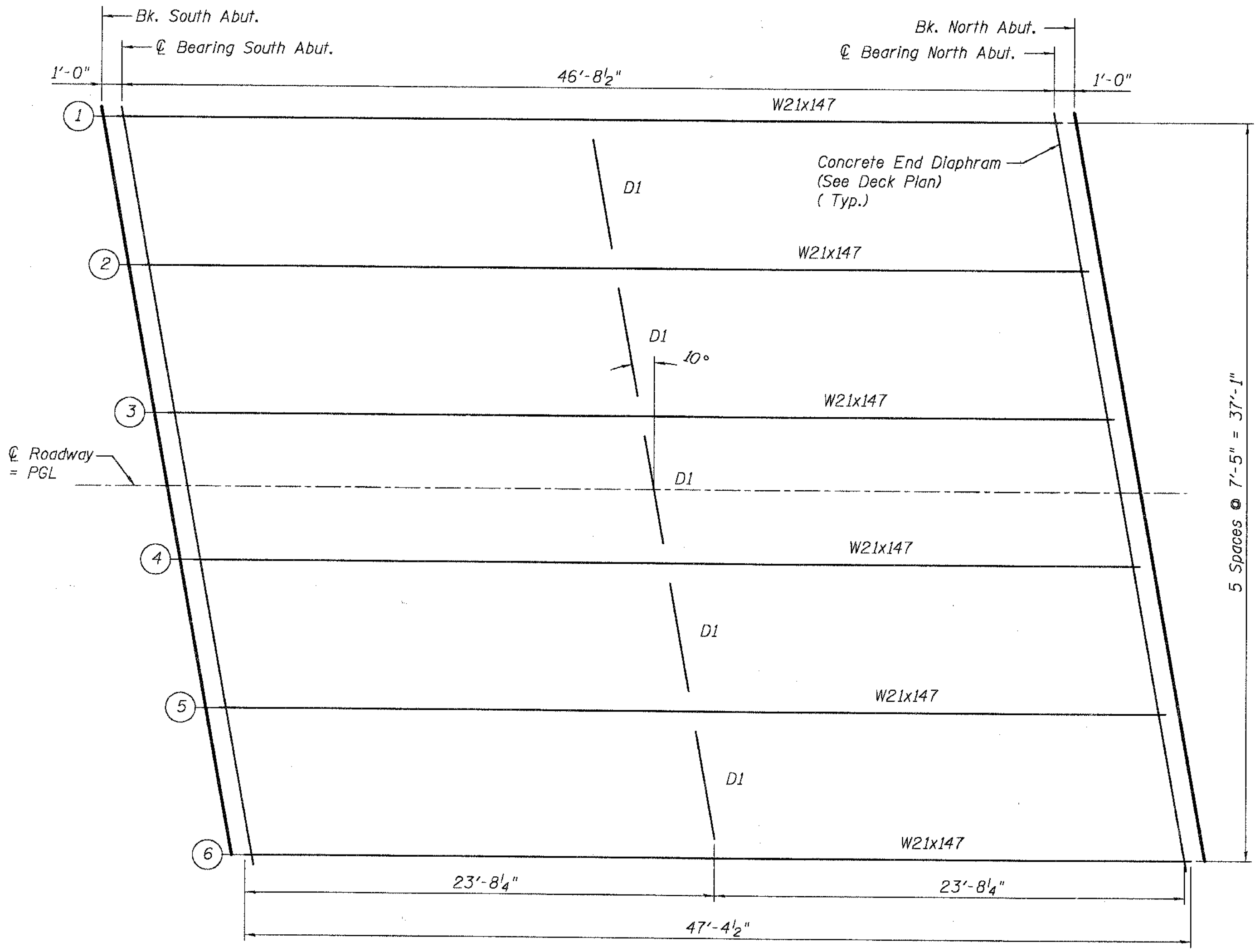
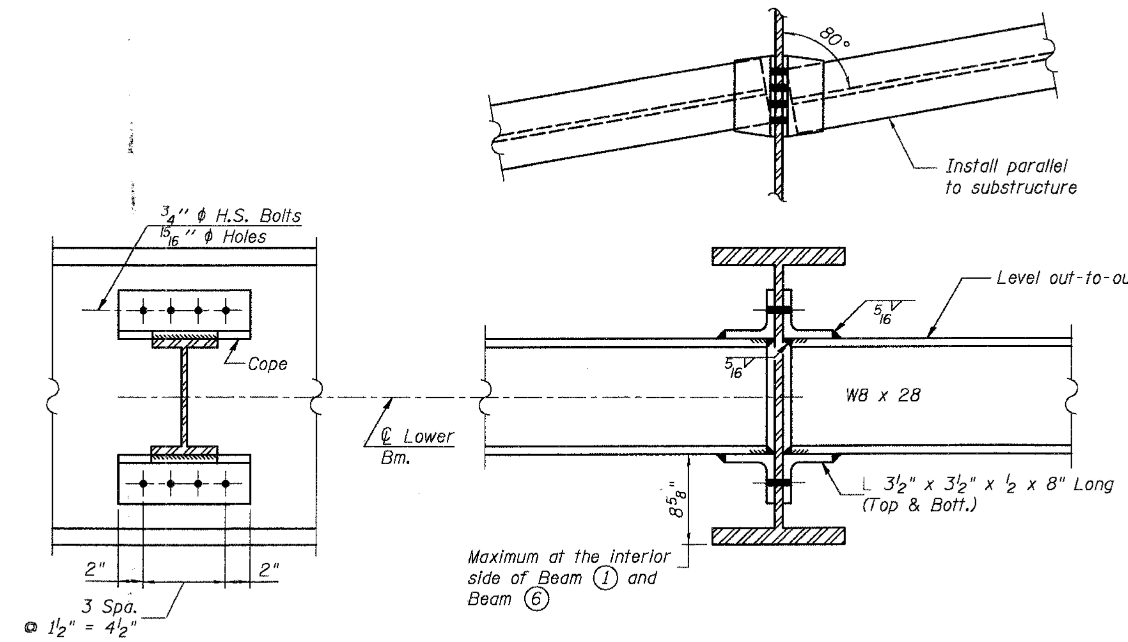
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 3762	01-00139-02-BR	Will	35	20
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

CONTRACT #: 83802

SHEET NO. S-06
S-13 SHEETS



FRAMING PLAN
Not to Scale



INTERIOR DIAPHRAGM D1
Not to Scale

MOMENT AND REACTION TABLES

INTERIOR GIRDER MOMENT TABLE

		0.5 Span
Is	(in4)	3630
Ic (n)	(in4)	10,635.1
Ic (3n)	(in4)	7,732.86
Ss	(in3)	329
Sc (n)	(in3)	478.38
Sc (3n)	(in3)	423.98
DL	(k/ft.)	0.87
M_{DL}	('k)	258.3
fs DL(non-comp)	(k.s.i.)	9.42
S_{DL}	(k/ft.)	0.50
M_{SDL}	('k)	147.4
fs SDL(comp)	(k.s.i.)	4.17
M_{LL}	('k)	416.1
M_{I} (Impact)	('k)	119.8
fs [M_{LL}+M Impact]	(k.s.i.)	13.44
fs (Total)	(k.s.i.)	27.04
VR	(k)	59.19

INTERIOR GIRDER REACTION TABLE

		Abut.
R_{DL}	(k)	33.3
R_{LL}	(k)	46.0
Imp.	(k)	13.3
R (Total)	(k)	92.6

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total).

Ic(n) and Sc(n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic(3n) and Sc(3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)

VR is the maximum Live Load + Impact shear range in span.

Live Load and Impact designed for 120,000 lb. permit loading (one lane) as well as HS20-44.

TOP OF BEAM ELEV. TABLES

GIRDER #	N. ABUT.	S. ABUT.
1	688.59	688.60
2	688.74	688.75
3	688.85	688.86
4	688.85	688.86
5	688.74	688.75
6	688.59	688.60

For Fabrication use only

NOTES:

1. Work this sheet with sheet S-07

DESIGNED	MGH
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

Steel Framing Plan
Harlem Avenue/Drecksler Road
Over Black Walnut Creek
Will County
Section 01-00139-02-BR
SN. 099-3091

DATE 5-26-2005