



- NOTES:**
- 1). ALL W-BEAMS ARE 13'-6½" IN LENGTH.
  - 2). PLACE GUARDRAIL DELINEATORS IN ACCORDANCE WITH DETAIL B-13, SHEET 9.
  - 3). POSTS 1 & 8 ARE TO BE W6x9, 6'-0" STEEL POSTS. POSTS 2 THROUGH 7 ARE TO BE TYPE 31 LONG, WOOD BREAKAWAY POSTS.
  - 4). THE RAIL SHALL BE ATTACHED AT POSTS 2 THROUGH 7 WITH A 5/8" x 22" GUARDRAIL BOLT, STEEL WASHER, AND RECESS NUT.
  - 5). CULVERT HEADWALL SHALL NOT EXTEND MORE THAN 2" ABOVE GRADE.
  - 6). THERE SHALL BE A MINIMUM OF 12" FROM THE BACK OF POST TO THE CULVERT WINGWALL.
  - 7). IF CURB IS USED, IT SHALL BE A MAX 2" HEIGHT WITHIN THE LIMIT OF PAYMENT OF THE GUARDRAIL OVER CULVERT.
  - 8). MASH COMPLIANT SYSTEM - FHWA ELIGIBILITY LETTER B-189



  
 ENGINEERING SUPPORT      09/01/2020  
 RECOMMENDED      DATE

**GUARDRAIL OVER CULVERTS, TYPE 2-31**

STANDARD NO.      B-3 (2020)      SHT.      2      OF      3

REVIEWED        
 DEPUTY DIRECTOR - DESIGN      09/01/2020  
 DATE

APPROVED        
 CHIEF ENGINEER      09/01/2020  
 DATE