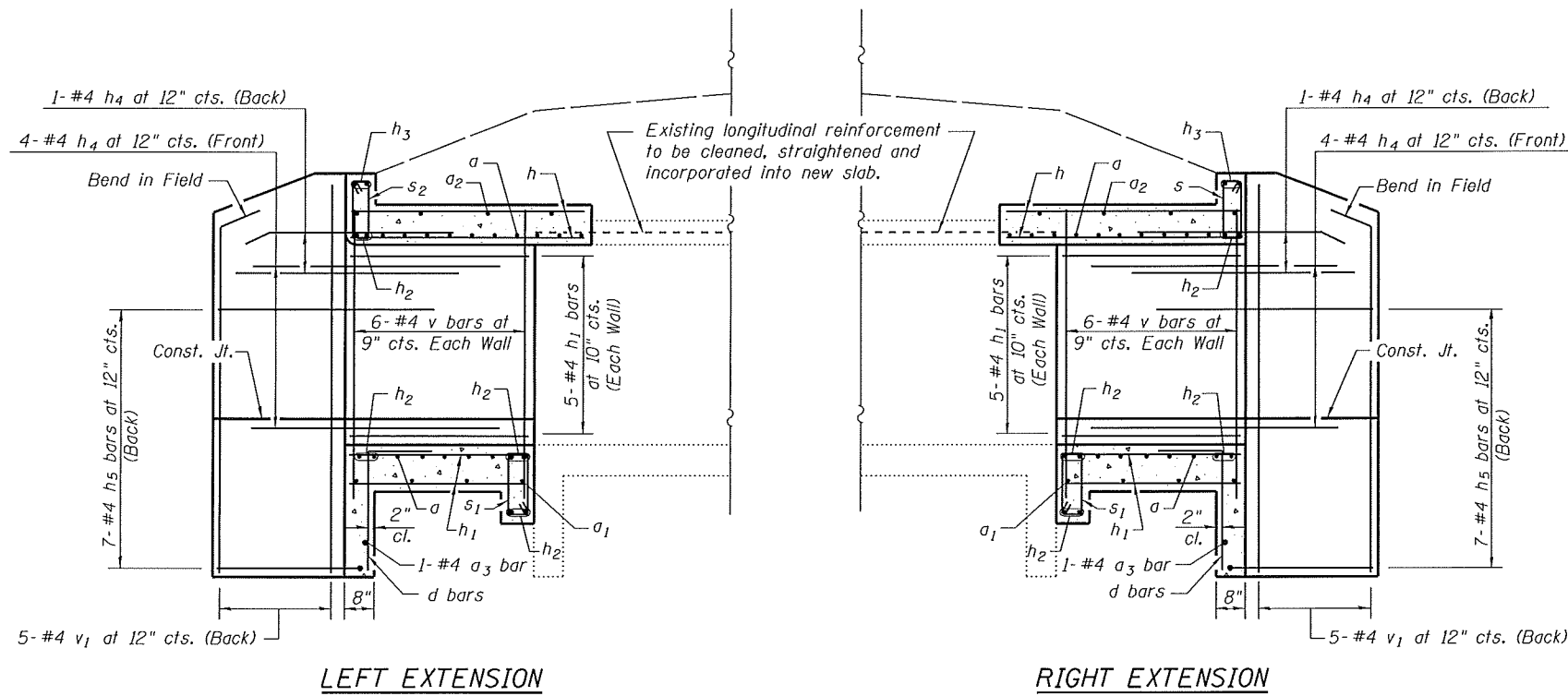
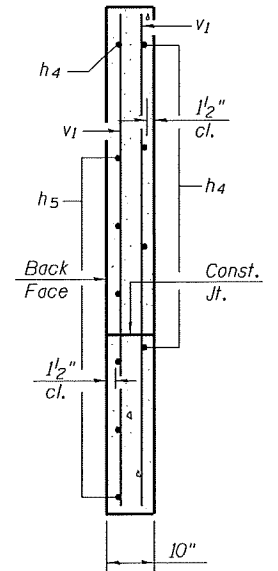


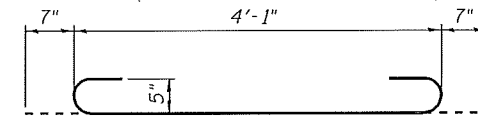
Note:
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost shall be included in Concrete Removal.



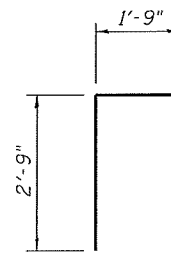
ELEVATION



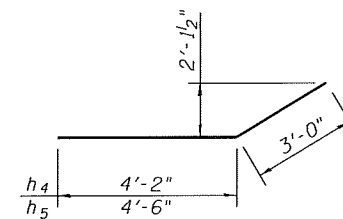
SECTION B-B



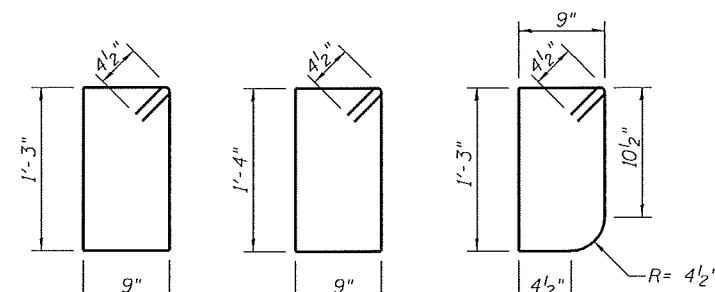
BAR a



BAR d



BARS h4 & h5



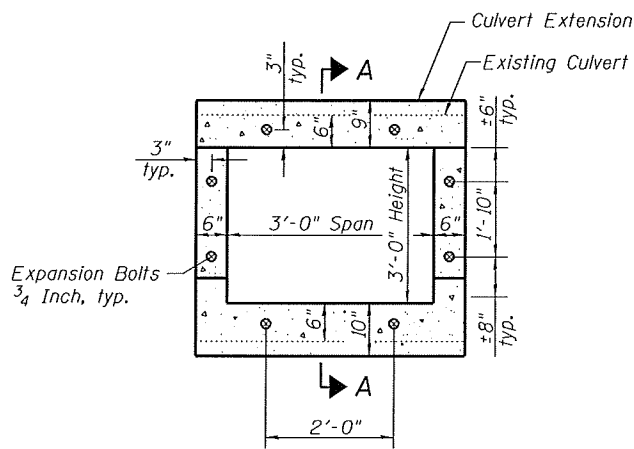
BAR s

BAR s1

BAR s2

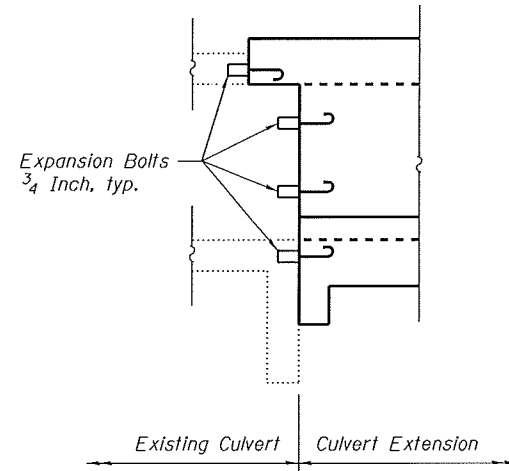
TOTAL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	24	#5	5'-3"	
a1	6	#4	4'-1"	
a2	8	#5	4'-1"	
a3	2	#4	3'-10"	
d	8	#4	4'-6"	
h	34	#4	4'-8"	
h1	48	#4	3'-9"	
h2	16	#6	4'-0"	
h3	4	#6	3'-3"	
h4	20	#4	7'-2"	
h5	28	#4	7'-6"	
s	5	#4	4'-9"	
s1	10	#4	4'-11"	
s2	5	#4	4'-7"	
v	28	#4	4'-3"	
v1	24	#4	7'-2"	
			Concrete Removal	Cu. Yd. 2.0
			Reinforcement Bars	Pound 1050
			Expansion Bolts 3/4 Inch	Each 16
			Concrete Box Culverts	Cu. Yd. 7.9
			Traversable Pipe Grate	Foot 19



EXPANSION BOLT LAYOUT

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



SECTION A-A

FILE NAME = 354-1167-76789-003.dgn



USER NAME = jdinke1mann
Illinois Design Firm Number 184.001670
PLOT SCALE =
PLOT DATE = 8/8/2014

DESIGNED - JD
CHECKED - BB
DRAWN - WS
CHECKED - CJF

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT EXTENSION DETAILS
STATION 354 + 11.67

SHEET NO. 3 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	101-2RS-1	JERSEY	438	252
ILLINOIS FED. AID PROJECT			CONTRACT NO. 76789	