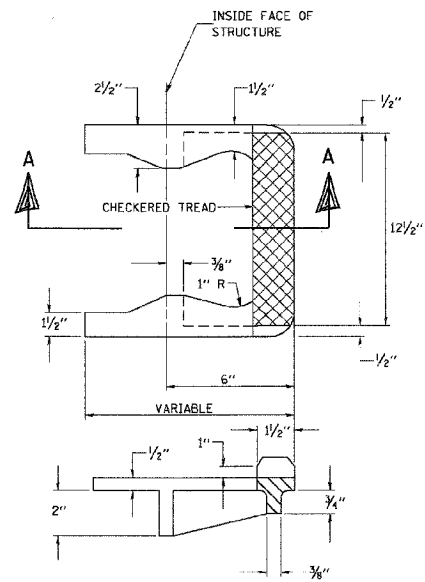


F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	99 (I&2) WRS	WILL.	334	193
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



SECTION A-A  
CAST IRON STEPS

**MATERIAL REQUIRED FOR  
DRAINAGE STRUCTURE SPECIAL  
AT STA. 258+92**

Bar	No.	Size	Length (ft)	Shape
a6(E)	12	#6	7'-1"	U
a7(E)	8	#6	4'-2"	U
a8(E)	4	#8	7'-7"	U
a9(E)	4	#4	5'-9"	U
a4(E)	8	#4	2'-0"	U
b12(E)	10	#6	11'-0"	—
b13(E)	4	#6	4'-4"	—
b14(E)	4	#4	11'-0"	—
b15(E)	4	#6	2'-4"	—
h7(E)	10	#5	5'-5"	—
h8(E)	10	#5	10'-8"	—
h9(E)	2	#5	10'-9"	U
h10(E)	12	#5	3'-10"	U
h11(E)	4	#5	2'-6"	U
s1(E)	14	#3	2'-1"	U
s1(E)	13	#3	1'-10"	U
s2(E)	13	#3	2'-0"	U
l3(E)	15	#5	5'-5"	—
v5(E)	46	#5	3'-0"	—
w2(E)	10	#5	10'-8"	—
Item	Unit	Quantities		
Concrete Structures	Cu Yd	5.2	**	
Reinforcement Bars, Epoxy Coated	lbs	1,140	**	
Frame and Grates, Type 22	Each	1	**	
Steps	Each	2	**	

\*\* Item included in the cost for Drainage Structure Special.

**MATERIAL REQUIRED FOR  
DRAINAGE STRUCTURE SPECIAL  
AT STA. 363+33**

Bar	No.	Size	Length (ft)	Shape
a1(E)	12	#6	7'-6"	U
a1(E)	8	#6	4'-7"	U
a2(E)	4	#8	8'-0"	U
a3(E)	4	#4	6'-2"	U
a4(E)	8	#4	2'-0"	U
b1(E)	11	#6	11'-2"	—
b1(E)	4	#6	4'-5"	—
b2(E)	4	#4	11'-2"	—
b3(E)	4	#6	2'-5"	—
h1(E)	12	#5	5'-10"	—
h1(E)	12	#5	10'-10"	—
h3(E)	16	#5	4'-0"	U
h4(E)	8	#5	3'-3"	U
s1(E)	14	#3	2'-1"	U
s1(E)	13	#3	1'-10"	U
s2(E)	13	#3	2'-0"	U
l1(E)	15	#5	5'-10"	—
v1(E)	60	#5	4'-1"	—
w1(E)	10	#5	10'-10"	—
Item	Unit	Quantities		
Concrete Structures	Cu Yd	5.4	**	
Reinforcement Bars, Epoxy Coated	lbs	1,350	**	
Frame and Grates, Type 22	Each	1	**	
Steps	Each	3	**	

\*\* Item included in the cost for Drainage Structure Special.

**MATERIAL REQUIRED FOR  
DRAINAGE STRUCTURE SPECIAL  
AT STA. 372+85**

Bar	No.	Size	Length (ft)	Shape
a1(E)	14	#6	7'-6"	U
a1(E)	8	#6	4'-7"	U
a2(E)	4	#8	8'-0"	U
a3(E)	4	#4	6'-2"	U
a4(E)	8	#4	2'-0"	U
a5(E)	26	#6	2'-0"	U
b4(E)	13	#6	12'-4"	—
b5(E)	4	#6	5'-0"	—
b6(E)	6	#4	12'-4"	—
b7(E)	4	#6	3'-0"	—
h1(E)	12	#5	5'-10"	—
h2(E)	12	#5	12'-4"	—
h4(E)	8	#5	3'-3"	U
h5(E)	16	#5	5'-0"	U
h6(E)	4	#5	13'-6"	U
s1(E)	14	#3	2'-1"	U
s1(E)	13	#3	1'-10"	U
s2(E)	13	#3	2'-0"	U
l1(E)	17	#5	7'-2"	—
l2(E)	13	#5	8'-4"	U
v1(E)	46	#5	4'-9"	—
v4(E)	16	#5	7'-6"	U
w1(E)	10	#5	12'-4"	—
Item	Unit	Quantities		
Concrete Structures	Cu Yd	8.4	**	
Reinforcement Bars, Epoxy Coated	lbs	1,890	**	
Frame and Grates, Type 22	Each	1	**	
Steps	Each	3	**	

\*\* Item included in the cost for Drainage Structure Special.

**MATERIAL REQUIRED FOR  
DRAINAGE STRUCTURE SPECIAL  
AT STA. 395+85**

Bar	No.	Size	Length (ft)	Shape
a1(E)	16	#6	7'-6"	U
a1(E)	8	#6	4'-7"	U
a2(E)	4	#8	8'-0"	U
a3(E)	4	#4	6'-2"	U
a4(E)	8	#4	2'-0"	U
b8(E)	11	#6	12'-8"	—
b9(E)	4	#6	5'-2"	—
b10(E)	4	#4	12'-8"	—
b11(E)	4	#6	3'-2"	—
h1(E)	14	#5	5'-10"	—
h2(E)	14	#5	12'-4"	—
h4(E)	8	#5	3'-3"	U
h5(E)	16	#5	5'-0"	U
s1(E)	14	#3	2'-1"	U
s1(E)	13	#3	1'-10"	U
s2(E)	13	#3	2'-0"	U
l1(E)	17	#5	5'-10"	—
v2(E)	62	#5	4'-6"	—
w1(E)	10	#5	12'-4"	—
Item	Unit	Quantities		
Concrete Structures	Cu Yd	6.2	**	
Reinforcement Bars, Epoxy Coated	lbs	1,570	**	
Frame and Grates, Type 22	Each	1	**	
Steps	Each	3	**	

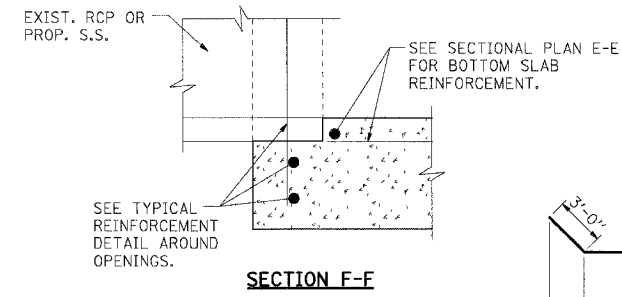
\*\* Item included in the cost for Drainage Structure Special.

**BILL OF MATERIAL**

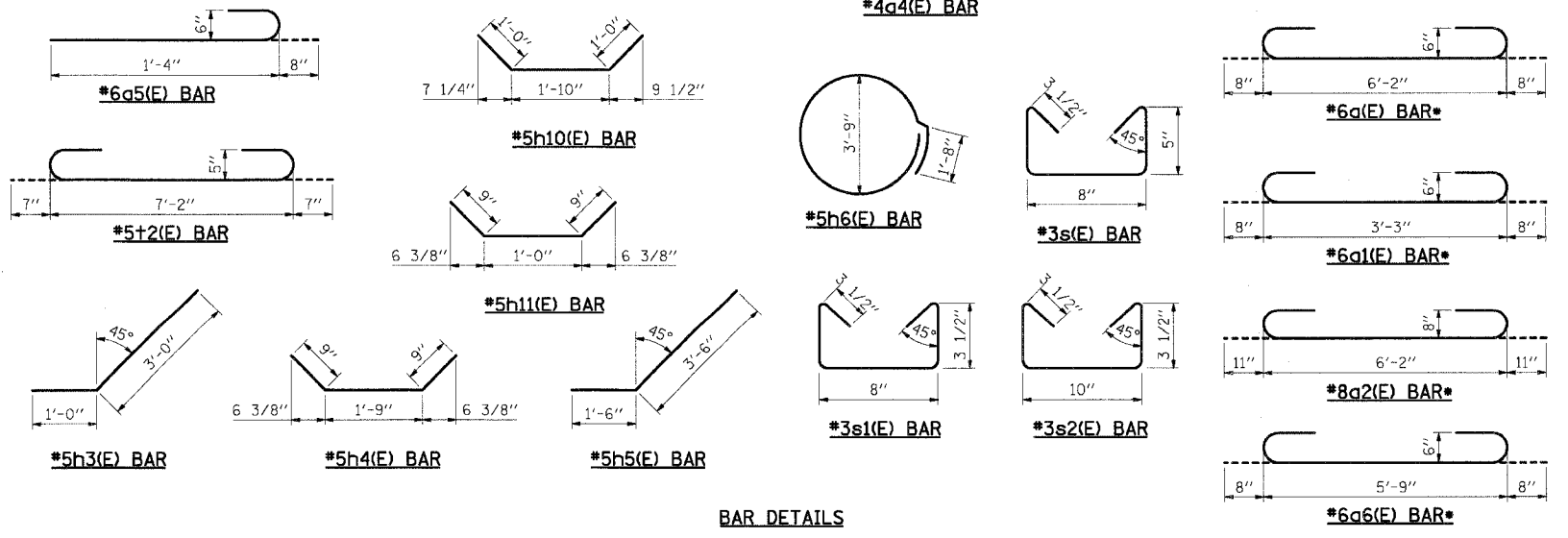
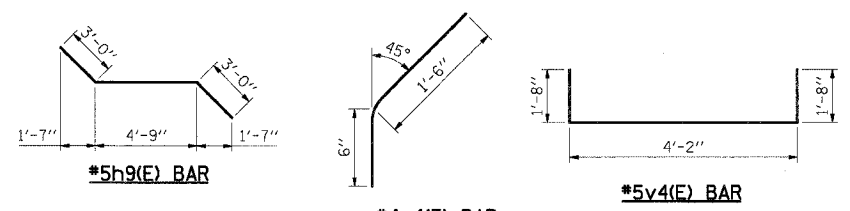
Item	Unit	Total
DRAINAGE STRUCTURE SPECIAL	EACH	4

**NOTES:**

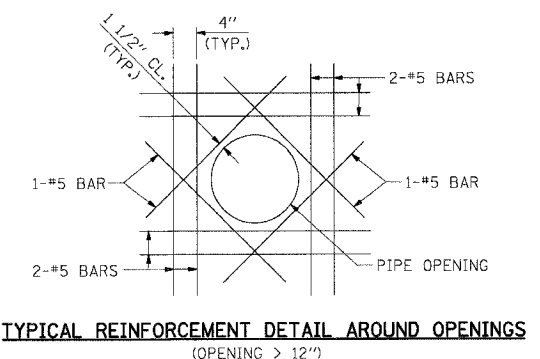
1. WORK THIS SHEET WITH SHTS. 189, 190, 191, & 192.
2. ALL BARS DESIGNATED (E) SHALL BE EPOXY COATED.



SECTION F-F



BAR DETAILS



TYPICAL REINFORCEMENT DETAIL AROUND OPENINGS  
(OPENING > 12")

REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
FAI ROUTE 55 (I-80 TO BLACK ROAD)  
WIDENING AND RESURFACING

**DRAINAGE DETAILS - IX  
DRAINAGE STRUCTURE SPECIAL  
DETAILS & QUANTITIES**

SCALE: N.T.S. DRAWN BY: MDB  
DATE: 02/23/07 CHECKED BY: MJK

**TENG**  
TENG & ASSOCIATES, INC.  
ENGINEERS/ARCHITECTS/PLANNERS  
CHICAGO, ILLINOIS

PLOT DATE = 02/23/07  
FILE NAME = 022307.DWG  
PLOT SCALE = 1/8"=1'-0"  
USER NAME = MJB