

**V J Rice Concrete Limited**

CONCRETE PIPE  
AND  
ACCESSORIES

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***RICE***  
**CONCRETE**

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**ASSOCIATED PRODUCTS**

- ◆ Reinforced Concrete Manholes
- ◆ Reinforced Concrete Catch Basins

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**CONCRETE PIPE  
AND  
ACCESSORIES**



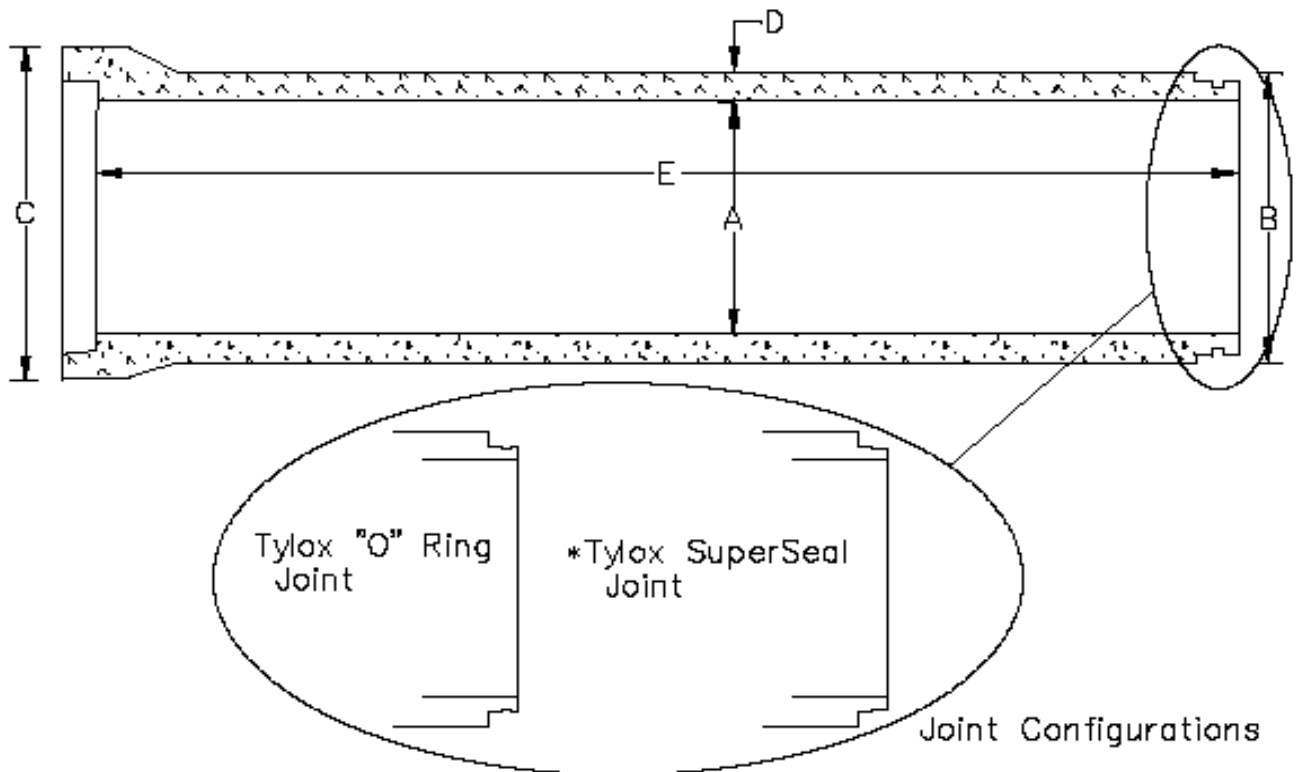
# REINFORCED CONCRETE PIPE

**VJ RICE**  
CONCRETE LIMITED  
*Specialist in concrete products*

Phone: (902)885-4444  
Fax: (902)885-4017  
P.O. Box 399, Bridgetown  
Nova Scotia, B0S 1C0

## MANUFACTURING STANDARD:

Concrete Pipe Is Manufactured To The Strength  
Of ASTM Specification C76 & CSA A257.2



INSIDE DIAMETER mm	OUTSIDE BARREL DIAMETER mm	OUTSIDE BELL DIAMETER mm	WALL THICKNESS mm	LAYING LENGTH M	
A	B	C	D	E	
300(12")	406	508	51(2")	2.5	
375(15")	495	597	57(2.25")	2.5	
450(18")	584	686	63(2.5")	2.5	
525(21")	673	762	70(2.75")	2.5	
* 600(24")	762	838	76(3")	2.5	*
750(30")	940	1003	89(3.5")	2.5	

NOMINAL SIZE (SOFT METRIC CONVERSION)

RC-2



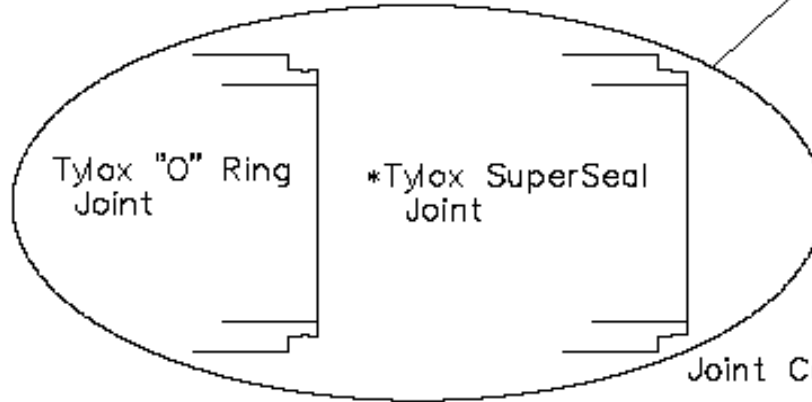
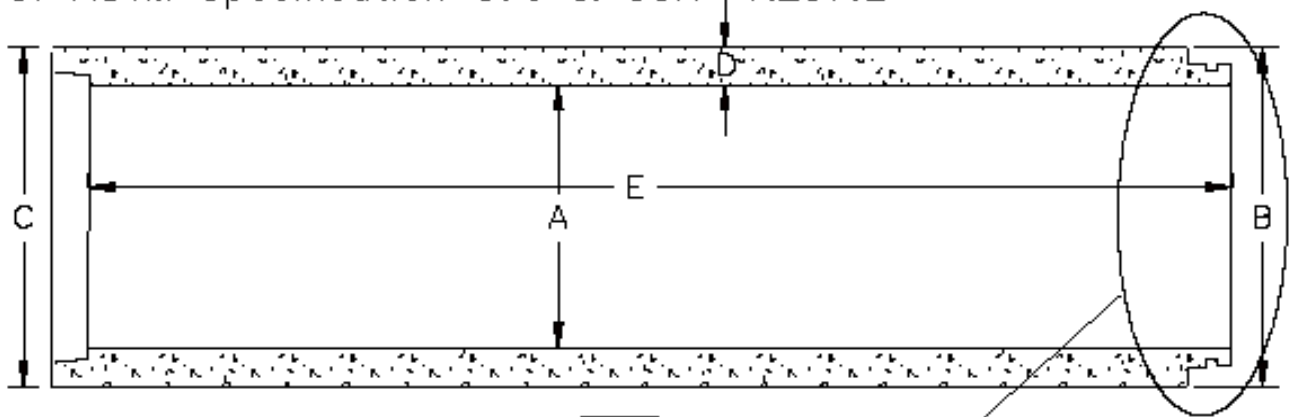
# REINFORCED CONCRETE PIPE

**VJ RICE**  
CONCRETE LIMITED  
*Specialist in concrete products*

Phone: (902)865-4444  
Fax: (902)665-4017  
P.O. Box 399, Bridgetown  
Nova Scotia, B0S 1C0

## MANUFACTURING STANDARD:

Concrete Pipe Is Manufactured To The Strength  
Of ASTM Specification C76 & CSA A257.2



Joint Configurations

INSIDE DIAMETER mm	OUTSIDE BARREL DIAMETER mm	OUTSIDE BELL DIAMETER mm	WALL THICKNESS mm	LAYING LENGTH M	
A	B	C	D	E	
900(36")	1156	1156	121(4.75")	2.5	
* 1050(42")	1295	1295	114(4.5")	2.5	*
* 1200(48")	1473	1473	127(5")	2.5	*
1500(60")	1829	1829	152(6")	2.5	
1800(72")	2222	2222	197(7.75")	2.5	
2100(84")	2578	2573	222(8.75")	2.5	
2400(96")	2895	2895	229(9")	1.83	

NOMINAL SIZE (SOFT METRIC CONVERSION)

RC-3



# CONCRETE PIPE FITTINGS



Phone (416) 895-1144  
 Fax (416) 895-1017  
 P.O. Box 346, Driggs, Ont.  
 L0V 1C0

## 90° Bend & 45° Bends

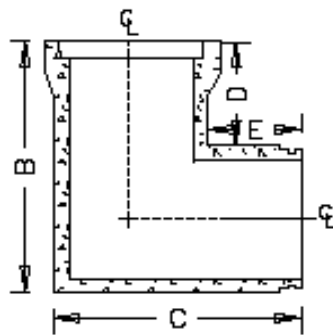
### 90° Bend

INSIDE DIAMETER mm					
	A	B	C	D	E
300 (12")	740	600	600	200	200
375 (15")	1050	840	840	330	330
450 (18")	1200	900	900	330	330
525 (21")	1300	1045	990	360	300
600 (24")	1350	1120	1050	360	300
750 (30")	1500	1295	1245	360	300
900 (36")	1705	1475	1425	370	300
1050 (42")	1800	1655	1600	370	300
1200 (48")	Use Two 45 Degree Fittings				
1500 (60")	Use Two 45 Degree Fittings				
1800 (72")	Use Two 45 Degree Fittings				
2100 (84")	Use Two 45 Degree Fittings				

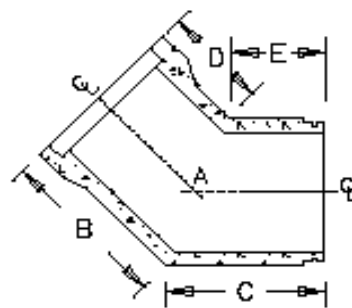
### 45° Bend

INSIDE DIAMETER mm					
	A	B	C	D	E
300 (12")	525	410	360	230	180
375 (15")	740	510	510	300	300
450 (18")	790	560	560	300	300
525 (21")	815	585	585	300	300
600 (24")	900	690	635	360	300
750 (30")	995	750	715	360	300
900 (36")	1040	815	750	360	300
1050 (42")	1095	890	840	360	300
1200 (48")	1170	965	900	360	300
1500 (60")	1270	1120	1050	360	300
1800 (72")	1425	1220	1475	360	300
2100 (84")				360	300

Nominal Size ( Soft Metric Conversion )



90° Bend



45° Bend

Intermediate Angle Bends And Bends With Dimensions Other Than Shown Can Be Manufactured On Request.

Dimensions Other Than Diameter Are Plus Or Minus 100mm.

RC-4

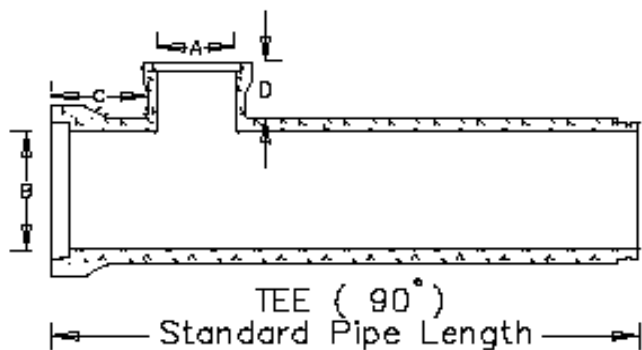


# CONCRETE PIPE FITTINGS



Phone (902) 885-4444  
 Fax (902) 885-4617  
 P.O. Box 380 Hagerstown  
 New Scotia, B0S 1C0

Junctions – Tees ( 90° ) And Wyes ( 45° )

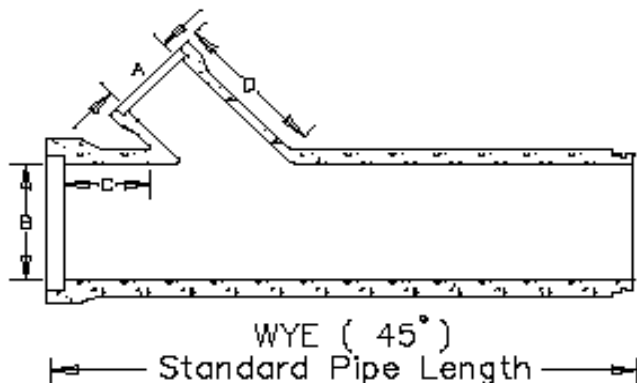


TEE ( 90° )

Diameter of Branch mm	Diameter of Main mm	mm	mm
A	B	C	D
300 (12")	300 And Greater	350	250
375 (15")	375 And Greater	350	250
450 (18")	450 And Greater	350	250
525 (21")	525 And Greater	350	300
600 (24")	600 And Greater	350	300
750 (30")	750 And Greater	350	300

Dimensions C and D Are Plus Or Minus 100mm.

Special Angle Bends Or Bends Having Dimensions Other Than Those Shown Can Be Manufactured Upon Request.





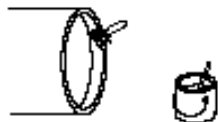


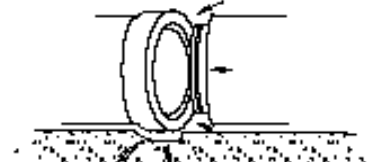

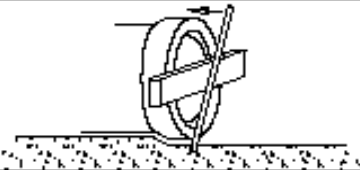

WYE ( 45° )

Diameter of Branch mm	Diameter of Main mm	mm	mm
A	B	C	D
300 (12")	300 And Greater	350	660
375 (15")	375 And Greater	350	750
450 (18")	450 And Greater	350	840
525 (21")	525 And Greater	350	940
600 (24")	600 And Greater	350	1020
750 (30")	750 And Greater	350	1100 +

NOMINAL SIZE (SOFT METRIC CONVERSION)

RC-5

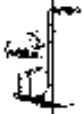
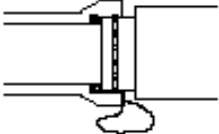
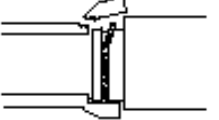
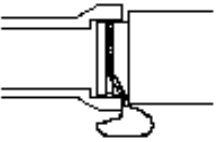
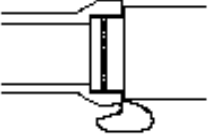
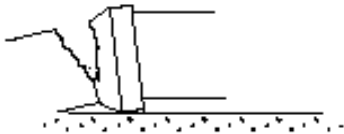
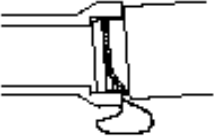

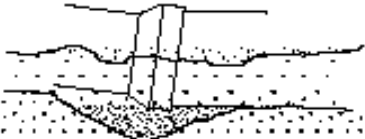


<h1 style="text-align: center;">JOINTING PROCEDURES</h1>	 <p><b>VJRICE</b> CONCRETE LIMITED Specialty Products Division</p>	<p>Phone (800) 960-4444 Fax (302) 883-4077 P.O. Box 488, or 488c-1 Newburg, MD 20690</p>
<h2>FOR "O" RING GASKETED PIPE.</h2>		
	<p><b>CLEAN JOINT SURFACES</b> CLEAN ALL DIRT, DUST AND FOREIGN MATTER FROM BELL AND SPIGOT SURFACES. TAKE EXTRA CARE TO CLEAN THE SPIGOT GROOVE.</p>	
	<p><b>LUBE INSIDE OF BELL</b> GENEROUSLY RUB LUBRICANT INTO THE FLARED BELL SURFACE OVER THE ENTIRE CIRCUMFERENCE.</p>	
	<p><b>LUBE "O" RING</b> THOROUGHLY LUBRICATE THE GASKET BEFORE STRETCHING THE GASKET AROUND THE SPIGOT. RUBBER GLOVES ARE RECOMMENDED TO PROTECT HANDS FROM EXPOSURE TO THE LUBRICANT.</p>	
	<p><b>EQUALIZE STRETCH</b> INSERT A SMOOTH OBJECT, SUCH AS A SCREWDRIVER, UNDER THE GASKET AND RUN IT AROUND THE CIRCUMFERENCE TWO OR THREE TIMES. THIS EQUALIZES THE STRETCH IN THE GASKET AND IS VERY IMPORTANT WITH LARGER PIPE.</p>	
	<p><b>DIG BELL HOLE</b> A HOLE MUST BE DUG IN THE SUB-BASE TO ACCOMMODATE THE BELL.</p>	
	<p><b>ALIGN CAREFULLY</b> WHEN COUPLING PIPE, ALIGN SPIGOT OF PIPE WITH BELL OF PIPE PREVIOUSLY LAID. PIPE SHOULD BE ALIGNED SO THAT THE GASKET IS IN CONTACT WITH THE FLARED BELL SURFACE AROUND THE ENTIRE CIRCUMFERENCE.</p>	
	<p><b>BAR JOINT HOME</b> JOINTS ON SMALLER PIPE UP TO 24"(600) DIA. USUALLY CAN BE BARRED HOME. PLACE A BLOCK OF WOOD ACROSS THE INVERT OF THE PIPE TO PROTECT THE BELL WHEN THE SUBGRADE IS NOT FIRM ENOUGH TO ALLOW BARRING. THE USE OF A COMEALONG MAY BE NECESSARY.</p>	
	<p><b>BEDDING AND BACK FILL</b> GRANULAR MATERIAL SHOULD BE PLACED UP TO THE SPRING LINE OVER THE ENTIRE LENGTH OF THE PIPE.</p>	

RC-6





<h1>JOINTING PROCEDURES</h1>	 <p><b>VJRICE</b> CONCRETE LIMITED 598/5091 rd concrete products</p>	<p>Phone (905) 880-4444 Fax (905) 880-4017 P.O. Box 366, Uxbridge Ontario, L9R 1C7</p>
<p>CONTINUED</p>		
	<p>DIRT OR FROZEN MATERIAL ON BELL OR SPIGOT SURFACES CAN PREVENT THE GASKET FROM MAKING A TIGHT SEAL.</p>	
	<p>FAILURE TO LUBRICATE BELL CAN CAUSE THE GASKET TO ROLL, SOMETIMES SPLITTING THE BELL.</p>	
	<p>WHEN THE GASKET HAS NOT BEEN THOROUGHLY LUBRICATED, A ROLLING ACTION TAKES PLACE IN THE SPIGOT GROOVE. THIS MAKES THE JOINT SEEM TO SPRING APART EVERY TIME IT IS PUSHED HOME.</p>	
	<p>FAILURE TO EQUALIZE THE STRETCH OF THE GASKET CAN BE A CAUSE FOR LEAKS IN THE JOINT OR FOR THE GASKET TO BREAK.</p>	
	<p>FAILURE TO DIG A BELL HOLE CAN CAUSE BEAM BREAKS OR CRACKS IN THE BARREL OF THE PIPE.</p>	
	<p>IF BELL AND SPIGOT ARE NOT LEVEL OR CAREFULLY ALIGNED, THE GASKET WILL FISH MOUTH, CAUSING A LEAK OR SPLITTING THE BELL.</p>	
	<p>USE OF A MACHINE TO PUSH THE PIPE HOME OR TO PUSH PIPE DOWN TO GRADE CAN PUT EXCESSIVE PRESSURE ON PIPE CAUSING IT TO BREAK OR CRACK.</p>	
	<p>IMPROPER BEDDING CAN CAUSE THE PIPE TO BE FORCED OUT OF ALIGNMENT WHEN BACK FILLED.</p>	



# JOINTING PROCEDURES



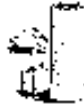
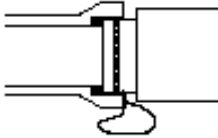
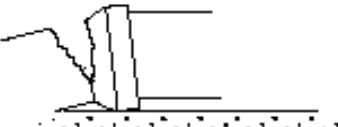



Phone (902) 850-4444  
 Fax (902) 850-4011  
 P.O. Box 395, B. 698-47  
 Kentville, NS B3G 1C9

## For TYLOX SuperSeal Gasketed Pipe

	<p><b>CLEAN JOINT SURFACES</b>                  CLEAN ALL DIRT, DUST AND FOREIGN MATTER FROM BELL AND SPIGOT SURFACES. INSPECT SURFACES FOR CRACKS, CHIPS OR OTHER DEFECTS.</p>
	<p><b>STRETCH GASKET OVER SPIGOT</b>                  PLACE NOSE OF OF GASKET AGAINST STEP, AND THE TUBE LAYING FLAT AGAINST THE SPIGOT.</p>
	<p><b>DO NOT LUBE GASKET</b>                  DO NOT LUBRICATE.</p>
	<p><b>DO NOT EQUALIZE</b>                  EQUALIZATION IS NOT REQUIRED.</p>
	<p><b>DIG BELL HOLE</b>                  A HOLE MUST BE DUG IN THE SUB-BASE TO ACCOMMODATE THE BELL.</p>
	<p><b>ALIGN CAREFULLY</b>                  WHEN COUPLING PIPE, ALIGN SPIGOT OF PIPE WITH BELL OF PIPE PREVIOUSLY LAID. PIPE SHOULD BE ALIGNED SO THAT THE GASKET IS IN CONTACT WITH THE FLARED BELL SURFACE AROUND THE ENTIRE CIRCUMFERENCE.</p>
	<p><b>BAR JOINT HOME</b>                  JOINTS ON SMALLER PIPE UP TO 24"(600) DIA. USUALLY CAN BE BARRED HOME. PLACE A BLOCK OF WOOD ACROSS THE INVERT OF THE PIPE TO PROTECT THE BELL WHEN THE SUBGRADE IS NOT FIRM ENOUGH TO ALLOW BARRING, THE USE OF A COMEALONG MAY BE NECESSARY.</p>
	<p><b>BEDDING AND BACK FILL</b>                  GRANULAR MATERIAL SHOULD BE PLACED UP TO THE SPRING LINE OVER THE ENTIRE LENGTH OF THE PIPE.</p>

RC-7



<h1 style="text-align: center;">JOINTING PROCEDURES</h1>	 <p><b>VJRICE</b> CONCRETE LIMITED Specialists in concrete products</p> <p style="text-align: right;">                 Phone (800) 995-4477                  Fax (202) 655-0777                  P.O. Box 958, Erdogheim                  New South Wales 1500             </p>
<p>CONTINUED</p>	
	<p>DIRT OR FROZEN MATERIAL ON BELL OR SPIGOT SURFACES CAN PREVENT THE GASKET FROM MAKING A TIGHT SEAL.</p>
	<p>FAILURE TO DIG A BELL HOLE CAN CAUSE BEAM BREAKS OR CRACKS IN THE BARREL OF THE PIPE.</p>
	<p>IF BELL AND SPIGOT ARE NOT LEVEL OR CAREFULLY ALIGNED, THE GASKET WILL FISH MOUTH, CAUSING A LEAK OR SPLITTING THE BELL.</p>
	<p>USE OF A MACHINE TO PUSH THE PIPE HOME OR TO PUSH PIPE DOWN TO GRADE CAN PUT EXCESSIVE PRESSURE ON PIPE CAUSING IT TO BREAK OR CRACK.</p>
	<p>IMPROPER BEDDING CAN CAUSE THE PIPE TO BE FORCED OUT OF ALIGNMENT WHEN BACK FILLED.</p>
	<p>RC-7a</p>

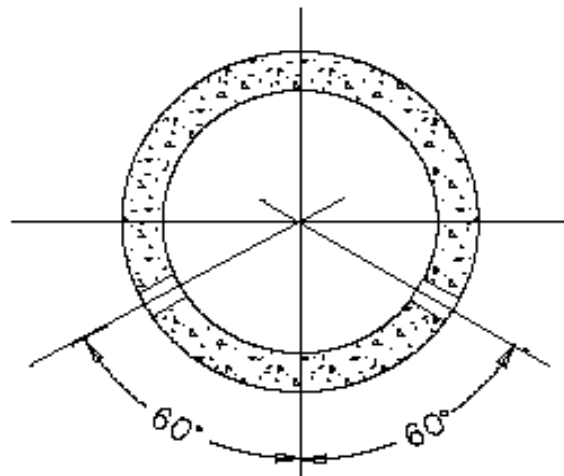
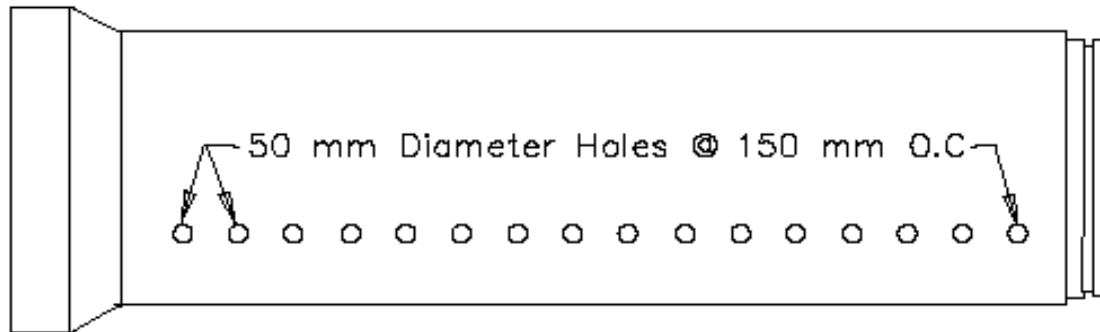


# PERFORATED CONCRETE PIPE



**VJRICE**  
CONCRETE LIMITED  
Specialist in concrete products

Phone (005) 557-4444  
Fax (002) 605-4011  
P.O. Box 300, Ringwood  
Newcastle, NSW 1591



Perforated Concrete Pipe Available In All Circular Sizes.

RC-8

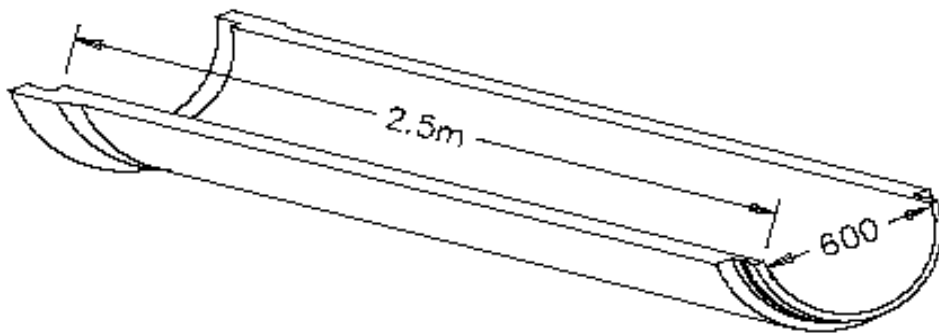


CONCRETE  
CHANNEL PIPE



Phone: (506) 485-4444  
Fax: (506) 365-4017  
P.O. Box 989, Antigonish  
Nova Scotia B0J 1C0

(Circular Concrete Pipe Cut-In-Half)



RC-9

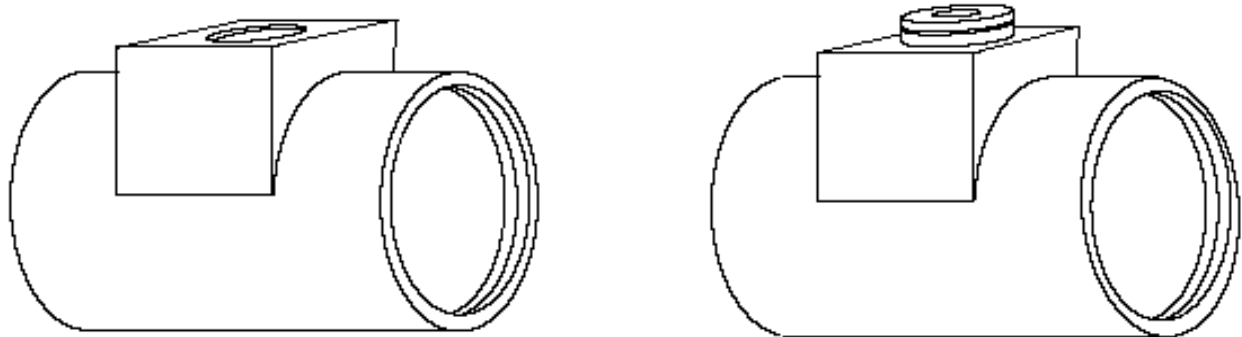


# PRECAST MANHOLE TEE BASES

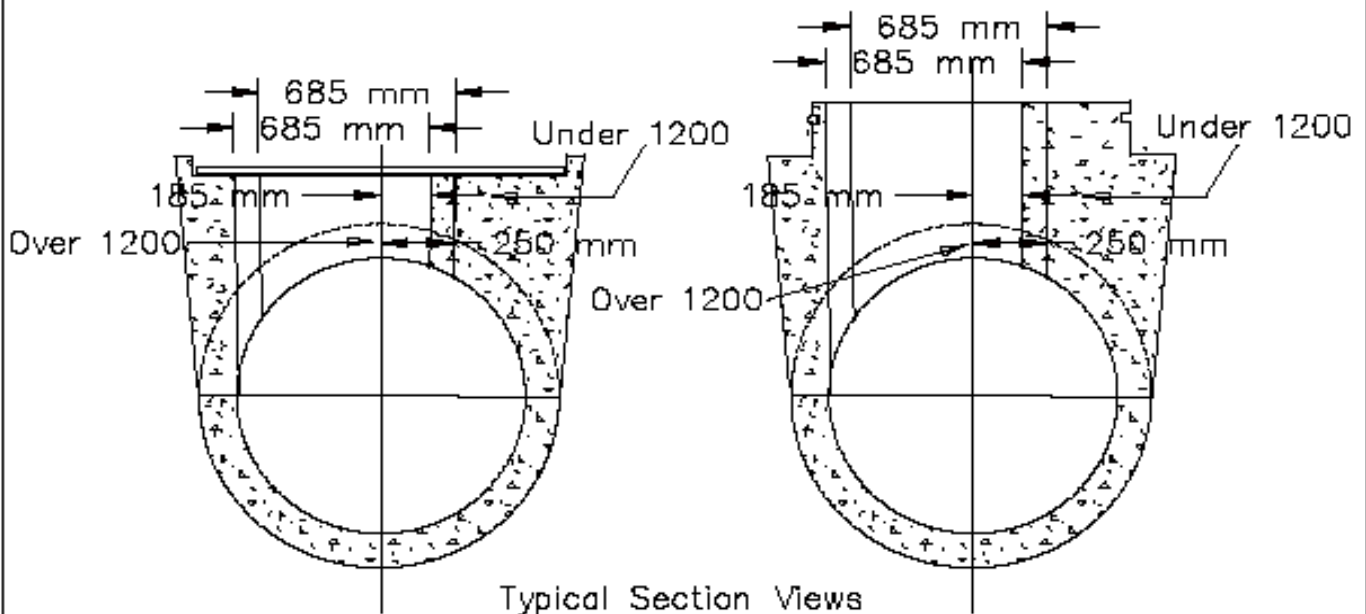


Phone (507) 695-4444  
 Fax (507) 695-2117  
 P.O. Box 368, Ridgeland  
 New South 39810

750mm, 900mm, 1050mm, 1200mm  
 and 1500mm Diameter.



Isometric Views  
 Designed to Accomodate Standard  
 1050 mm Dia. Manhole Shafting



Typical Section Views

NOMINAL SIZE (SOFT METRIC CONVERSION)

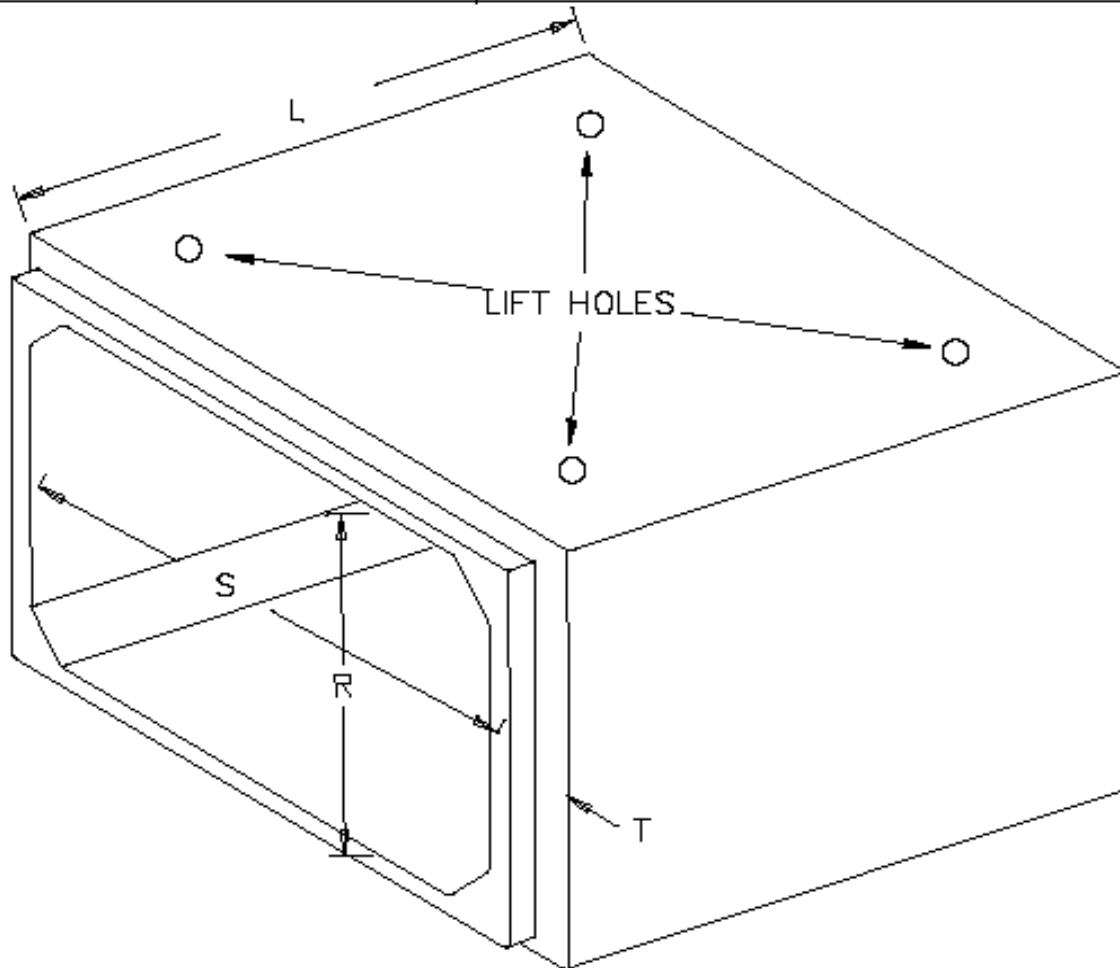
RC-10



# PRECAST CONCRETE BOX CULVERTS



Phone (504) 835-4444  
 Fax (504) 305-4317  
 P.O. Box 308 Edinger  
 New Orleans, LA 70110



NOMINAL SIZE (SOFT METRIC CONVERSION)

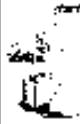
SPAN m m	RISE m m	W ALL THICKNESS m m	LAID LENGTH m
S	R	T	L
1800 (6')	1200 (4')	178	2
1200 (4')	1800 (6')	178	2
1800 (6')	2400 (8')	203	1.73
2400 (8')	1800 (6')	203	1.73

Concrete Box Culverts are Manufactured to ASTM Standards  
 C-789 For "Fill Heights" Greater Than 0.6M  
 C-850 For A "Fill Height" Less Than 0.6M

RC-11



# Outlet Headwall & Grate Detail

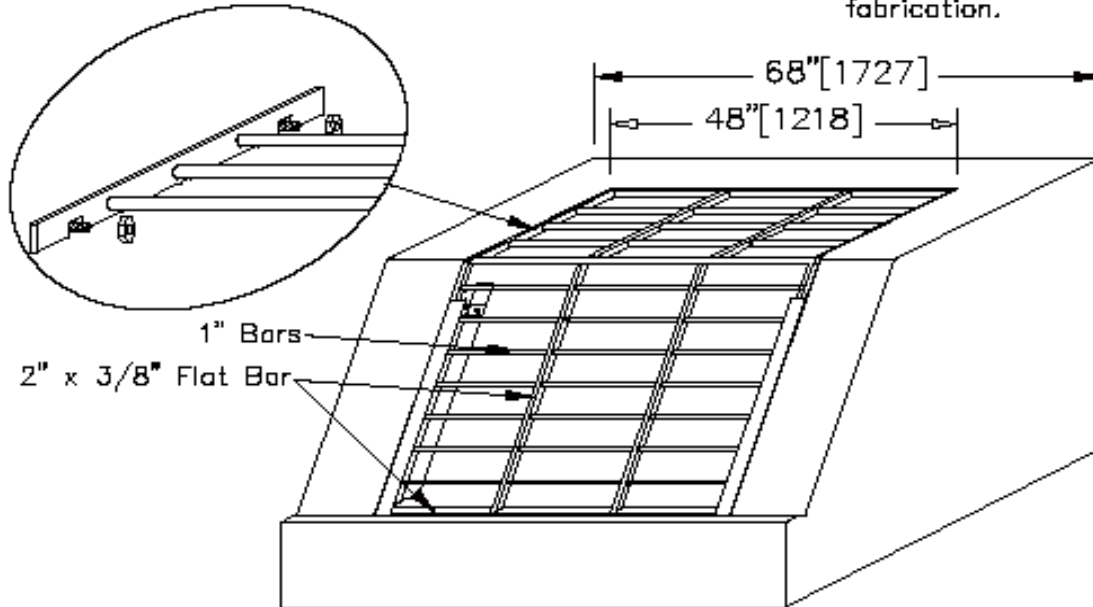


**VJRICE**  
CONCRETE LIMITED  
Specialist in concrete products

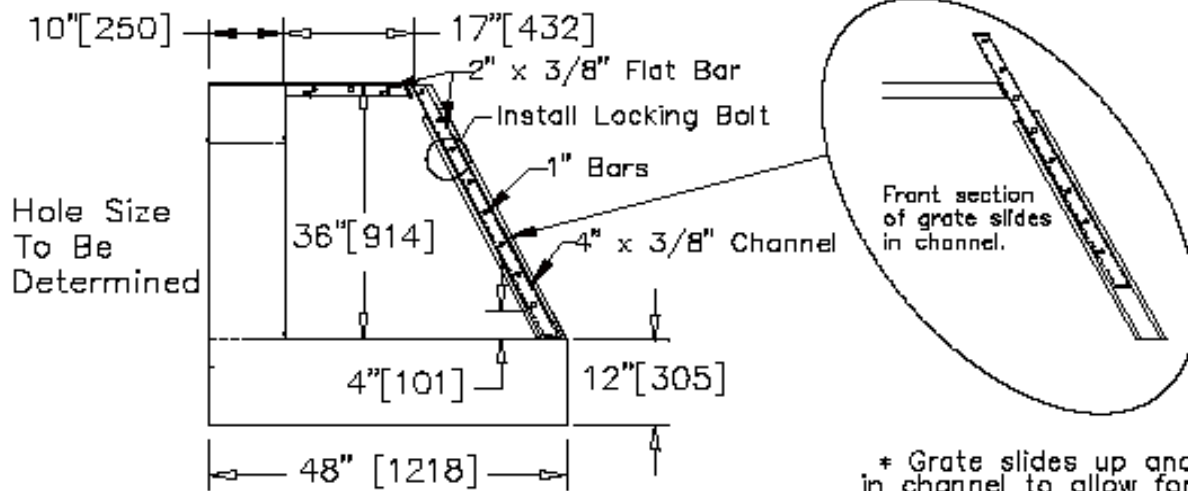
Phone (902) 635-4444  
Fax (902) 666-4017  
- 404 38th Highway  
New South, B3E 1C0

Headwall has 10" [250mm] concrete walls  
c/w 5/8" [15mm] rebar 12" [300mm] each  
way, 4000 PSI (28mpa) concrete to be used.

Note: For Grate Only,  
All fabricated steel to be  
hot dipped galvanized after  
fabrication.



## Side View (Cutaway)



\* Grate slides up and down  
in channel to allow for  
maintenance.

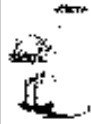
\* Grates may not be required for pipes 12"/300mm and smaller.

RC-12





# Inlet Headwall & Grate Detail



**VJRICE**

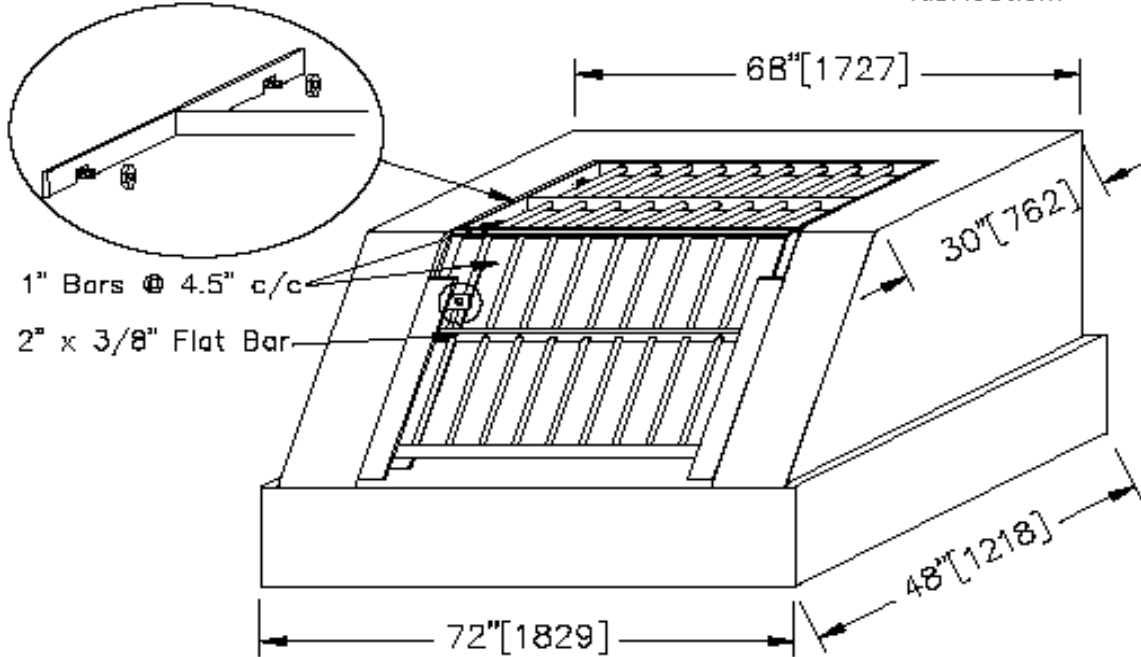
CONCRETE - 112 - 11  
Specialist in concrete products

Phone (902) 666-4444  
Fax (902) 666-0117

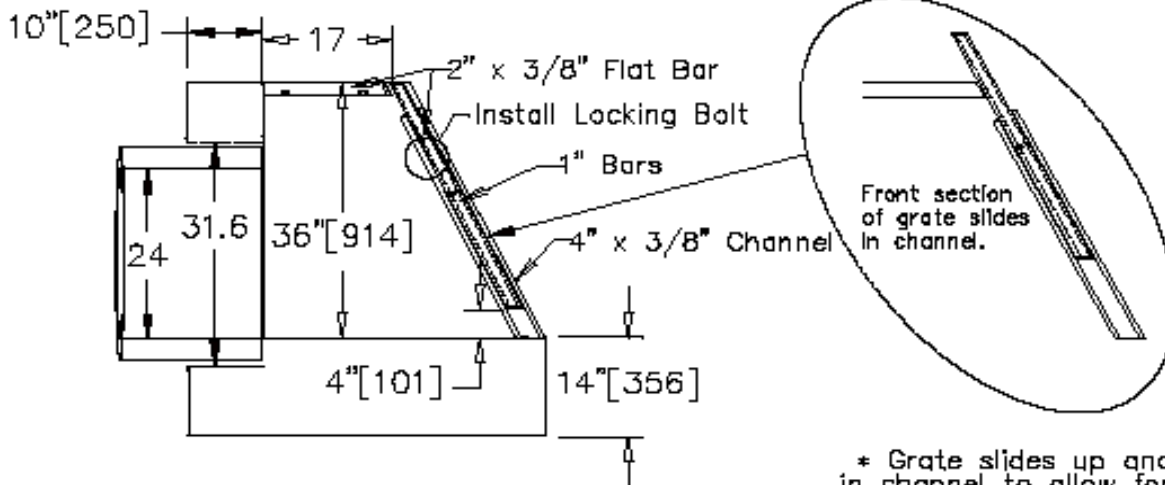
P.O. Box 288 Bridgetown  
Nova Scotia B0S 1G2

Headwall has 10" [250mm] concrete walls  
c/w 5/8" [15mm] rebar 12" [300mm] each  
way, 4000 PSI (28mpa) concrete to be used.

Note: For Grate Only;  
All fabricated steel to be  
hot dipped galvanized after  
fabrication.



## Side View (Cutaway)



\* Grate slides up and down  
in channel to allow for  
maintenance.

\* Grates may not be required for pipes 12"/300mm and smaller.

RC-12a

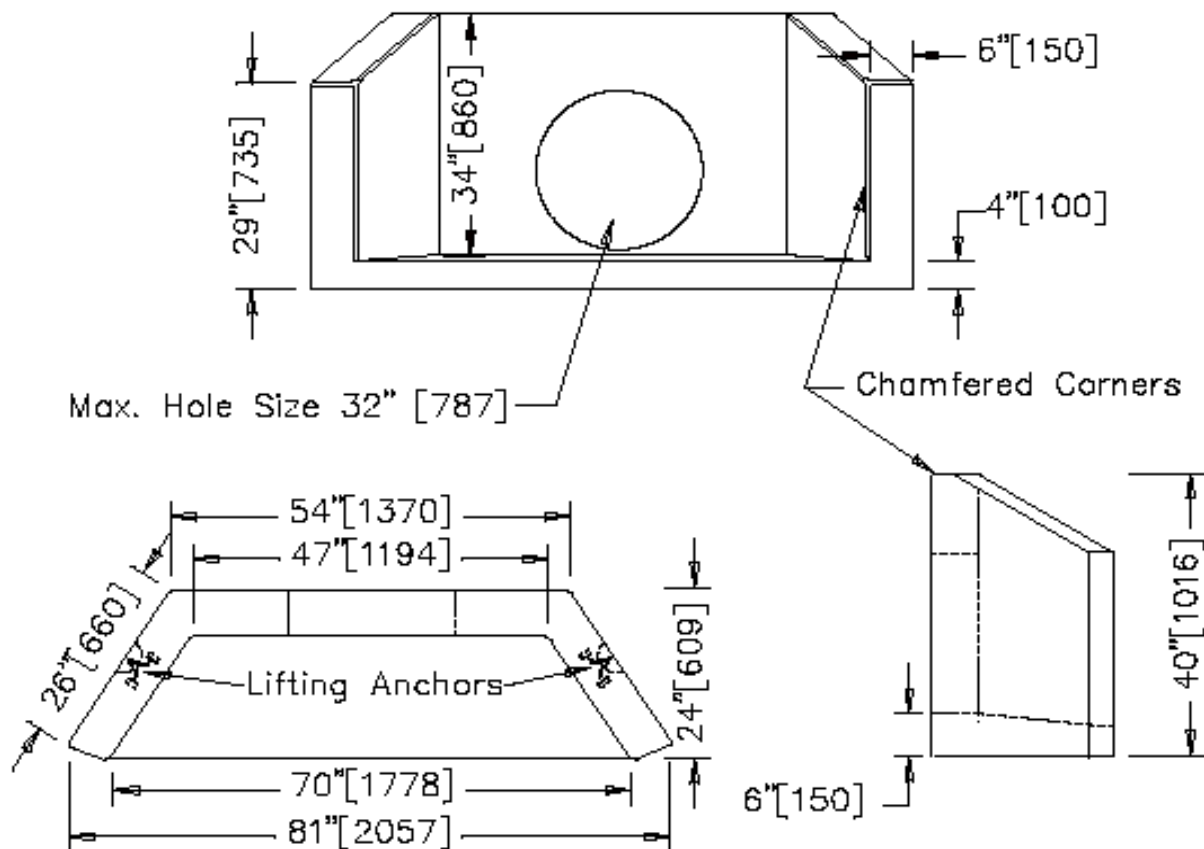


# Driveway Culvert Headwall



Phone (902) 485-4444  
 Fax (902) 952-4017  
 P.O. Box 359, Miramichi  
 New Brunswick E0B 1C0

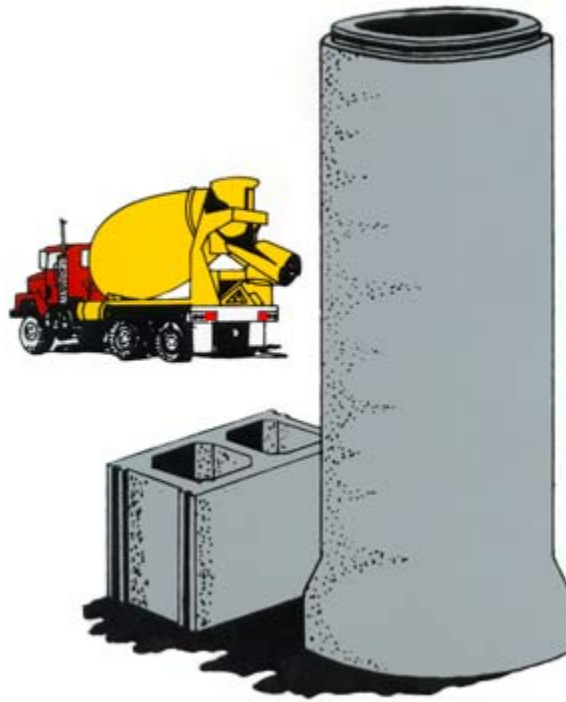
This product is designed to enhance your driveway, giving you an attractive, durable and stable system. Our unique lifting anchors allow for easy installation. Designed to be used for either existing or new driveways. Many different hole sizes in stock.



**NOTE:** Driveway headwalls should be installed so that the top of the headwall is flush with the driveway surface. Special hole location and size can be made to order. For further installation instructions, contact your local Department of Transportation and Public Works representative.

RC-13





# **V J Rice Concrete Limited**

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