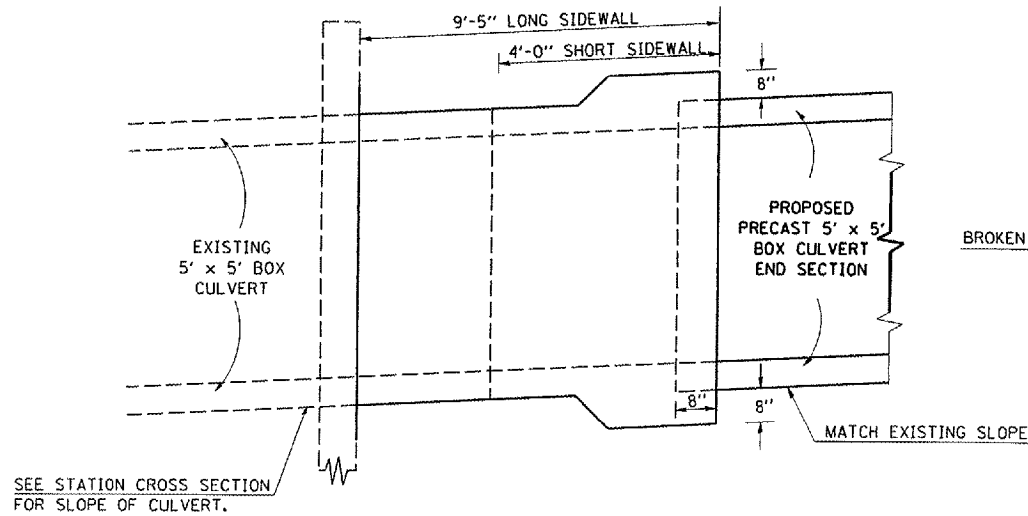
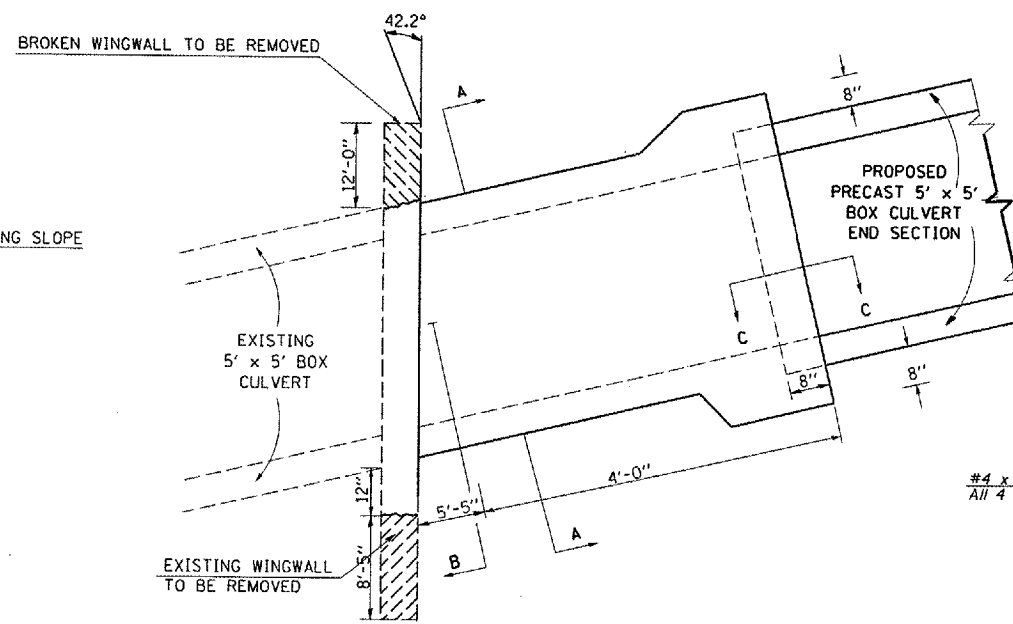


**CAST-IN-PLACE
CONCRETE COLLAR FOR
PRECAST BOX CULVERTS
STA. 752+80 RT SIDE**

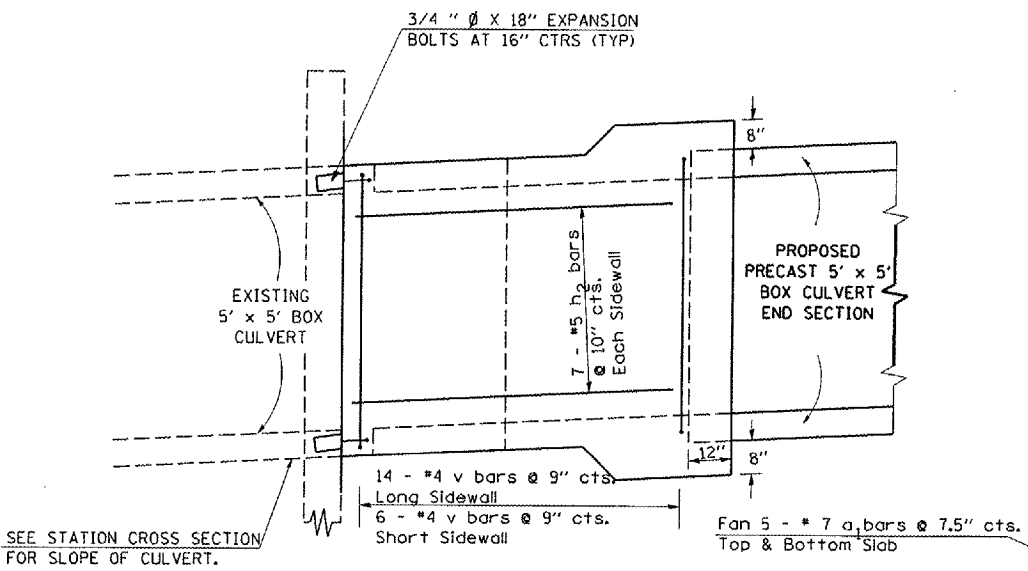
VARIOUS ROUTES
D-9 CONT. MAINT. FY 06-3
VARIOUS CO.
CONTRACT #98924
SHEET 30 OF 42



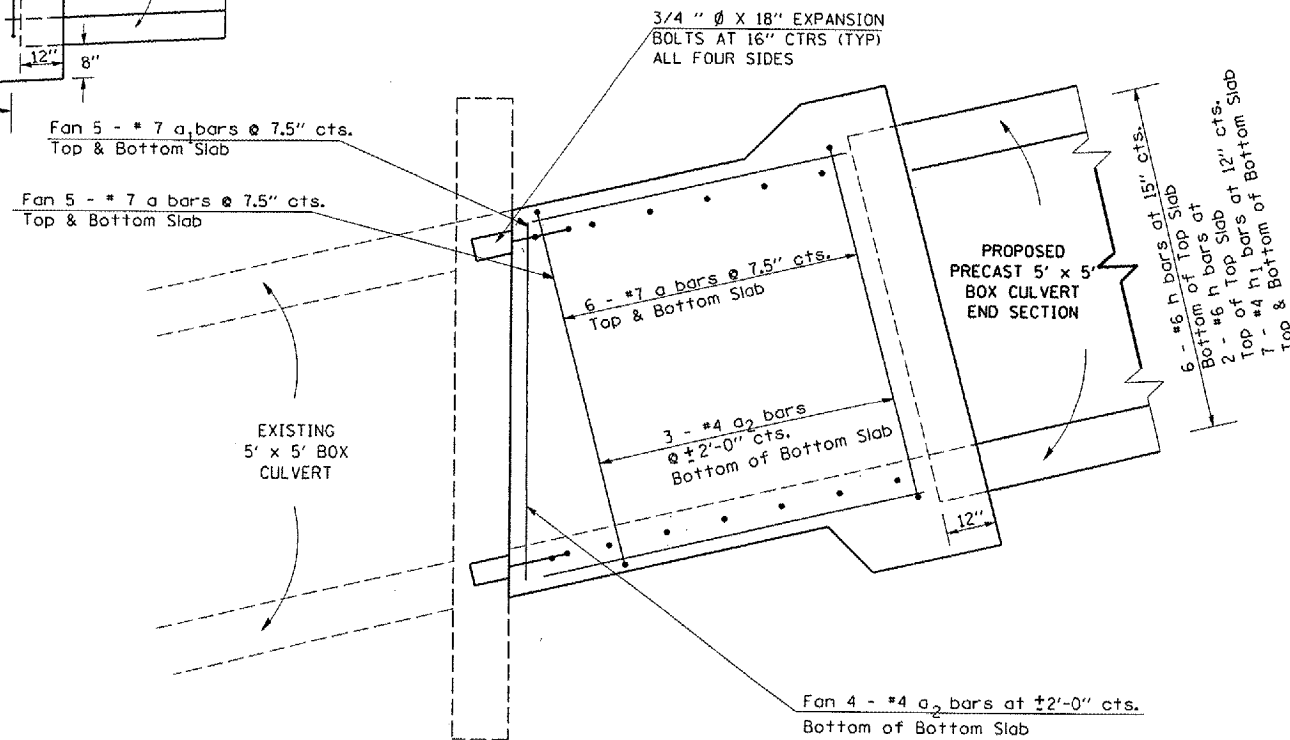
**SIDE VIEW
DIMENSIONS SHOWN**



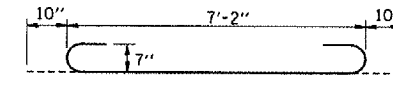
**TOP VIEW
DIMENSIONS SHOWN**



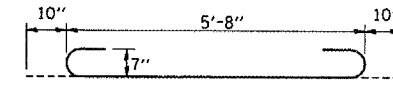
**SIDE VIEW
REINFORCEMENT SHOWN**



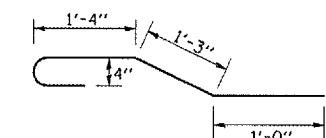
**TOP VIEW
REINFORCEMENT SHOWN**



BAR a₁

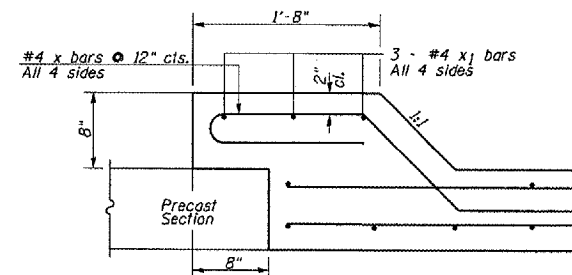


BAR a

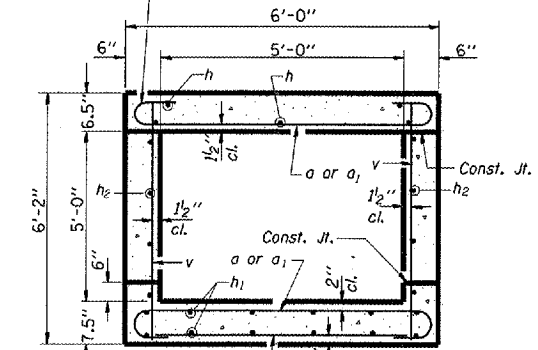


BAR x

Tilt hook of a₁ bars
for 1 1/2" min. cl.

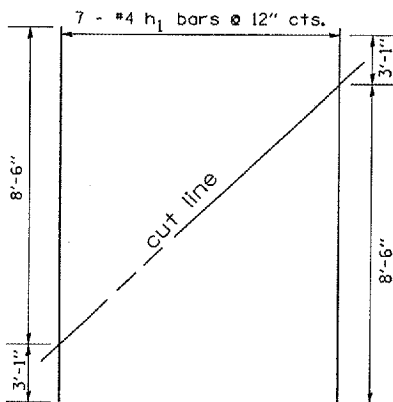


SECTION C-C



SECTION A-A

SEE STATION CROSS SECTION FOR SLOPE OF CULVERT.



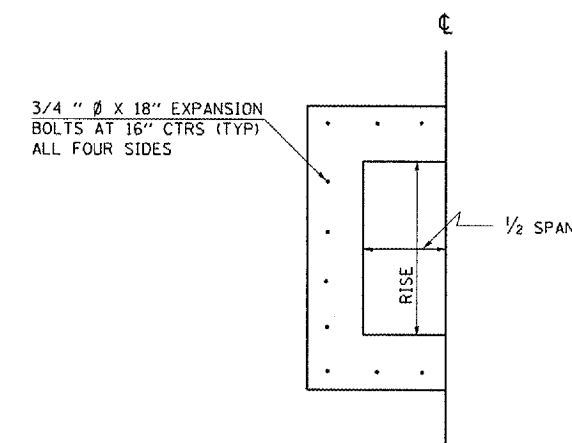
FIELD CUTTING DIAGRAM

Order h₁ bars full length. Cut as shown and use remainder of bars in opposite face.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a	22	#7	7'-4"	U	
a ₁	10	#7	8'-10"	U	
a ₂	7	#4	7'-8"	—	
h	8	#6	8'-6"	—	
h ₁	7	#4	11'-7"	—	
h ₂	7	#5	11'-7"	—	
x	30	#4	5'-3"	—	
x ₁	12	#4	7'-0"	—	
v	20	#4	5'-10"	—	
Expansion Bolts 3/4"				Each	22
Concrete Box Culverts				Cu. Yd.	3.79
Reinforcement Bars				Pound	10,30

Cut a₂, h, h₁, and h₂ bars in the field to fit.



SECTION B-B

NOTES:

ANCHOR BOLTS, MEETING THE REQUIREMENTS OF ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS, SHALL EXTEND A MINIMUM OF 9 INCHES INTO THE NEW CONCRETE. EXPANSION SHIELDS SHALL PROVIDE A MINIMUM CERTIFIED PROOF LOAD OF 4080 POUNDS.

THE REMOVAL OF SUCH PORTIONS OF THE EXISTING HEADWALLS AND WINGWALLS AS MAY BE REQUIRED SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PRECAST CONCRETE BOX CULVERTS. CLASS S1 CONCRETE SHALL BE USED THROUGHOUT.

PROPOSED PRECAST BOX CULVERT END SECTION SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF THE CAST-IN-PLACE CONCRETE COLLAR.

