled crossings feature special auditory and tactile devices integrated into the control boxes; all the traffic signals in Greater London are the responsibility of Transport for London rather than the Council, irrespective of whether or not the site in question is on a 'TfL' road or a Council road.

The Council's Principal Accessibility Officer is keenly interested in any cases where problems have been reported to the Council where access on pavements and/or at pedestrian crossings are identified. As part of planned footway works additional dropped kerbs/pram crossings with tactile paving may be installed at road junctions as appropriate.

Dropped kerb enforcement

When the Traffic Management Act 2004 was enacted in 2008, it gave councils the power to undertake enforcement where vehicles were parked across a dropped kerb, even if there were no other parking restrictions, such as yellow lines, etc., in that location. Since then the Council has been able to assist residents that find their dropped kerb obstructed.

The general principles relating to the enforcement of the vehicular access dropped kerb are as follows:

Single dropped kerb

The enforcement of a dropped kerb that serves single residential driveway can only be instigated at the request of the occupier of the property. This enables the resident to park their vehicles or their visitor's vehicles across the dropped kerb, as they are not obstructing the resident's access to their driveway.

The resident is required to register their personal and residential details before any enforcement can be carried out and they can do so by completing an online form. The registration process is essential to confirm the occupier's residential status as the occupier of the property can park their vehicle or permit someone else to park their vehicle in front of his/her dropped kerb. There is no charge made to the resident to register their details or to request the council to undertake parking enforcement action in the event that their dropped kerb is blocked.

Shared dropped kerb

However, parking in front of a shared access dropped kerb is prohibited at all times. A shared access dropped kerb is one where more than one household uses the same dropped kerb, e.g. a dropped kerb serving a small block of flats, etc.

As more than one person may use this type of dropped kerb/driveway you cannot park across it even with the permission of the occupier. In this case, there is no requirement for a resident to register.

Enforcement arrangements

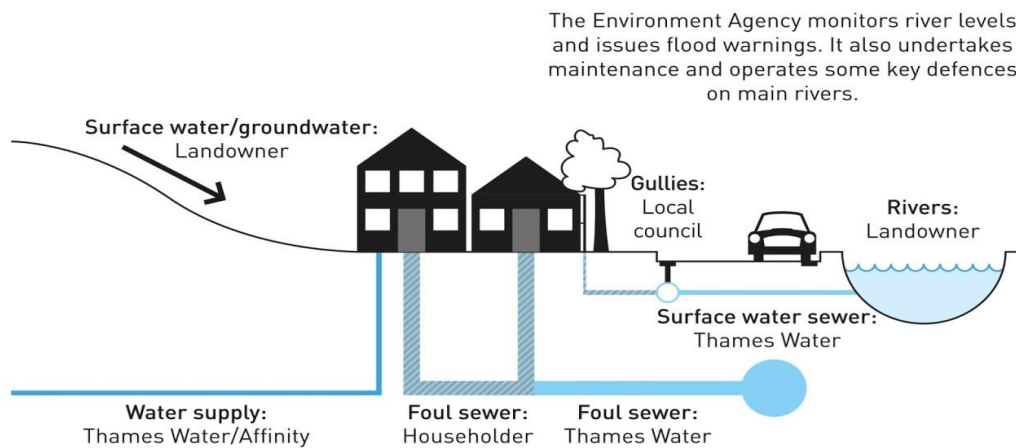
Parking enforcement in Hillingdon is undertaken by a specialised parking enforcement contractor, APCOA Parking (UK) Ltd on behalf of the Council. Residents that require assistance in relation to vehicles parking in contravention alongside a single or shared dropped kerb should contact APCOA's parking enforcement hotline on 01895 271 418 (Mon- Sat 06:00 to 22:00 hrs, Sun/Bank Holidays 08:00 to 22:00 hrs).

All enforcement requests are attended to as soon as possible and if appropriate the enforcement action is carried out against all offending vehicles.

Flooding

Roles and responsibilities

The Council as a Lead Local Flood Authority (LLFA) under the Flood and Water Management Act has the lead on 'local' flood risk from surface water, groundwater and ordinary watercourses. The Environment Agency has the lead on main rivers, reservoir flooding and a strategic overview. Thames Water have responsibility for surface and foul water sewers, and Riparian Owners have responsibility for the stretch of river, stream or ditch next to their land or property.



Although the organisations have the lead on these issues, they do not have the responsibility or the ability to solve all flooding issues, the primary responsibility remains with the landowner.

Gullies

Most common highway drainage feature is a gully. This consists of a concrete pot positioned under the road surface with an iron grate visible from the road. The water collects in the concrete pot and is then channelled via a pipe before connecting into the surface water sewer network or to a soak away.

Sometimes these pots and pipes become blocked with soil, dead leaves and rubbish, preventing the free flow of water to the main surface water sewer. Hillingdon Council has over 32,000 road gullies across the Borough. Gullies are normally cleaned by lifting the metal grating or cover and sucking all the dirt out using a gully sucker machine. High pressure jetting is required to remove some obstructions.

The Council has an annual cyclical gully cleansing programme whereby gullies in residential roads are cleansed once per year; A-roads twice per year; B & C-roads once per year. 400 No 'critical gullies' have also been identified in locations that require more frequent cleansing and are cleansed four times per year.

Gullies on the Transport for London Road Network are the responsibility of Transport for London. There are also private roads which have gullies or other road drainage infrastructure which are the responsibility of those residents to maintain.

Surface water sewers

Highway run-off flows from a gully into a surface water sewer main. Often flooding can occur even where the gully is clear. This can be because there is a blockage within the surface water sewer, for example because of tree roots or silt build up, a blockage at the outfall or as a result of the river levels being high.

Surface water sewers are the responsibility of the utility companies, and in Hillingdon, this is Thames Water. The utility company will investigate and determine if there is an issue and take appropriate action to clear it. If a water main is overwhelmed simply because a great deal of rain has fallen, a utility company is not required to undertake works to increase the size and capacity.

Flooding on roads

New roads include designed drainage systems intended to remove water efficiently from the surface of the highway to provide a safe passage for all vehicles and pedestrians. Older roads may have less sophisticated drainage, but all have features designed to take the water away from the road surface as quickly as possible. In some rural areas or on very minor roads, this may simply be a ditch leading to a watercourse.

When there is very heavy rainfall on the highway in a short period, it can often be greater than the capacity of the drainage facilities designed to take it away, so it should be expected to see some water on a road after very heavy rain and water can remain for a while in low spots in the road even where the drainage system is working. Roads are designed to contain this water on the road by keeping it within the kerbs.

However if the water remains after a number of hours, the gullies and the sewers may need to be investigated by the different organisations in order to determine if there is a problem or if the drainage system has sufficient capacity.

Actions during a major flood event

If the MET office issues a weather warning indicating heavy rain and or the Environment Agency issue a Flood Alert, this information is distributed via an Adverse Weather email to all those within the Council who may be required to take action.

Some of the key service areas involved the planning, preparation, response or recovery may include Highways, Green Spaces, Planning, Corporate Communications, Social Services, Corporate Property, and Emergency Management & Response Service. Key strategic actions include determining those most at risk, critical local infrastructure and possible evacuation and shelter requirements.

Each service has their own individual Flood Plan which details the resources they have available to respond and the types of action they can and will take to prepare and ensure a suitable response, as well as when. In large events they may need to flag a need for additional help to be requested as part of a mutual aid request.

In an event an Emergency Response Officer from the Council would be requested to attend the scene by the emergency services as the Local Authority Liaison Officer (LALO). The role of the LALO at the scene is to receive a situation report from the emergency services and to make a note of any requests made with regard to providing

an emergency rest shelter, and if other council departments also need to be contacted such as Housing, Highways and Social Care - to ascertain if there are any vulnerable adults who may have been affected.

The LALO is the Councils representative at the scene of the emergency event, and as such would need to liaise with the emergency services, provide regular updates, and send regular situation reports to the Borough Emergency Control Room. Any requests for Council departments to attend the scene would need to be escalated to Council Silver, who would contact the relevant departments. If an emergency rest shelter is required then Council Silver would activate this and make contact with the rest centre managers and officers.

Council learning from previous major flood events

As a Lead Local Flood Authority the Council also has a duty to investigate significant flooding events. This tries to identify the organisations involved, and what action they are taking to alleviate flooding. It is dependent on the cooperation of these other organisations. The writing of the investigation does not mean the Council is responsible for the flooding or to provide a solution. However it is hoped that by making the process more transparent, other organisations and stakeholders can be more easily held to account for their actions.

Investigation

Reports of flooding to the Council are collated and recorded, and significant flooding (where properties or business have been flooded internally) trigger a Section 19 investigation, which will be published.

Any investigation takes time to prepare, but particularly in Hillingdon as often the places affected are so disparate across the Borough. Each significant report is investigated by the Flood and Water Officer, further information collected, reviewed, and referred to other organisations such as Thames Water where necessary for feedback. Often there are a number of organisations involved with responsibility for different parts of the drainage system. For example where gullies on the road, which the council are responsible for, drain to a Thames Water Sewer, which in turn flows into a main river for which the Environment Agency has responsibility.

The Council understands the concerns of residents who wish to see action taken quickly, but it is important that the Council prioritises resources and funding to those affected most. The Council must also ensure that works do not make the situation worse for others. The Council has published flood investigation reports following significant flood events in December 2013, July 2014 and June 2016.

Action

In the long term, finalised investigations from reported flooding sites will be incorporated into an update of Hillingdon's Surface Water Management Plan as sites where further investigation will try to seek ways of reducing flood risk. These will be prioritised in accordance with the consequences of the flood and the numbers affected against those already on the Action Plan being taken forward.

Where possible, the most affected sites will be the subject of applications for external funding on behalf of the relevant service area. This will allow the Council to do more detailed studies of the area and assess options for solutions to determine if there is a future scheme to alleviate flooding. This will often need the cooperation of other organisations with responsible for different parts of the drainage system.

Implications on related Council policies

A role of the Policy Overview Committees is to make recommendations on service changes and improvements to the Cabinet who are responsible for the Council's policy and direction.

How this report benefits Hillingdon residents

Policy Overview Committees directly engage residents in shaping policy and recommendations from the Committees seek to improve the way the Council provides services to residents.

Financial Implications

None at this stage.

Legal Implications

None at this stage.

BACKGROUND PAPERS

NIL.