



School Safety Zone Guidance



Gloucestershire County Council guidance for the consideration, prioritisation, implementation and maintenance of School Safety Zones



Revision	Purpose/Description	Author	Checked	Reviewed	Authorised	Date
1.0	Old draft rewritten	GD	MM	MM	ST	April 2013

Purpose of this document:

To provide officers and designers with guidance on delivering appropriate measures following a request for a School Safety Zone (SSZ).

1.0 Background:

- 1.1 School safety zones were first developed to provide a safe highway environment for children entering and leaving school, this was to be achieved through highlighting the presence of the school, reducing vehicles speeds to an appropriate level and restricting parking adjacent to accesses.
- 1.2 In Gloucestershire, SSZs were initially intended for schools where fatalities or serious incidents had occurred. The quantifiable accident problem was identified from accident data showing Killed or Serious Injuries (KSIs). Gloucestershire Constabulary gave their support for zones with advisory 20mph limits, but not for mandatory 20mph speed limits. Any mandatory limits need to be self-enforcing (through traffic calming for example) and would require a statutory consultation through the Traffic Regulation Order (TRO) process, as with any amendment to a speed limit.
- 1.3 All the priority schools based on the initial assessment criteria now have a SSZ or some form of traffic management. In 2003 a Halcrow report was produced outlining the installation of advisory and mandatory 20mph speed limits outside schools and whilst this did make reference to the provision of wigwags, signing and some road markings, there was no critique of SSZs as an overall measure.
- 1.4 Gloucestershire started a significant programme of SSZ installations in 2003/04 and since then SSZs have proved popular with schools, the public and Councillors and we continue to receive requests for their installation or for improvements to existing zones. The majority of these requests are now usually based on a perceived safety problem and therefore do not necessarily have any recorded incidents.

2.0 Existing policies:

- 2.1 There is no national guidance or policy on the design and provision of SSZs, however there is much good literature on traffic calming and 20mph speed limits.

3.0 The Zone:

3.1 A SSZ can comprise of a number of different features:

- Road signs.
- Flashing wigwags.
- Yellow backing boards (although their use must be limited so as not to lose their benefit.)
- Waiting restrictions – typically mandatory or advisory School Keep Clear markings.
- An advisory 20 mph speed limit (or consider a reduced speed limit if existing limit is above 30 mph.)
- Road markings, text
- Coloured road surface panels. (The use of these should now be limited due to the going maintenance issues associated with these).
- Traffic calming features, vertical and horizontal.
- Pedestrian crossings/measures.
- Cycle facilities.

A list of these measures and suggestions of when each should be considered is shown in Appendix A.

A typical arrangement of a SSZ is shown in Figure 1.

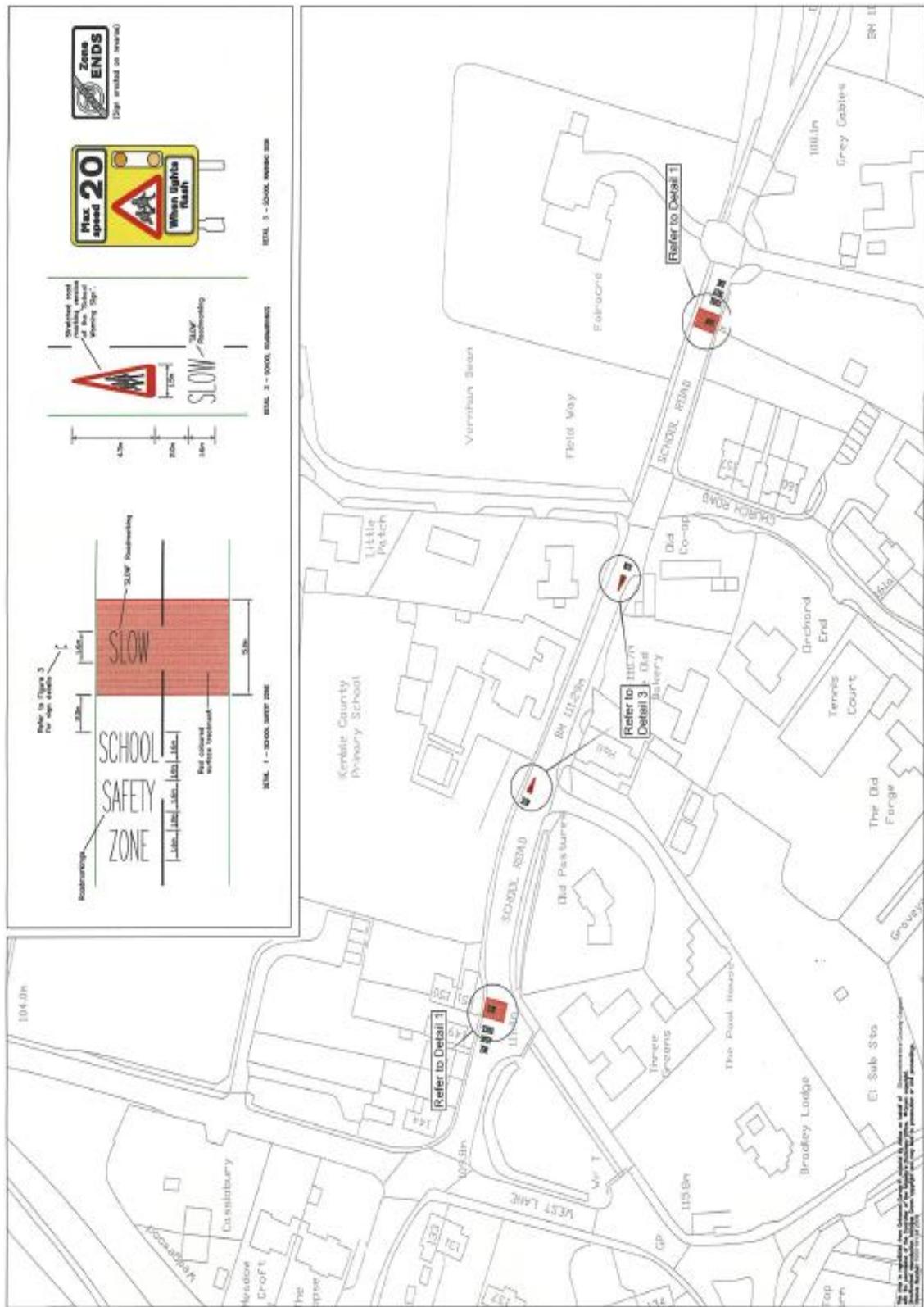


Fig. 1 – Typical SSZ Layout

4.0 Considerations for a new request:

- 4.1 There are several factors to take into consideration when investigating a request for either a new, or amendment to an existing, SSZ as detailed below.
- 4.2 Individual Solutions. As Gloucestershire SSZs have developed over the years, an almost standard design has evolved to the point where the provision of a generic zone is the simplest response to a new request. However, it must be recognised that there is no “one size fits all” solution and each request must be thoroughly investigated in order to identify any specific problems.
- 4.3 Urbanisation. The use of urban signs and lines may be inappropriate in a rural village. This does mean that the request needs to be managed carefully as it may be based on a SSZ as seen outside another school. Any reasons why some, or even all, of the features may not be appropriate for a given location need to be clearly reported back to the person or group making the request. It is the designers responsibility to deliver an appropriate solution to an identifiable problem.
- 4.4 Compliance with DfT/TSRGD. Some of the features that have been employed as part of SSZs in Gloucestershire are not actually approved by the Department of Transport (DfT). For example the 545 warning triangles installed on the road and some of the SSZ signs that combine advisory 20 mph limits in combination with other TSRGD signs. Within the DfT’s Traffic Advisory Leaflet 01/13, Reducing Sign Clutter, there is a clear statement that yellow backing boards should not be used in combination with flashing wigwags. However, whilst these measures may not be approved they are very well received and understood by the public and Councillors.

Within the DfT, Traffic Signs Policy Paper Oct 2011, there is a suggested configuration of signage for part time advisory 20mph speed limit signing shown below in figure 2.



Fig. 2



4.5 Maintenance issues and ongoing costs. Consideration must be given to the long-term maintenance costs of installing road markings (see figure 3), especially given the reduction in our capital and revenue budgets. This is particularly true for coloured surfacing, which should only be installed where it can be justified on safety grounds. Whilst such measures have a high impact when initially installed their effectiveness wanes over time. Officers should consider whether their installation is necessary or if clear and effective signing (see figure 4) is a more cost effective alternative. The use of wigwags and other lit signage will have on going energy costs.

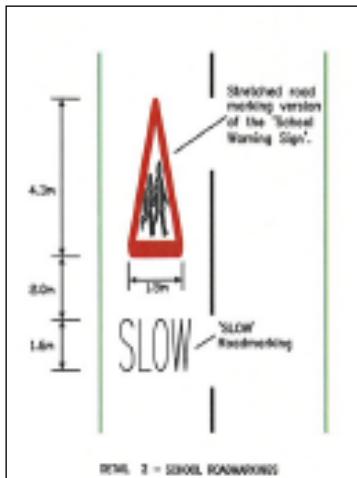


Fig.3 - 545 Typical road marking



Fig. 4 - SSZ sign example

4.6 Accident records. The accident record for roads outside schools is very good, and those previously identified as having recorded incidents have now been treated. On this premise, save for exceptional cases, a request for a new SSZ would be unlikely to pass the Council's priority assessment process if submitted as a safety scheme. As future capital works programmes will not provide specifically for SSZs we must identify funding streams in each case as we will see later in this report (See section 7.0).

It is understandable that people would think that the road outside a school is the most dangerous place for a child; it is, after all, where the conflict between children and vehicles is most obvious. However, statistics show that most of the accidents involving school children happen *en route* to school and not in proximity to the school premises. This suggests that to have the greatest impact on child safety we should be concentrating on Safer Routes to School initiatives or measures, providing a safe and viable route to school.

This is not to say that school sites are not deserving of our attention, but a specific request for a SSZ needs to be kept in perspective with other demands – which is what the priority assessment system is for.



5.0 Positives:

- 5.1 SSZs do serve a purpose even if there is no quantifiable safety problem to address. They highlight the presence of a school to those drivers who are unfamiliar with the area; even local drivers are reminded of its presence.
- 5.2 With SSZs having been used for a number of years in the County and with many examples to pick from, we have great in-house experience to call upon to ensure that all future zones, including amendments, are site determined and appropriate. There is great flexibility as to what measures can make up a SSZ, allowing it to be shaped to meet the requirements of the specific site and its users.
- 5.3 The use of a SSZ can also help to engage with the local community and provide a sense of local identity through the addition of a locally designed sign plate. Guidance and template forms (see example in Appendix B) can be sent to the school and its pupils asked to design a logo and message for drivers. Some examples of these are shown in figure 5 below:

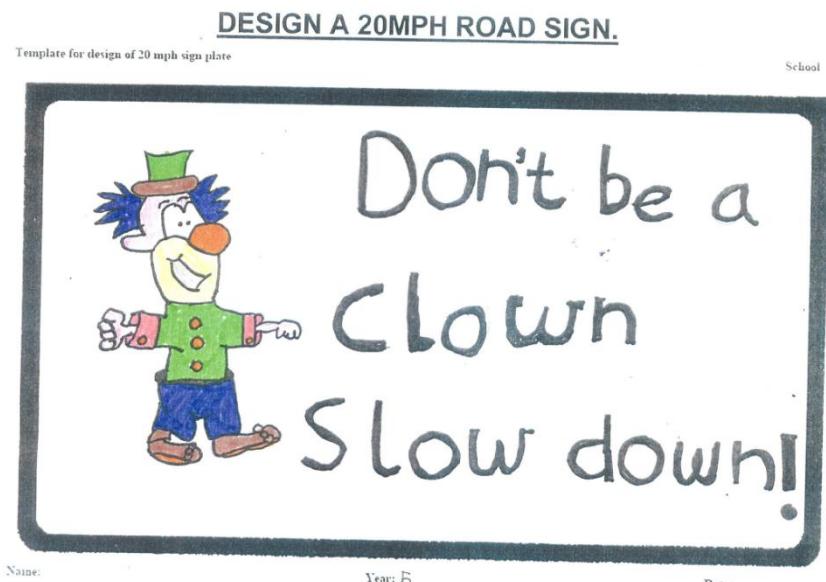


Fig. 5 – Examples of local community designed signs



6.0 Case example

6.1 A well designed, bespoke SSZ can have definite safety and accessibility benefits. An example of good practice is Heron SSZ in Gloucester, where problems of on-street parking, speeding traffic and the problems pedestrians had crossing the highway have all been addressed in the design (Fig. 6):

- Pinch points either side of the school to help pedestrians cross the road and reduce vehicle speeds past the school.
- Footway markings directing pedestrians (particularly children) to the crossing points.
- Mandatory Keep Clear/No Stopping Zig Zags, with on-street parking retained outside of the zone on the same side of road as the school to avoid unnecessary crossing movements.
- Advisory 20mph limit with wig wags.
- Three pairs of speed cushions within the zone.
- Road markings and signs to reinforce the safety zone message.



Fig. 6 – Heron SSZ, Gloucester

6.2 This SSZ has been reviewed and amended to meet the changing demands of the school and its site; we continue to receive requests to install further measures. This design is not blue print for all SSZs, but is an example of good practice.



7.0 The assessment of SSZ requests:

7.1 With the recent changes to the Councils budgets there is a focus on safety and structural maintenance. However, there are other funding sources through which a SSZ may be funded, these include:

- Community Match or Highways Local initiatives
- Development related s106 contributions
- Area Team Minor Works budgets
- In combination with a structural road repair scheme if the change only involves lining works.

For any potential SSZs officers must determine exactly what the issues are and decide what type of scheme it is. If there are recorded incidents of safety then it should still be processed as a safety scheme through the Capital Priority Assessment process. However for those seeking to address quality of life, accessibility or congestion issues consideration must be given as to whether these are partially or wholly funded through other means. Where it is felt that a SSZ should be developed as a safety scheme then this needs to have the approval of the Road Safety Team.

7.2 In order to undertake a thorough assessment we should be using every resource at our disposal:

• Highway & Customer Services Colleagues	
• Road Safety Partnership	- advice, data.
• Transport Monitoring Team	- data.
• School	- site knowledge.
• Residents	- site knowledge.
• Local Councillors	- site knowledge.
• Community groups	- site knowledge.

7.3 In the first instance any request for a new SSZ or amendments to an existing SSZ need to be discussed amongst the groups listed in 7.2 in order to clarify what the perceived problem is and the expectation of those making the request.

7.4 The officer assessing the request will collate and monitor the evidence to either support the request or to provide a reasoned reply why the SSZ cannot be delivered.

7.5 If the SSZ is considered appropriate the officers and designers will consider what the most appropriate, site specific, solution is and will seek funding through the channels highlighted 7.1. It is suggested that the table (Table 1) is used as a guide to show who should be involved when considering the various actions available.

7.6 The Councils priority assessment process should be used for the installation of new zones as well as improvement works to existing facilities. As the



majority of school sites already have some measures in place, modification works could be the most common form of assessment.



Table 1 – Assessment of SSZ requests

* advisory or mandatory (requires TRO)

WHAT THEN	END	MONITOR	MONITOR	PRIORITY ASSESSMENT	PRIORITY ASSESSMENT	PRIORITY ASSESSMENT
BY WHOM	HIGHWAY & CUSTOMER SERVICES TEAM	ROAD SAFETY PARTNERSHIP	ROAD SAFETY PARTNERSHIP	SCHEMES DELIVERY	SCHEMES DELIVERY	SCHEMES DELIVERY
WHAT	DO NOTHING	EDUCATION	CAMPAIGNS	SIGNS & LINES*	SSZ & 20 ZONE*	HUMPS / CROSSINGS / ROUTE TREATMENT
INCREASING SIGNIFICANCE						

8.0 Conclusion:

- 8.1 School Safety Zones are popular highway schemes that have been used extensively through-out the county for a number of years. However it is difficult to measure their effectiveness as a safety scheme given the already good accident record outside most schools. We do continue to receive requests for SSZs, but we also get requests for changes and improvements to existing SSZs where highway issues remain.
- 8.2 Although a “generic” school safety zone design has been identified it must be remembered that it is not necessarily the best solution for all school sites. Each request for a zone must be assessed on its individual merits and the investigation should detail what measures are appropriate given the requirements of the site and road users, delivering a bespoke solution. This may not actually be a SSZ at all.
- 8.3 The priority assessment process would then be applied to ensure that an objective decision is made on whether a scheme gets the go-ahead. This approach will ensure that the most deserving sites are addressed and that appropriate measures are installed.



APPENDIX A – Possible SSZ measures and when they should be considered:

Measure	When Appropriate	Considerations
Speed humps #	Recorded incidents of speeding creating a safety issue.	Bus services, ambulance & the impact on local residents.
Pedestrian crossing #	Measured pedestrian demand – outside school times too.	SCPO, concerns about zebra crossings outside schools.
Build-outs	Pedestrian demand/speeding.	Maybe more appropriate than crossing. Road widths and SCPO input.
Coloured surfacing	Where school site is not obvious (gateway effect).	Maintenance.
Zigzags	Parking issues adjacent to school (usually in place).	Mandatory (TRO)/ advisory. Mandatory requires additional signing.
Waiting restrictions #	Parking issues away from school entrance.	TRO required. There may be an impact on residents outside of school times.
Wigwags	To support a 20 limit, especially advisory.	On-going energy costs.
20mph limit #	Measured speeding issue.	Mandatory (TRO)/ advisory. Police support would be required for mandatory along with calming features.
Warning signs	Rarely inappropriate, should be in place.	Backing board? Correct supplementary plate.
School Crossing Patrol Officer (SCPO)	At established crossing points used by school children.	Recruited by the school.

advice/guidance available on these individual elements not specific to SSZs.



APPENDIX B – Design a 20mph sign plate guidance sheet and template

Design a 20mph sign plate

A 20mph speed limit is being proposed near your school. When this type of speed limit is introduced there is an opportunity for local children to be involved in the design of the road sign. The best design would be displayed underneath the regulatory speed limit sign (see below). There are a few rules to follow when designing the sign (see below) but children should use their imaginations. The design may have a road safety theme or it may have a link to the local community – it might have both! The attached template should be used to design the sign. We encourage schools to choose a winning design from each year group with Gloucestershire Highways taking the final decision on which design(s) will be made into a road sign so we can check it meets the criteria.

Please note that the introduction of any speed limit is subject to a legal consultation process and Gloucestershire Highways cannot guarantee the implementation of this limit or the signing of it.

RULES

1. Any contrasting colours can be used for the background and lettering except for red.
2. Any style of lettering can be used – it should be clear and easy to read.
3. No advertising material or political slogans.
4. Use as much of the template area as possible. We want it to be seen.
5. Keep the design simple.



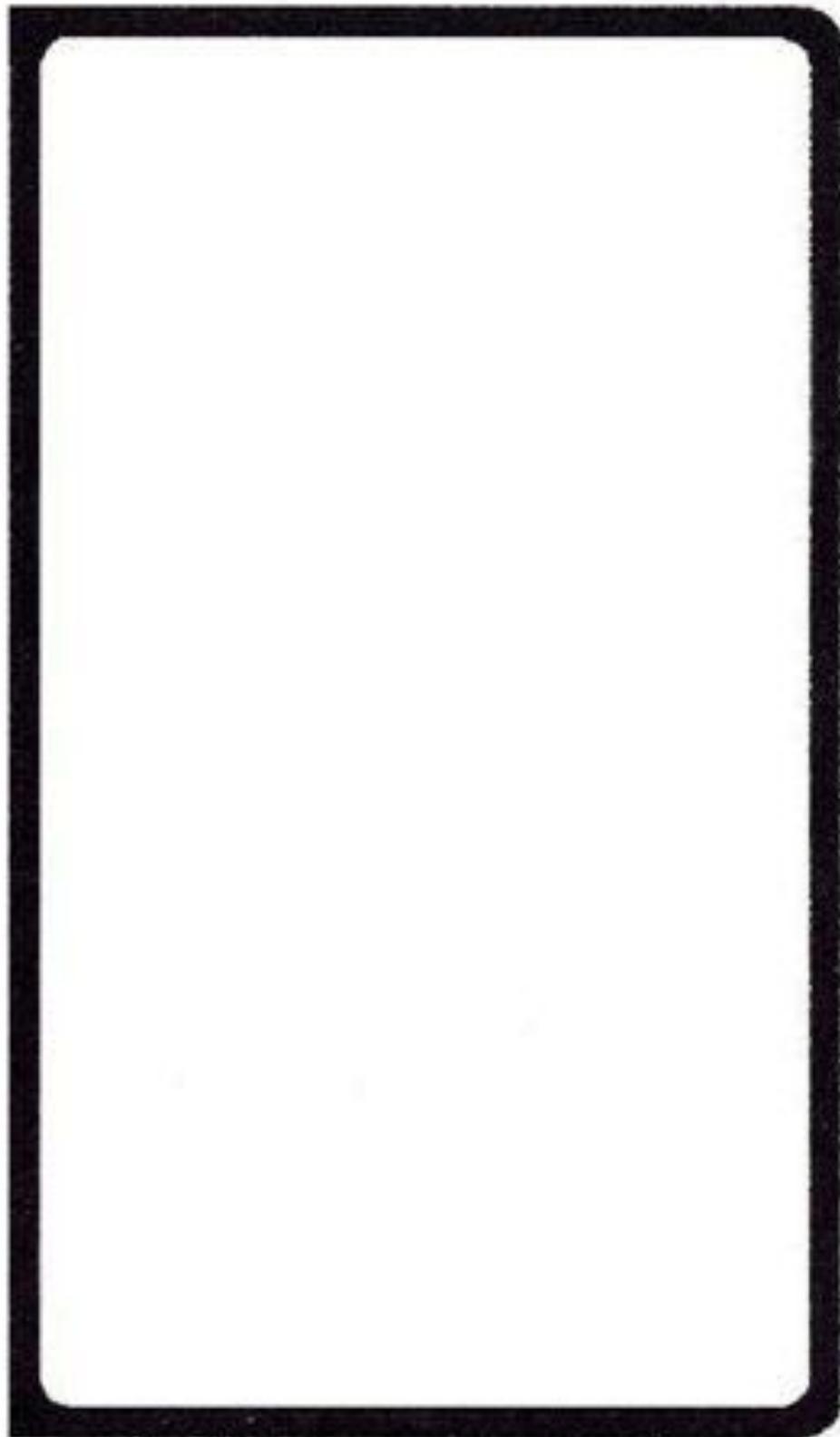
Your design here





Template for design of 20 mph sign plate

..... School



Name:

Year:

Date: