1. Use on existing W-beam guardrail systems when barrier system meets standard specification 02841 and BA-4 series STD DWG for W-beam guardrail unless otherwise specified. Minimum acceptable height for existing W-beam guardrail is 28 inches.

2. Tangent installations:
   A. Replace type G end treatment with 12 1/2 ft of W-beam guardrail flared at 12 1/2:1 and a type H end treatment as specified in the guidelines for crash cushion and end treatments, current edition.
   B. New guardrail required if an approved type H is currently installed.
   C. Replace attachment rail assembly to existing posts:
      1) Replace steel blocks with modified wood blocks if existing W-beam installation has steel posts with steel blocks.
      2) Meet manufacturer's requirements for cable attachment rail and associated hardware.
   D. Install STD DWG BA 5C1 cable W-beam anchor assembly.
      1) Leave existing posts in place when anchor assembly foundations can be installed without removing.
      2) Replace steel blocks with modified wood blocks if existing W-beam installation has steel posts with steel blocks.

3. Flared installations:
   A. Remove existing end treatment.
   B. Install STD DWG BA 5C1 cable W-beam anchor assembly, tangent to the roadway.
   C. Install cable attachment rail assembly tangent to the roadway.
      1) Meet manufacturer's requirements for cable attachment rail and associated hardware.
      2) Replace steel blocks with modified wood blocks if existing W-beam installation has steel posts with steel blocks.
   D. Install 12 1/2 ft typical W-beam flared at 12 1/2:1 and a type H end treatment.
   E. Install, 12 inch dia x 42 inch deep foundation. Meet all other manufacturer's requirements for cost in place cable post foundations.

4. Flare rate: Equal to or flatter than 50:1 desirable, 25:1 maximum acceptable.

5. Flaring:
   A. Attenuation assembly range in length from 6 ft to 25 ft.
   B. Replace steel blocks with modified wood blocks if existing W-beam guardrail is less than 200 ft.
   C. Flaring cable at post 14.

6. Typical W-beam guardrail and end treatment will be paid as standard pay items.

7. Refer to STD DWG BA 5B1 & BA 5B2 for maximum and minimum offset and slope requirements. See plan set for project offset requirements.

8. Typical W-beam guardrail.

9. Refer to STD DWG BA 5C1 for anchor assembly requirements.