APPROVED

SEP 25 2001

AS A BASIS FOR PREPARATION OF DETAILED PLANS

BM 3010 - Cut "+" in west flange bolt of fire hydrant located on east side of Humbert Road and north of mailbox 6415 across from church. Humbert Road Sta 19+821, 10 m Rt. Elev. 187.953

Existing Structure - None

All dimensions are in millimeters (mm) except as noted.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.R. A.A.H. 328	*	MADISON	.	.
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

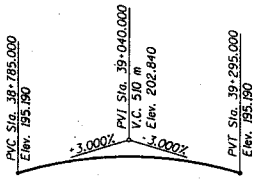
SHEET NO. 1
2 SHEETS

* 60-15HB-1

HIGHWAY CLASSIFICATION

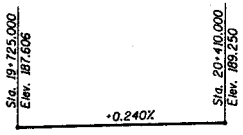
FAP Route 310 (Illinois Route 255):
Class - Principal Arterial (Freeway)
Northbound Lanes:
DHV - 360 (2000) 660 (2020)
ADT - 2640 (2000) 4880 (2020)
ADTT - 132 (2000) 224 (2020)
Southbound Lanes:
DHV - 360 (2000) 660 (2020)
ADT - 2640 (2000) 4880 (2020)
ADTT - 132 (2000) 224 (2020)
Design Speed 110 km/hr
Posted Speed 105 km/hr

Route C.H. 4 (Humbert Road):
Class - Local Road
DHV - 1680 (2000) 3110 (2020)
ADT - 13,800 (2000) 25,600 (2020)
ADTT - 690 (2000) 1280 (2020)
Design Speed 60 km/hr
Posted Speed 60 km/hr



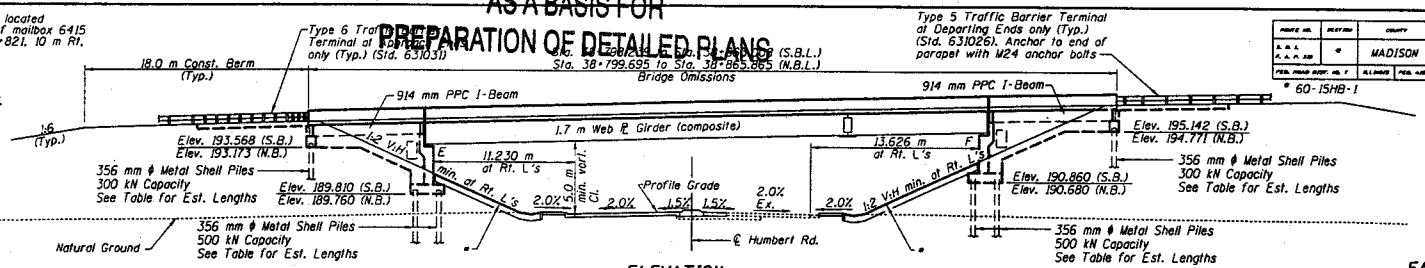
FAP 310 PROFILE

(Along Median Edge)



HUMBERT ROAD (CH 4) PROFILE

(Along Median Edge)



ELEVATION

Notes:

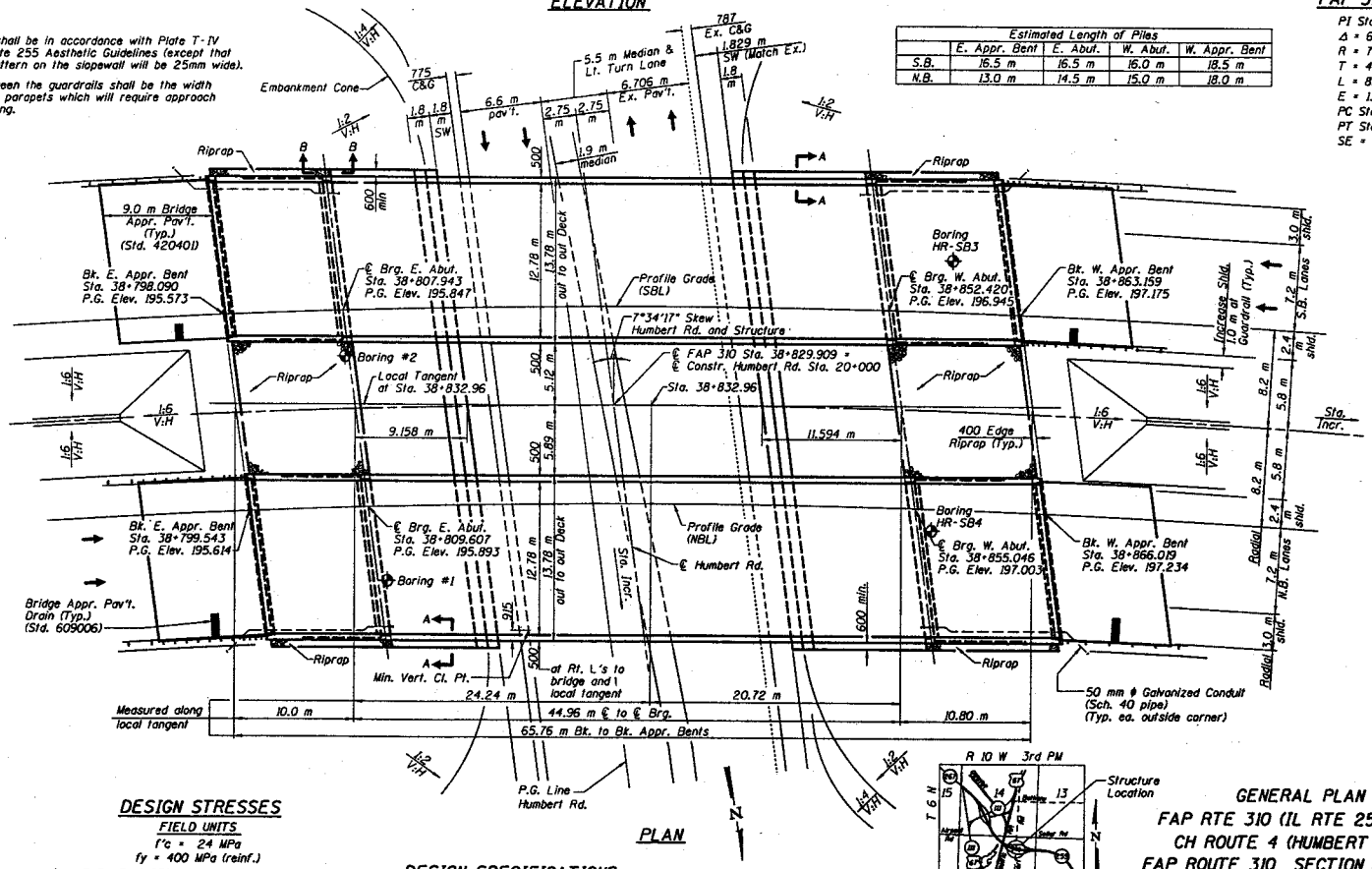
- The slopewall shall be in accordance with Plate T-IV of the Interstate 255 Aesthetic Guidelines (except that the saw cut pattern on the slopewall will be 25mm wide).

The width between the guardrails shall be the width between bridge parapets which will require approach shoulder widening.

Estimated Length of Piles				
	E. Appr. Bent	E. Abut.	W. Abut.	W. Appr. Bent
S.B.	16.5 m	16.5 m	16.0 m	18.5 m
N.B.	13.0 m	14.5 m	15.0 m	18.0 m

FAP 310 CURVE DATA

PI Sta. 39+183.523
Δ = 62° 37' 42" (RT)
R = 780.000 m
T = 474.512 m
L = 852.596 m
E = 132.996 m
PC Sta. 39+709.010
PT Sta. 39+561.606
SE = 5.5%



PLAN

DESIGN STRESSES

FIELD UNITS
f'c = 24 MPa
fy = 400 MPa (reinf.)
fy = 345 MPa (W270M Grade 345, Structural Steel)

PRECAST PRESTRESSED UNITS
f'c = 42 MPa f's = 1860 MPa (12.7 mm ϕ Strands)
f'ci = 35 MPa f'si = 1395 MPa (12.7 mm ϕ Strands)

DESIGN SPECIFICATIONS

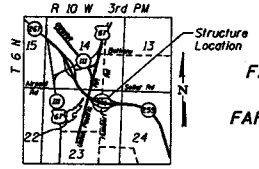
AASHTO 1996 with 1997, 1998, 1999 & 2000 Interims

LOADING MS18

Allow 2.4 kN/m² for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.080g
Site Coefficient (S) = 1.0



LOCATION SKETCH

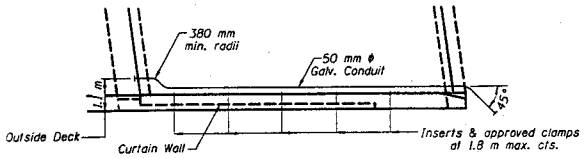
GENERAL PLAN
FAP RTE 310 (IL RTE 255) OVER
CH ROUTE 4 (HUMBERT ROAD)
FAP ROUTE 310 SECTION 60-15HB-1
MADISON COUNTY
STATION 38+829.909
S.N. 060-0308 (NB) & 060-0309 (SB)

DESIGNED	ADL
CHECKED	
DRAWN	DGM/ADL
CHECKED	

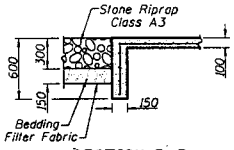
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I.L. F.A.P. 310	60	MADISON	.	.
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
2 SHEETS

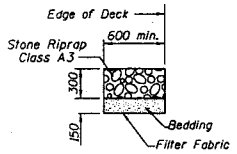
* 60-15HB-1



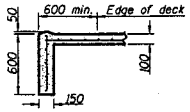
PARTIAL PLAN OF VAULTED ABUTMENT
Showing Electrical Conduit



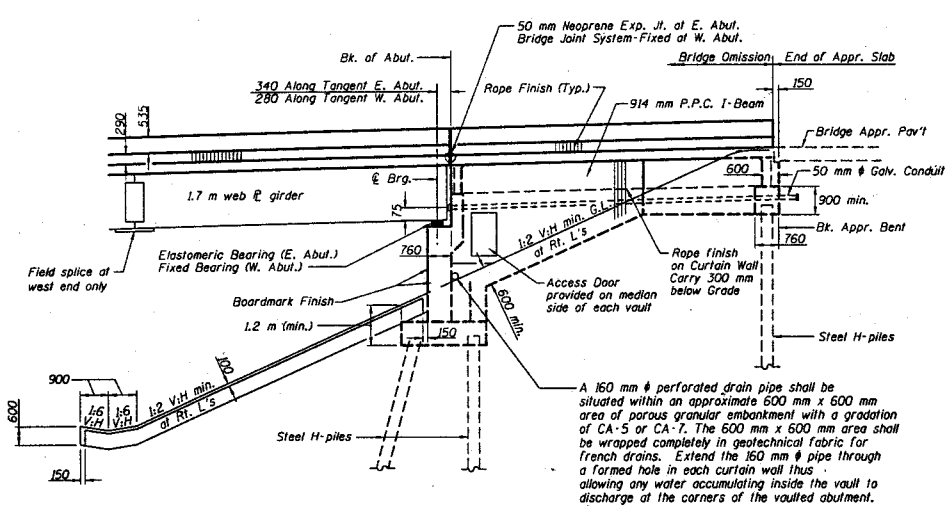
SECTION B-B
SECTION BETWEEN RIPRAP AND CONCRETE SLOPEWALL



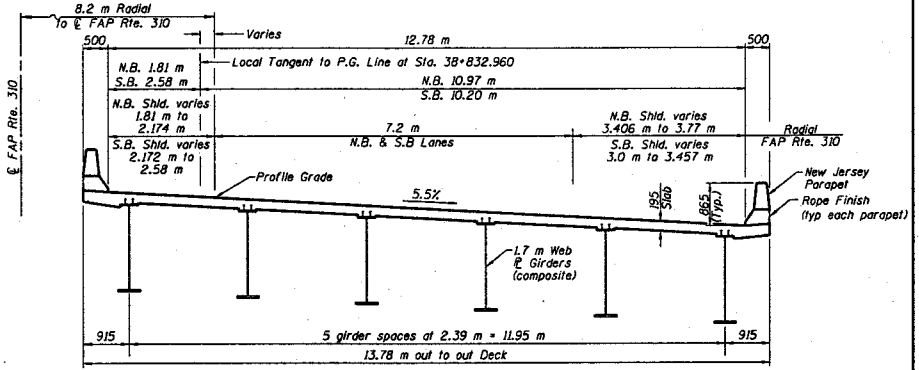
RIPRAP DETAIL



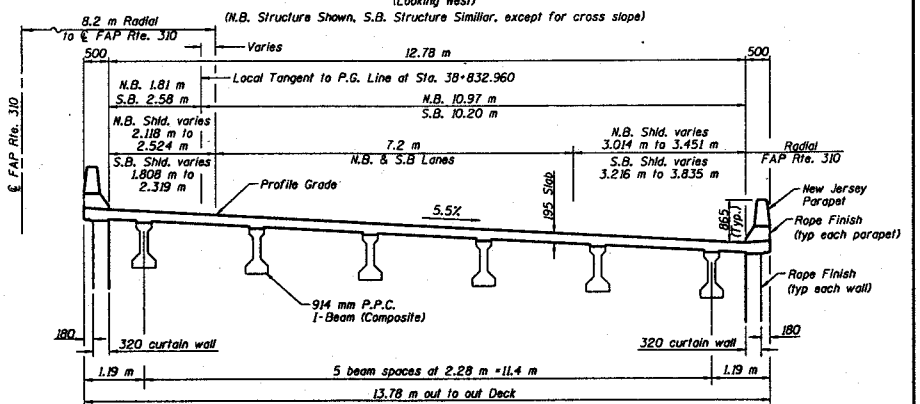
SECTION A-A



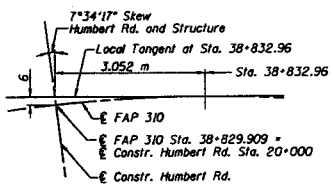
VAULTED ABUTMENT AND SLOPEWALL DETAILS
(Dimension are at Right L's, unless noted)



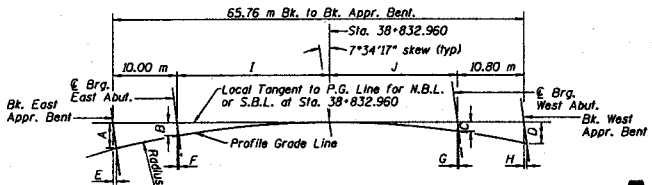
CROSS SECTION THRU DECK
(Looking West)
(N.B. Structure Shown, S.B. Structure Similiar, except for cross slope)



CROSS SECTION THRU APPROACH SLAB
(Looking West)
(N.B. Structure Shown, S.B. Structure Similiar, except for cross slope)



LOCAL TANGENT DETAIL



	A	B	C	D	E	F	G	H	I	J	Radius
S.B. Structure	788	405	245	591	105	54	33	79	25.33 m	19.63 m	788.2 m
N.B. Structure	708	346	309	693	94	46	41	92	23.15 m	21.81 m	771.8 m

OFFSET SKETCH

DESIGNED	ADL
CHECKED	WDW
DRAWN	DGM/ADL
CHECKED	WDW

APPROVED

SEP 2 5 2001

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

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