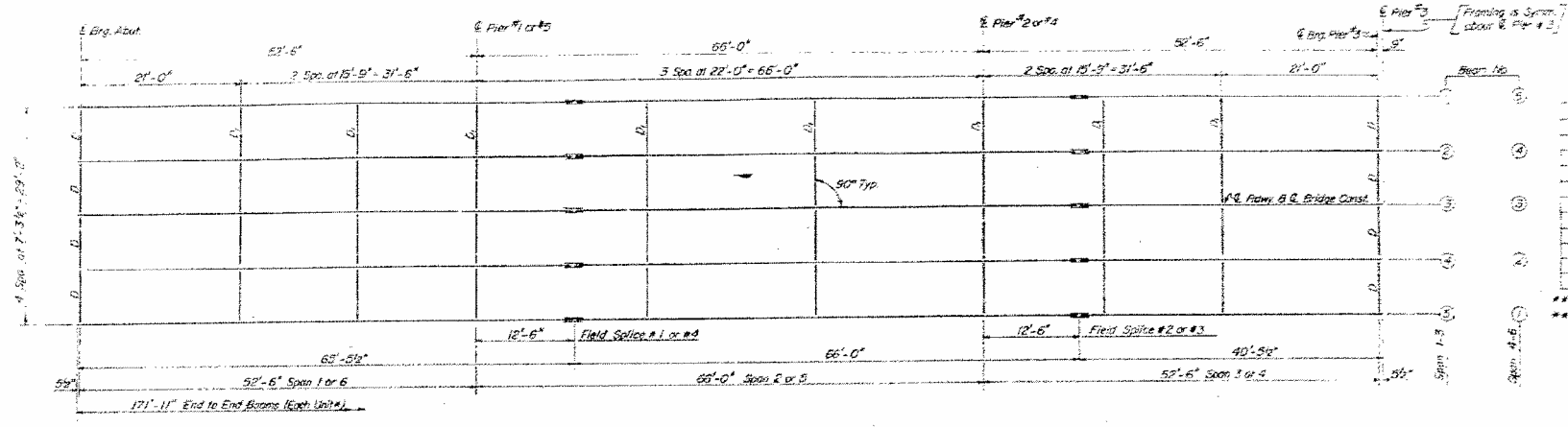


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	SHEET	TOTAL SHEETS
14-022	22 BR-3	2	14
FILE NAME	DATE	DESIGNED BY	CHECKED BY
	8/5/2014	E.F.V.	G.E.P./D.J.K.

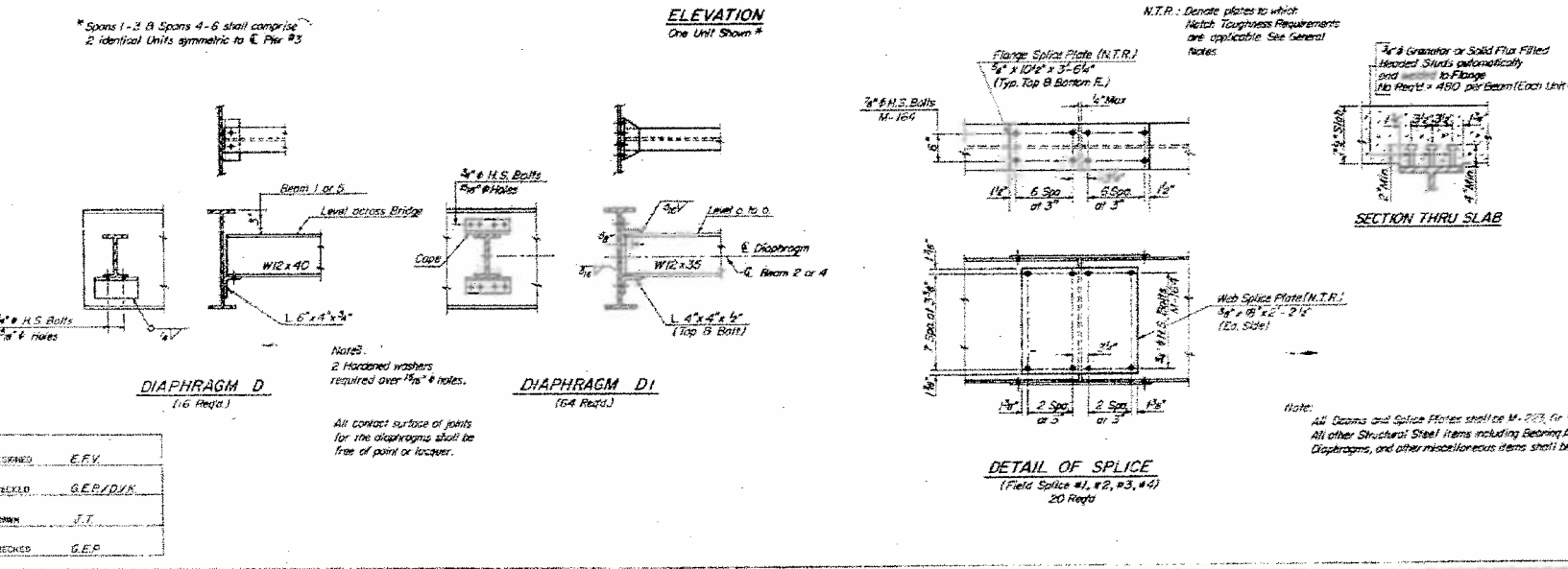
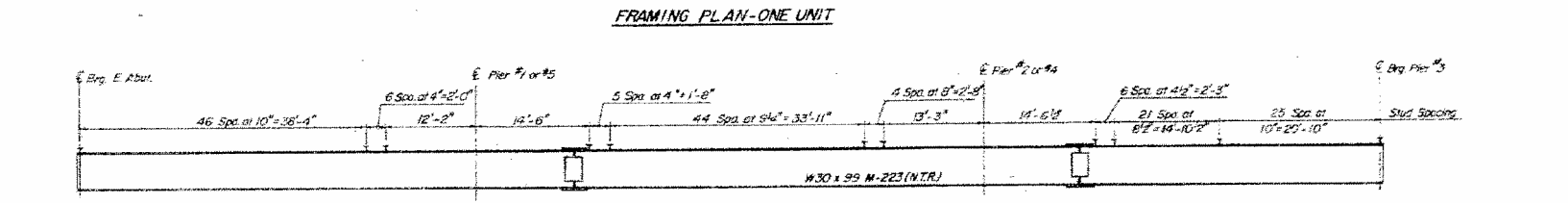


ELEVATIONS - TOP OF W BEAMS

Location	Beam #1	Beam #2	Beam #3	Beam #4	Beam #5
E. Abut.	395.82	393.93	394.04	393.93	393.82
E. Pier #1	393.79	393.90	394.01	393.90	393.79
E. Splice 1	393.79	393.90	394.01	393.90	393.79
E. Pier #2	393.77	393.88	394.01	393.88	393.77
E. Splice 2	393.77	393.88	394.01	393.88	393.77
E. Pier #3	393.76	393.87	394.00	393.87	393.76
E. Splice 3	393.76	393.87	394.00	393.87	393.76
E. Pier #4	393.75	393.86	393.99	393.86	393.75
E. Splice 4	393.75	393.86	393.99	393.86	393.75
E. Pier #5	393.74	393.85	393.98	393.85	393.74
E. W. Abut.	393.73	393.84	393.97	393.84	393.73

INTERIOR BEAM MOMENT TABLE

Is (in ⁴)	End Span	Piers	Midspan
Is (in ⁴)	3850	3990	3950
Is (in ⁴)	1,017	---	1,017
Is (in ⁴)	269	269	269
Is (in ⁴)	401	---	401
Is (in ⁴)	0.012	1.122	0.012
Is (in ⁴)	---	4970	200.2
Is (in ⁴)	0.324	-21.86	8.93
Is (in ⁴)	34.2	---	118.5
Is (in ⁴)	534.2	459.0	950.8
Is (in ⁴)	234.7	104.5	249.1
Is (in ⁴)	1181.2	593.9	136.4
Is (in ⁴)	34.75	-26.00	30.32
Is (in ⁴)	43.67	-47.91	48.32
Is (in ⁴)	531	---	451



INTERIOR BEAM REACTION TABLE

	Abut. #1	Pier #2	Pier #4	Abut. #5
R (k)	22.73	74.82	---	---
R (k)	42.80	49.50	---	---
Imp (k)	12.10	13.40	---	---
R Total (k)	77.63	137.58	---	---

Notes:
Is and Is are the moment of inertia and section modulus of the steel section used in computing Is Total
Is and Is are the moment of inertia and section modulus of the composite section used in computing Is Total
Imp is the maximum impact stress range in span
The load factor (1.3) Imp is included for computing moments and stresses.
Section is correct for positive moment

STRUCTURAL STEEL DETAILS
F.A. RTE. 823 (S. BL) RTE. 81 OVER
WHITE OAK SLOUGH
SECTION 22 BR-3
WAYNE COUNTY
STATION 348+81.5

DESIGNED	E.F.V.
CHECKED	G.E.P./D.J.K.
DRAWN	J.T.
CHECKED	G.E.P.

Notes:
2 Hecobond washers required over 1/2" notes.
All contact surface of joints for the diaphragms shall be free of paint or looser.