

RIVER TRAINING WORKS

Any work constructed in order to contain the rivers in their specified path of flow.

Classification of rivers

The rivers on alluvial soils may be classified into three types :

1. The meandering type
2. The aggrading type
3. The degrading

Objects of river training

1. To achieve safe and expeditious passage of flow through the river.
2. To achieve efficient transport of bed silt and suspended silt.
3. To achieve stable stream course with minimum bank erosion.
4. To achieve sufficient depth of flow for navigation.

Types of river training works

1. **Guide banks:** they are used to guide the river to pass through the constrained width of the river at the structure as bridge or diversion structures .
2. **Margnal Bunds:** (levees) they are earthen bunds whose face towards the river is generally pitched . they ae constructed parallel to river banks to protect the marginal land from inundation caused by floods.
3. **Pitching of Banks:** it is a protection of concrete blokes to the river bank or stone pitching and asphalt. The thickness of the pitching is governed by the velocity of the current ner the bank .
4. **Artificial and Natural cut-off:** when meandering river develops very sharp horse-shoe bends,a small cut is given to connect the peaks with slope more than the slope of the river ,then less Q will pass through the curved river and silted ,then the shape of the river will change after many years to straight river.
5. **Spurs or Groynes:** they are structures built transverse to the river flow ,extending from the bank towads the river , they perform many functions as :
 - Increase silting
 - Cause scouring
 - Deflecting the flow of water
6. **Pitched Islands:** it is an artificially created in the river . It may be made of masonry or earth embankment . but pitched all-round.