The Contractor may replace Bars B, C, D, F1, F2, M, Z, and/or Y with deformed reinforcing (WWR) meeting the requirements of ASTM A1064. The area of required reinforcement may be reduced by the ratio of 60 ksi / 70 ksi (ex. 500 square in. = 571 square in. when the Rail Anchor Curb (RAC) standard sheet is referred to elsewhere in the plans."

For vehicle safety, the following requirements must be met:

- For structures without bridge rail, construct curbs no more than 3' above finished grade.
- For structures with bridge rail, construct curbs flush with finished grade.
- Reduce slab thickness, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

For curbs less than 3' high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3' high, Bars M may be omitted.

"1'0" Typical: 2'-3" when the Rail Anchor Curb (RAC) standard sheet is referred to elsewhere in the plans.

For structures with pedestrian rail or curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet. For structures with bridge rail refer to the Multiple Box Culverts (MC-MD) standard sheet. Refer to the Multiple Box Culverts (MC-MD) standard sheet for structures with bridge rail other than T631 or T631LS.

For structures with pedestrian rail or curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet.

The Contractor may replace Bars B, C, D, F1, F2, M, Z, and/or Y with deformed reinforcing (WWR) meeting the requirements of ASTM A1064. The area of required reinforcement may be reduced by the ratio of 60 ksi / 70 ksi. The maximum bar size may be reduced in the WWR if the same length required for the equivalent bar size rounded up for wire sizes between conventional bar sizes. The lap length required for WWR is never less than the lap length required for uncoated #4 bars.

Example conversion: Replacing No. 6 Gr 60 at 6" Spacing with WWR. Required AWR = (0.306 sq. in.) / (0.755 sq. in. per ft.) x (12 in. per ft.) = 4.86" Min Spacing. Required lap length for the provided WWR area is 2'-1" x 2'-1" area. The maximum lap length required for uncoated #4 bars, as listed under MATERIAL NOTES.

CONSTRUCTION NOTES:
Do not use permanent forms. Chamfer the bottom edge of the bottom slab 3" at the entrance. Optionally, raise construction joints shown at the flow line by a maximum of 1'. If this option is taken, Bars M may be cut off or raised. Bars C, D, Z, and/or Y may be reversed, and Bars F1 and/or F2 may be reversed.

MATERIAL NOTES:
- Pretension Grade 60 reinforcing steel.
- Pretension galvanized steel (required elsewhere in the plans.
- Prestress Class C concrete (600 ksi) for culvert barrel and curbs.
- Provide bar laps, where required, as follows:
  - 1'-0" typical: 2'-3" Min
  - 1'-8" typical: 2'-1" Min
  - 3'-0" typical: 2'-3" Min
  - 6'-0" typical: 2'-1" Min

GENERAL NOTES:
- Delivered according to AASHTO UFD Bridge Design Specifications for the range of fill heights shown. See the Multiple Box Culverts Cast-In-Place Miscellaneous Details (MCP-MD) standard sheet for details pertaining to skewed ends, angle sections, and lengthening.
- Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.