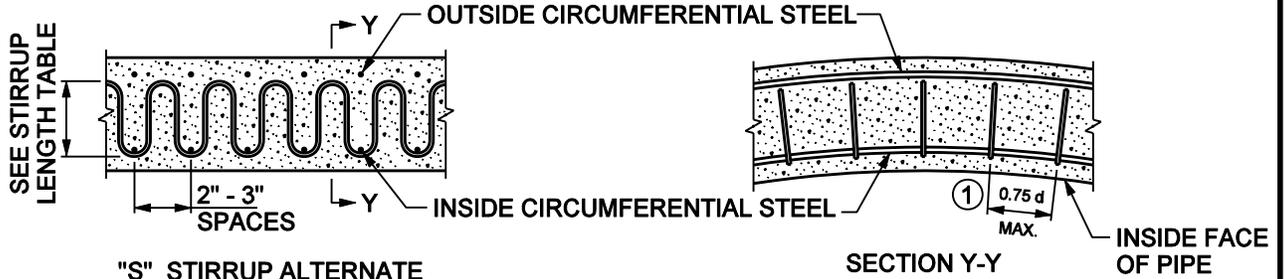


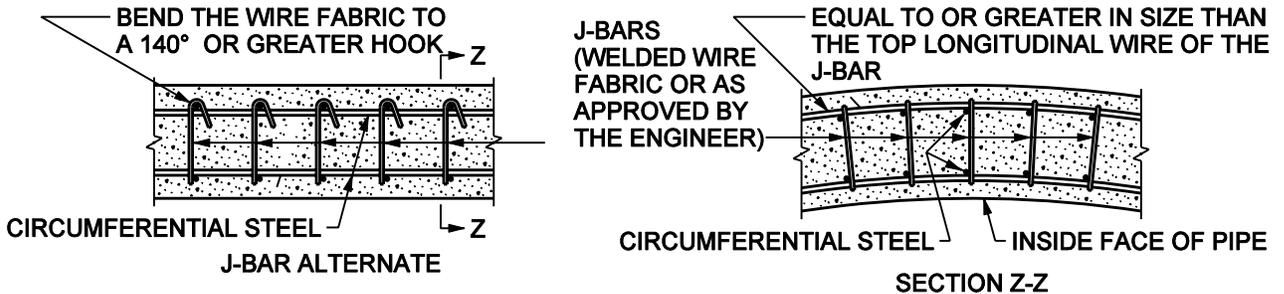
SHEAR LOCK ALTERNATE ③



"S" STIRRUP ALTERNATE

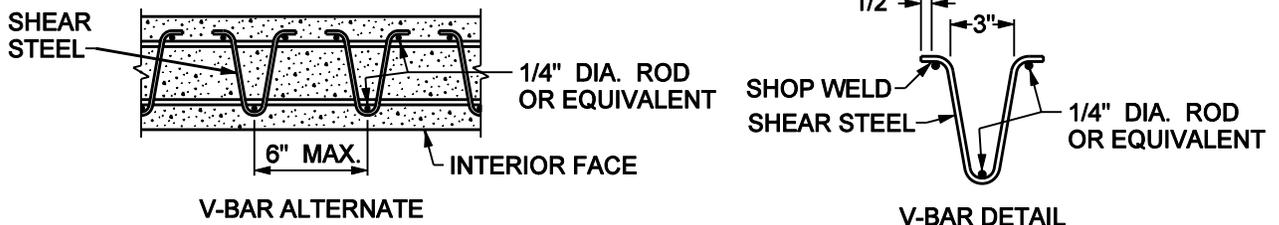
STIRRUP LENGTH TABLE ③

PIPE DIA.	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"
C WALL MIN. LENGTH	4"	4-1/2"	5"	5-1/2"	6"	6-1/2"	7"	7-1/2"	8"	8-1/2"	9"



J-BAR ALTERNATE

SECTION Z-Z



V-BAR ALTERNATE

V-BAR DETAIL

**NOTES**

- OTHER FORMS OF SHEAR REINFORCEMENT WILL BE CONSIDERED FOR APPROVAL UPON WRITTEN REQUEST.
- ① "d" = DISTANCE FROM CENTROID OF REINFORCING TO OUTSIDE OF CONCRETE (d = WALL THICKNESS MINUS 1-1/4").
- ② LENGTH MUST BE VERIFIED BY MANUFACTURER TESTING, SHOWING ADEQUATE ANCHORAGE INTO COMPRESSION ZONE.
- ③ STIRRUPS MAY BE SPLICED A MINIMUM OF ONE OVERLAP AT OR NEAR CL OF PIPE WALL. THE SHEAR REINFORCEMENT STEEL USED SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M32.

THE REINFORCEMENT BARS SHALL BE GRADE 60. THE ANCHORAGE OF THE SHEAR REINFORCEMENT SHALL BE IN ACCORDANCE WITH SECTION 16 OF AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES". CLEARANCES TO REINFORCEMENT, SHEAR REINFORCEMENT AREAS AND SPACING SHALL BE AS SHOWN ON MNDOT STANDARD PLATE 3014 OR THE MNDOT PRECAST BOX CULVERT SHEETS.

MNDOT SPEC. REF. 2501, 2503  
MNDOT 3007D  
NOT TO SCALE

	<b>MINNEAPOLIS</b> DEPARTMENT OF PUBLIC WORKS		<b>SHEAR REINFORCEMENT FOR          PRECAST DRAINAGE STRUCTURES</b>	STANDARD PLATE NO. SEWR-4000
	DRAWN: CXD	DATE: 4/03		
	APPROVED: HRS	DATE: 12/06		