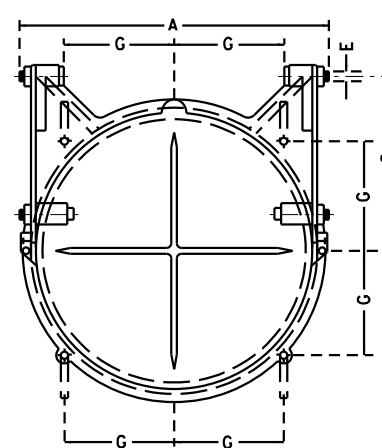
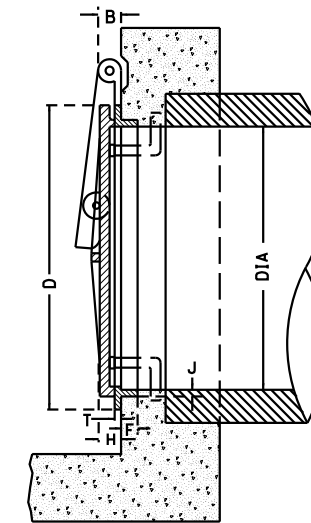


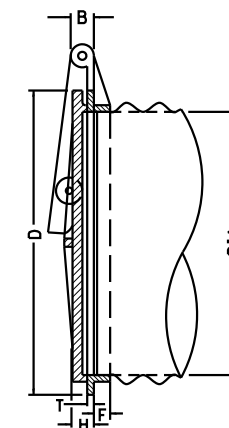
PLAN  
RIPRAP APRON



FRONT ELEVATION



SECTION

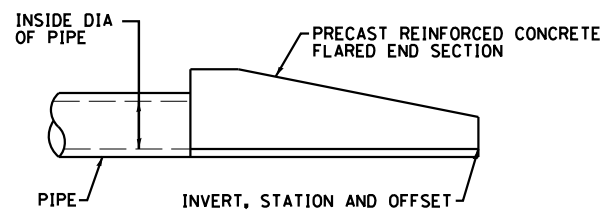


SECTION SHOWING METHOD OF APPLICATION TO CORRUGATED METAL PIPE

IT IS INTENDED THAT THE AUTOMATIC FLAP GATES SHALL BE A COMMERCIAL PRODUCT PRODUCED BY A RELIABLE MANUFACTURER. THE GATE MAY BE MADE OF CAST IRON, CAST STEEL OR OTHER SUITABLE MATERIALS. THE DESIGN MAY DIFFER FROM THE DRAWING IF IT WILL WORK IN A SATISFACTORY, TROUBLE FREE MANNER AND WILL WITHSTAND THE WATER PRESSURE AT THE INSTALLATION LOCATION. THE GATE SHALL BE APPROVED BY THE ENGINEER.

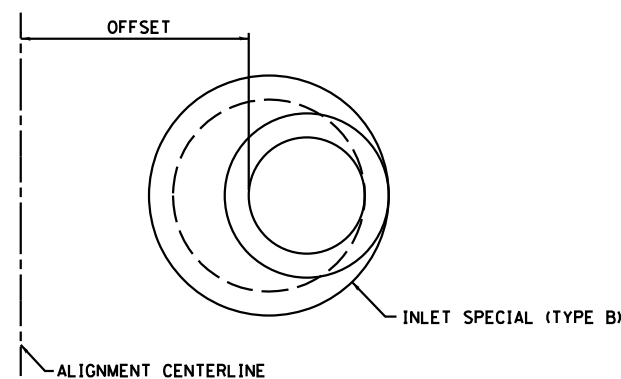
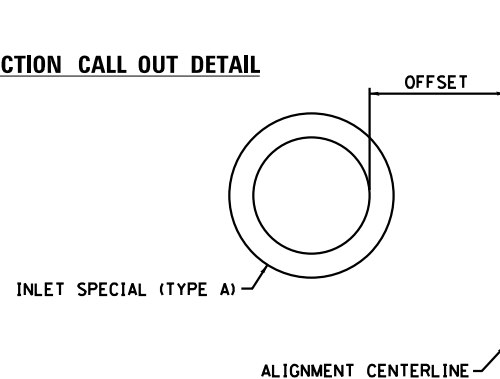
THE SIZE OF AUTOMATIC FLAP GATES SHALL REFER TO THE DIAMETER OF THE OUTLET PIPE OR OPENING.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR FLAP GATES OF THE SIZE SPECIFIED AND SHALL INCLUDE ALL MATERIALS AND COMPLETE INSTALLATION.



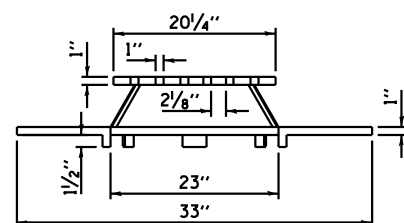
NOTE:  
ALL PIPE STATIONS, OFFSETS, AND INVERTS ARE MEASURED FROM THE INVERT OF THE END SECTION.

END SECTION CALL OUT DETAIL



NOTE:  
ALL INLET OFFSETS ARE MEASURED FROM THE C TO THE NEAREST INSIDE EDGE OF THE INLET. THE INLET STATIONS ARE MEASURED TO THE CENTER OF THE INLET.

INLET CALL OUT DETAIL

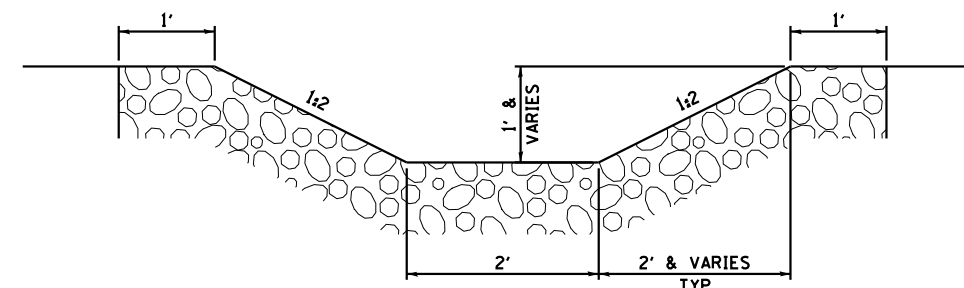


SPECIAL FRAME AND GRATE DETAIL

TABLE OF DIMENSIONS

DIA	A	B	C	D	E	F	G	H	J	T
8"	10 3/4"	1 3/8"	5 1/16"	10"	1/2"	1 1/8"	3 9/16"	1 1/4"	3/8"	3/8"
10"	12 3/4"	1 3/8"	7 1/8"	12 1/4"	1/2"	1 1/8"	4 3/8"	1 1/2"	1/2"	1/8"
12"	14 3/4"	1 3/8"	8 1/2"	14 1/2"	1/2"	1 1/8"	5 1/8"	1 1/2"	1/2"	1/2"
14"	17 1/4"	1 3/8"	9 7/8"	16 3/4"	1/2"	1 1/4"	5 5/8"	1 1/2"	1/2"	3/8"
15"	17 3/4"	1 3/8"	10 5/8"	17 3/4"	1/2"	1 1/4"	6 1/4"	1 1/2"	1/2"	3/8"
16"	19 1/4"	1 3/8"	11 1/4"	18 3/4"	1/2"	1 1/4"	6 5/8"	1 1/2"	1/2"	3/8"
18"	22 1/4"	2"	12 5/8"	21"	3/4"	1 3/16"	7 1/16"	1 3/4"	3/8"	3/8"
20"	24 3/4"	2"	14 1/8"	23 3/4"	3/4"	1 3/16"	8 1/4"	1 3/4"	5/8"	5/8"
21"	25 1/4"	2"	14 7/8"	24 1/4"	3/4"	1 3/8"	8 9/16"	1 3/4"	5/8"	5/8"
24"	28 1/4"	2"	17"	27 1/2"	3/4"	1 1/2"	9 3/4"	1 3/4"	5/8"	5/8"

AUTOMATIC FLAP GATES



RIPRAP DETAIL

LENGTH AS NOTED ON PLAN SHEETS.