



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		070113	27	82
			(1)	06799		CONT. UNIT	40960	

GENERAL NOTES

Governing specifications are the Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 edition) with applicable supplemental specifications and special provisions.

All concrete shall be Class S(AE) and shall be poured in the dry. All exposed corners to be chamfered  $\frac{3}{4}$ " unless otherwise noted.

All concrete shall be poured and screeded off prior to initial set. The concrete deck shall be finished in accordance with section 802.9, Class 5 of the Standard Specifications. Movement of the finishing machine across new concrete shall be on planks placed on the surface and shall be prohibited for 72 hours after finishing the pour. Sufficient concrete must be placed ahead of the strike-off to fully load the beam. If a longitudinal strike-off is used, a vertical camber adjustment must be made in the strike-off to account for the future dead load deflection of the railing.

Concrete in bridge superstructure shall be placed and consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent.

The bridge deck shall be given a tine finish as specified for final finishing in subsection 802.19 for a Class 5 Bridge Roadway Surface Finish.

Reinforcing steel shall conform to AASHTO M31 or M53, Grade 60. The reinforcing is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly but will be considered subsidiary to the item "Reinforcing Steel-Bridge".

All stud shear connectors shall be granular flux filled, solid fluxed, or equal, and shall be automatically end welded in accordance with recommendations of the manufacturer.

Field connections shall be bolted with  $\frac{3}{4}$ " high strength bolts unless otherwise noted. Bolt holes shall be  $\frac{1}{16}$ "  $\phi$  except that  $\frac{5}{16}$ "  $\phi$  holes may be used for connection of expansion devices, diaphragms and end struts if a washer is used under both the nut and head of the bolt.

Diaphragms shall be installed as beams are erected and shall be completely bolted prior to pouring of the concrete deck.

Drawings show general features of design only. Shop drawings shall be made in accordance with the specifications, submitted and approval secured before any fabrication is begun. Structural shapes of equal or greater strength may be substituted for shapes shown if approval is obtained from the bridge engineer. Payment will be made on the basis of shapes shown.

All Structural Steel shall be AASHTO M270, Gr. 50W unless otherwise noted and shall be paid for at the unit price per pound bid for "Structural Steel in Beam Spans (M270, Gr. 50W)". M270, Gr. 50W steel shall not be painted. All exposed surfaces to be cleaned in accordance with Subsection 807.84(e) of the Standard Specifications. Structural steel completely embedded in concrete may be AASHTO M270, Gr. 36.

All beams shall be blocked in their true position in the shop. The camber, length of sections, distance between bearings and openings of joints shall be measured with the beams in this position and this information shall become a part of the permanent record of the job. The component parts shall be match marked in this assembly and these marks shall be shown on the erection diagram. All beam dimensions are based on a temperature of 60°F. A tolerance of  $\frac{1}{4}$ " is allowed for camber.

Beams are considered main load carrying members and shall meet the longitudinal Charpy V-Notch test specified in Section 807.05. All welding shall conform to Subsection 807.26. Welded connections shall be  $\frac{3}{8}$ " fillet shop welds unless otherwise noted. All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If the Contractor or Erector should want to make additional welds, whether temporary or permanent, he shall submit detailed drawings with formal request to the Bridge Engineer of the Arkansas State Highway and Transportation Department for approval.

SLAB REINFORCING

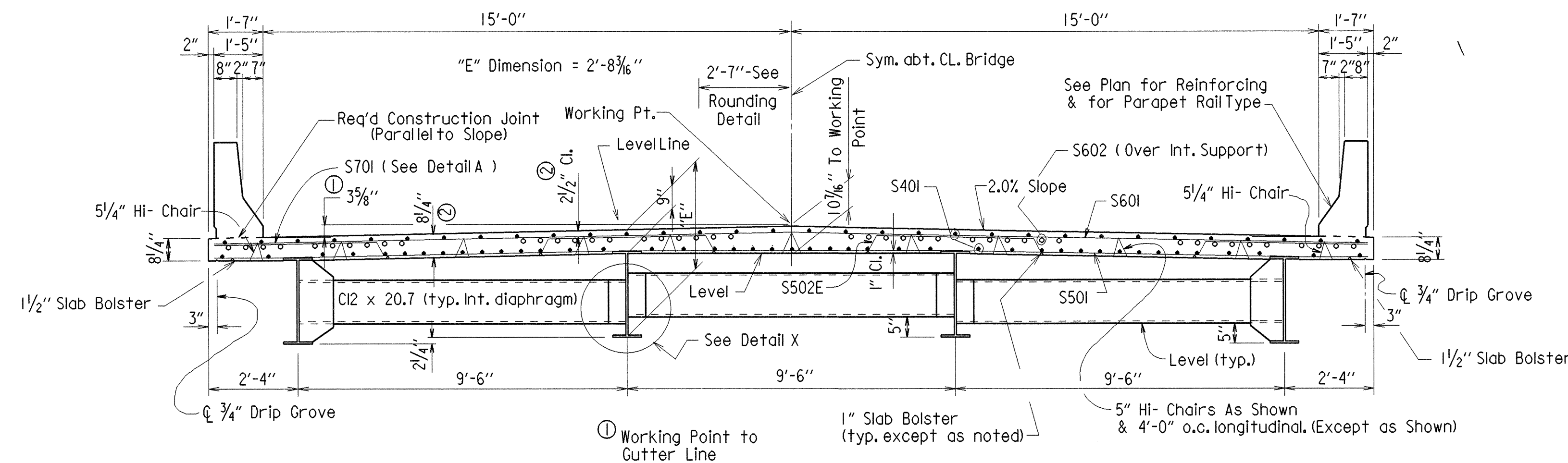
Transverse: S60I @ 14" o.c.in Top  
S50I @ 14" o.c.in Bottom  
S502 @ 14" o.c.Bent Up Over Beams  
S70I @ 14"o.c.(Both Sides)

NOTE: Class I Protective Surface Treatment shall be applied to the Roadway Surface and to the Face & Top of the Concrete Parapet Rail.

Longitudinal: S401 in Top (Placed as Shown 18" max.)  
S401 in Bottom Place as Shown  
S602 place as shown centered over Int. Supports

NOTE: At the Contractor's option, two straight #5 bars

may be substituted for bar S502. Payment for reinforcing will be based on the weight of bar S502.



## SECTION NEAR MIDSPAN

N.T.S.

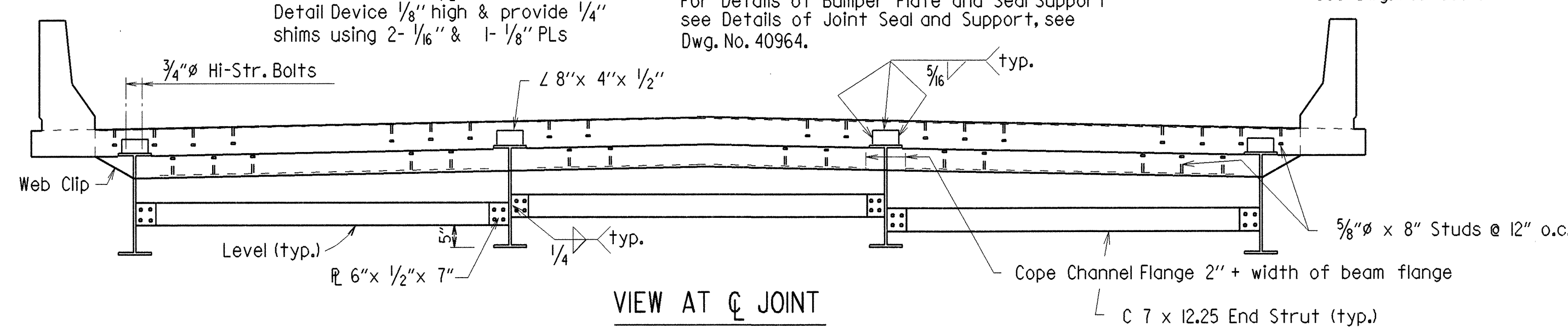
② Tolerance Minus =  $\frac{1}{4}''$

Expansion Device:

Rdwy. Channel-MC 18 x 42.7  
Conn. L's 8"x 4"x 1/2"  
Detail Device 1/8" high & provide 1/4"  
shims using 2- 1/16" & 1- 1/8" PLs

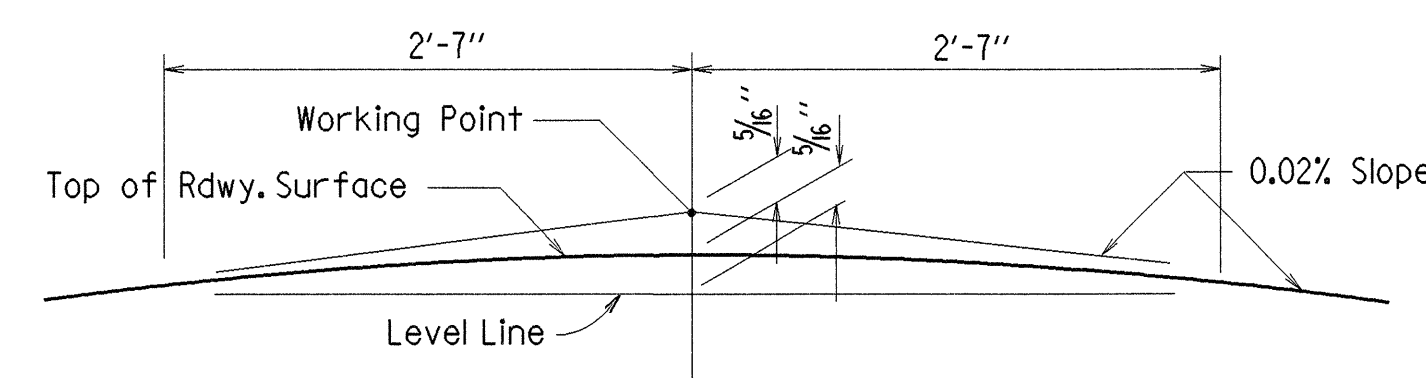
5/8"Ø x 8" Studs @ 12" o.c. (top and bottom)  
For Details of Bumper Plate and Seal Support  
see Details of Joint Seal and Support, see  
Dwg. No. 40964.

Minus =  $\frac{1}{4}"$   
 Plus: Equal to amount of slab thickening  
 used to meet slab thickness tolerance  
 See Adjustment For Slab Thickness Tolerance  
 See Dwg. No. 40964.



## VIEW AT C JOINT

N.T.S.

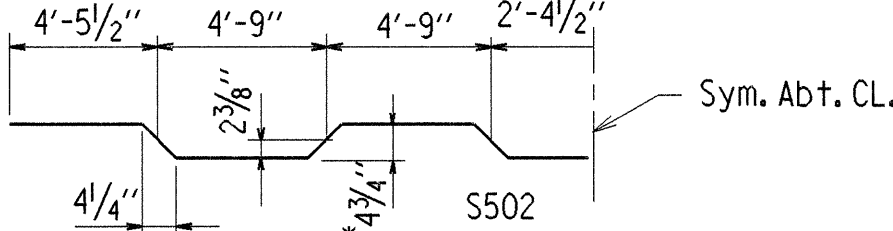
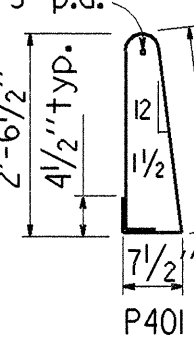
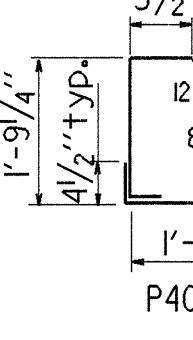
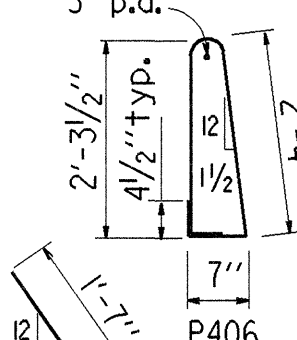
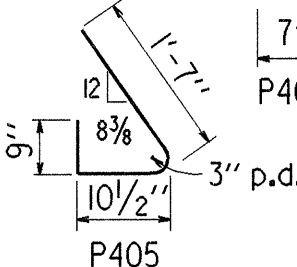
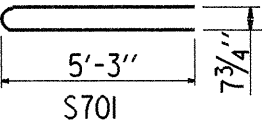


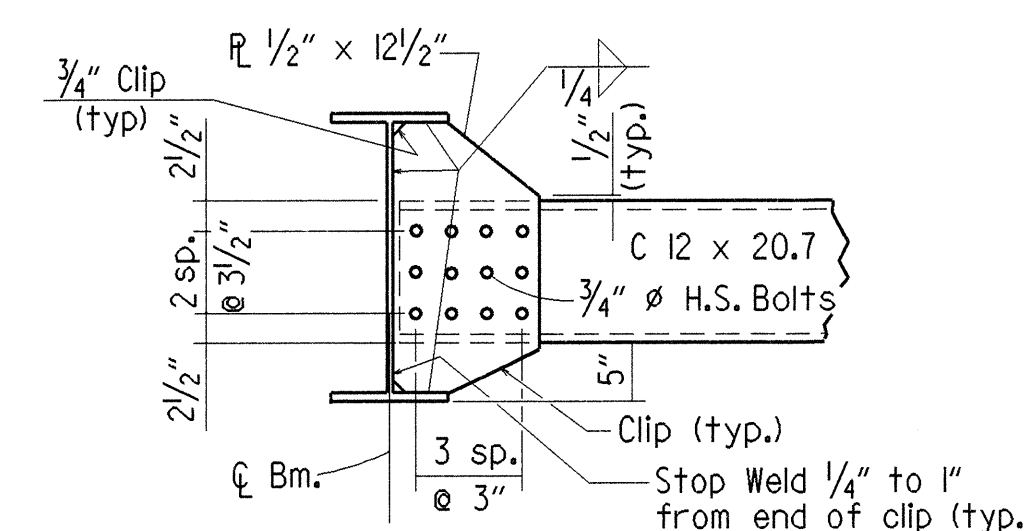
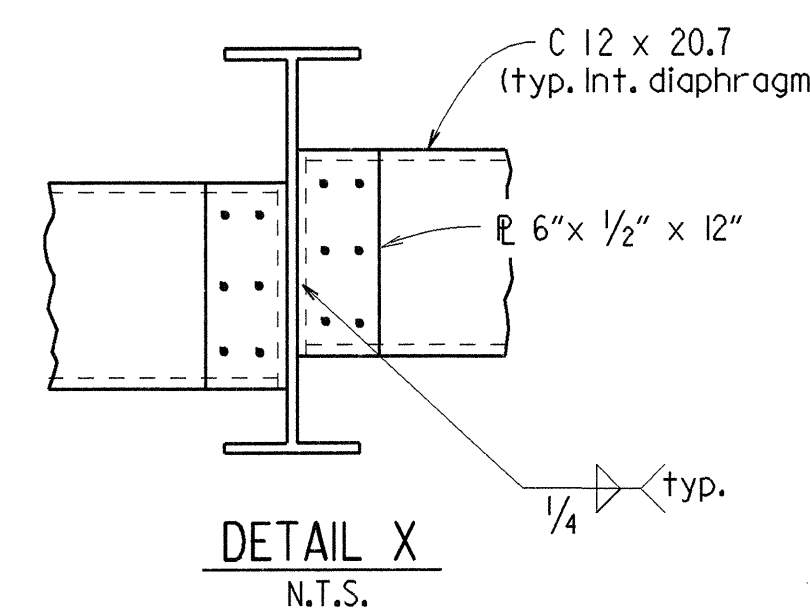
NOTE: Working Point matches Theoretical Roadway Grade

### ROUNDING DETAIL

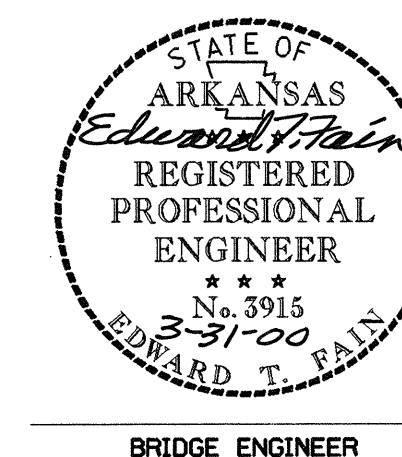
N. T.S.

## BAR LIST

MK	No. Required	Length	Pin Dia.	Bending Diagrams (Dimensions are out to out of bars.)
S401	375	39'-9"	Str.	<p><b>**1/2" Overtolerance, No Undertolerance.</b></p> 
S501	161	32'-10"	Str.	
S502	160	33'-4"	3"	
S601	161	32'-10"	Str.	
S602	176	24'-0"	Str.	
S701	320	10'-9"	6"	    
P401	340	6'-4"	2"	
P402	340	5'-8"	2"	
P403	120	6'-7"	Str.	
P404	32	9'-7"	Str.	
P405	136	3'-2"	2"	
P406	136	5'-10"	2"	
P407	48	12'-7"	Str.	
P601	40	9'-7"	Str.	
P602	60	12'-7"	Str.	



C 12 x 20.7 DIAPHRAGM CONNECTION AT EXTERIOR BEAMS



SHEET 1 OF 5  
DETAILS OF  
188' CONT. COMP. W-BEAM UNIT  
CYPRESS RELIEF  
COLUMBIA COUNTY  
ROUTE 19 SEC. 1  
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY:	J.P.S.	DATE:	3-2-2000	FILENAME :	B070113X2.SII
CHECKED BY:	B.E.F.	DATE:	3-17-00	SCALE:	As Shown
DESIGNED BY:	ARW	DATE:	Feb-00		
BRIDGE NO.	06799	DRAWING NO.	40960		