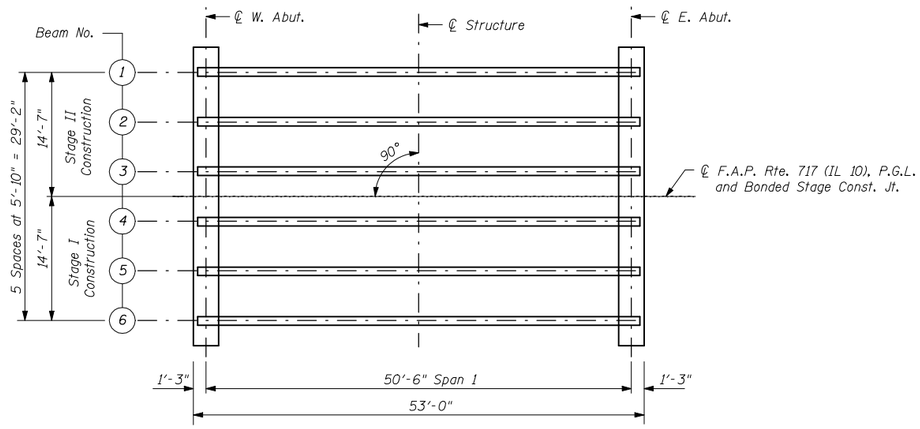
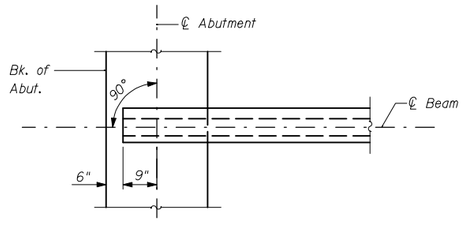
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	110BR	DEWITT	40	14
STA. 736+00		TO STA. 741+00		
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT		

SHEET 7 OF 14 SHEETS

CONTRACT NO. 90932



FRAMING PLAN



TYPICAL BEAM SEATING DETAIL

N

INTERIOR BEAM MOMENT TABLE		
		0.5 Sp. #1
I	(in^4)	48648
I′	(in^4)	162797
S_b	(in^3)	3165
S_b'	(in^3)	5759
S_t	(in^3)	2358
S_t'	(in^3)	21060
$M_{\mathbb{D}}$	(ft. k)	0.932
$M_{\mathbb{D}}$	(ft. k)	297
$s_{\mathbb{D}}$	(ft. k)	0.409
$Ms_{\mathbb{D}}$	(ft. k)	130
$M_{\mathbb{L}}$	(ft. k)	338
M (Imp)	(ft. k)	96

I and I′ are the moment of inertia and composite moment of inertia of the beam section.

S_b and S_b' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.

S_t and S_t' are the non-composite and composite section modulus for the top fiber of the prestressed beam.

$M_{\mathbb{D}}$ is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.

$Ms_{\mathbb{D}}$ is the moment due to dead loads on the composite section.

$M_{\mathbb{L}}$ is the moment due to live load on the composite section.

M (Imp) is the moment due to live load impact on the composite section.

INTERIOR BEAM REACTION TABLE		
		Abut.
$R_{\mathbb{D}}$	(k)	24
$Rs_{\mathbb{D}}$	(k)	10
$R_{\mathbb{L}}$	(k)	31
Imp.	(k)	9
R (Total)	(k)	74

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

IL. ROUTE 10 OVER UN-NAMED CREEK

FAP RTE. 717 SECTION 110BR

STA. 738+60

DEWITT COUNTY STR. No. 020-0061

SCALE: N.T.S. DRAWN BY

DATE MAY 2009 CHECKED BY MJS

TUG PROJ.= #PROJNO#
PLOT DATE = 10/15/2009 #TIME#
FILE NAME = #FILE#

THE UPCHURCH GROUP, INC.