

Culvert & Bridge Rehabilitation by Reline Method

(From small pipe to large bridges)

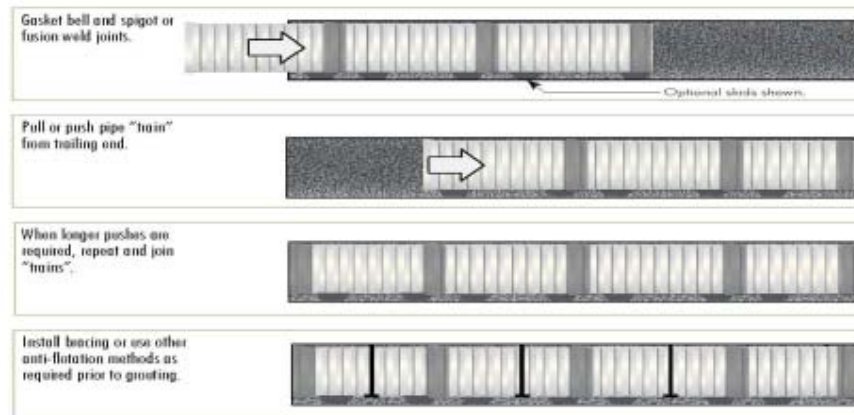


- Limited traffic disruptions and detours
- Minimal permitting
- Significantly shorter project time
- Historic preservation
- Reduced costs of 30%-50% in most cases
- No special equipment required



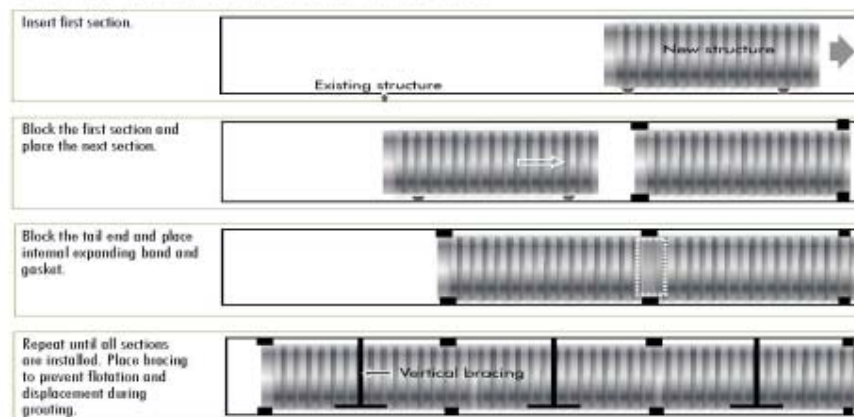
Segmental Sliplining Process for Plastic Pipe

These include DuroMaxx and A2 Liner Products. Consult your local Contech representative for more detail.



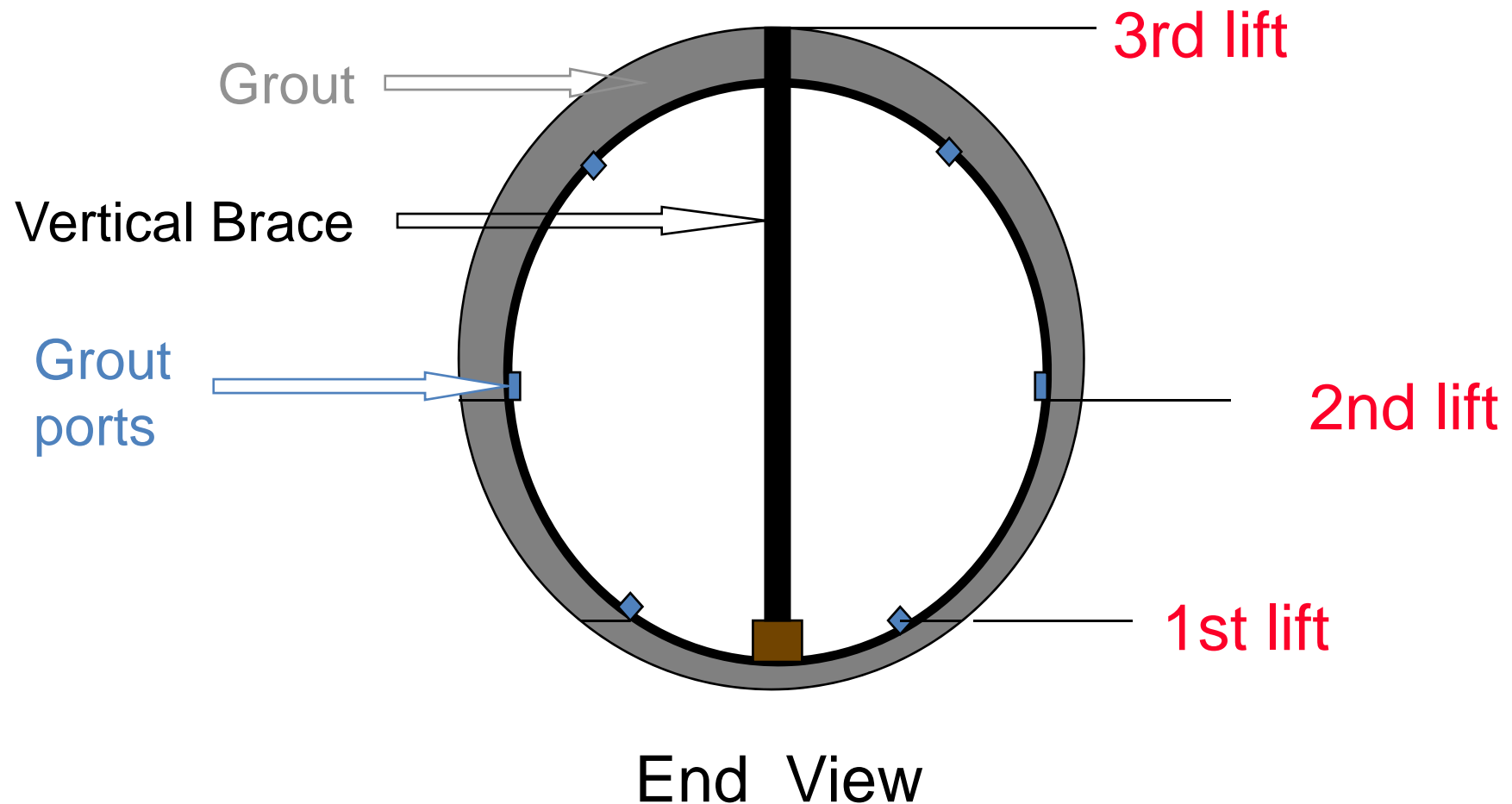
Segmental Sliplining Process for CMP

Consult your local Contech representative for more detail.



Rehabilitating Aging Structures

Grout in Stages



12" – 60"



Solid Wall HDPE Pipe



10" – 63"

Corrugated Metal Pipe



- Galvanized
- Aluminized (ALT2)
- Aluminum
- Polymeric Coated
- Double Wall Poly
- Ultra Flo



Aluminized Spiral Rib



Polymeric Double Wall

18" – 132" Round & Pipe Arch



103" x 71" Pipe Arch





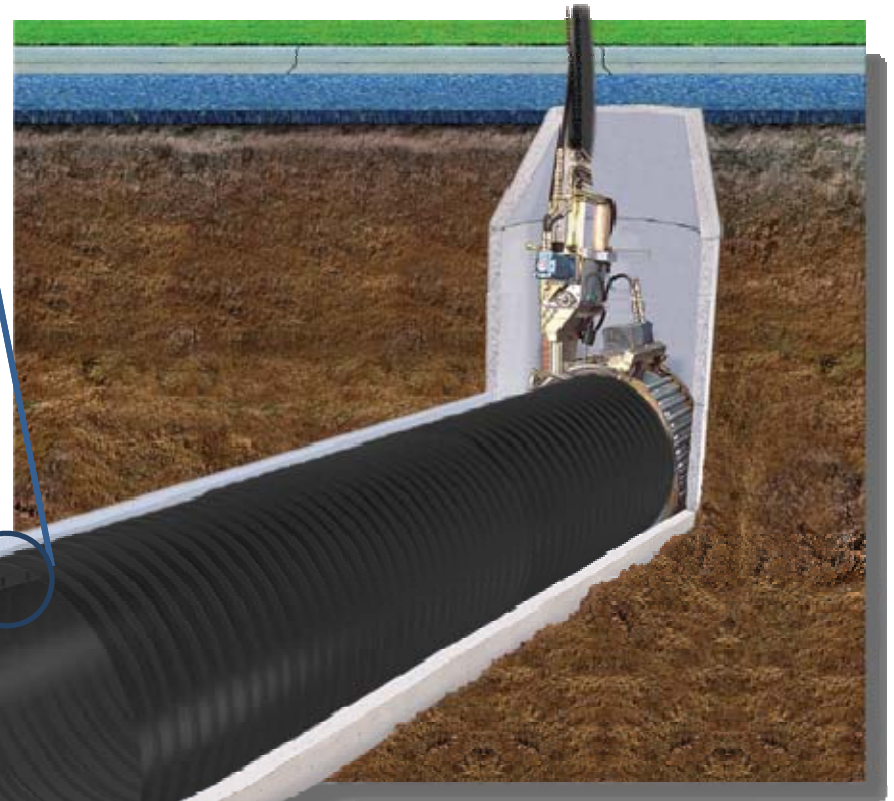
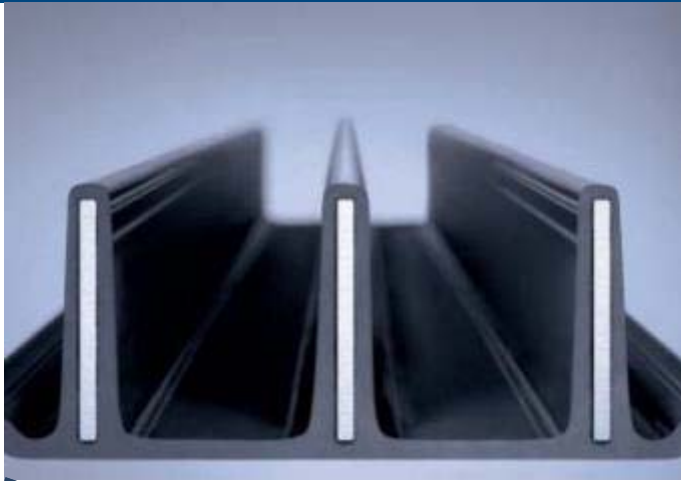
Steel Reinforced PE Pipe

30" – 120"





SPR™ PE & PVC



6" – 120"



U.S. A.C.E. Sioux Falls, SD



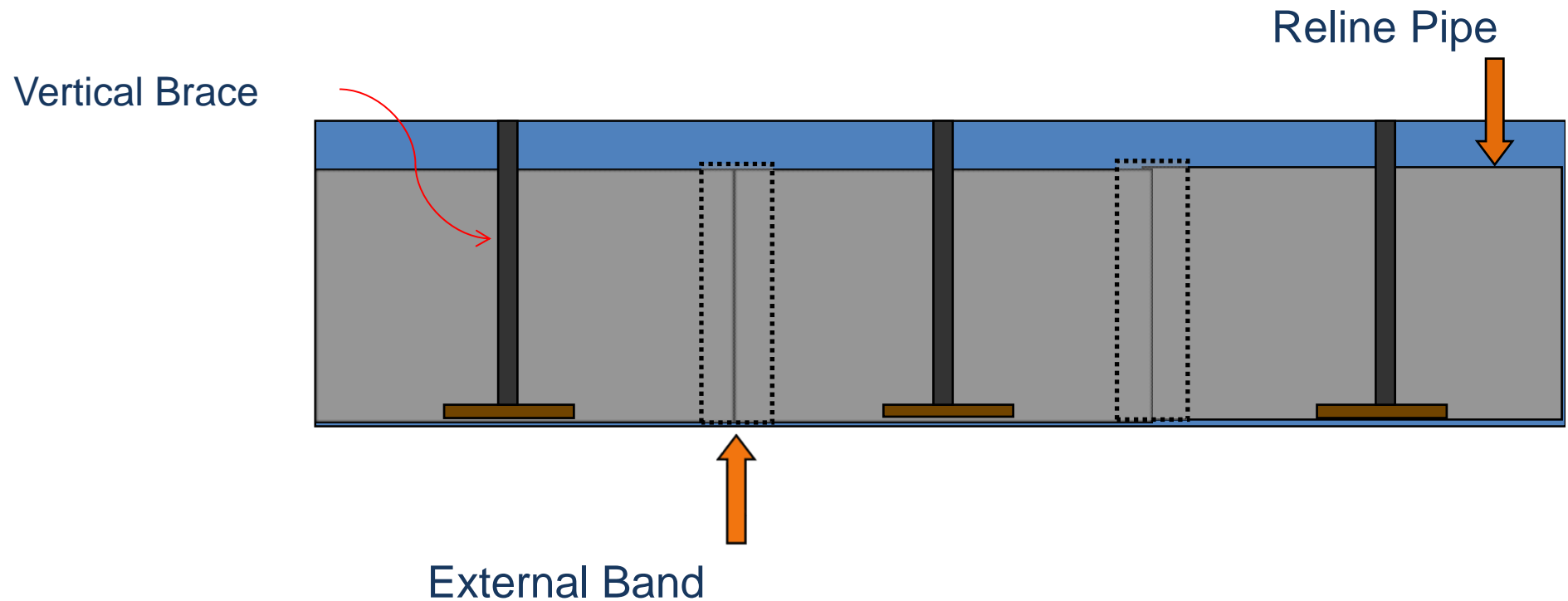
Flotation Prevention

filling bottom of pipe with water



Large Pipes

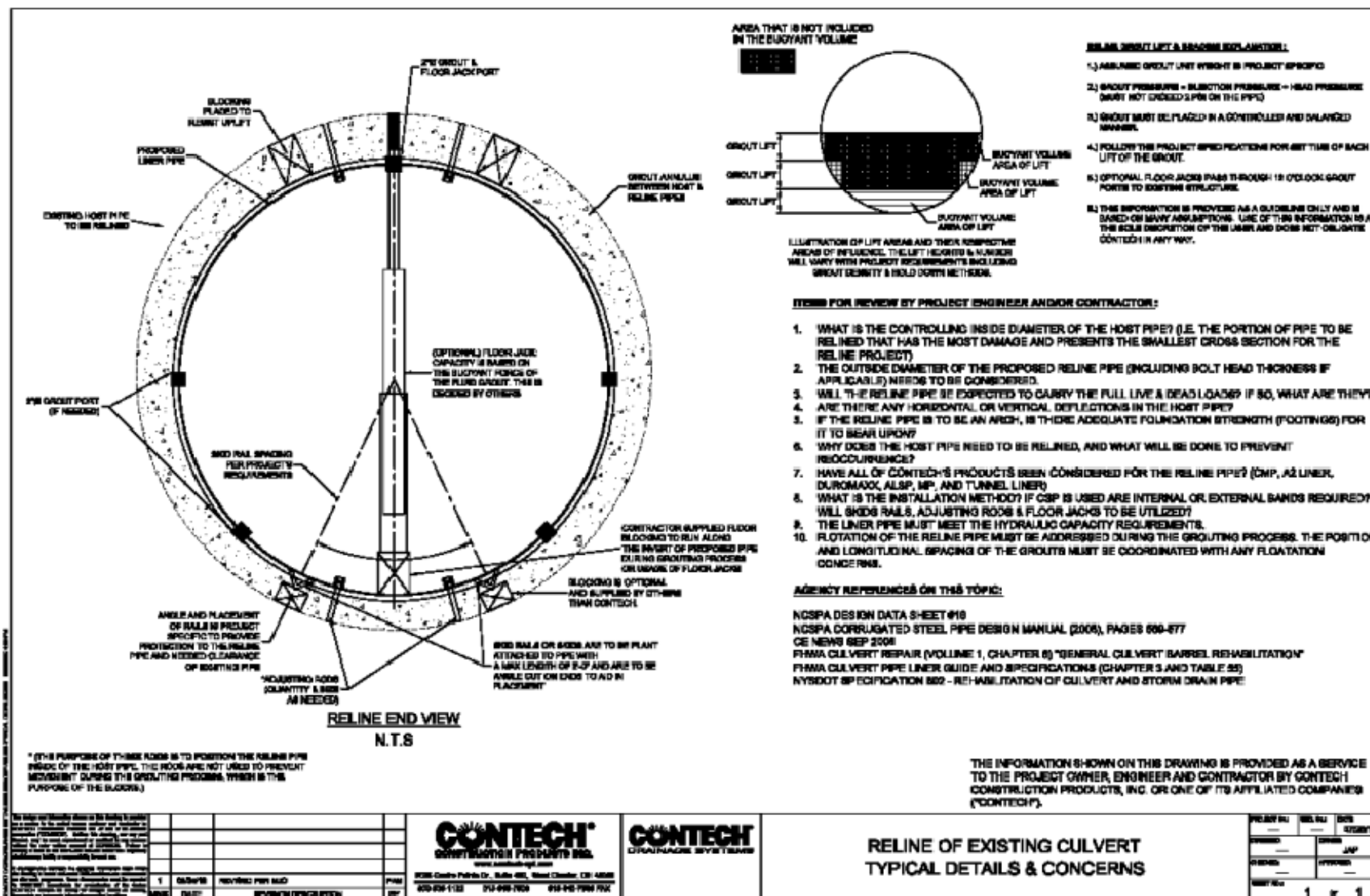
Bracing to Prevent Floatation



Profile View













Bridge Reline Overview

Plate, Precast & Truss

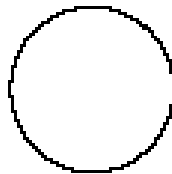


Structural Plate Shapes

Shapes

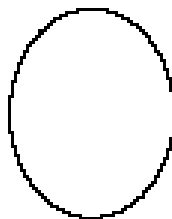
Sizes — Span x Rise

Round



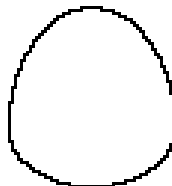
5' to 26'

Vertical Ellipse



4'8" x 5'2"
to
25' x 27'7"

Underpass



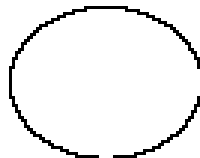
12'2" x 11'0"
to
20'4" x 17'9"

Pipe-Arch



6'1" x 4'7"
to
20'7" x 13'2"

Horizontal Ellipse



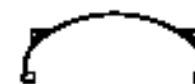
7'4" x 5'6"
to
14'11" x 11'2"

Arch
(single radius)



5' x 1'9"
to
25' x 12'6"

Low-Profile
Arch *



20'1" x 7'6"
to
45'0" x 18'8"

High-Profile
Arch *



20'1" x 9'1"
to
35'4" x 20'0"

Pear-Arch



23'-11" x 23'-4"
to
30'-4" x 25'-10"

Pear



23'-8" x 25'-5"
to
29'-11" x 31'-3"

Horizontal
Ellipse



19'4" x 12'9"
to
37'2" x 22'2"

Box Culvert



8'9" x 2'6"
to
35'-3" x 13'-7"

Aluminum Box Culvert





Eliminate Road Closure/Reduce Costs

33' span Horizontal Ellipse



No Bridge Deck

No deck freezing in winter, no deck maintenance, & wider shoulder for safe traffic flow



Aluminized, Galv. Steel & Aluminum



Tunnel Liner Plate







Existing Historic Stone Arch



1.



Assemble and Slip line

2.



3.





Structural Check HS-25 Live Load

Saved
\$ 1.74 million !!



Reline Stone Arch Bridge



- Maintain one lane
- Cost Effective
- Constructible





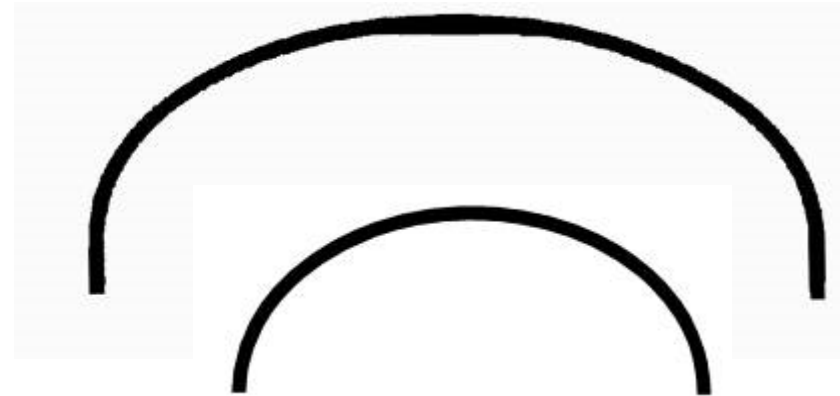






Precast Concrete Arches









Precast Concrete Arches



Precast Concrete Arches



Precast Concrete Arches





Precast Concrete Arches









Recommendations:

Leave the sliplining & grout techniques up to the Contractor.

