

\* Special Bar Splacers to be lapped with  $m_4(E)$  &  $m_7(E)$  bars. See sheet 34 of 42 for detail.

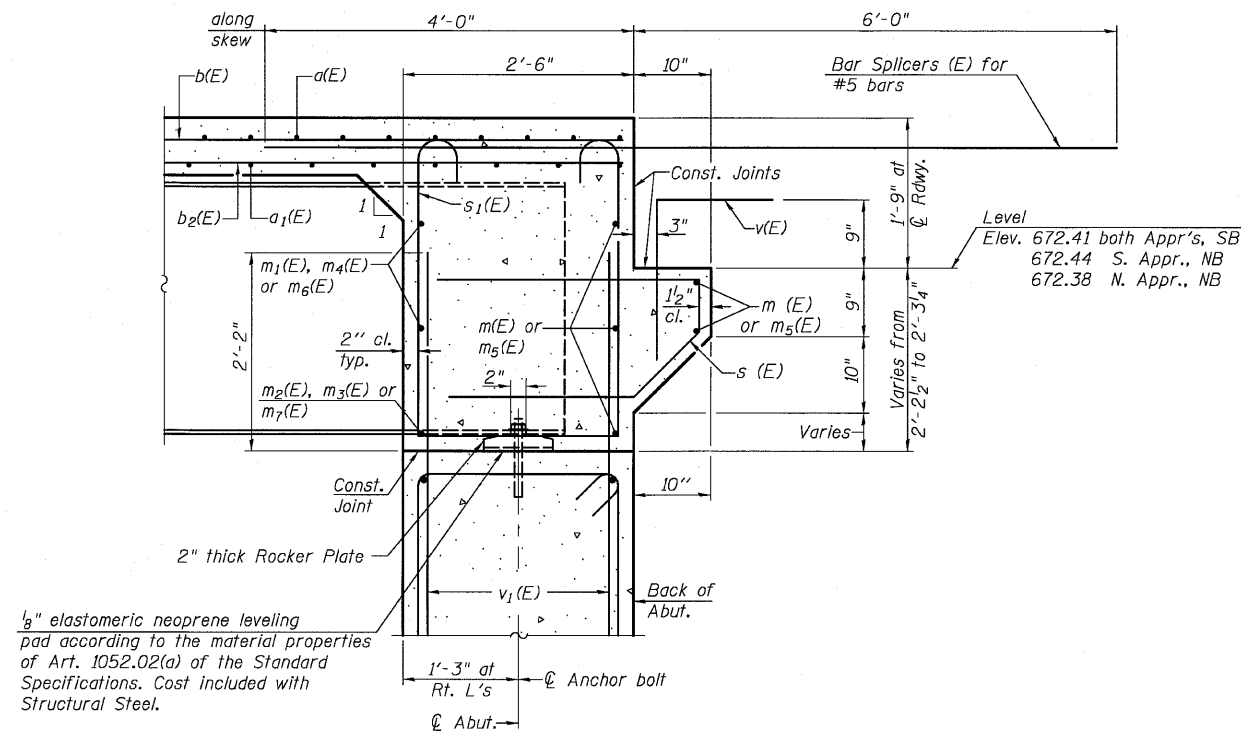
**DIAPHRAGM ELEVATION AT ABUTMENT**

(Looking North, SB)  
(Looking South, NB)

Notes:  
Reinforcement bars in diaphragm are billed with superstructure on sheet 17 of 42.  
Concrete in diaphragm is included with Concrete Superstructure on sheet 17 of 42.  
For details of bars  $s(E)$  &  $s_1(E)$  see sheet 17 of 42.  
The  $s(E)$  and  $s_1(E)$  bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

**MIN. BAR LAP**

#6 bar = 3'-4"



**SECTION A-A**

Dimensions at right angles to abutment, except as shown.

**INTEGRAL ABUTMENT  
DIAPHRAGM DETAILS  
STRUCTURE NO. 053-0187 (NB)  
STRUCTURE NO. 053-0186 (SB)**

**CB** Coombe-Bloxdorf P.C.  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

PROJECT NO. 05004-10  
SCALE  
DATE 8/10/10  
DESIGN BY GB/MCB  
DRAWN BY MML  
CHECKED BY MCB

SHEET NO. 18  
42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(53-1) HBR & HBR-1	LIVINGSTON	102	37
CONTRACT NO. 66856				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			