

SPECIFICATIONS AND DETAILS FOR BORDER FENCE
TO BE CONSTRUCTED AT BROWNSVILLE, TEXAS

Near and parallel to international boundary

1. LOCATION: On levee at Brownsville, Texas between Gateway Bridge and International Bridge, with wings of sufficient length extending outward from each bridge to complete total required fence.
2. LENGTH: Approximately ^{4.9}~~three~~ miles.
3. HEIGHT: (Overall) Fence to stand 11' above grade when erected, (including barbed wire). Will require 10' fence.
4. FABRIC: Chain-link, hot-galvanized by hot-dip process after weaving. Ten feet high of No. 6 gauge wire, woven in a 2" chain-link diamond mesh. Top and bottom selvages to have twisted and barbed finish, barbing to be done by cutting wire on bias, thus creating sharp points.
5. TENSILE STRENGTH TEST: Wire pickets of fabric to be made to stand a tensile strength test of 90,000 pounds per square inch based on the cross sectional area of the galvanized wire.
6. GALVANIZING TEST: Wire fabric to stand six one minute immersions under the Preece Copper Sulphate method test for uniformity and weight of coating. Test to be made on a section of wire picket at least four inches in length so as to include one bend and at least one straight side of the formed link in the test.
7. LINE POSTS: Hot-dip galvanized "H" column (2" x 2 1/4") weight 4.1 lbs. per lineal foot, carbon content 0.35%. No used, re-rolled, or open seam material will be permitted in posts or rails.

8. **TERMINAL POSTS:** End, corner, and pull posts, except as specified above, shall be hot-dip galvanized pipe 3" O.D., 5.79 lbs. per lineal foot. Gate posts shall be hot-dip galvanized pipe 4" O.D., weight per lineal foot 9.11 lbs.
9. **POST SPACING:** Posts shall be placed in line of fence not farther apart than 10 foot centers.
10. **POST SETTING:** All posts to be long enough to set in concrete footings three feet deep, post holes to be 12 inches square or round -- flared at bottom.
11. **EXTENSION ARMS:** To be "V" shaped arms, carrying 6 strands of barbed wire. Arms shall be hot-dip galvanized. Line post arms to be of pressed steel riveted to heavy malleable iron base, and terminal post arms to be of malleable iron. Arms having projections to be bent down over barbed wire may not be used. Topmost barbed wire to be 12 inches above fabric.
12. **TOP RAIL:** To be hot-dip galvanized pipe of 1 5/8 inch O.D., weight 2.27 lbs. per lineal foot, provided with couplings approximately every 20 feet. Couplings to be outside sleeve type and at least 7 inches long. Top rail to pass through base of line post tops and form a continuous brace from end to end of each stretch of fence. Top rail to be securely fastened to terminal posts by suitable pressed steel connections.
13. **BRACES:** To be hot-dip galvanized of same material as top rail. To be spaced midway between top rail and ground, and to extend from terminal post to first adjacent line post. Braces to be securely fastened to posts by suitable pressed steel connections, then trussed from line post back to terminal post with 3/8" inch round rod.

14. FITTINGS: All fittings to be used in connection with fence or gates to be malleable cast iron or pressed steel, hot-dip galvanized.
15. FABRIC BANDS: Bands to fasten fabric to line posts to be spaced approximately 14 inches apart. Tie wires to be used to attach fabric to top rail to be spaced approximately 24 inches apart.
16. BARBED WIRE: Six lines of four point pattern, each composed of two strands of No. 12 1/2 gauge wire with large barbs placed 3 inches apart, galvanized after weaving.
17. GATES: Double swing for 12 foot opening. Frames to be made of 2 inch O.D. hot-dip galvanized pipe, weight 2.72 lbs. per lineal foot. Corner fittings to be heavy malleable castings or pressed steel. Fabric to be same as in fence. To be complete with malleable iron ball and socket hinges, catch, stops, and center rest. Hinges to permit gates to swing back against fence, -180 degrees.
18. CONCERTINA WIRE: Coil for top of fence to be true concertina type of four foot diameter having an open space across diamonds no greater than approximately 12 inches when stretched. All barbed wire used in coils to be 4-point type with barbs 4" on center, galvanized after weaving. Line wire to be 12 1/2 gauge, barbs to be 14 gauge. The roll of concertina to be placed on top of fence to be tied to extension arms with 11 gauge ties, and with hog rings to running barbed wire approximately every 24 inches. ~~Coil to be placed on ground on south side of fence to be of 3 foot diameter and otherwise to meet specifications of coil which is to be placed on top of fence. Wire on ground to be tied to fence with hog rings approximately every 24 inches.~~

19. FINISH: All materials used in the construction of this fence to be heavily galvanized by the hot-dip process.

Spers for road on south side of fence to be written and included in invitations to bid.