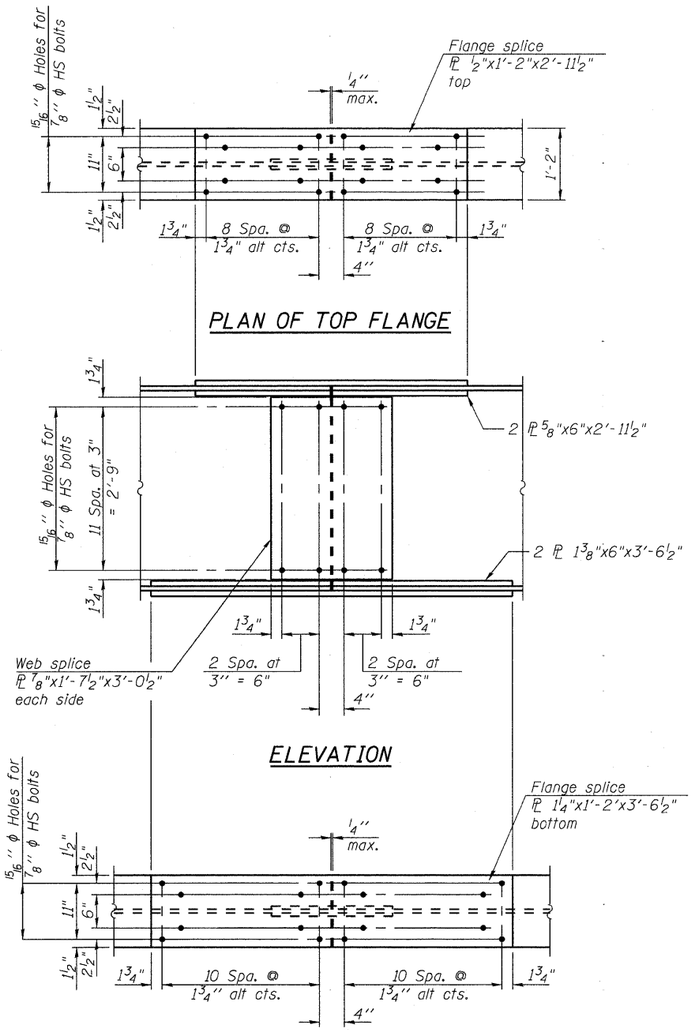
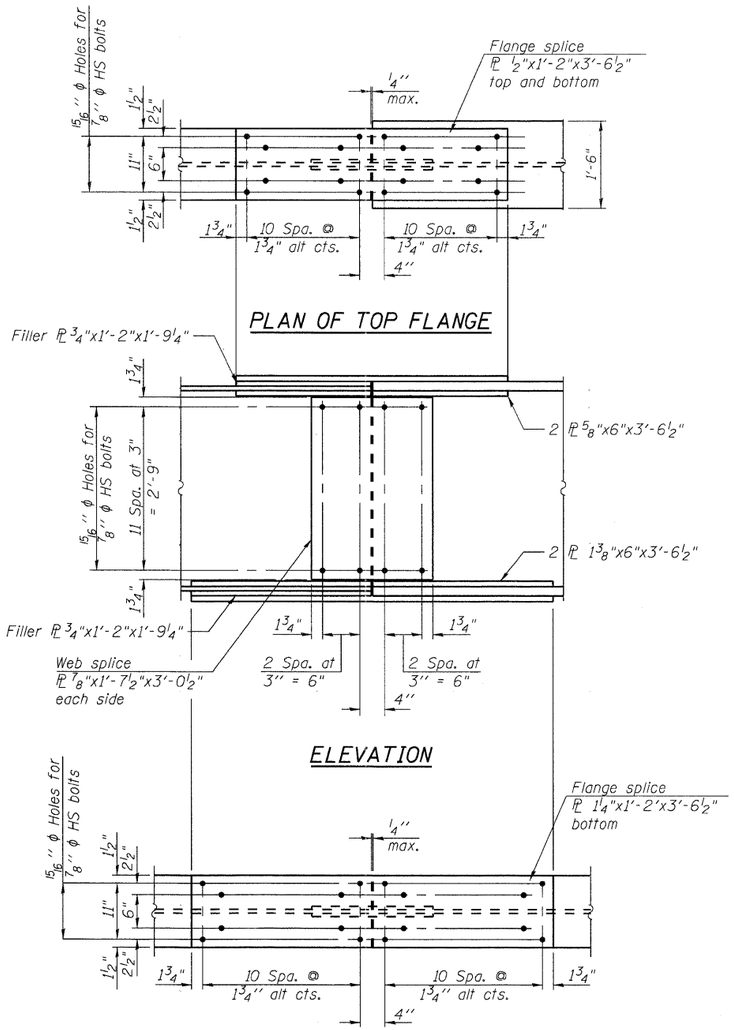
J:\2009\246 IDOT PTB 153 Item 21\Cadd\Design\016-1101\W.O. 15 Oriole Steel Plans\016-1101.dgn 12:38:30 PM 12/7/2011



SPLICE DETAIL #1 & #4
(16 Required)



SPLICE DETAIL #2 & #3
(16 Required)

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 2	Pier 2	0.6 Sp. 1
I_s	(in^4)	16032	33250	16032
$I_c(n)$	(in^4)	37357		37357
$I_c(3n)$	(in^4)	28185		28185
$I_c(cr)$	(in^4)		38870	
S_s	(in^3)	729	1462	729
$S_c(n)$	(in^3)	973		973
$S_c(3n)$	(in^3)	897		897
$S_c(cr)$	(in^3)		1542	
DC1	(k/')	1.00	1.00	1.00
M_{DC1}	('k)	591	-1462	533
DC2	(k/')	0.24	0.24	0.24
M_{DC2}	('k)	152	-335	137
DW	(k/')	0.31	0.31	0.31
M_{DW}	('k)	190	-427	173
M_{L+IM}	('k)	1312	-1655	1276
M_u (Strength I)	('k)	3510	-5783	3330
$\phi_f M_n$	('k)	4981	6372	5132
f_s DC1	(ksi)	9.73	-12.00	8.78
f_s DC2	(ksi)	2.03	-2.61	1.84
f_s DW	(ksi)	2.55	-3.32	2.31
f_s 1.3(L+IM)	(ksi)	22.82	-16.74	22.19
f_s (Service II)	(ksi)	37.13	-34.67	35.12
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	49.24	-45.78	46.61
$\phi_f F_n$	(ksi)	50	50	50
V_f	(k)	24.6	39.8	26.3

TOP OF WEB ELEVATIONS							
	℄ Bearing S Abut.	℄ Splice 4	℄ Splice 3	℄ Bearing Pier 2	℄ Splice 2	℄ Splice 1	℄ Bearing N Abut.
Girder 1	655.29	655.73	656.27	656.41	656.55	656.60	656.45
Girder 2	655.39	655.83	656.39	656.54	656.69	656.76	656.62
Girder 3	655.49	655.94	656.52	656.68	656.84	656.93	656.80
Girder 4	655.56	656.01	656.61	656.78	656.95	657.06	656.94
Girder 5	655.50	655.97	656.58	656.76	656.94	657.07	656.95
Girder 6	655.33	655.80	656.44	656.63	656.81	656.96	656.85
Girder 7	655.11	655.60	656.25	656.45	656.65	656.81	656.71
Girder 8	654.90	655.40	656.07	656.28	656.49	656.67	656.57

Note: For fabrication only.

INTERIOR GIRDER REACTION TABLE				
		S. Abut.	Pier 2	N. Abut.
R_{DC1}	(k)	36.8	135.3	35.1
R_{DC2}	(k)	8.6	30.5	8.2
R_{DW}	(k)	10.9	38.9	10.4
R_{L+IM}	(k)	102.9	218.7	101.8
R_{Total}	(k)	159.2	423.4	155.5

Notes:
All splice plates are AASHTO M270
Grade 50 galvanized and shall meet N.T.R.

ABNA
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DESIGNED - SEA	REVISED -	
CHECKED - RJL	REVISED -	
DRAWN - JJE / SCS	REVISED -	
CHECKED - SEA	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIELD SPLICE AND STRESS TABLES
STRUCTURE NO. 016-1101
SHEET NO. 17 OF 36 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1515.1-B	COOK	101	60
STA. TO STA.		CONTRACT NO. 60M79		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		