FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7000	02-00212-00-BR	VERMILION	59	43
FROM STA. 96+00.00		TO STA. 103+10.10		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

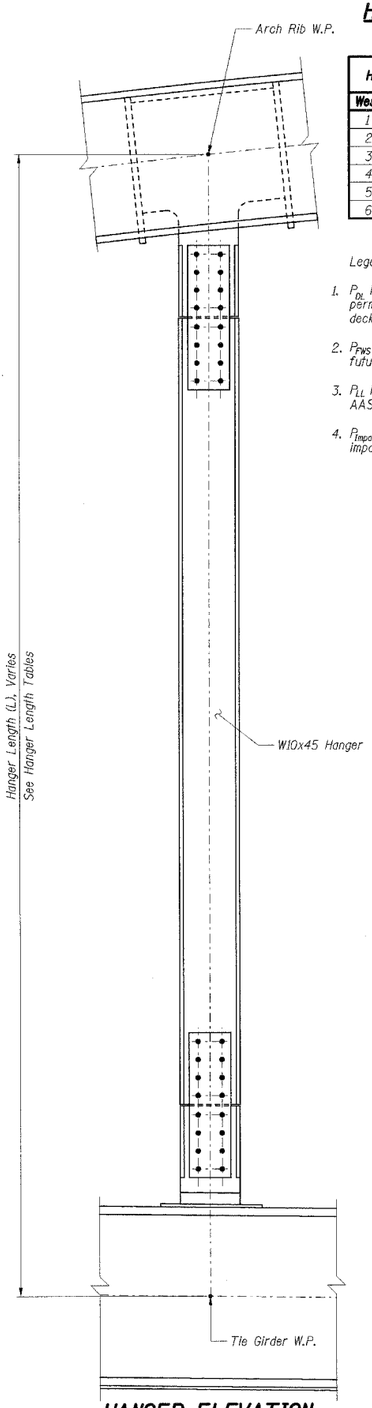
CONTRACT NO. 91285

HANGER STRESS DATA

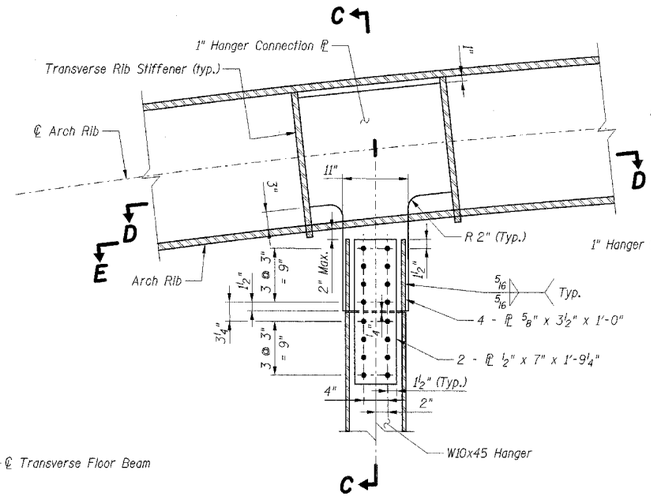
Hanger		"P_{DL}" (kips)	"P_{FWS}" (kips)	"P_{LL}" (kips)	"P_{IMPACT}" (kips)	"P_{TOTAL}" (kips)
West	East					
1	6	62	19	32	6	119
2	5	71	22	41	7	141
3	4	70	22	42	8	142
4	3	70	22	42	8	142
5	2	70	22	42	8	142
6	1	70	22	36	7	135

Legend:

1. P_{DL} is the axial force in the hanger due to permanent loads including steel self weight, deck and parapets.
2. P_{FWS} is the axial force in the hanger due to future wearing surface.
3. P_{LL} is the axial force in the Hanger due to AASHTO HS20-44 truck or lane loading.
4. P_{Impact} is the axial force in the hanger due to impact loading.

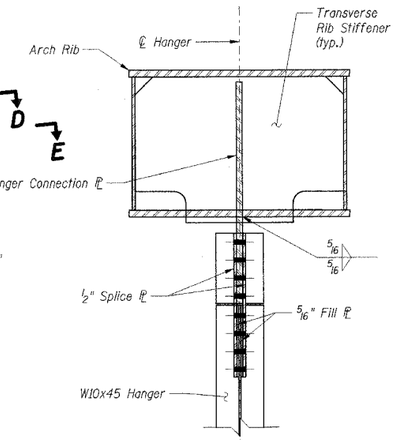


HANGER ELEVATION

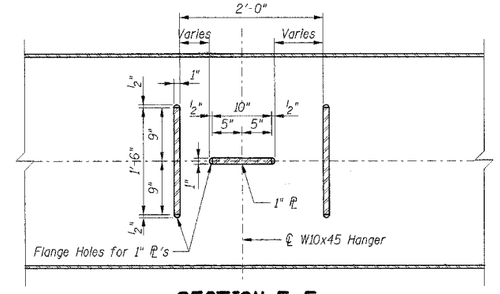


HANGER TO ARCH RIB CONNECTION

(Section thru Arch Rib)

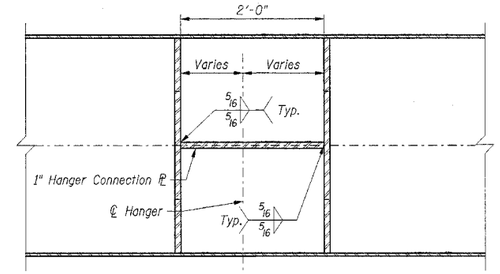


SECTION C-C



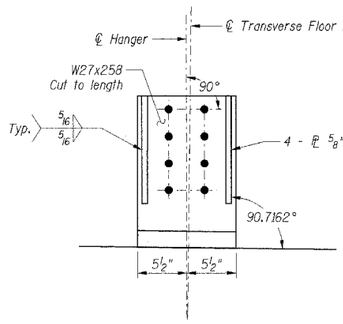
SECTION E-E

(Hanger not shown for clarity)

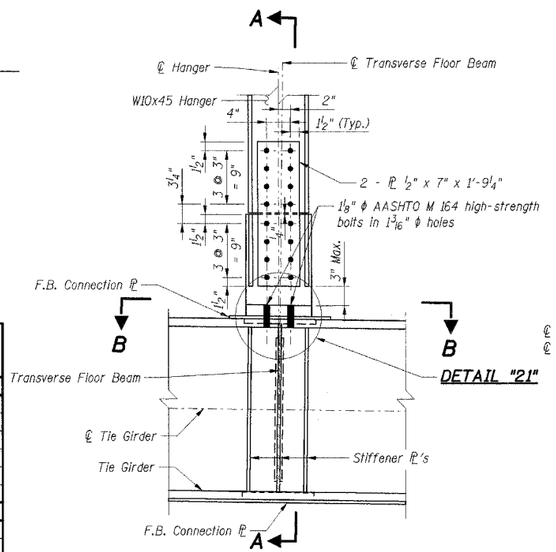


SECTION D-D

(Hanger not shown for clarity)



DETAIL "21"



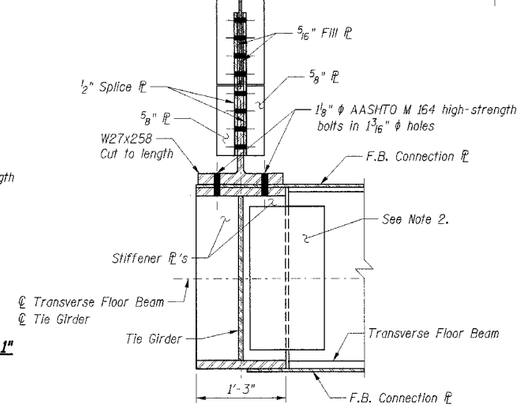
HANGER TO TIE GIRDER CONNECTION

HANGER LENGTHS

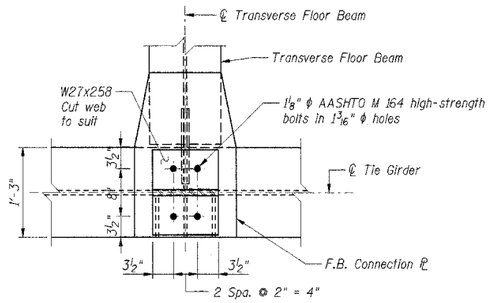
Hanger	"$L_{Initial}$" (ft)	"L_{Final}" (ft)
East		
1	16.86	16.87
2	27.74	27.74
3	33.26	33.26
4	33.38	33.39
5	28.06	28.07
6	17.26	17.26
West		
1	17.02	17.02
2	27.83	27.83
3	33.29	33.30
4	33.35	33.36
5	27.97	27.98
6	17.10	17.11

Final Hanger Lengths are based on steel self-weight and deck slab.

Initial Hanger Lengths include camber.



SECTION A-A



SECTION B-B

Notes:

1. Fasteners for Hanger connections shall be ⅞" ϕ AASHTO M 164 high-strength bolts in 15/16" ϕ holes unless noted otherwise.
2. For Transverse Floor Beam to Tie Girder connections, see Sht. 39.

SHT. S-28 OF 40

REVISIONS	
NAME	DATE

CITY OF DANVILLE, ILLINOIS
HUNGRY HOLLOW ROAD BRIDGE

HANGER DETAILS

SCALE:
DATE 12/06/05
DRAWN BY LAR
CHECKED BY JRH

TENG

TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE: 312/616-0600

ROSSPF

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