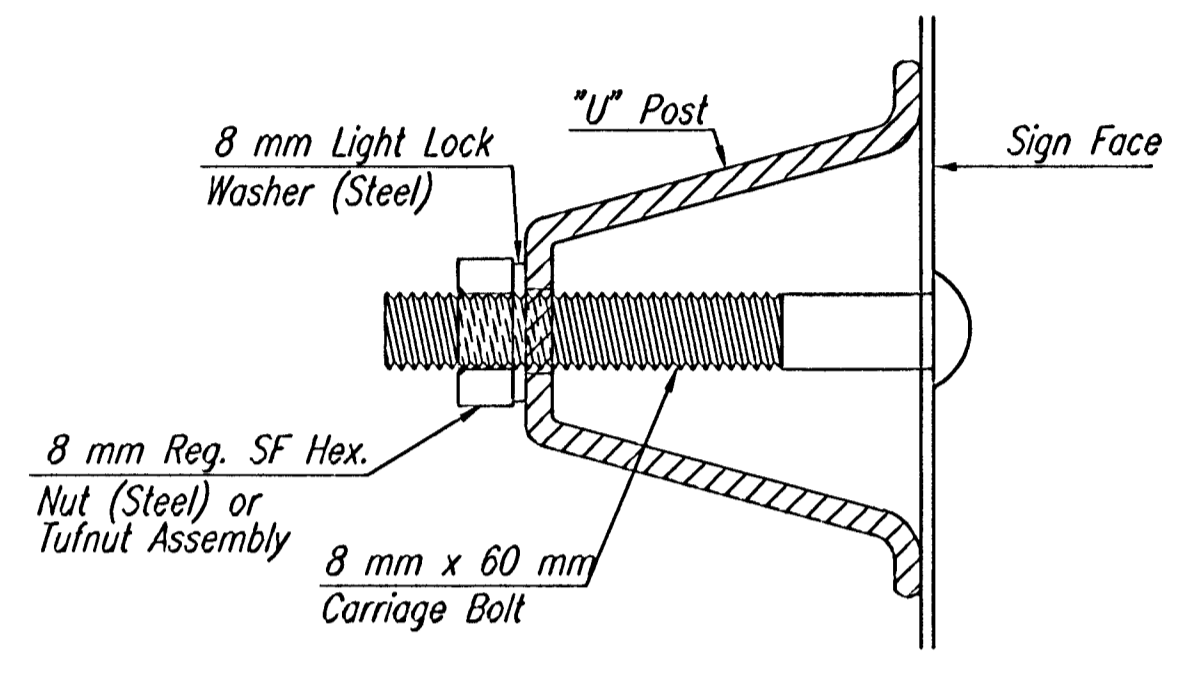
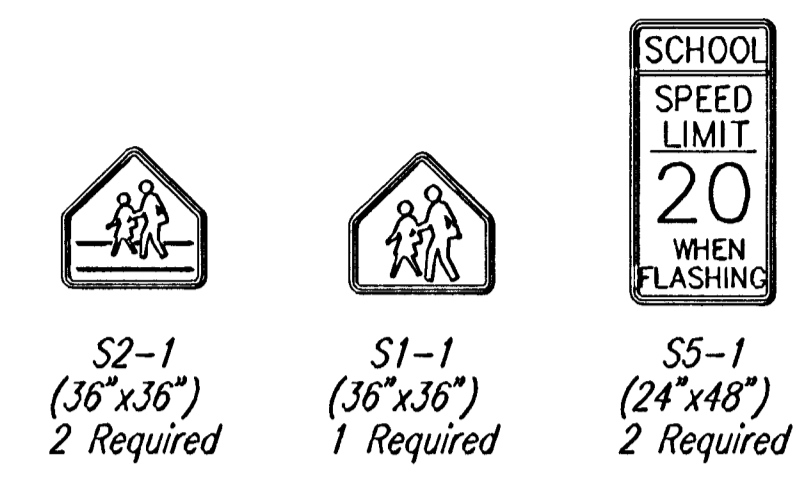
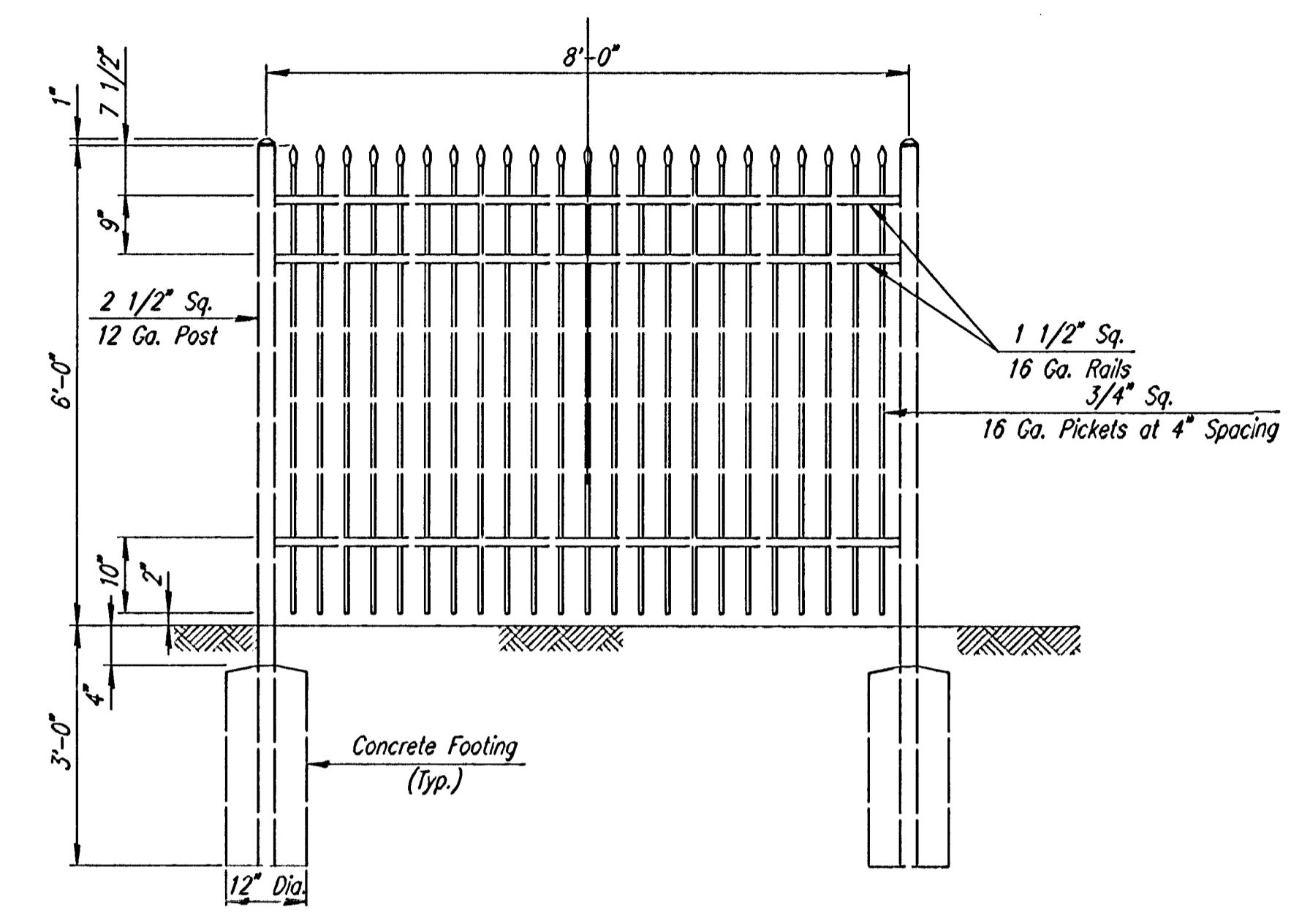
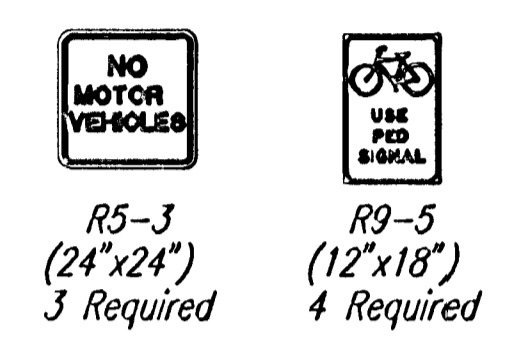


TYPICAL SIGN ASSEMBLY INSTALLATION



SIGN MOUNTING DETAIL



TYPICAL FENCE SECTION

**ORNAMENTAL STEEL FENCE**

**Scope of Work**  
Furnish all labor, materials, equipment and incidentals required and install the ornamental steel fence as specified herein.

**Submittals**  
Submit to the City Engineer, product data, shop drawings showing layout and details of construction and erection of fencing and accessories required and manufacturer's installation instructions.

**Products**  
**Ornamental Steel Picket Fence**  
Provide in the locations shown on the Drawings, a six foot high steel picket fence with concrete footings similar to the "J-Rail Monterey" model by Harbor Towne Fence Co. of Cartersville, Georgia, or the "Classic J-Rail" model by Ameristar Fence Products of Tulsa, Oklahoma or National Fabrication and Coating Company, San Fernando, California (custom fabricated for 3rd rail) or equal.

Posts, rails and pickets shall be formed of high tensile steel, cold-formed. Posts shall be 2-1/2" inch square, 12 gauge; rails 1-1/2 inch square, 16 gauge; pickets 3/4 inch square with spear top, 16 gauge spaced 4" apart. All steel shall be hot-dipped galvanized and electrostatically applied factory coated with Allied Stretch-Coat (by Allied Tube and Conduit Corp. or equal) nylon finish, color=black. Gates shall be fabricated by welding each upright and rail intersection. Electrostatic application of coating shall follow the welding operation.

Pickets shall be set vertical and plumb.

All brackets, caps, clips, studs, grommets and fittings shall be matched to the posts, rails and pickets as specified in materials, finishes and dimensions per manufacturer's recommendations.

The fence installation and paint finish shall be warranted for minimum of five years by the manufacturer against defects in workmanship, cracking, chipping, peeling and blistering.

**Execution**  
Layout fencing in field as per the drawings and obtain City Engineer's approval prior to installation.

Posts shall be set true to line and grade of fence.

Set all posts to depth recommended by the manufacturer. After setting and plumbing posts, fill holes with 3,500 psi concrete. Crown top surface of concrete to shed water. Footings shall be 12 inches in diameter. Depth of footings shall be 3 feet minimum. Top of footing shall be 4 inches below finish grade.

Assemble in accordance with manufacturer's recommendations.

Attach fence sections to masonry piers with manufacturer supplied hardware as approved.

Provide equal spaces between end pickets and piers and posts or piers. Space posts equally, 8 feet on center as approved.

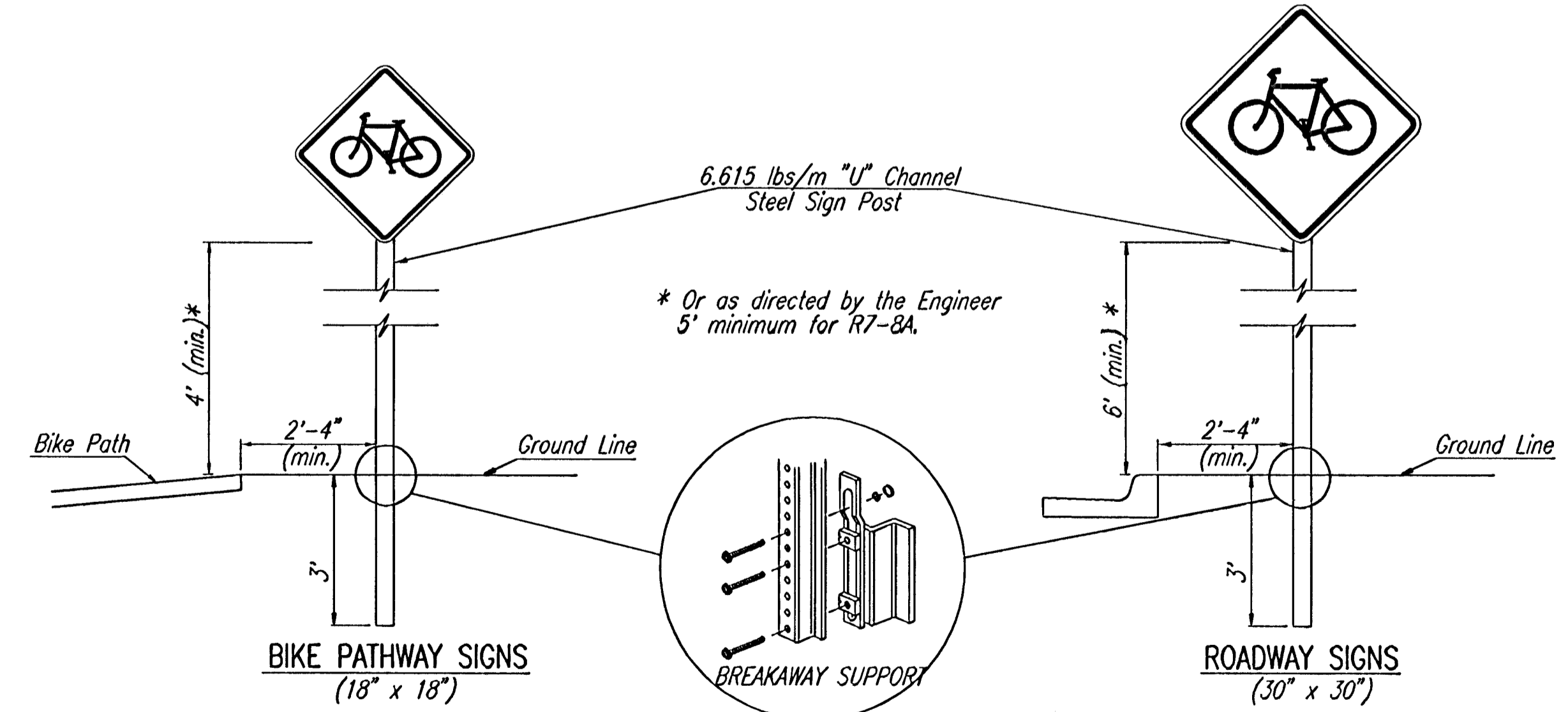
**Payment**  
Contractor shall be paid at the contract unit price bid per linear foot for "Ornamental Steel Fence".

**GENERAL NOTES - SIGNING**

- NOTE: REFERENCES BELOW TO "STANDARD SPECIFICATIONS" DENOTE "STANDARD SPECIFICATION FOR STATE ROAD AND BRIDGE CONSTRUCTION, EDITION 1990 METRIC VERSION" BY THE KANSAS DEPARTMENT OF TRANSPORTATION.
- POST ANCHORS. POSTS SHALL BE ANCHORED WITH A YIELDING BASE POST SUPPORT AS DETAILED.
  - POSTS FOR TRAFFIC CONTROL SIGNS. POSTS SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 1620 OF THE STANDARD SPECIFICATIONS EXCEPT THAT ALL POSTS SHALL WEIGH 6.15 lbs/m MINIMUM.
  - SIGN BLANKS FOR TRAFFIC CONTROL SIGNS. SIGN BLANKS SHALL BE FABRICATED FROM 2 mm ALUMINUM ALLOY 6063-T6 CONFORMING TO THE REQUIREMENTS OF SUBSECTION 1626 OF THE STANDARD SPECIFICATIONS.
  - FASTENERS. ALL STEEL FASTENERS FOR TRAFFIC CONTROL SIGNS SHALL BE GALVANIZED AND SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 1614 OF THE STANDARD SPECIFICATIONS. TUFNUT WORKS, P.O. BOX 39, TESUQUE, N.M. 87574, (1-800-227-0949) MAY BE SUBSTITUTED AT THE OWNERS REQUEST.
  - REFLECTIVE SHEETING. REFLECTIVE SHEETING SHALL BE TYPE II - HIGH PERFORMANCE CLASS HA IN ACCORDANCE WITH SUBSECTION 2201 OF THE STANDARD SPECIFICATIONS.
  - PROCESS INK. ALL PROCESS INK SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 2202 OF THE STANDARD SPECIFICATIONS.
  - DETAILS. REGULATORY AND WARNING SIGNS SHALL CONFORM TO THE DETAILS IN "STANDARD HIGHWAY SIGNS", FHWA, 1979.
  - TRAFFIC CONTROL, REGULATORY AND WARNING SIGNS SHALL BE MEASURED AND PAID FOR AT THE CONTRACT LUMP SUM PRICE BID FOR BIKE PATH SIGNAGE. THE PAYMENT AS SET FORTH ABOVE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL EXCAVATION, BACKFILLING, POSTS, ANCHORS, FASTENERS, MATERIALS, LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK.

**GENERAL NOTES - PAVEMENT MARKING**

CROSSWALK LINES SHALL BE 12" SOLID WHITE LINES. THEY SHALL BE SPACED A MINIMUM OF 8.0' APART FROM INSIDE EDGE TO INSIDE EDGE. STOP BAR LINES SHOULD BE SOLID WHITE 24" WIDE PLACED PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW. THE LINE PLACEMENT IS DETERMINED BY CENTERLINE OF THE BIKE PATHWAY. WHEN REQUIRED, STOP LINES SHALL BE INSTALLED A MINIMUM OF 5' FROM CROSSWALKS.



TYPICAL SIGN PLACEMENT DETAILS

ZOO BOULEVARD BIKE PATH  
CENTRAL TO WESTDALE

**ORNAMENTAL STEEL FENCE,  
SIGNING DETAILS AND TYPICAL  
MISCELLANEOUS PAVEMENT MARKING**

**Professional Engineering Consultants, P.A.**  
303 S. TOPEKA • WICHITA, KANSAS 67202  
316-262-2691 • FAX 316-262-3003

Designed by	RMH	Checked by	
Drawn by	SAD	Date	SEPTEMBER 2001
		Job No.	96450-002

DSNR: SAD OPER: SAD SCALE: 1=1.00  
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