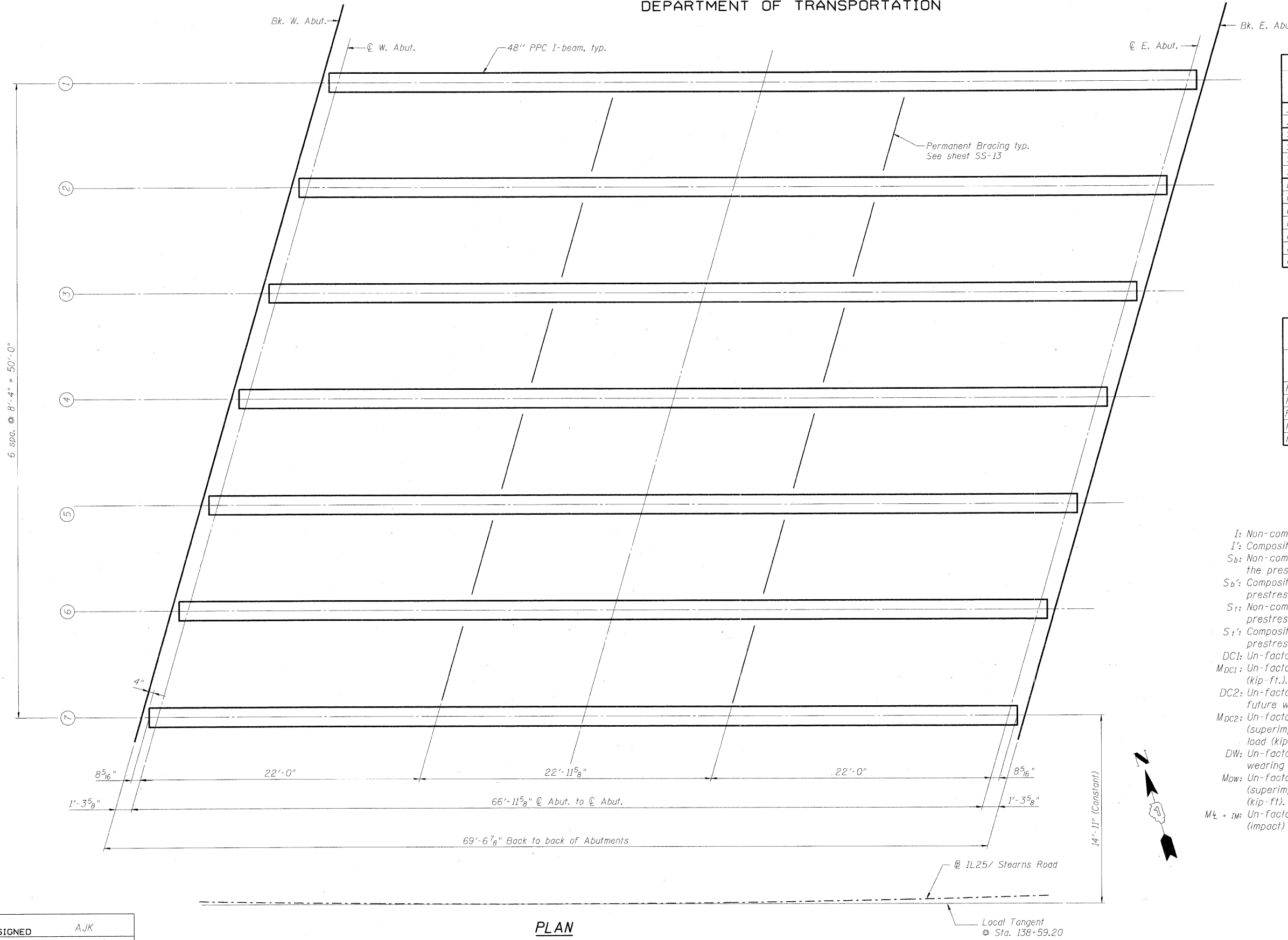


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET SS- 11 OF 22 SHEETS
-	-	KANE	545	362	
FED. ROAD DIST. NO. 7	ILL. ROUTE	FED. AID PROJECT			

Contract # 63074



INTERIOR BEAM MOMENT TABLE

0.5 Sp. 2

I	(in ⁴)	144117
I'	(in ⁴)	429259
S _b	(in ³)	6834
S _b '	(in ³)	11577
S _t	(in ³)	5355
S _t '	(in ³)	22688
DC1	(k/ft)	1.46
M _{DC1}	(k)	821
DC2	(k/ft)	0.13
M _{DC2}	(k)	69
DW	(k/ft)	0.42
M _{DW}	(k)	221
M _{L + Imp}	(k)	1177

INTERIOR BEAM REACTION TABLE

HL93 Loading

		Abutments
R _{DC1}	(k)	49.1
R _{DC2}	(k)	4.4
R _{DW}	(k)	13.2
R _{L + Imp}	(k)	92.1
R _{Total}	(k)	158.8

- I: Non-composite moment of inertia of beam section (in⁴).
- I': Composite moment of inertia of beam section (in⁴).
- S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_b': Composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_t: Non-composite section modulus for the top fiber of the prestressed beam (in³).
- S_t': Composite section modulus for the top fiber of the prestressed beam (in³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M_{L + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

PLAN

DESIGNED	AJK
CHECKED	AAY
DRAWN	AYR
CHECKED	HMA/DMC

benesch
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Chicago, Illinois 60601
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Job # 3944

FRAMING PLAN AND MOMENT TABLE
IL 25/STEARNS ROAD OVER THE
EAST BRANCH OF BREWSTER CREEK
F.A.P. 2503 - SEC. 06-00214-15-BR
KANE COUNTY
STATION 138+59.20
STRUCTURE NO. 045-2035