SPREAD BOX BEAMS - SPANS (X-X) AND (X-X)

DIMENSIONS

Fabricator shall apply a bond breaker in this region as shown in Figure A.

MATERIALS

All concrete shall be Class A-1 with f'c = 4000 psi and f'ci = 2700 psi.

Use Grade 610 wires, Grade 270 strands, and Prestressing Strands for all members.

General Notes:

Concrete for primary beams shall be placed with f'c = 4000 psi and f'ci = 2700 psi.

All rebar shall be Grade 4000.

All S2 bars shall be epoxy coated.

Straps not shown for clarity.

Note: This drawing is not to scale. Follow dimensions.
STANDARD DRAWING GUIDANCE (do not show on plans):
Turn off level Bridge-Guidance to hide guidance

1. Actual strand arrangement, bent up strands, and debonding (if any) is by design (top two strands are required). Add or remove symbols and instructions as required. Strands may be placed continuously across beam (eliminating 4’ space). But dimension to drain hole in Part Plan shall be revised to 10”.

2. Revise if #5 is required. Use 6’-7” for #5-S1 actual length and 6’-1” for #5-S2 actual length.

3. Splices shown only when necessary (girder length > 60’-2”). Use 2’-1” lap for #4 & 2’-7” lap for #5.

   When lap is unnecessary:
   - Delete grouped elements.
   - Extend A bars to & Beam.
   - Revise 10 to 3 A1 bars & 5 to 4 A2 bars.

4. Interior diaphragm & vent pipe shall be shown only when necessary (when structure may be submerged).

   When not necessary:
   - Delete the two grouped elements.
   - Extend hidden lines to & Beam.
   - In Part Plan revise remaining dimension to full length of void.

5. Revise minimum dimension if required by design.

6. By design. Typically 30.98 kips per 0.5” strand & 43.94 kips per 0.6” strand, rounded to nearest whole kip.

7. Strand location not available when vent pipe is required.