



## **SCOTTISH EXECUTIVE**

Development Department  
Transport Division 3

Victoria Quay  
Edinburgh EH6 6QQ

### **SEDD Circular No. 6/2001**

To: Chief Executives, Scottish Local Authorities  
Chief Officers of Transportation, Scottish Local Authorities  
Chief Constables

Telephone: 0131-244 0837

Fax: 0131-244 0871

[Ann.whatcott@scotland.gsi.gov.uk](mailto:Ann.whatcott@scotland.gsi.gov.uk)

<http://www.scotland.gov.uk>

Your ref:

Our ref:

17 August 2001

Dear Sir/Madam

### **20 MPH SPEED LIMITS**

1. This Circular restates the guidance, in SODD Circular 13/1999, on 20 mph zones and provides revised guidance on mandatory and advisory 20 mph speed limits. The information in this Circular, which replaces that contained in SODD Circular 13/1999, is intended as guidance only: it is not meant to modify or override any of the provisions contained in the relevant road traffic legislation.

### **BACKGROUND**

2. Changes to the legislation relating to 20 mph speed limits, introduced in 1999, removed the requirement for local authorities to obtain the consent of the Scottish Ministers before making an order in respect of a 20 mph speed limit. Authorities now have power to introduce 20 mph zones, in which engineering measures are a standard feature to ensure that the zones are self-enforcing, and 20 mph speed limits, with or without traffic calming measures, at suitable locations. Traffic Advisory Leaflet 9/99 gives advice on the implementation of 20 mph zones and speed limits.

3. Circular 13/1999 provided interim guidance on the use of signs only 20 mph speed limits. It also indicated that the Scottish Executive and the Society of Chief Officers of Transportation in Scotland (SCOTS) were evaluating trials involving low cost advisory 20 mph speed limits implemented by local authorities throughout Scotland. The pilot sites did not have speed reducing features designed to make the limits self-enforcing and relied for their effectiveness on the co-operation and support of local people. A report on the evaluation was published on 15 March. The research found that average speeds were reduced at 60% of trial sites, that there was a considerable drop in the number and severity of recorded accidents, and that overall the schemes had received strong support from local communities.

4. The Scottish Executive has considered with SCOTS how best to take forward the results of the research. It has been concluded that there is a continuing role for advisory 20 mph speed limits in certain circumstances. The revised guidance in this Circular on mandatory and advisory 20 mph speed limits takes account of the findings of the research on the pilot projects.

## **20 MPH ZONES**

5. The key to a successful 20 mph zone is to have in place speed reducing features in sufficient numbers and of appropriate design to reduce traffic speeds to 20 mph or less without the need for police enforcement. The Traffic Signs General (Amendment) Directions 1999 provide that the 20 mph zone sign (diagram 674 in the Traffic Signs Regulations and General Directions 1994 (TSRGD)) may only be placed on a road if no point on the road to which the sign applies is more than 100 metres from a traffic calming feature. They also identify the measures considered suitable for creating a successful 20 mph zone. It is for local traffic authorities to decide on the number and type of measures which should be employed in each particular case. If speed reducing features which do not comply with the Directions are to be used in a scheme, it will be necessary to seek special authorisation for their use.

6. The following issues should be taken into account when considering the establishment of 20 mph zones:

- a. The establishment of the zone should be consistent with the authority's road safety objectives as set out in its Road Safety Plan.
- b. It should be judged likely that, after the engineering measures have been installed, the average speed will be 20 mph or less at representative sites within the zone, i.e. at individual features and at points between measures where speeds are expected to be highest.
- c. The emergency services must have been consulted and their responses taken into account when designing a 20 mph zone. In that context 20 mph zones are unlikely to be appropriate on the approaches to fire or ambulance stations or hospitals, where the casualty reductions to be expected from lower speed may be outweighed by the delay to emergency service vehicles.
- d. Entrances to 20 mph zones should normally be at a junction so that drivers whose destination is not within the zone have an alternative route outside the zone. Entrances should be designed so as to give the appearance of passing through a "gateway" to a more restricted area. "Gateway" in this context means a physical feature or features (such as engineering measures or landscaping) which alert drivers to the fact that they are entering a "special" area. All entrances should have a 20 mph zone sign.
- e. The type of engineering measures available to slow traffic to 20 mph are detailed in Traffic Signs General Direction 14A which links traffic calming to 20 mph zones. Road humps are the most common speed reducing feature used in 20 mph zones but road narrowings, raised junctions and mini-roundabouts are also available and, if used in the right combination, can reduce speed sufficiently in a 20 mph zone. The design of a scheme should ensure, as far as possible, that the engineering measures used do not create hazards for cyclists and pedestrians – particularly those people with a visual or mobility impairment.

- f. 20 mph zones should not normally be introduced if any part of the zone will be more than 1 kilometre from any boundary road or there are no alternative routes available at entry points for through traffic.

## **20 MPH ZONE SIGNING**

7. The Traffic Signs General Direction 14A links the use of the 20 mph zone sign (diagram 674 in the TSRGD) to the placing of measures to reduce traffic speeds sufficiently so that an average speed of 20 mph or less can be achieved. While the use of repeater signs in 20 mph zones using sign 674 is not precluded in regulations, there should be no need for repeaters as the self-enforcing nature of the zones should not require a reminder of the speed limit. Signs to diagram 675 in the TSRGD are required at each exit from a 20 mph zone.

8. On roads which form part of a 20 mph zone there is no requirement to provide signing and lighting of road humps nor signing of traffic calming features. The requirements for signing and lighting do, however, apply in roads to which a 20 mph speed limit, indicated by sign 670 in TSRGD, is applied.

## **MANDATORY 20 MPH SPEED LIMITS**

9. Local authorities may establish mandatory 20 mph speed limits indicated by speed limit signs only (diagram 670 in TSRGD) and with no supporting speed reducing features. It is recognised that there may be pressure on local authorities from the public and community groups for the introduction of 20 mph speed limits as a road safety measure in certain areas. Authorities may regard mandatory 20 mph speed limits without relatively expensive speed reduction features as an attractive option, but such limits should not be introduced where there is no realistic expectation that they will achieve the required decrease in traffic speeds, or where the police are unable to give an undertaking to provide an effective level of enforcement. Local authorities should, therefore, consult the police at an early stage when considering the introduction of mandatory 20 mph speed limits. Unrealistic and unenforceable speed limits will not bring about the expected road safety benefits and are likely to lead to pressure for the provision of traffic calming measures to ensure their effectiveness.

10. It is considered that certain roads or small groupings of roads in town or village centres, where the 85<sup>th</sup> percentile speed is only a little over 20 mph - no higher than 24 mph is recommended - might be suitable for signs only mandatory 20 mph speed limits. The character and environment of these roads, because they are narrow, or have bends or natural build-outs, should convey to drivers the impression that 20 mph is the most suitable speed. In these circumstances the placing of 20 mph signs could by themselves be sufficient to achieve the required small reduction in speed.

11. If the 85<sup>th</sup> percentile speed of traffic before implementing a mandatory 20 mph speed limit is higher than 24 mph, or it is felt that the desired reduction in the vehicle speeds is unlikely to be achieved by the use of signs alone, it is possible to construct speed reducing features in 20 mph speed limits indicated by sign 670. It should be noted, however, that any road humps would require to be adequately illuminated, and it may be necessary to erect warning signs indicating the presence of road humps or other traffic calming features.

## **SIGNING OF MANDATORY 20 MPH SPEED LIMITS**

12. In order to comply with Direction 10 in TSRGD, repeater signs are required in roads to which a 20 mph speed limit indicated by sign 670 applies. This has a practical application as 20 mph speed limits are likely to be established on roads previously subject to a 30 mph speed limit. Without the use of repeater signs, drivers could legitimately expect the speed limit to be 30 mph. At the end of the mandatory 20 mph speed limit signs to diagram 670 will be required indicating the change of speed limit.

## **CONSULTATION ON 20 MPH ZONES AND MANDATORY 20 MPH SPEED LIMITS**

13. There is a statutory requirement (Paragraph 20 (1) of Part III of Schedule 9 to the Road Traffic Regulation Act 1984) to consult the police and organisations representing road users about proposals for speed limit orders. This is of particular significance in the case of mandatory 20 mph speed limits without supporting speed reducing measures, where effective enforcement will depend on the police. It is vital, when promoting such orders, to give full weight to the views expressed by the police as regards the enforceability of the speed limit proposed.

14. There are, in addition, statutory requirements to consult the fire and ambulance services about proposals to construct road humps (The Road Humps (Scotland) Regulations 1998) or other traffic calming measures (The Roads (Traffic Calming) (Scotland) Regulations 1994). Local traffic authorities are, however, also encouraged to consult local residents, perhaps through community councils or residents' associations; bus operators and, where appropriate, Passenger Transport Executives; the Road Haulage Association and the Freight Transport Association. In coastal towns and villages Lifeboat and Coastguard services should also be consulted.

## **ADVISORY 20 MPH SPEED LIMITS**

15. The findings of the pilot 20 mph schemes have been taken into account in devising recommended criteria for future advisory 20 mph schemes. The sites selected for the pilot projects were in self-enclosed residential areas used mainly by local residents and with little or no through traffic. It is considered that areas with similar characteristics, particularly a small group of streets, a whole housing estate or a readily identifiable sector of a community, may be suitable for new advisory 20 mph speed limits. In general, roads which carry through traffic, bus routes, or roads which have a significant volume of non-resident traffic are unlikely to be suitable because of the difficulty in obtaining widespread public support.

16. Advisory 20 mph speed limits are most likely to be effective in areas where before 85<sup>th</sup> percentile speeds are in the range 25-30 mph. An advisory 20 mph limit may be appropriate where 85<sup>th</sup> percentile speeds are lower, but in those circumstances consideration should be given to a mandatory speed limit. Local authorities should exercise caution where 85<sup>th</sup> percentile speeds are higher than 30 mph – some traffic calming to support the advisory speed limit is recommended in such areas. An advisory 20 mph speed limit is **not** considered appropriate where the legally enforceable speed limit is higher than 30 mph.

17. The length of road on which an advisory 20 mph speed limit should apply and the availability of alternative routes for drivers is an important factor. In general, drivers should not be required to travel more than 600 metres before reaching the end of the 20 mph speed limit. Where a road is

straight for more than 400 metres in length and has no natural traffic calming features, consideration should be given to reinforcing the advisory speed limit by the installation of low cost traffic calming measures.

18. Experience from the pilot schemes suggests that reductions in the number and severity of accidents may be expected in line with reductions in speeds. While an advisory 20 mph speed limit may be considered in areas with no history of accidents, such a measure is unlikely to be appropriate in areas with a significant accident history. More comprehensive remedial measures are likely to be required in those areas.

### **SIGNING OF ADVISORY 20 MPH SPEED LIMITS**

19. The Scottish Executive and SCOTS have considered the signs used in the pilots and have agreed on the signs to be used in new advisory 20 mph speed limits. The signs are shown in the annex, and councils will have the option of including a plate indicating the street or area name, either separately or as part of the sign. Before using the signs, it will be necessary for local authorities to apply for authorisation for their use. The Executive will be prepared to issue a blanket authorisation within a local authority area for the use of the signs shown in the annex. Applications for authorisation should be submitted in the usual way.

20. Signs should be erected at each point of entry to the advisory 20 mph limit. They should not coincide with a point where there is a change in the level of the legal speed limit. Signs on both sides of the road will have a greater visual impact, but a sign on the nearside only can be used where there is insufficient space on both sides or where environmental considerations are important. Repeater signs are not required. Because the legal speed limit of 30 mph is unaffected by the advisory 20 mph speed limit, no exit signs are required.

21. Road markings to DOT diagram 'P101RM' should be provided at the entry to the advisory speed limit and at intervals of not more than 120 metres. Green coloured surfacing may be used to maximise the impact, i.e. a white roundel on a green surface.

### **CONSULTATION ON ADVISORY 20 MPH SPEED LIMITS**

22. By their nature, advisory speed limits cannot be enforced and the police cannot take action to enforce compliance. The pre-existing legal limit will still have effect and any enforcement carried out could only be in respect of that limit. Gaining the support of local residents is, therefore, crucial to the success of an advisory 20 mph speed limit. For this reason it is strongly recommended that consultation with residents should be as full as possible and should be carried out at an early stage in the development of the proposals. Local authorities should actively seek to win support for the proposals. As a minimum, every house within the area proposed for an advisory 20 mph scheme should be circulated with information about the proposals and residents should be encouraged to indicate their views. Authorities may wish to consider leaflet drops, public meetings and focus groups in addition to media features and publicity. Publicity should be carried out both before and immediately after the introduction of the scheme. Where a school is located on a road proposed for an advisory 20 mph speed limit, it is recommended that publicity should be specifically targeted at the teachers as well as the pupils and their parents, many of whom may live outside the area to be covered by the proposed advisory speed limit.

23. While there is no statutory requirement to consult them about proposed advisory speed limits, it is recommended that consultation with the police and with the fire and ambulance services also be carried out.

### **MONITORING AND EVALUATION OF ADVISORY 20 MPH SPEED LIMITS**

24. Advisory 20 mph speed limits should be monitored and evaluated after at least 12 months and not more than 3 years, with speeds and accidents being taken into account. On the basis of the information obtained, authorities should consider:

- conversion to a mandatory 20 mph speed limit where the advisory limit has been successful in reducing the 85<sup>th</sup> percentile speed to 24 mph or less;
- retaining the advisory 20 mph speed limit with or without the addition of measures to further reduce speeds; or
- removing the advisory 20 mph speed limit.

### **VARIABLE SPEED LIMITS**

25. Under the existing legislation, local authorities do not require the consent of the Scottish Ministers to the making of variable 20 mph speed limit orders under section 84 of the Road Traffic Regulation Act 1984. These are speed limits which vary between 30 mph and 20 mph according to the time of day as specified in the speed limit order. Variable 20 mph speed limits should not be introduced on roads subject to a speed limit higher than 30 mph. Consent continues to be required for orders in respect of variable speed limits other than 20 mph. The signing required for variable speed limits is prescribed by Regulation 46 of the TSRGD.

### **MANPOWER AND RESOURCE IMPLICATIONS**

26. The measures outlined in this Circular are options for local traffic authorities and need have no net manpower or financial implications.

### **FURTHER INFORMATION**

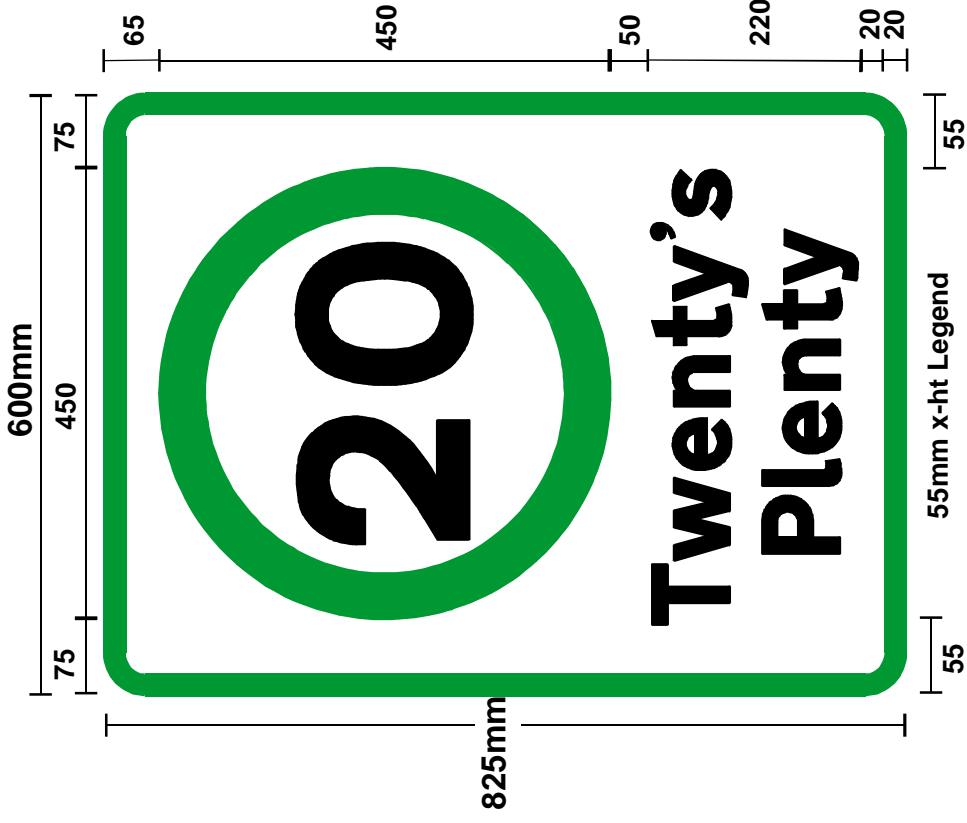
27. For further information about the content of this Circular, or to request additional copies, please contact the Scottish Executive Development Department, Transport Division 3, Area 2-E, Victoria Quay, Edinburgh, EH6 6QQ, Telephone 0131 244 0837 (Mrs Ann Whatcott).

Yours faithfully

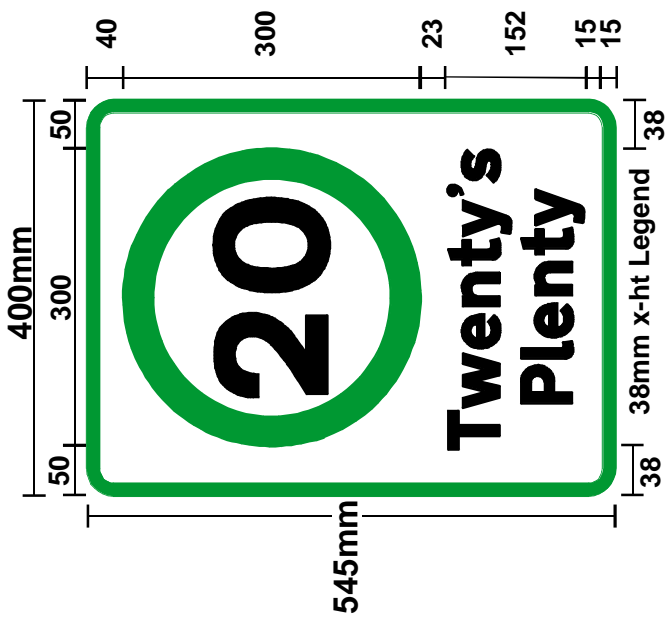


ALAN BROWN

**Diagram showing standard Twenty's Plenty sign and variations**  
 All sizes are in millimetres



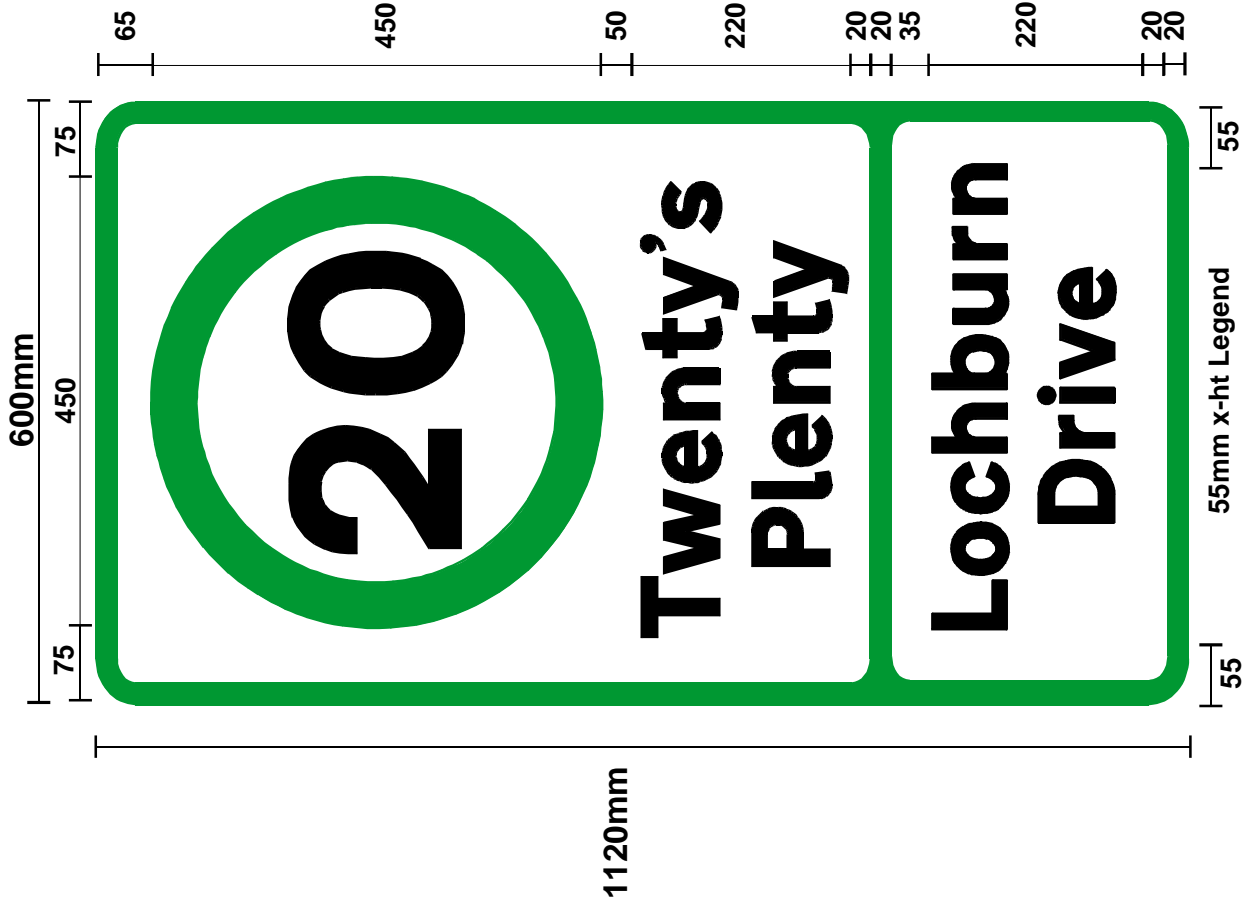
- NOTES :** Main sign  
 White reflective background  
 Interstate Green border  
 55mm x-ht Black letters
- Roundel  
 White reflective background  
 Interstate Green border  
 125mm x-ht Black letters



Variation 1 - 300mm roundel

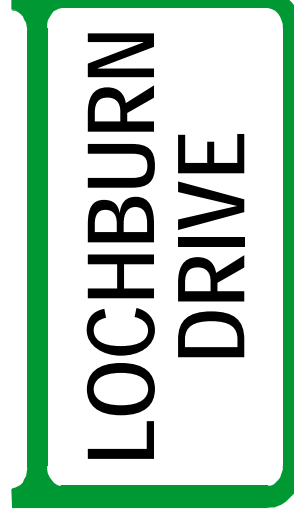
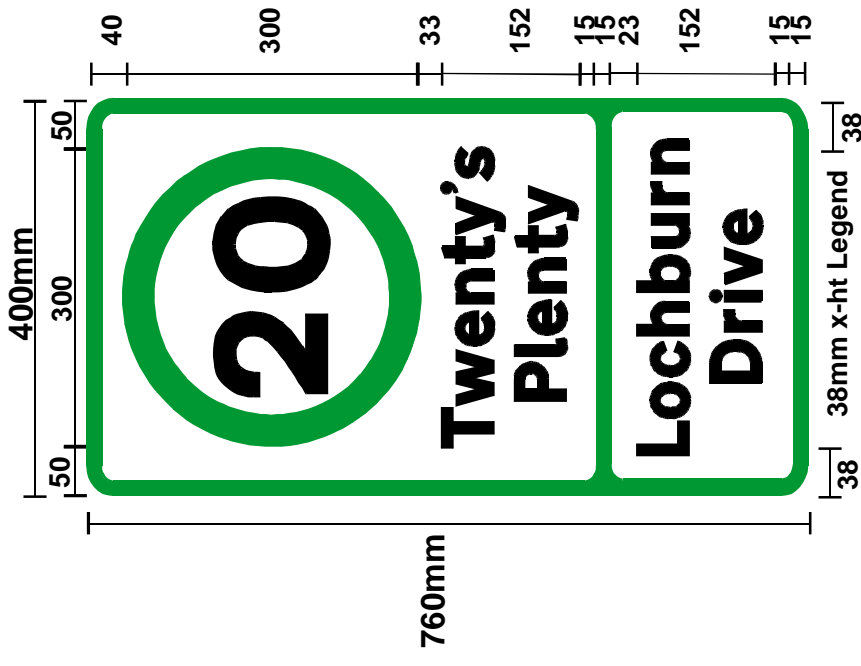
- NOTES :** Main sign  
 White reflective background  
 Interstate Green border  
 38mm x-ht Black letters
- Roundel  
 White reflective background  
 Interstate Green border  
 80mm x-ht Black letters

Variation 2 - showing Place Name



All colours to be the same as the standard sign

Variation 3 - 300mm roundel and Place Name



Place name lettering may be varied