

## POLICE ORDER No. 244

### SKETCH MAP

It has been brought to my notice that Investigating Officers generally fail to prepare sketch maps showing places of occurrence and the material land marks which help both supervising officers and trial courts to get an idea of the scene of crime. In this connection attention is drawn to P. M. Rule 176 which provides for the preparation or maps of plans of scenes of crime. In certain kinds of investigation, it is incumbent on the Investigating Officer to prepare these maps or plans of scenes of crime to be attached to the relevant case diaries. The Investigating Officer is also given discretion in preparing plans of scenes of occurrence in any other case not listed in the first part of this rule. The sketch map has invariably to accompany the charge sheet in the cases mentioned in sub-clause (a) of this rule. The map or plan has to be drawn to a scale as it may have to be exhibited in court and it shall bear the signature of the officer who prepares it. Instructions contain clause (d) are also to be observed carefully.

2. Maps and plans are useful in criminal investigation and prosecution for the following reasons—

- (a) They reduce the length of reports
- (b) They make a much more exact impression on the mind than written reports
- (c) They make a lucid explanation of an intricate case fairly easy
- (d) Their preparation increases the power of observation of the Investigating Officer
- (e) They introduce method into investigation
- (f) They help Judges, Magistrate, Jurymen and others to an accurate understanding of a case
- (g) They often prove whether a witness is reliable or not thus a plan may show whether a witness was of hearing or an incident or was unable to see what he stated he saw.

3. There are four main types of sketch maps for police purposes:—

- (1) Sketch of details or of the interior of a room—This describes the immediate scene only for instance the room in which the crime was committed and the details thereof, e. g., the furniture, blood marks, stains, etc.
- (2) Sketch of house—This gives a sketch of a flat floor or containing several rooms or whole house with or without a courtyard. It indicates the walls of the different room with door, windows, etc.
- (3) Sketch of grounds or the environs of the house—This gives a picture of the scene or the crime with its nearest surrounding, i. e., a house with garden, several flats or several floors in a house or several houses or compounds with their immediate environs or a plot of land with surrounding plots.
- (4) Sketch of a large portion of country—This gives a plan of a considerable tract of country showing salient physical features, e. g., rivers, hills, etc. and prominent artificial features, e. g., roads, tanks, temples, etc. This is useful in giving a picture of the scene of crime and all its surroundings up to a considerable distance including such items as buildings, fields, roads leading to the house, trails of the culprit or culprits, etc. This type of sketch is required to be drawn when a wide area is involved, e. g., in a rioting case spread over a wide area by a big mob as during the communal riots of 1943-47 or where the surroundings are relevant to the case as where a person is murdered in a field, the deadbody is taken to and buried on the compound of a garden, house and digging is noticed by witnesses of bordering precincts.

#### 4. General instructions for all types of sketches:—

- (i) The sketches must be to scale distances, should be measured accurately and nothing of importance should be left out of the sketch map. These distances should be measured before the exhibits and other articles are distributed or taken charge of for purpose of investigation. All measurements should be taken with equal accuracy e. g., one distance should not be measured by paces and another with a measuring tape-distances measured by pacing shall not be expressed in feet and inches. It is also a mistake to draw the outlines of a room from measurements and then put the furniture into the sketch by guesses. The exact position of the furniture may ultimately turn out to be the deciding factor in the case.
- (ii) The sketch map should show the position of all articles, exhibits, marks such as blood stains, track marks of vehicles etc., relevant to the case.
- (iii) The compass point must be indicated. The north point can be obtained—
  - (a) by means of a compass.
  - (b) or from an existing map of the area after it has been set, i. e., arranging a map on the ground in represents in such a manner that a line from the point on the map which represent the observer is position to any particular point on the map is the real direction of the point on the ground.
- (iv) It is necessary not only to obtain correct distances but also the true angles of cross road junction and angles between various articles.
- (v) Articles, marks, etc. on the map should be indicated by letters such as A. B. C., etc. and details explained in margin or at the fact of the map.
- (vi) The work of sketching is made easier by using graph paper.
- (vii) The scale together with the title, the case reference, date, time and the sketchers name must be recorded in the corner of the sketch. The sketcher should also put his signature and date on it.
- (viii) When sketching large outdoor sets paragraph 3 (4) the conventional signs used on maps printed by the Survey of India or those used in the cadastral maps may be used with advantage.
- (ix) If a photograph has been taken, its position should be marked on the sketch
- (x) Measurements should be taken by the sketcher himself, these should not be left to be taken by others.
- (xi) No reliance should be placed on memory to make corrections at the P.-S. or at a place removed from the P. O.

5. In preparing a sketch of the interior of a room when details on the ceiling are to be shown the plastic cross projection method will be found extremely useful. In this method the ceiling and the walls are pictured as if they were on the same plane as the floor. The projection of all articles on the floor is drawn on the nearest wall in addition to showing the stains and other marks on the walls in the proper places. The cross projection is drawn on board and cut out. Light cuts are made along the junctions of walls, floor and ceiling so that card board may be bent. The folding of the card board walls in proper relation to one another produces a model of the interior of the room. One of the walls is left hanging to permit looking into the room. This method gives a clear impression of the scene in cases where bloodstains, bullet holes, etc. are found on the walls or on the ceiling and which can not be indicated in the ordinary type of sketches. The accompanying sketch shows how a plastic cross projection is made. The thick lines indicate where the light cuts are to be made on the card board.

6. In the case of a sketch of a P. O. of a motor vehicle accident case, the following information should be shown on the map—

- (a) Point of impact
- (b) Track marks of vehicles concerned in the accident
- (c) Position of vehicle after the accident
- (d) Width of the road and nature of road surface (Whether metalled or otherwise, etc.)
- (e) Skid marks and brake impressions, it will be appreciated that this information must be secured as soon as possible in view of the possibility of track mark being made by other passing vehicles, where opportunity presents itself the tread of tyres should be compared with tyre impressions on the road way.
- (f) Position on the road of glass or other debris from the accident
- (g) Dimensions of vehicles concerned
- (h) Width and nature of the katcha portion of the road and road side land
- (i) If visibility is obscured by hedges, fences, walls, poles, etc. and if so measurement thereof
- (j) Any fixed objects (e. g. trees, telegraph, telephone and electric poles) which might have a bearing on the accident or which might help to fix the exact position on the road of and vehicles or injured persons concerned.
- (k) Road directions, traffic signs are invariably located some distance ahead of the point to which they refer, and they should be shown in such way on the drawing as to indicate this distance.
- (l) Compass points
- (m) The scale in which it must be borne in mind that not only the road but such other object as vehicles, should be shown in proper proportion.
- (n) Note should be made of the weather conditions at the time of the accident
- (o) Position of bloodstains, and
- (p) Position and direction of the dead body or the injured.

#### 7. Procedure :—

- (1) The I. O. should draw an outline of the room placing in it the doors, windows and other fixed objects. This is done free hand on a blank sheet of paper. He then should put in the furniture such as chairs, table beds and other objects, and finally sketch other objects relevant to the case, e. g. the dead body, stains marks etc. in relation to these articles. With the stape, measurements may then be made of the size of the room, door ways, windows etc. and then the accurate distances of various places of furniture marks etc. from the stationary objects measured and noted on the rough map. At some latter time, an accurate drawing may be prepared showing all of these details in proper scale.
- (2) A scale should be determined suitable to the locality or scene to be sketched and to the size of the paper being used.
- (3) The simplest way of drawing angles of room etc. correctly on the sketch is to cut a piece of stiff paper to fit the angle and then draw the angle on the plan by laying the paper angle upon it.
- (4) Appliances required are :—
  - (a) a measuring tape
  - (b) an ordinary 'instrument' box
  - (c) suitable drawing paper and pencil if these are not available, ordinary paper and pencil may be used.
  - (d) a compass

Those from part of equipment of the "Investigation Boxes" where these 'boxes' have not been supplied the I. Os. must provide themselves with these simple appliances.

8. In some cases where the sketch may be complicated particulars where the drawing involves the boundary of several fields, tanks, roads, etc. the services of an expert (an Amin) may be requisitioned. This should be done in as few cases as possible and if the services of an Amin are essential, he should be requisitioned at as early a stage as possible and not after weeks as is sometimes done. Even if the Amin available after only a few days, it is essential that position of relevant articles marks, etc. (e. g. dead body blood stains, cutting of embankment, uprooting of crops) should be shown on a rough sketch and their distances from fixed objects like wells, embankments etc. measured and mapped on the rough sketch so that the Amin may draw an accurate map. It is dangerous to indicate these positions in an open place by movable articles like bricks etc. and leave the measurement to be taken by the Amin at a later date.

All officers of and above the rank of S-I. are now trained in survey work and there is no excuse for the I. O. to call for an Amin except for very special reasons.

In many cases, particularly in rioting cases the task of preparation of sketches will be rendered much easier, if the I. O. obtained blank copies of the cadastral maps of that locality if such map is required to be used, however, it should be checked on ground by the Police Officer before he make any use of such a map. This is necessary for two reasons.

- (i) There may be a mistake in the Revenue Map
- (ii) The boundaries may have changed after the last survey

This precaution is necessary only in important cases

Wherever possible, the I. O. should take one or more photographs of the P. O. from different angles. A photographer can not however, replace a sketch nor can the latter replace the former. The two are complimentary.