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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 5768.4-2017

Replacing GB 5768-1999

Road traffic signs and markings - Part 4: Work zone

道路交通标志和标线 第4部分：作业区

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1 Scope

GB 5768.4-2017 is the Chinese national standard on road traffic signs and markings - part 4: work zone, in the field of services and company organization. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 31 July 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 February 2018. Classification: ICS 03.220.20, CCS R80. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Part of GB 5768 specifies the requirements for setting of road work zone's traffic signs and markings. This Part is applicable to the setting of traffic signs and markings for works such as construction and maintenance of roads, urban roads, and places, squares, public

parking lots and other places that are under the jurisdiction of the organization but allow social vehicles. The settings of traffic signs and markings for works such as construction and maintenance of other places where motor vehicles pass can refer to this Part.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB 5768.2, Road traffic signs and markings - Part

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 work zone A section where traffic is controlled due to operations that affect traffic operation such as road construction, maintenance.

3.2 long-term work zone A work area where the total time of setting up the work area, carrying out the work, and dismantling the work area is greater than 24h at one location.

3.4 temporary work zone A work area where the work area is set up at one location, the total time to implement the operation and dismantle the work area is greater than 30min and less than or equal to 4h.

3.5 mobile work zone A work area of intermittent mobile work where continuous moving or staying time does not exceed 30min.

4 Composition of work zone

4.1 A work zone is composed of six zones. warning zone, upstream transition zone, buffer zone, working zone, downstream transition zone and termination zone, as shown in Figure 1.

4.2 The speed limit value in the work zone shall not be greater than the value specified in Table

1. The difference in speed limit transition shall not exceed 20km/h. It can be set at a decrease of 20km/h per 200m.

4.3 The length of the warning zone shall not be less than that specified in Table 2.

4.4 The length of the upstream transition zone is determined by the width of the road occupied by the work and the design speed.

4.5 The length of the buffer zone shall be greater than that specified in Table 3.

4.6 The length of working zone shall be determined based on comprehensive consideration of traffic delays and economic operation.

4.7 The length of downstream transition zone shall not be less than the reduced road width.

5.1.1 General provisions

5.1.2 Construction signs The construction signs and related auxiliary signs are set in the work zone. The distance sign in work zone, as shown in Figure 2a), is used to predict the length of work zone. Set near the starting point of warning zone.

5.1.3 Sign of decrease number of lanes According to the situation of lane closure in the work zone, select the sign pattern of decrease number of lanes, as shown in Figure

3. Set near the midpoint of warning zone.

5.1.4 Detour sign It is used to warn vehicles to detour, used for the work zone that borrows the opposite lane or detours on access road. Set near the midpoint of warning zone.

5.1.5 Orange arrow sign It is used to indicate the detour route that the vehicle leaves the road where the work zone is located, bypasses the work zone and returns to the original road, as shown in Figure

5. The orange arrow is attached to the support structure of the original guide sign along the detour. The height of the arrow shall not be less than the height of the attached guiding sign.

5.1.8 Sign of attention to traffic guiding personnel It is used to notice that there is a traffic guide ahead to command the traffic in the road section of work zone. It is set at least 100m before the traffic guide.

5.1.9 Sign of exit closed It is used to indicate that the exit of a highway or urban expressway is closed due to work.

5.1.10 Exit sign When the work zone affects the driver's judgement of the exit, it is used to indicate the exit. It may be set as needed. Character height is not less than 50cm. It can use an auxiliary sign to indicate the name or number of the exit.

5.2 Road traffic markings in work zone

5.2.1 The traffic markings in work zone are temporary markings. They are used to regulate and direct traffic flow during operation.

5.2.2 The traffic markings in work zone shall be selected according to the needs of the traffic organization in the work zone and relevant regulations in GB 5768.3.

5.2.3 The traffic markings in work zone are orange. The size shall comply with the provisions of GB 5768.3.

5.2.4 The work zone without lights at night shall use anti-cursor line materials.

6 General provisions on work zone layout

6.1 The traffic signs, markings and other facilities in work zone are temporary facilities set during operation. After the completion of the operation, the original traffic signs, markings and other facilities shall be demolished and restored in time. See Annex B for other facilities.

6.4 In addition to mobile work, channeling facilities must be set up to separate the work zone and the traffic flow. When separating the oncoming traffic flow, it shall use mobile barriers. It can use plastic water injection (sand) barriers. When the conditions are not met, traffic cones, buckets or columns can be used.

6.5 The setting range of channeling facilities include upstream transition zone, buffer zone, operating zone and downstream transition zone. Place according to Figure 1.

6.6 In addition to the mobile work zone, the work zone shall set up traffic signs in the work zone according to the actual traffic organization.

6.7 The speed limit sign shall be set before the starting point of the upstream transition zone. Repeat setting in the buffer zone and the working zone as needed. The speed limit of work zone at the end of termination zone shall be removed.

6.8 For the work zone without inner lane of middle section and the work zone that borrows the opposite lane to organize traffic, traffic signs, markings and other facilities in the opposite work zone shall be set up.

6.9 When the existing traffic signs and markings are applicable to the traffic during road work period, the long-term work zone shall be maintained and maintained in good condition throughout the work period. When the existing traffic signs and markings conflict with traffic organization during work, they shall be removed and blocked.

6.10 The mobile work zone shall install the mobile work sign or variable arrow

7.1 General provisions

7.1.1 According to the need, an additional work zone distance sign can be set up at the upstream of the starting point of the warning zone. The distance from the starting point of the warning zone shall not exceed 1000m.

7.2 Partial lanes of one-way three-lane roads and of roads with more than three lanes are closed due to work zone

7.2.1 When two and more lanes are closed at the same time, upstream transition zone and downstream transition zone shall be set up in each lane, as shown in Figure 16.