OFFICE MEMORANDUM

Subject: Preliminary inspection Reports of two identified black spots in the states of Telangana and Karnataka for reference and guidance (Black Spot ID: KA-055 & TG-058)

This office OM of old No RW/NH-15017/109/2015-P&M (RSCE) i.e., New even number dated 08.Oct.2015 where in the approach to be adopted for investigation and rectification of identified accident black spots is detailed may please be referred. Carrying out preliminary inspection of the identified black spots and formation of preliminary inspection reports covering all aspects of the black spot including possible reasons for repeated accidents, required remedial measures, availability of land, and improvement proposals on the black spot stretch in progress/ in pipeline if any, is the first and important step in handling the accident black spot. After the preliminary inspection report, detailed proposals through survey/ investigations along with cost estimates are to be prepared giving all existing features on/ adjacent to road superimposing the proposed rectification measures and are to be furnished for sanction.

2. As per the time schedules communicated in the above cited OM all preliminary inspection reports of the identified black spots on NHs within the jurisdiction of state PWD were to be furnished by 25.11.2015 along with consolidated brief details of all the black spots in Annex-II of the said OM. However, no preliminary inspection report has so far been received from your state/UT (except Karnataka & Telangana).

3. To facilitate preparation of preliminary inspection reports with adequate details, two numbers of black spots were inspected in each of the states of Telangana and Karnataka by the committee constituted for inspection by the respective state PWDs in the presence of CE(RSCE) as co-opted member and reports were prepared for all the 4 black spots. Two of the preliminary inspection reports, one falling in rural area in Karnataka and other falling in urban area in Telangana are enclosed (Black spot ID KA-055 & TG-058). It may be appreciated that each of the road accident black spots is unique in itself in terms of the reasons for accidents, feasible remedial measures for its rectification. However, the above preliminary reports can be used for general guidance in respect of details to be
covered, approach to be adopted for inspection etc. These may be circulated to all concerned for reference and guidance.

4. It is requested that all the identified black spot locations may be inspected by the committee and preliminary inspection reports and consolidated details in Annex-II of the above cited OM be forwarded at the earliest without further delay. After preliminary inspection, necessary action for preparation of proposals may also be taken up in the light of the findings of preliminary inspection to facilitate their sanction at the earliest.

Enclosure: As above(13pages)

(Ravi Prasad)
Chief Engineer (Road Safety)

To
PWD Chief Engineers of NH, Regional Officers/ELOs, MoRTH with a request to make personal efforts in the above matter which are urgently required to bring about perceptible improvement in the present unenviable road accident scenario on NHs.

Copy for information to: PS to Secretary (RT&H), Sr. PPS to DG (RD) & SS, PPS to ADG-I/ADG-II/ Coordinator-I, II & III.
Inspection report of state level committee in respect of identified road accident black spot at Dasakodi on NH-48 in the state of Karnataka.

ID of black spot: KA- 055

Date of inspection: 14-11-2015

Inspection committee and other members: Inspection is carried out by the following committee / co-operated members.

Members of the committee:
   i. Shri Raghavan Superintending Engineer, NH circle Bengaluru- Representative of Chief Engineer (NH) Karnataka
   ii. Shri J.H Eligar Regional Officer, MORTH Bengaluru.
   iii. Shri M.O Ramesh Executive Engineer, NH Division Mangaluru

Co-opted members:
   iv. Shri Ravi Prasad chief Engineer (Road safety), MORTH
   v. Shri Abdul Rehman Assistant Executive Engineer, NH sub division Mangaluru.
   vi. Shri Chandra Sekharaiah, Sub-Inspector Traffic police station, Bantwal along with one police constable.

Location of Road accident black spot: Km 318.60 to 319.10 of NH -48

Inspection tools and equipment: 30 m tape, 3m metallic tape, plumb bob were available for inspection. Though ranging rods, straight edge, spirit level, marking chalk etc. were required, these were not available and work was managed with local arrangements.

Improvement works in progress / in pipeline: NH-48 from Hasan to Mangaluru is being taken up for 4 laning by NHAI for which, DPR preparation is completed. Land acquisition is in progress. After completion of DPR / bidding it is likely to take about 2 years for Four laning work to start and one more year to complete new two lane carriage way after which the existing carriage way would be taken up for improvement. Therefore, present traffic will still have to use existing NH for about 3 years. In the DPR prepared by NHAI, geometric improvements by straightening the road are incorporated in the proposed four laning. PR work is sanctioned in 2015-16 from Km 309 to Km 328 and the work is yet to be executed. Keeping in view the present traffic of about 20,000 PCLs /day which is quite high for a two lane road and the repeated accidents/fatalities taking place at this black spot, interim improvements have to be carried at the earliest.
Details of existing road /road environment: The existing road generally has 2 lane carriage way with carriageway width varying from 6.7m to 7 m with earthen shoulders of about 1m to 1.5m. Existing ROW (land width) is varying from 30m to 40m. The road is in rolling terrain. Road side has bushes / jungles except one or two isolated houses or small dhabas.

Inspection methodology and possible reasons for repeated accidents as per site conditions: Discussions with local traffic police and local people were made and it was identified that based on accidents /fatalities taking place in the stretch near Dasakodi, it is appropriate to consider the above black spot stretch from Km 318.600 to Km 319.100. There is a 'S' curve in the black spot stretch and a village road towards Shamboor and two more village roads are joining the NH without proper junctions. As the stretch is in rolling terrain ruling (i.e., generally adopted) design speed is 80 Kmph and absolute minimum design speed is 65 Kmph. The curve near km 318.73 has very low sight distance of about 45 m (as measured approximately at site) against normal stopping sight distance requirement of 120m and absolute minimum stopping sight distance requirement of 90 m for this NH. The curve at this location has a radius of about 90m (Chord: 20m, Offset: 0.78m to inner edge as measured approximately at site i.e., Radius of about 90m) against normal radius of 230m & absolute minimum radius of 155m required for this NH. At next immediate curve near Km 318.600 sight distance as measured is about 45 m and radius is about 110 m (chord 23 m, offset: 0.6m to inner edge of the curve i.e., radius of 110 m) as measured approximately at site against the above normal and minimum requirements of 230m & 155m respectively. There is an Indian oil retail outlet on RHS near Km 318.600. There are no edge line markings, no centre line markings, no signs/markings prohibiting overtaking etc. There is also severe edge drop between carriage way and earthen shoulders (The sketch of the existing alignment is enclosed at Annexure I alongwith the photographs).

Broad improvements required: Due to high rate of accidents / fatalities taking place at the black spot interim measures are required immediately to reduce accident potential before the 4 laning of this road is implemented. Improvement of curves /sight distance within available land, widening at curves, speed restrictions through rumble strips, road signs/ markings, improvements and signs at the cross roads, improvement of camber /super elevation, acceleration/ deceleration lanes at the retail outlet etc. are to be implemented.

Mode of Implementation: Some of the improvements like camber/ super elevation, centre line/ edge line markings etc., can be implemented in the sanctioned PR work. Other improvements would be implemented through a separate proposal. A DPR preparation consultancy work is in progress on NH-275 at nearby location in Mani - Bengaluru section. Detailed improvement proposal through survey investigations in
the light of the above details shall be prepared either through variation of this consultancy or through in-house efforts of Karnataka PWD. The work would be executed after sanction through short notice tender in minimum possible time as per the usual procedures followed for NH (O) works.

(Raghavan)  
Superintending Engineer  
for Chief Engineer (NH),  
State PWD, Bangalore/Chairman

(J.H. Jigar)  
Regional Officer/Member  
MoRTH

(M.O. Ramesh)  
Executive Engineer/Member  
NH Division, Mangalore
Inspection report of state level committee in respect of identified road accident Blad<
Spot at Uppal Cross Road on NH-163 in the state of Telangana

ID of black spot: TG-058

Date of inspection: 17-11-2015

Inspection committee and other members: Inspection is carried out by the following committee/co-opted members:

Members of the committee:

i. Smt. Or. C. Vasantha, Superintending Engineer, NH circle Hyderabad - Representative of Chief Engineer (NH) Telangana
ii. Shri A Krishna Prasad, Regional Officer, MORTH Hyderabad.
iii. Shri S Surender, Executive Engineer, NH Division Hyderabad

Co-opted members:

iv. Shri Ravi Prasad, Chief Engineer (Road safety), MORTH
v. Shri K Srinivas, Dy Executive Engineer, NH sub division Hyderabad
vii. Shri K Praveen Reddy, AEE. NH Section, Hyderabad

Location of Road accident black spot: Km 7.5 TO 8.0 of NH-163

Inspection tools and equipment: 30 m tape, 3m metallic tape, plumb bob, ranging rods, straight edge, spirit level, marking chalk were available for inspection.

Improvement works in progress in pipeline: One elevated highway on Warangal leg of this Uppal Cross Road junction is being planned for which DPR consultants are recently appointed. No other work is in progress/in pipeline.

Details of existing road/road environment: This black spot stretch from km 7.5 to km 8.0 is falling on the Uppal Cross Road junction which is a cross junction between 4-lane NH 163 and 8-lane inner ring road which is under Greater Hyderabad Municipal Corporation (GHMC). There is a small rotary in the centre of the junction which has a very small dia of 25m. Presently, this rotary is not being used and the traffic is moving through U-turns on the inner ring road. There is Ambedkar Statue on the rotary. NH-163 coming from Chadarghat junction point on NH-65 is slightly deflected towards right. The inner ring road is deflecting substantially towards right. There are no right turning lanes, channelizers, proper pavement markings/road signs. There are lot of undesirable open spaces within the junction area leading to hap hazardous weaving manors resulting in unsafe conditions. There severe unauthorised and irregular parking of vehicles, autos etc. on Warangal leg as well as Nagole leg. Some urban streets are irregularly joining at the junction without any service roads or other facilities. Footpaths are partially existing. No drains are existing. There is no
continuous movement path for the pedestrians. Though signals are existing they are neither functional nor are catering to all the movements at the junctions. There is Uppal Metro station near the junction on Nagole leg. All the unsafe conditions prevailing at this junction need to be remedied through comprehensive proposal based on survey investigations / detailed designs.

**Inspection methodology and possible reasons for repeated accidents as per site conditions:** Simple measurements of different features of the intersection are taken. Traffic patterns were observed and a rough sketch depicting the site conditions is prepared. Local enquiries and discussions with traffic police were made. Basically the traffic paths have unregulated deflections. The junctions have undesirable open spaces and pedestrians have no facilities. In spite of this being a busy intersection, all traffic movements are not being regulated through signals. There are several pedestrian to vehicle and vehicle to vehicle accidents taking place at this junction as reported traffic police and the local people.

**Broad improvements required:** Appropriate right turning, acceleration or deceleration lanes are to be created. Proper channelizing islands are to be provided streamlining all the traffic movements maintaining minimum widths for median islands as well as channelizing islands. Several obstructions lying in the intersection area are to be removed. Footpaths/ drains are to be provided. Complete signalization is to be designed / provided catering to all traffic and pedestrian movements. All road signs and pavement markings are to be provided. No parking zones and regulated parking areas are to be established. Bus bays have to be properly relocated and redesigned. Camber and super elevation are to be corrected. A comprehensive proposal is to be designed after preparing a detailed base map super imposing the proposed improvements.

**Mode of Implementation:** Improvements would be implemented through a separate proposal. A DPR preparation consultancy work is in progress on this NH near this black location for an elevated highway on the Warangal leg. Detailed improvement proposal through survey investigations in the light of the above details shall be prepared either through variation to this consultancy. The work would be executed after sanction through short notice tender in minimum possible time as per the usual procedures followed for NH (O) works.

Dr. C. Vasantha
S.E., NH, Hyd

A. Krishna Prasad
R.O., MORTH

I. Ganapathy Reddy
C.E., NH, T.S

Page 2 of 2