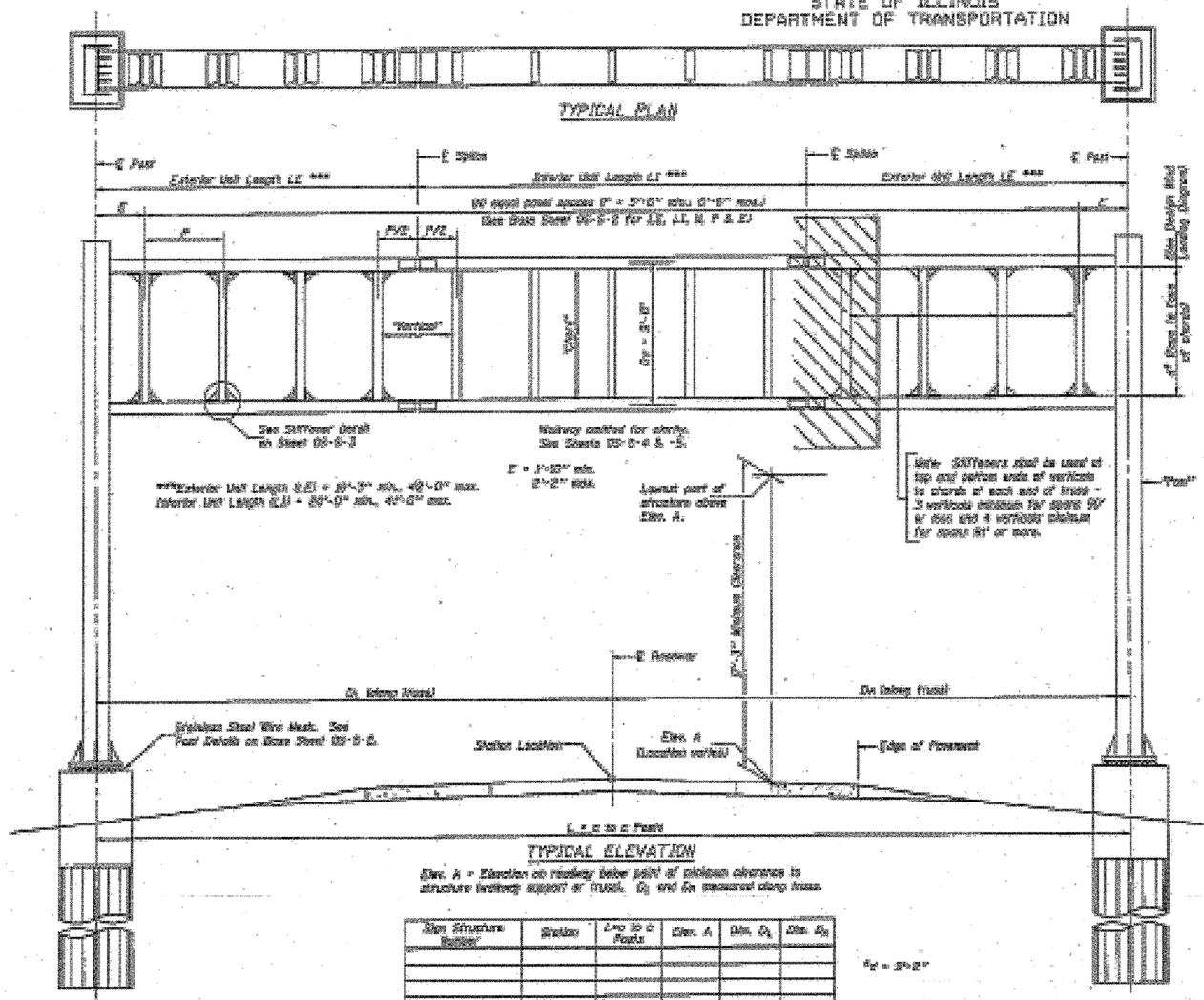
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note 1: Where construction specifications current at time contract is advertised. Original design based on 2004 AASHTO Specifications, for modifications and most current specifications.

					SHEET NO. "
					" SHEETS

Contract #

TYPICAL PLAN



TYPICAL ELEVATION

Elev. A = Elevation on roadway below point of minimum clearance to structure bearing support or truss. D_1 and D_2 measured along truss.

Sign Structure Number	Station	L=℄ to ℄ Posts	Elev. A	Dim. D_1	Dim. D_2

"E" = 3'-2"

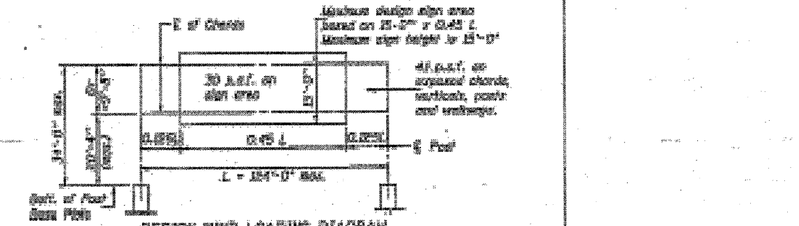
TOTAL BILL of MATERIAL

OVERHEAD SIGN STRUCTURE - SPAN (SPECIAL)	Lin. Ft.	
OVERHEAD SIGN STRUCTURE WALKWAY - TYPE S	Lin. Ft.	
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	

GENERAL NOTES

SPECIFICATIONS:
DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals - (Note 1)
CONSTRUCTION: Standard Specifications for Road and Bridge Construction, State of Illinois, Supplemental Specifications for Road and Bridge Construction, Standard Specifications for Traffic Control Items and Special Provisions. (Note 1)
MINIMUM CLEARANCES: Vertical Roadway Clearance = 17'-3" (All Destructions)
LOADING: 90 M.P.H. WIND VELOCITY.
WIND LOADING: 30 p.s.f. normal to Sign Panel Area as shown below in Wind Loading Diagram plus 40 p.s.f. normal to exposed truss members.
RAILROAD LOADING: Dead Load plus 20M# concentrated Live Load.

MATERIALS:
REINFORCEMENT BARS shall conform to the requirements of AASHTO M31 or M53, Grade 60. Reinforcement designated (E) shall be epoxy coated in accordance with Art. 1006.10 of the Standard Specifications.
CLASS SI CONCRETE shall be used throughout.
STRUCTURAL STEEL: All material for truss webs, post connections, angles, gussets and chord splices shall conform to either ASTM A 709 Grade 50 or HPS 50W (HPS 485W) Gr. 50 or M-270 Gr. 50 or M-270 Gr. 50W. For splice plate, sign brackets, walkways, etc., see respective details.
Material identified by a "CVN" in structural details must satisfy Zone (A) at frequency longitudinal Charpy V-Notch (CVN) impact test requirements of 25 ft.-lbs. at 40° F., per AASHTO T-243 and T-244. This shall include shoe, vertical, post, 1" gusset plates, ¾" chord-to-post stiffener plates and bracing angles and all chord splice material except plates.
HIGH STRENGTH BOLTS shall conform to the requirements of AASHTO M 164 and shall be galvanized per ASTM A153, Class 50.
PAINTING: The Organic zinc-rich primer/Epoxy/Urethane Paint System shall be used for shop painting of new structural steel, except ancillary items and stainless steel surfaces shall not be painted. The color of the final urethane coat shall be "Federal Brown", Munsell No. 2.5 YR ¾. See the Special Provision "Cleaning and Painting New Metal Structures".
WELDING: All welding shall be in accordance with the Standard Specifications for Road and Bridge Construction. (Note 1)
ANCHOR BOLTS: Shall conform to AASHTO M-314 Gr. 55 with a minimum Charpy V-Notch (CVN) energy of 15 ft.-lbs. at -20° F. Test prior to galvanizing.
CONCRETE SURFACES: Bridge Seal Sealer shall be applied to all concrete surfaces above an elevation 6" below the final ground line in accordance with Art. 1017 of the Standard Specifications. (Seal backwall of Drilled Shaft Concrete Foundations.)



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards. Installations not within dimensional limits shown require special analysis for all components, and must be submitted to the I.D.O.T. Bureau of Bridges and Structures for approval. (Note 2)

OVERHEAD SIGN STRUCTURES
GENERAL PLAN AND ELEVATION

DESIGNED -
CHECKED -
DRAWN -
CHECKED -

APPROVED _____ 20__
DIRECTOR OF HIGHWAYS
PASSED _____
SECRETARY OF HIGHWAYS BOARD

D5-5-1 SPECIAL 7/01/2005