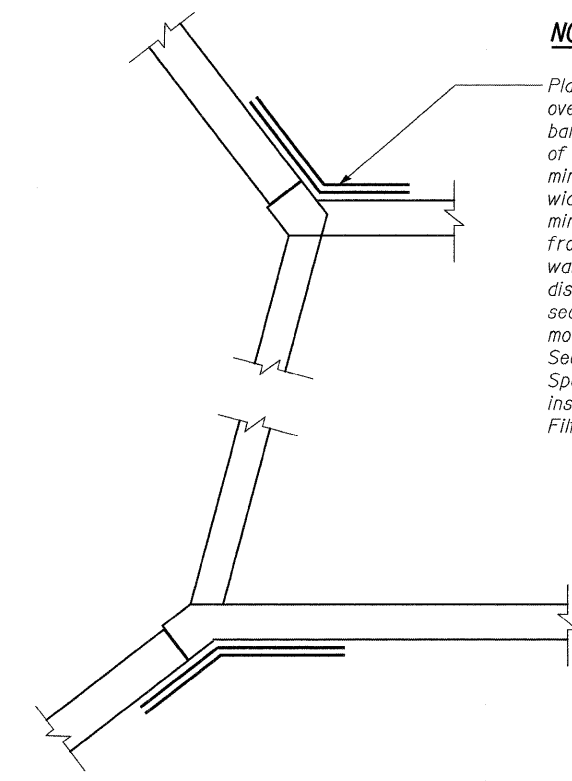
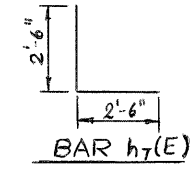


ELEVATION
 1-#4 h₃(E) bars in North cut-off wall
 3-#5 h₂(E) bars in North cut-off wall

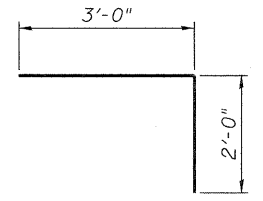


DETAIL AT WINGWALL WITH EXISTING WALL

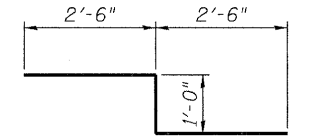
NOTE:
 Place two layers of nonwoven Filter Fabric over the joint between the existing culvert barrel and the new wing wall. The weight of the nonwoven Filter Fabric shall be a minimum of 8.0 ounces / square yard. The width of each layer of fabric shall be a minimum of 3 feet. The fabric shall extend from the top of footing to the top of the wall then drape over the wall for a distance of 2 feet. The fabric shall be secured so as to prevent the fabric from moving during the backfilling process. See Article 1080.03 of the Standard Specifications. Cost of the fabric and installation is included in the pay item Filter Fabric.



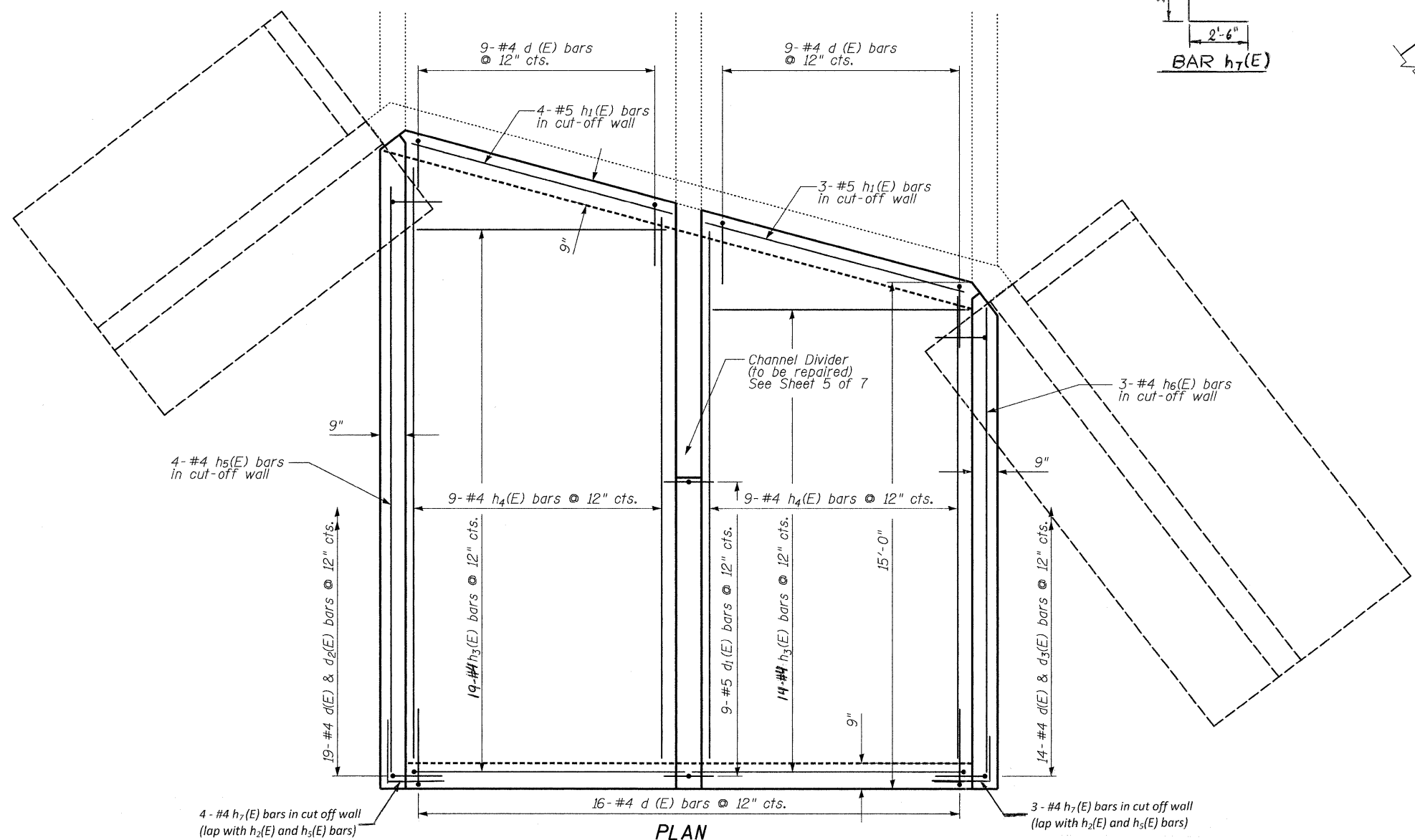
BAR h₇(E)



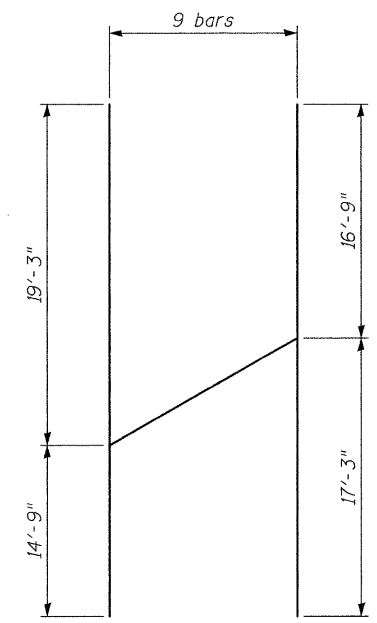
BAR d(E)



BAR d₁(E)



PLAN



h₄(E) Bar Cutting Diagram

APRON BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	49	#4	5'-0"	
d ₁ (E)	9	#5	6'-0"	
d ₂ (E)	19	#4	3'-9"	
d ₃ (E)	14	#4	3'-3"	
h(E)	3	#5	7'-9"	
h ₁ (E)	7	#5	8'-3"	
h ₂ (E)	3	#5	17'-9"	
h ₃ (E)	34	#4	9'-0"	
h ₄ (E)	9	#4	34'-0"	
h ₅ (E)	4	#4	18'-6"	
h ₆ (E)	3	#4	14'-6"	
h ₇ (E)	7	#4	5'-0"	
v(E)	8	#5	2'-6"	
Concrete Removal		Cu Yd	0.4	
Concrete Box Culvert		Cu Yd	13.2	
Reinforcement Bars, Epoxy Coated		Pound	920	

CHAMLIN & ASSOCIATES, INC. PERU, ILLINOIS

FILE NAME = 0502509-66A48-DET-004.DGN
 USER NAME =
 PLOT SCALE =
 PLOT DATE =

DESIGNED - JKC
 CHECKED - AJO
 DRAWN - ARR
 CHECKED - JKC

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CONCRETE APPROACH APRON
 STRUCTURE NO. 050-2509**

SHEET NO. 4 OF 7 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(50-2,4)RS-5 & (50-3)RS-6	LASALLE	109	77
			CONTRACT NO. 66A48	
ILLINOIS FED. AID PROJECT				