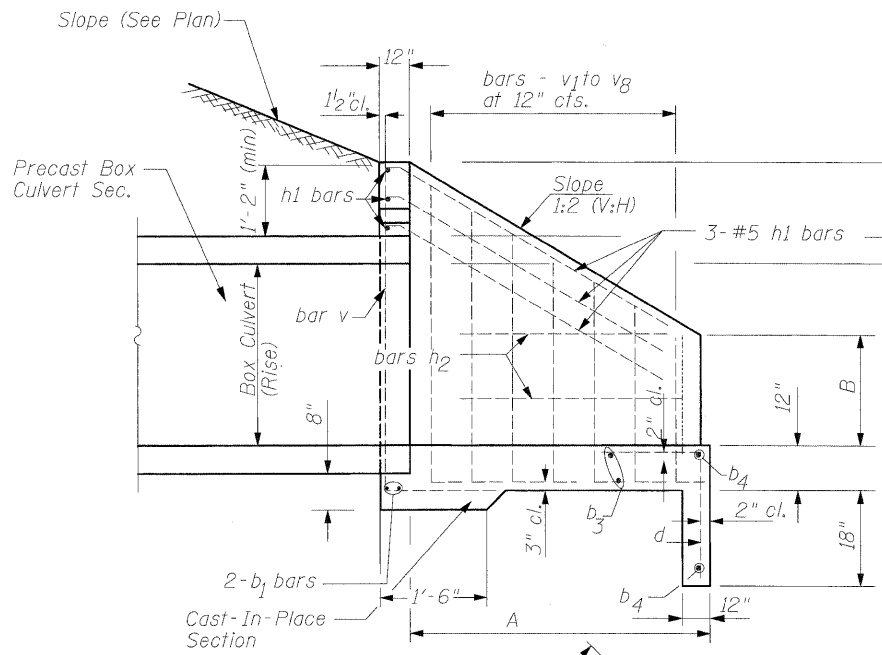


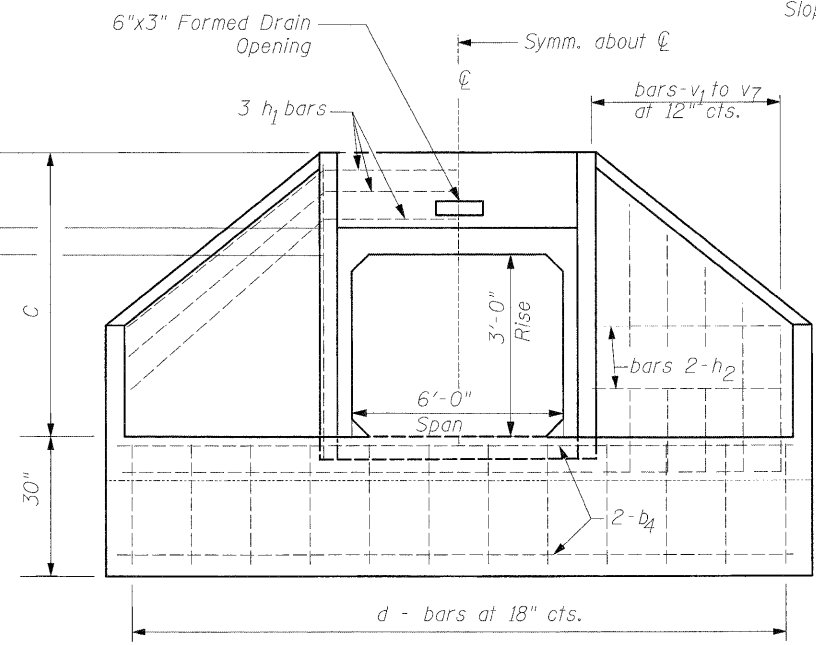
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**BARS IN ONE  
END SECTION**

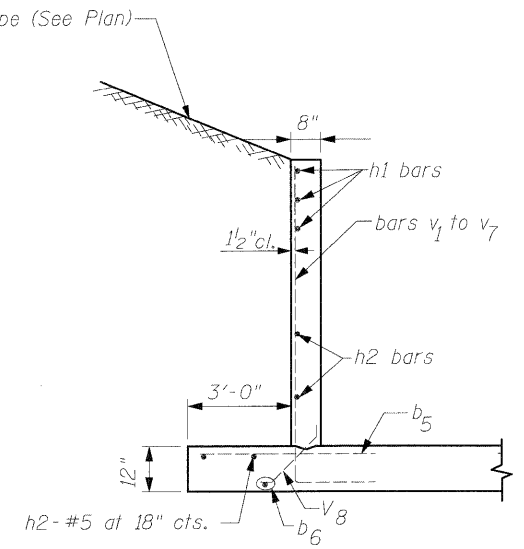
Bars	No.
d	12
b <sub>1</sub>	2
b <sub>2</sub>	1
b <sub>3</sub>	2
b <sub>4</sub>	2
b <sub>5</sub>	14
b <sub>6</sub>	2
h <sub>1</sub>	3
h <sub>2</sub>	4
v	2
v <sub>1</sub>	2
v <sub>2</sub>	2
v <sub>3</sub>	2
v <sub>4</sub>	2
v <sub>5</sub>	2
v <sub>6</sub>	2
v <sub>7</sub>	2
v <sub>8</sub>	14



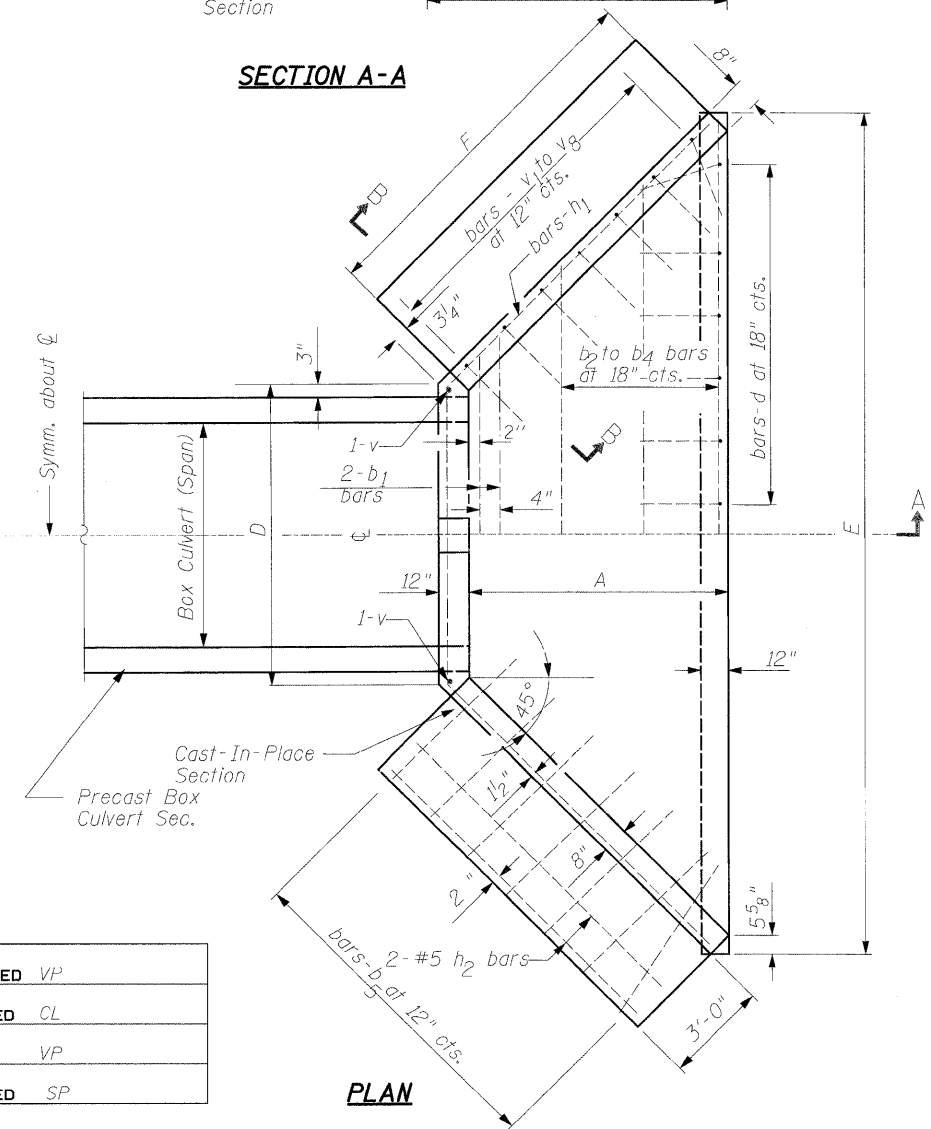
**SECTION A-A**



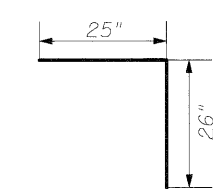
**END ELEVATION**



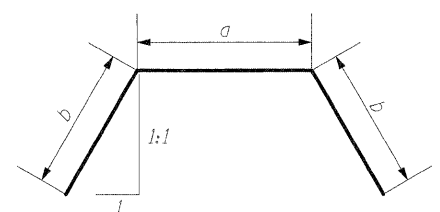
**SECTION B-B**



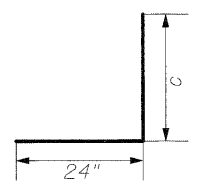
**PLAN**



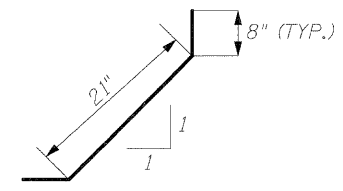
**No. 4 BAR-d**



**BARS-h1  
Bend in field**



**BARS - v to v7**



**BARS-V8**

**DIMENSIONS OF STRAIGHT BARS**

Bar	Size	Length
b <sub>1</sub>	No. 5	8'-0"
b <sub>2</sub>	No. 4	11'-0"
b <sub>3</sub>	No. 4	14'-0"
b <sub>4</sub>	No. 4	16'-8"
b <sub>5</sub>	No. 4	5'-0"
b <sub>6</sub>	No. 4	6'-3"
h <sub>2</sub>	No. 5	6'-6"

**DIMENSIONS OF BENT BARS**

No. 5 - bars h <sub>1</sub>			
BARS	a	b	Total Length
h <sub>1</sub>	7'-8"	6'-8"	21'-0"
No. 5 - bars v to v <sub>7</sub>			
BARS	c	Total Length	
v	5'-1"	7'-1"	
v <sub>1</sub>	5'-1"	7'-1"	
v <sub>2</sub>	4'-9"	6'-9"	
v <sub>3</sub>	4'-6"	6'-6"	
v <sub>4</sub>	4'-2"	6'-2"	
v <sub>5</sub>	3'-11"	5'-11"	
v <sub>6</sub>	3'-8"	5'-8"	
v <sub>7</sub>	3'-4"	5'-4"	

**DIMENSIONS AND QUANTITIES**

Box Culvert Rise	Box Culvert Span	Slope of Wing Walls	Dimensions						Concrete for two (2) End Sections (Cu. Yd.)	Reinf. Bars for two (2) End Sections (Lbs.)
			A	B	C	D	E	F		
36"	72"	1:2	4'-7"	34 1/2"	4'-9"	8'-0"	17'-2"	6'-9"	15	765

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

NOTE:  
1. Cast-In-Place Reinforced Concrete End Sections shall be constructed of Class SI concrete as per Article 503.

**SINGH**  
SINGH & ASSOCIATES, INC.  
CONSULTING ENGINEERS  
300 W. ADAMS ST.  
CHICAGO, IL 60606  
TEL: (312) 629-0240  
FAX: (312) 629-8449

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	55	(99-1&2)AC-3	WILL	524	338
S+g. 2032+25 (Ramp C)			CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1			ILLINOIS FED. AID PROJECT		

12/11/2005 10:20:01 PM \$FILE\$

FINAL