



16'-7"

157'30

<u>BAR h</u>

<u>BAR s</u>

112'30'



<u>a2 & a3 BAR CUT DIAGRAM</u> Order a2 & a3 bars full length: Layout in field according to diagram. Cut a2 & a3 bars along cut line. Use remainder of each bar in opposite stab.



<u>h3 & h4 BAR CUT DIAGRAM</u> Order h3 & h4 bars fuil length: Layout in field according to diagram. Cut h3 & h4 bars along cut line. Use remainder of each bar in opposite slab.



<u>v1BAR CUT DIAGRAM</u> Order v: bars full length: Layout in field according to diagram. Cut hs & h4 bars along cut line. Use remainder of each bar in opposite slab.





ALLEN HENDERSON & ASSOCIATES, INC.

CONSULTING CIVIL AND STRUCTURAL ENGINEERS SPRINGFIELD, IL.

### 93370

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
C.H. 11	*	MENARD	44	12	
PROJECT	<b>5R</b> -565(110	)			

\* 98-00047-00-RS

**GENERAL NOTES** Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M 273 M 273.

The minimum concrete strength shall be 5000 psi. Reinforcement bars shall conform to the requirements of AASHTO M - 31, M - 42 or M - 53, Grade 60.

Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

For Section B-B see Sheet No. 13.

Work this sheet with Sheet No. 11 of 44 Sheets.

# WATERWAY INFORMATION

Drainage	Area —	0.76	Sq.	Mi.		
Provided	Opening	- 40	) Śą	. Ft.		
Present	Opening	- 36	Sq.	Ft.		
Design D	ischarge	(20	Yr. F	1.)	271	c.f.s.

CULVERT NO. 4 TWO END SECTIONS BILL OF MATERIAL				
BAR	NO.	SIZE	LENGTH	SHAPE
a	20	#8	11'-4"	
a <sub>1</sub>	8	#5	11'-4"	
a2	32	#8	<u>12'-1"</u> 12'-1"	
az	14	#5	12'-1"	
b	2	#4	18'-1"	
b;	2	#4	<u>22'-7"</u> 27'-1"	
b <sub>2</sub>	2	#4	27'-1"	warmen
bg	4	#4 #4	31'-8"	
h	2 6	#5	35'-8"	
h1	6	#5 #5	5'-8" 13'-5"	
h2	6	#5	13'-5"	
hz	24	#4	17'-8"	~~~~~
h4	24	#6	17'-8"	
h5	4	#6 #7	16'-8"	
h6	4	#6	16'-8"	
S	34	#4	3'-11"	
v	42	#5	5'-4"	L
V1	18	#5	13'-2"	

	×	72	#4	5'-5"	
	Xt	6	#4	38'-8"	
*	Class SI Co	ncrete		Cu. Yd.	26.1
¥	Reinforceme	4355			
	Precast Cor	40			
	Bituminous	115.			
	Rock Fill Ton				186
	Porous Granular Backfill Cu. Yd.				172
	Pavement R	115			
	Box Culvert	2			
	Removal of	Existing Str	uctures No.	4 Each	1

\* Information Only

# CROSS ROAD CULVERT DETAILS (STA. 85+65) F.A.S. 565 – QUARRY ROAD (C.H. 11) SECTION 98-00047-00-RS MENARD COUNTY

## PHONE: (217) 544-8033