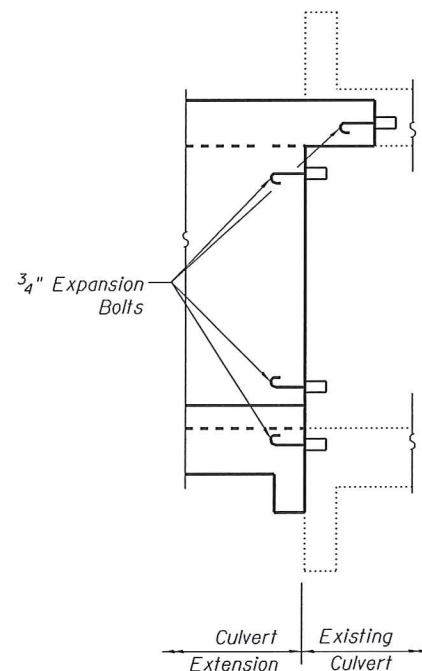
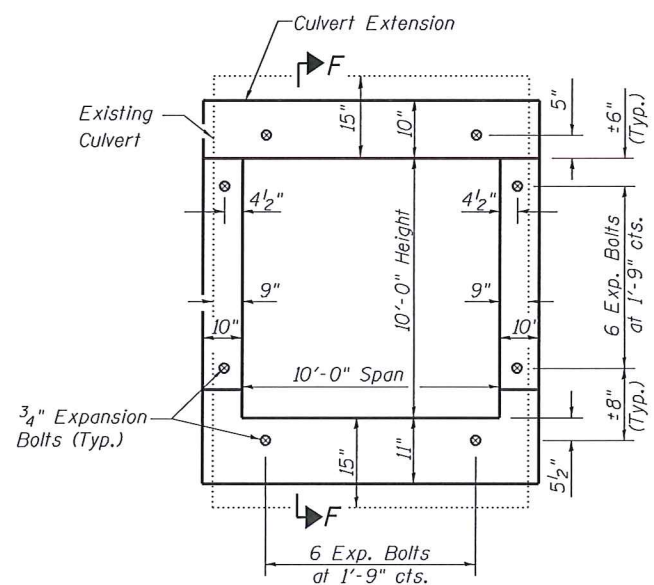


Note - Expansion Bolts shall be 3/4" hooked bolts. Hooked bolts shall extend a minimum of 9" into the new concrete

LEFT EXTENSION EXPANSION BOLT LAYOUT

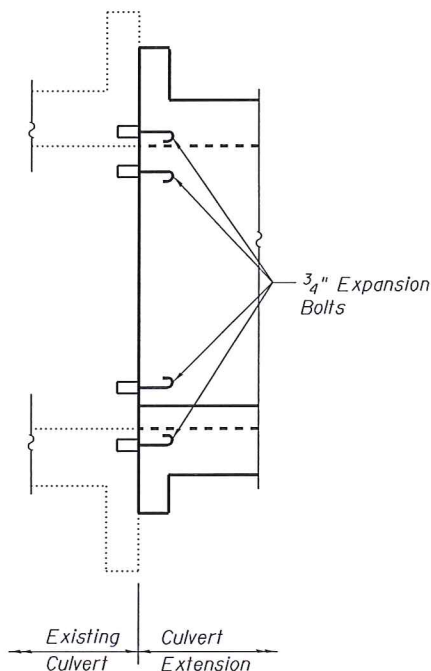


SECTION E-E

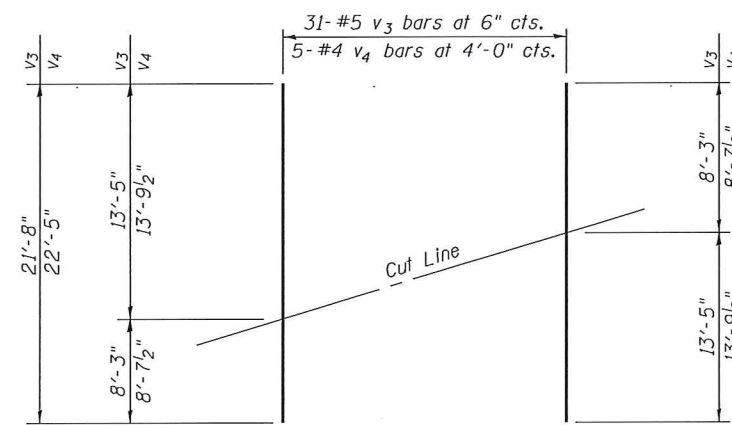
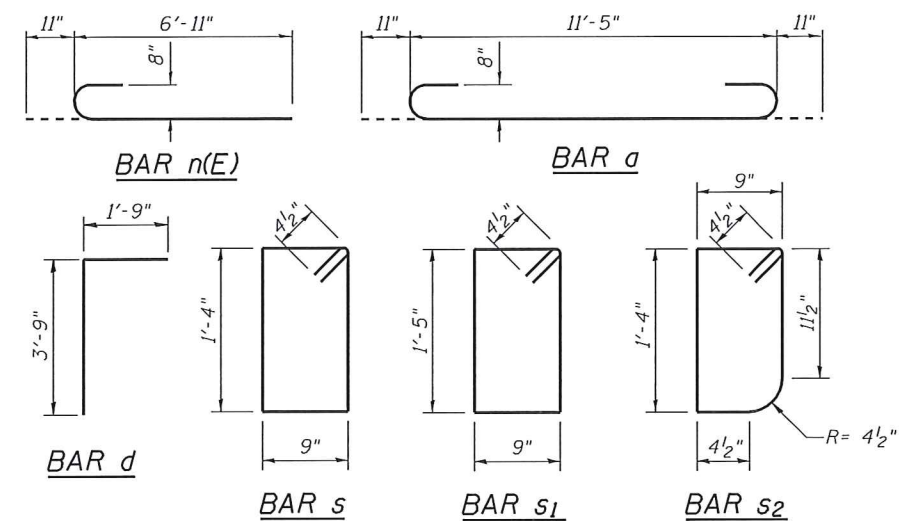


Note - Expansion Bolts shall be 3/4" hooked bolts. Hooked bolts shall extend a minimum of 9" into the new concrete

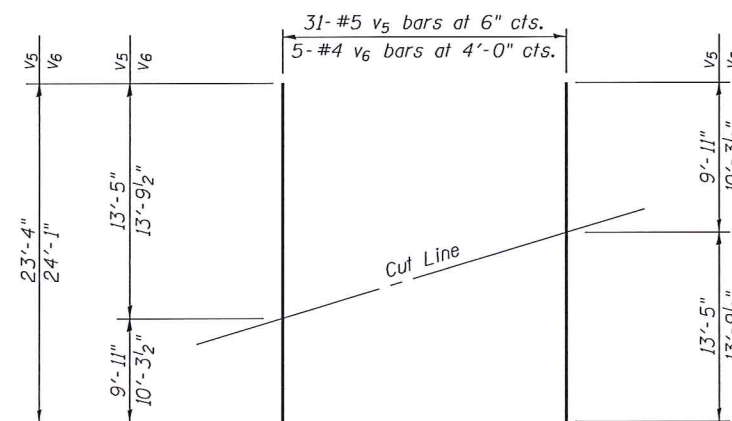
RIGHT EXTENSION EXPANSION BOLT LAYOUT



SECTION F-F



FIELD CUTTING DIAGRAM (v3 & v4 bars)



FIELD CUTTING DIAGRAM (v5 & v6 bars)

TOTAL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	108	#8	13'-3"	U
a1	18	#4	11'-5"	—
a2	2	#4	11'-10"	—
d	46	#4	5'-6"	L
h	23	#5	11'-0"	—
h1	58	#5	10'-3"	—
h2	81	#5	18'-3"	—
h3	4	#8	11'-2"	—
h4	20	#8	11'-5"	—
h5	32	#4	15'-0"	—
h6	16	#4	15'-10"	—
h7	36	#4	14'-10"	—
h8	12	#4	15'-2"	—
n(E)	124	#8	7'-10"	U
s	26	#4	4'-11"	□
s1	26	#4	5'-1"	□
s2	13	#4	4'-9"	□
t	208	#5	9'-1"	—
v	120	#7	10'-1"	—
v1	120	#7	4'-2"	—
v2	8	#7	15'-4"	—
v3	31	#5	21'-8"	—
v4	5	#4	22'-5"	—
v5	31	#5	23'-4"	—
v6	5	#4	24'-1"	—
w	28	#5	14'-11"	—
w1	28	#5	14'-9"	—
Concrete Box Culverts		Cu. Yd.	105.6	
Reinforcement Bars, Epoxy Coated		Pound	2,600	
Reinforcement Bars		Pound	16,680	
Expansion Bolts 3/4"		Each	52	
Concrete Removal		Cu. Yd.	21.2	
Rock Excavation For Structures		Cu. Yd.	0.9	

Notes:
Order v3 through v6 bars full length. Cut as shown.
Use remainder of bar in opposite Wing Wall.

FILE NAME = 349+98.07-76789-004.dgn



USER NAME = jdinkeimann	DESIGNED - JD	REVISED -
Illinois Design Firm Number 184,001670	CHECKED - BB	REVISED -
PLOT SCALE =	DRAWN - EW	REVISED -
PLOT DATE = 8/8/2014	CHECKED - CJF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT EXTENSION DETAILS
STRUCTURE NUMBER 042-2474

SHEET NO. 4 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	101-2RS-1	JERSEY	438	249
FED. ROAD DIST. NO. 8 ILLINOIS FED. AID PROJECT			CONTRACT NO. 76789	