

Traffic Advisory Leaflet 3/91
September 1991



Speed control humps - Scotland, England and Wales

Introduction

Road humps are an extremely effective means of keeping vehicle speeds low. The standard round topped kerb to kerb hump has been proved to be effective. At low speeds, vehicles can cross these humps without causing undue discomfort to passengers or damage to the vehicle, but as speeds increase, they become progressively more uncomfortable.

Superseding earlier regulations, the Highways (Road Humps) Regulations 1990 for England and Wales and the Road Humps (Scotland) Regulations 1990 allow greater flexibility in both the siting and shape of humps. Certain requirements of the regulations can be relaxed when humps are introduced in 20mph zone.

Shape

Both flat and round top humps are permitted. Both types may be tapered at the sides to allow a drainage channel between the hump and the kerb. The schedule to the regulations provides for a standard channel width, but allows a variation of the taper width. A hump may be of any height between 50mm and 100mm to suit particular cases.

It is perfectly acceptable to use a variety of heights and profiles in a series of road humps, according to the local circumstances. The lower height hump will not have the same speed reducing effect on vehicles.



Appropriate roads

In England and Wales, road humps may be used along single carriageway and dual carriageway roads providing there is a 30mph speed limit and the road is not a trunk, special, or principal road. In Scotland, road humps may be installed on all types of roads which meet the criteria set out in the Regulations and have a 30mph speed limit or less. For all 3 countries unless the road is within a 20mph zone, there must be a system of lighting conforming to the requirements of the regulations, or the hump must be lit by lighting specially provided.

Location

Road humps must be located along a road so that they are always preceded by a speed reducing feature. This must be of a type referred to in the regulations, sited at a distance no greater than that set out in the regulations. In some situations it may be necessary to apply these distances from more than one point in a junction, to ensure the relevant distance is not exceeded from any of the approach arms.

Speed reducing features include:

- another road hump (within a series)
- certain junctions
- road markings to Diagram 1002.1, 1003, 1003.1 and 1003.3 (i.e. stop and give way lines)
- bends - as specified
- the end of a cul-de-sac.

There is no restriction on the number of humps in a series, but it is recommended that not more than 20 be used. (For Scotland, see additional information panel.)

Pedestrian Crossings

Road humps may be coincident with both Pelican and Zebra Crossings, subject to the necessary speed reducing features being present. Humps cannot be located within the controlled area, nor within 30m of the crossing.

It can also be an advantage to site a road hump at an uncontrolled crossing place.

Where road humps coincide with any crossing it is strongly recommended that only flat top humps are used.

Studs indicating the limits of a controlled crossing should be contained within the flat top of the hump, and not placed before or on the ramps.

Visually impaired people can have great difficulty in distinguishing between the carriageway and the footway at both controlled and uncontrolled crossings coincident with a road hump. Consideration should be given to the use of suitable tactile surfaces to indicate the edge of the footway.

Junctions

In England and Wales, providing the necessary speed reducing features are present, there are no restrictions as to the proximity of road humps to junctions. (For Scotland, see panel below.) However, to help avoid any stability problems arising for two wheeled vehicles, the hump could be set back from the junction by 5m-8m, depending on site conditions. Setting back the hump from the junction can also discourage pedestrians from crossing the side road too near to main road traffic and so minimise conflicts between them and turning traffic.

Other Structures

Humps must not be constructed on any bridge or other structure such as a subway, inside a tunnel, or within 25m of such a structure or tunnel. The reason for these restrictions is the risk of structural damage caused by vehicle impact, or increases in impact loading.

Bus Routes

The regulations do not prevent the use of full 100mm high humps along bus routes. Humps of this height offer the greatest reduction in speed of vehicles. However on occasions it may be appropriate, in order to minimise any detrimental effects on buses and their passengers, to consider the use of lower height humps. The type of bus and frequency should be taken into account when determining this, as smaller buses or a low frequency of services should not normally require a lower height hump. (For Scotland, see panel below.)

Railways

The existence of a railway level crossing need not in itself preclude the construction of road humps. However, the position of the hump in relation to the crossing can affect the safety of the crossing itself. The Regulations prescribe a minimum distance of 20m between any part of a hump and a level crossing. The responsible railway operator should always be consulted about the siting of humps to be constructed near a level crossing. In England and Wales, where there is a light rail transit system running along the street, road humps should not be installed within 2m of the LRT track. (For Scotland, see panel below.)

2 Wheeled Vehicles

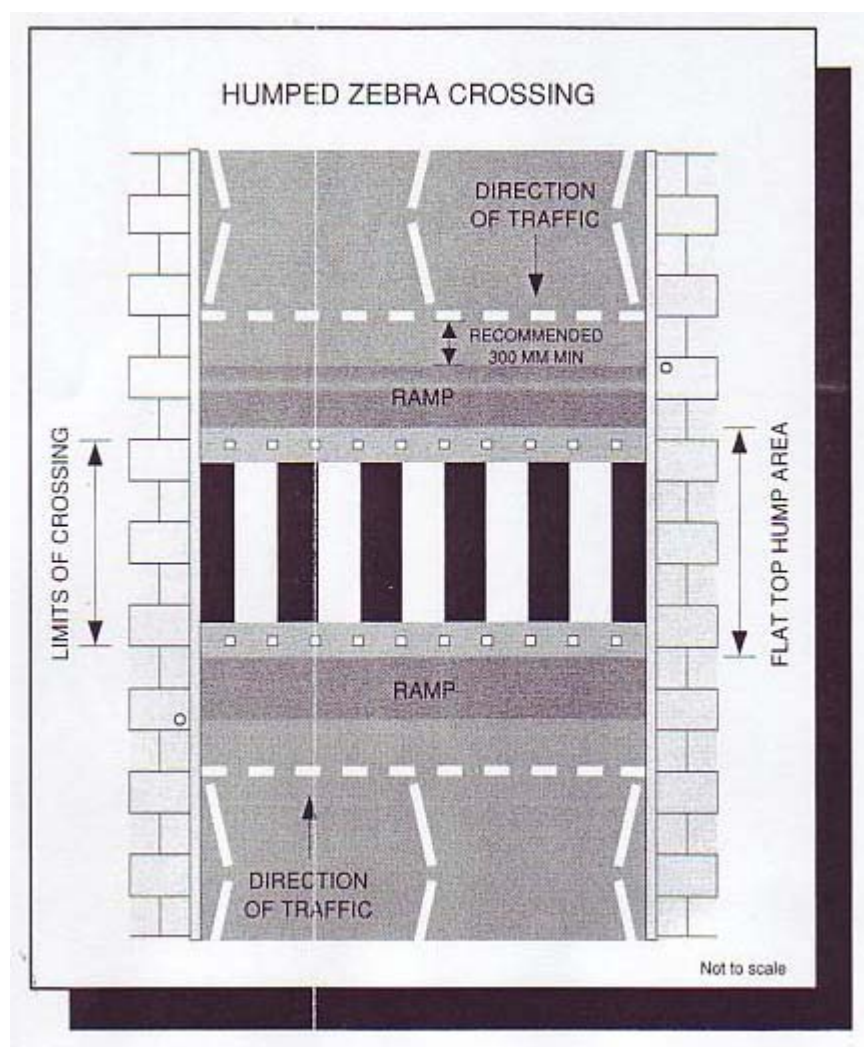
There have been fears raised about the possible dangers of tapered humps to riders of two wheeled vehicles who might attempt to ride in the channel between the hump and the kerb or who might slip off the edge of the hump into the channel. There is a requirement in the regulations for an edgeline of all humps: on tapered humps, this will serve as a guide to encourage cyclists and motorcyclists to keep clear of the edge of the taper.

Additional Information Applicable in Scotland

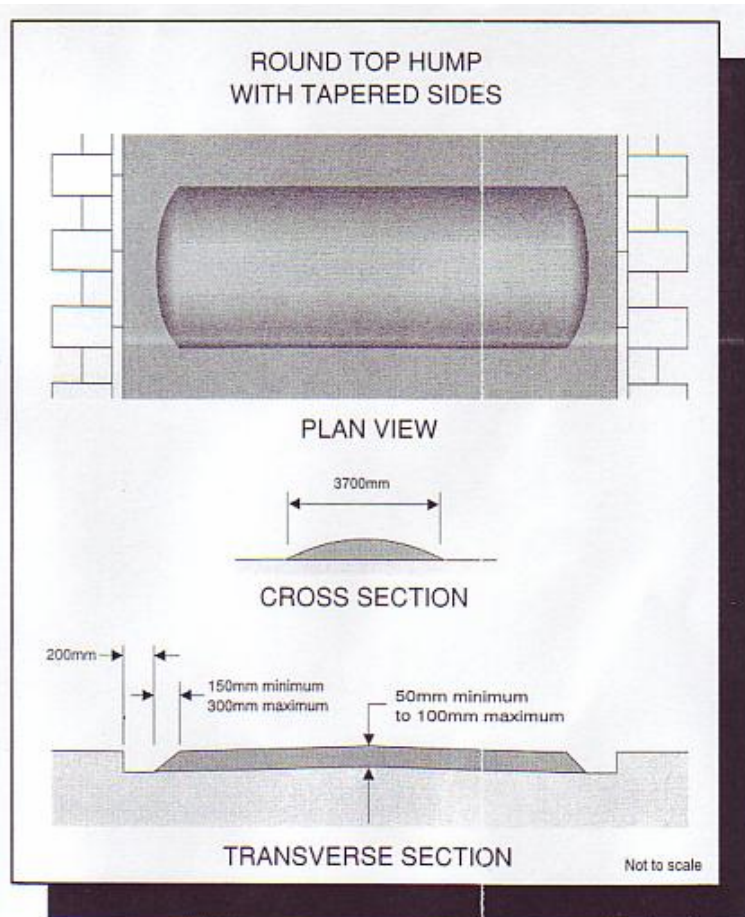
Series of humps - no more than 20 road humps in a series are permitted. Junctions - no humps are permitted with 8 metres of a road junction except within 20mph speed limit zones. Bus routes - humps may not be placed within 20 metres of certain bus stop signs and markings. Railways - the Scottish regulations do not make any specific references to roads which incorporate a light rail transit system.

In cases where the requirement of the regulations cannot be met, but for road safety reasons road humps would be appropriate, roads authorities may apply for these to be authorised by the Secretary of State for Scotland.

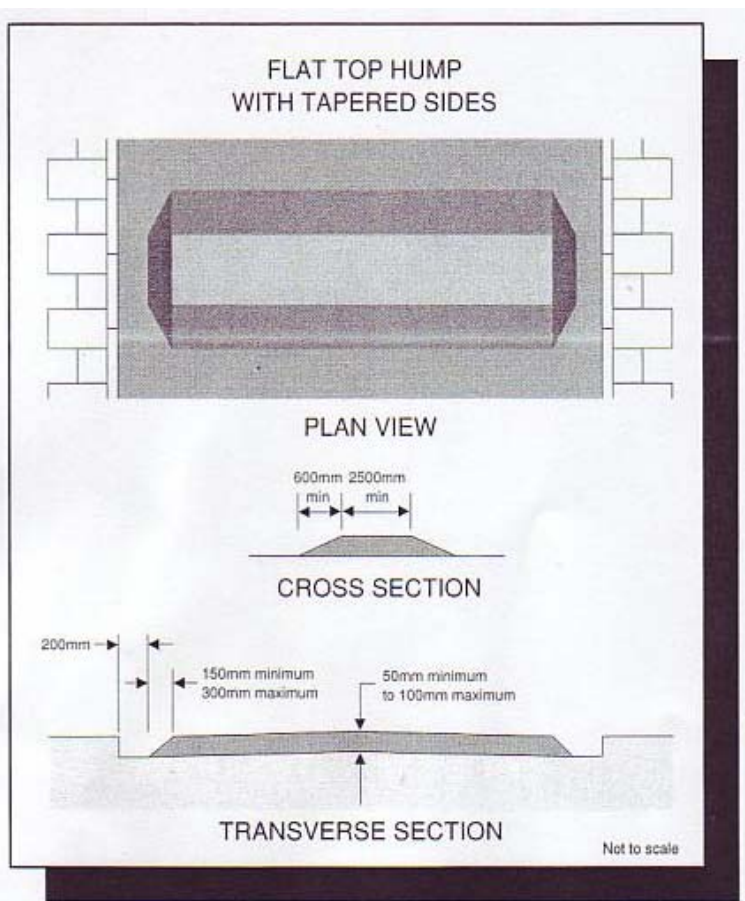
Road marking on a pedestrian crossing



Round top hump dimensions

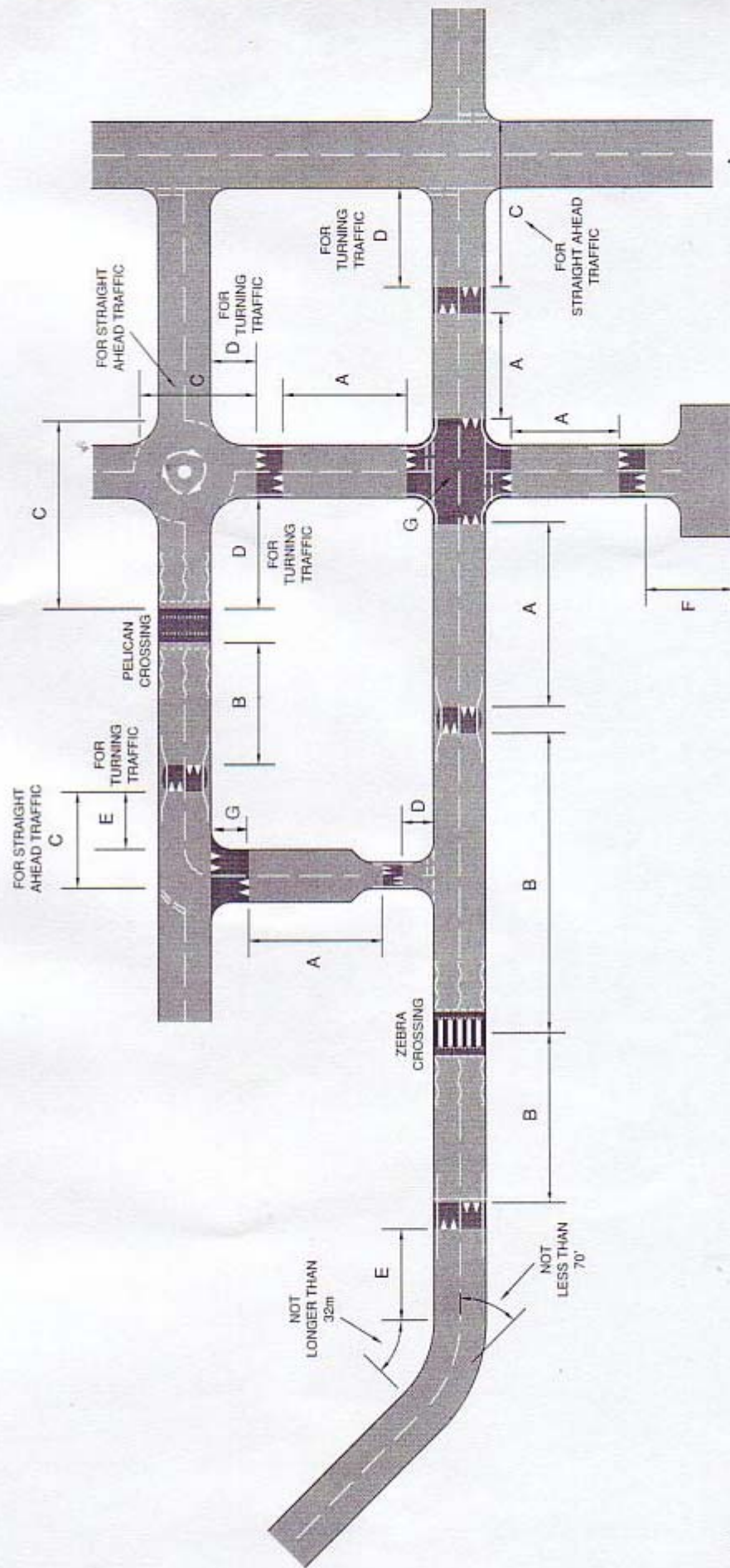


Flat top hump dimensions



Notional diagram of road hump locations

NOTIONAL DIAGRAM OF ROAD HUMPS LOCATIONS



Not to scale

- A = NOT LESS THAN 20m NOR GREATER THAN 150m BETWEEN HUMPS
- B = NOT LESS THAN 30m FROM A ZEBRA/PELICAN CROSSING, NOR WITHIN THE ZEBRA/PELICAN CONTROLLED AREA, NOT GREATER THAN 150m BETWEEN HUMPS (UNLESS COINCIDENT WITH THE CENTRE OF THE CROSSING)
- C = NOT GREATER THAN 60m FROM THE MARKINGS TO DIAGRAMS 1002.1, 1003, 1003.1, OR 1003.3
- D = NOT GREATER THAN 40m FROM A JUNCTION WITH ANOTHER HIGHWAY, OR IN SCOTLAND, ANOTHER ROAD (SEE ALSO G)
- E = NOT GREATER THAN 40m FROM A BEND (VEHICLE TO CHANGE DIRECTION NOT LESS THAN 70° IN 32m)
- F = NOT GREATER THAN 40m FROM THE END OF A CUL-DE-SAC
- G = IN SCOTLAND, HUMPS CANNOT BE PLACED WITHIN 8m OF A JUNCTION EXCEPT IN A 20MPH ZONE (RAISED JUNCTIONS ARE PERMITTED HOWEVER)

Signing

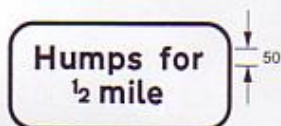
Traffic signs are required to warn of the presence of a road hump or series of humps. They may be accompanied by plates indicating the distance over which the humps extend, or the distance to the first hump. It should be noted that traffic signs to Diagram 557.1 must be illuminated during the hours of darkness. To improve the conspicuity of road humps two triangular road markings are required. These vary in size according to whether the hump has a round or a flat top. Edge of carriageway markings are specified for both tapered and full-width humps.



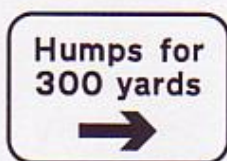
557.1



ROAD HUMPS AHEAD



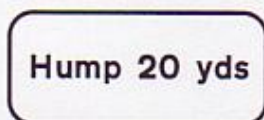
557.2



557.3



557.4



557.4
VARIANT

PLATES FOR USE WITH SIGN IN DIAGRAM 557.1

543



547.6



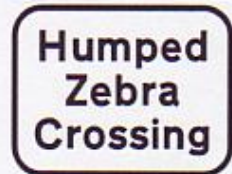
62.5
(75)
(100)
(150)

SIGN AND PLATE FOR PELICAN CROSSING

544



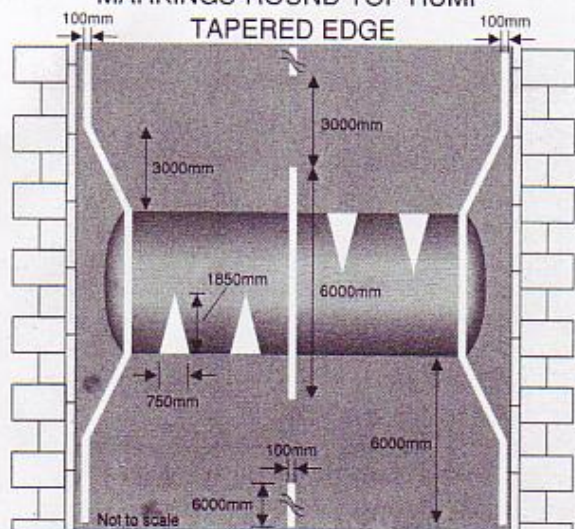
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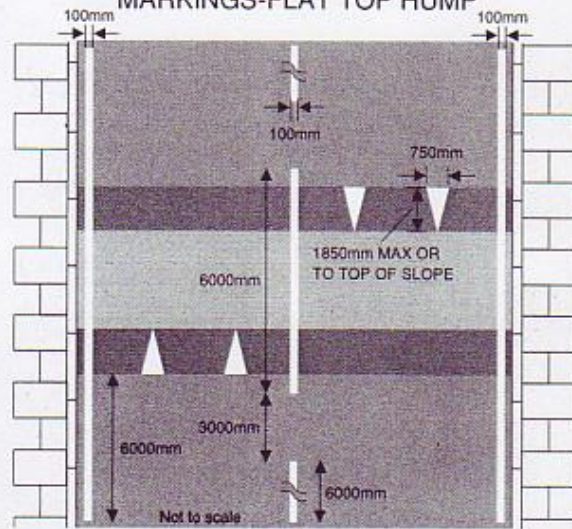
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SIGN AND PLATE FOR ZEBRA CROSSING

MARKINGS-ROUND TOP HUMP
TAPERED EDGE



MARKINGS-FLAT TOP HUMP



20 mph zones

On roads which form part of a 20mph zone, the regulations do not generally require the conditions for the siting, signing and marking to apply. There are exceptions notably that humps may not be located in specified positions on steep gradients, or within Zebra and Pelican controlled areas other than at the crossing itself.

A highway authority, or in Scotland a roads authority, may choose whether to sign or light road humps in 20mph zones, but it is advisable to ensure that humps are conspicuous at all times. This can usually be achieved by constructing the road hump in a different and contrasting material to the carriageway. If there is any doubt as to the conspicuity of a road hump, then it would be advisable to use the triangular markings and the associated edge and centre line markings.

Particular attention is needed where tapered humps are used, to ensure that riders of 2-wheeled vehicles are aware of the taper.

Road humps do not have to be preceded by speed reducing features in 20mph zones and therefore they should not be placed in unexpected positions. Reasonable visibility to the first in any series of road humps should be ensured. It may be appropriate in these zones to consider having a 50mm hump for the first with subsequent humps gradually increasing in height, though this may not be suitable for all zones.

Consultation

In England and Wales the regulations require that when road humps are proposed for a road

the police and the appropriate district council must be consulted, as must one or more organisations representing persons who use the highway. The views of the local fire and ambulance services should also be obtained. In Scotland the same bodies must be consulted (please note that consultation with local fire and ambulance services is a statutory requirement in Scotland). Additionally for Scotland, England and Wales, if a bus route is involved, bus service operators should be consulted.

Advertisement

In Scotland, section 37 of the Roads (Scotland) Act 1984, sets out requirements for notices of road hump proposals to be published locally, and to be posted on site.

Detailed Guidance

- The Highways (Road Humps) Regulations 1990 (SI 1990 No 703, and SI 1990 No 1500)
- The Road Humps (Scotland) Regulations 1990 (SI 1990 No 2623 (S.218))
- The Traffic Signs (Amendment) Regulations 1990 and The Traffic Signs (Amendment) General Directions 1990 (SI 1990 No 704)
- Circular Roads 3/90, Road Humps 1990
- Technical Advice Note (to be published)
- Scottish Office Industry Department Circular

Nothing in this leaflet modifies or overrides the provision contained in the Road Humps Regulations 1990 or the Road Humps (Scotland) Regulations

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