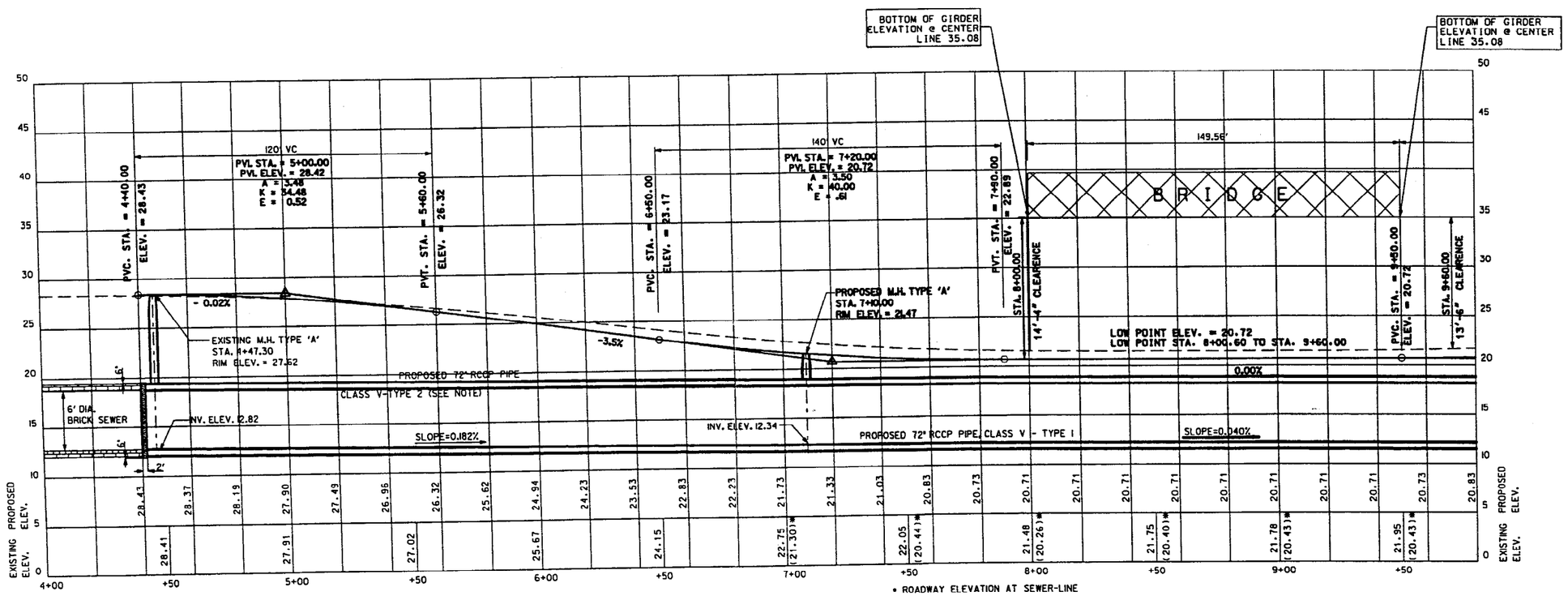

DESIGN DATA

Three Edge Bearing Design Method
Design Specification: ASTM C 76
Design Criteria: 0.01" cracking per ASTM C 76 (lb/ft/ft)
Inner Diameter: 72"
Wall 'C' thickness: 7¾"

Installation Conditions:
Minimum Depth of Fill: 0.5'
Maximum Depth of Fill: 9.5'
Soil Density: 125 lb/cu. ft
Installation Type: Trench
Trench Width: 10'

Loads:
Live Load: AASHTO HS-20
Vertical Surcharge 150 lb./sq. ft.
Possible Max. Fluid load: 1764 lb/ft

Factor of Safety on 0.01" Crack D-load (Earth, Live): 1.00, 1.00
Factor of Safety on Ultimate Earth and Live Load (ASTM C 76)
DL.01 Less Than or Equal to 2000 lbs/ft/ft: : 1.25
DL.01 Greater Than or Equal to 3000 lbs/ft/ft: :1.50
DL.01 Between 2000 and 3000 lbs/ft/ft: Interpolated

NOTE: 72" RCP, CLASS-V, SEWER WILL MEET THE ASTM-C 76 SPECIFICATION REQUIREMENTS SEE DESIGN DATA FOR DETAILS.

SCALE 1":50'

NO	BY	DATE	DESCRIPTION
			REVISIONS

DRAWN BY: JF/BD
CHECKED BY: BD/BC
APPROVED BY: PKG
DATE: MARCH 03, 1999
SCALE: HOR: 1"= 20' VERT: 1"= 5'

CONSULTANT: GANDHI AND ASSOCIATES, INC.

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

VIADUCT CLEARANCE IMPROVEMENT
7500 SOUTH WESTERN AVENUE
PROFILE - 1

SHEET NO. 12 OF 27
PROJECT No.

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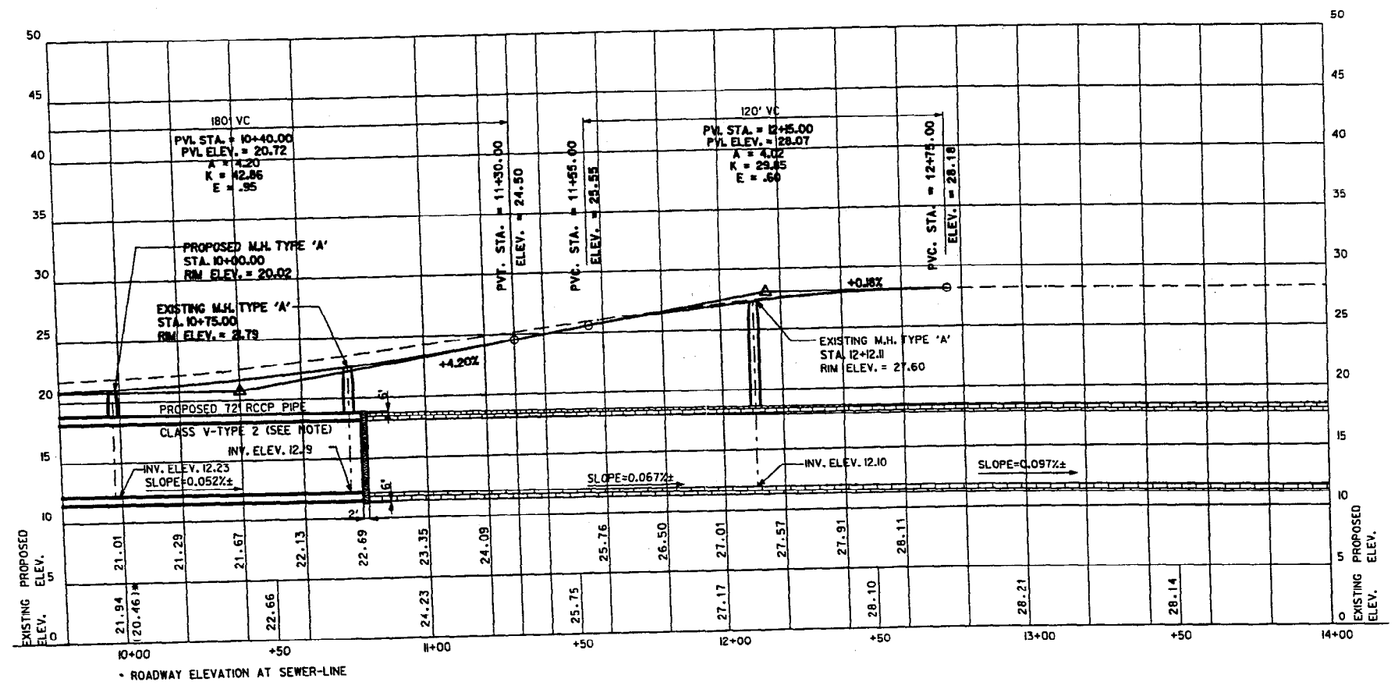

NOTE: 72" RCP. CLASS-V. SEWER WILL MEET THE ASTM C 76 SPECIFICATION REQUIREMENTS SEE NOTE ON SHEET NO.12 FOR DETAILS.

SCALE 1"=50'

NO	BY	DATE	DESCRIPTION
			REVISIONS

DRAWN BY: JF/BD
CHECKED BY: BD/BC
APPROVED BY: PKC
DATE: MARCH 03, 1999
SCALE: HOR: 1"= 20' VERT: 1"= 5'

CONSULTANT: GANDHI AND ASSOCIATES, INC. ENGINEERS AND PLANNERS 5835 N. NORTHWEST HIGHWAY SUITE 300 CHICAGO, ILLINOIS 60631 TEL.(312)774-8910

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

VIADUCT CLEARANCE IMPROVEMENT
7500 SOUTH WESTERN AVENUE
WESTERN AVENUE
PROFILE - 2

SHEET NO. 13 OF 27
PROJECT No.

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