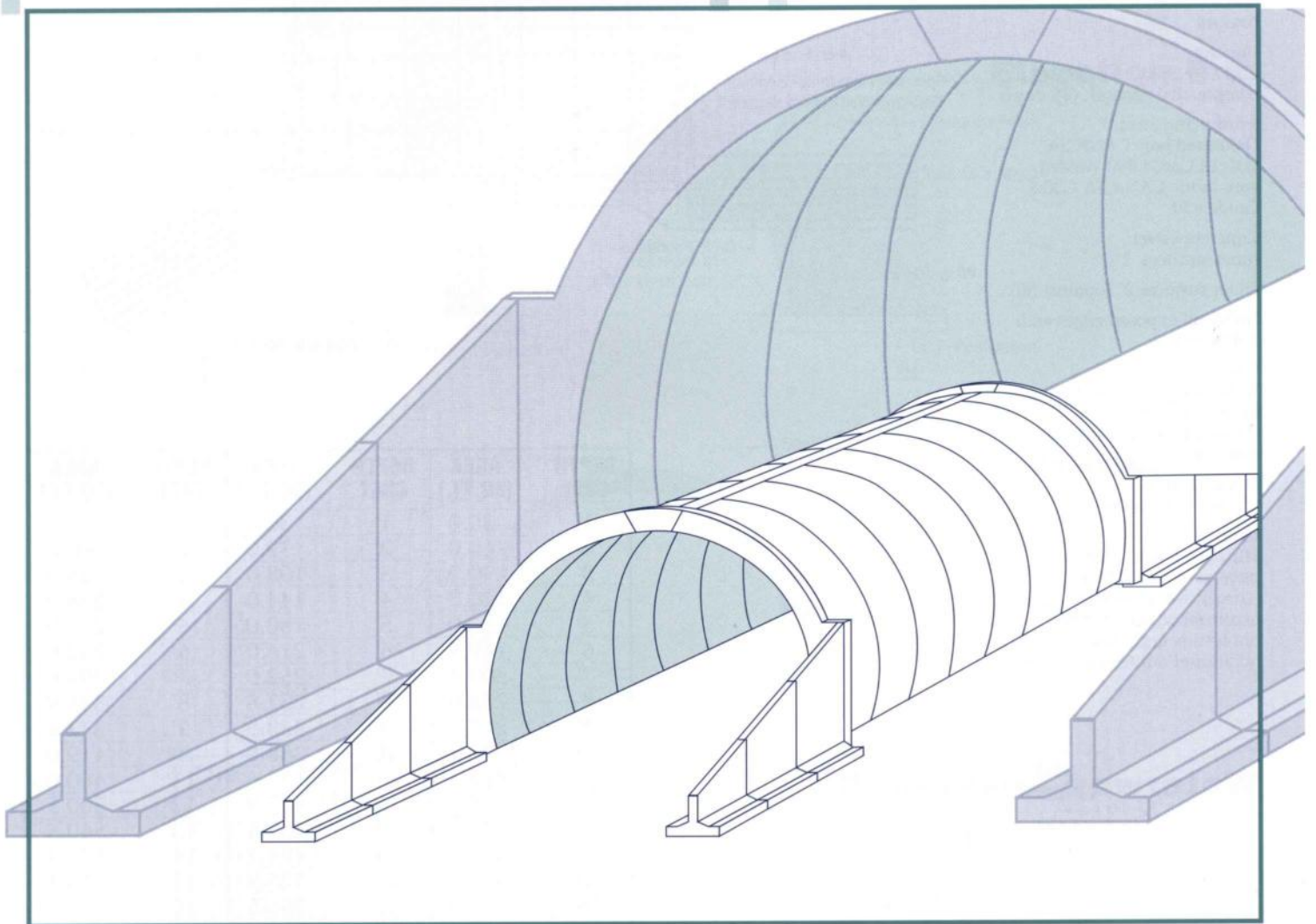


TYPE C30T, C36T, C42T

TYPE C30T, C36T, C42T

BEBO ARCH SYSTEM

... The Economical Solution



SHAW
PIPE

TYPE C30T, C36T, C42T

BEBO

ARCH SYSTEM

Standard Layout

Plan View

General Notes:

Design Standards:
 CSA CANS-A23.3 "Design of Concrete Structures"
 CAN/CSA-S6 "Design of Highway Bridges"
 AASHTO "Standard Specifications for Highway Bridges"

Concrete:
 CSA CANS-A23.1 5,000 psi compressive strength (28 days)

Reinforcing Steel:
 Deformed bars CAN/CSA G30.12 Grade 400 Welded wire fabric CAN/CSA G30.5 Grade 450

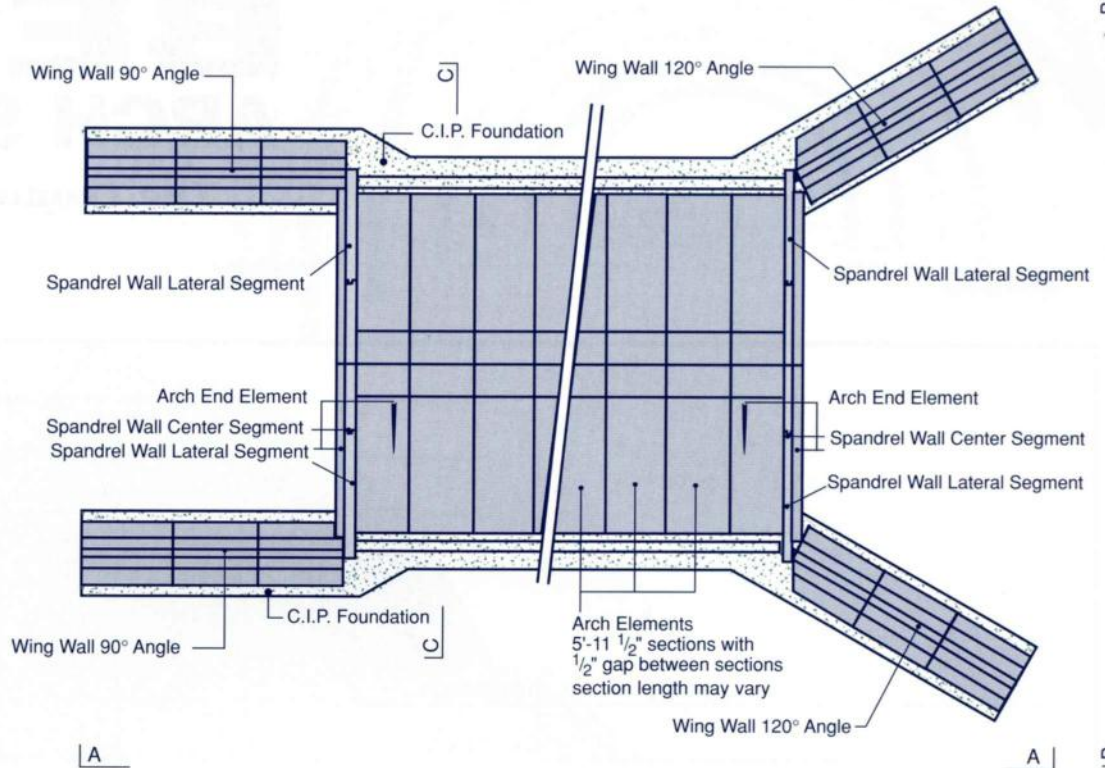
Concrete Cover:
 Inner surfaces 1 1/2"
 Outer surfaces 2" (against fill)

Finish all exposed edges with 3/4" bevel

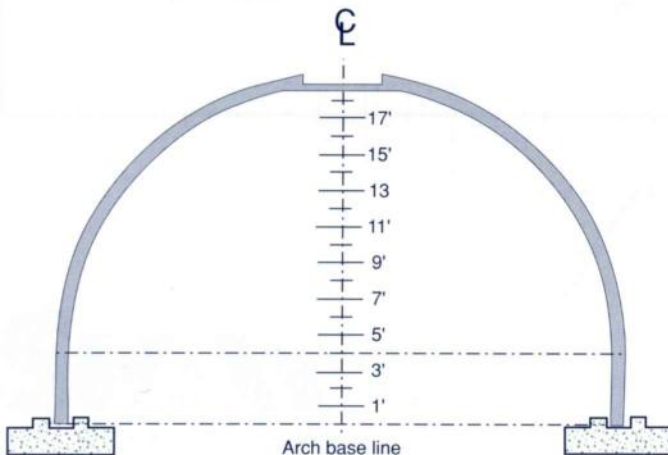
Foundation:
 To be designed according to local conditions
 (Precast footing options also available.)

Design Loads:
 CS-600 Truckload

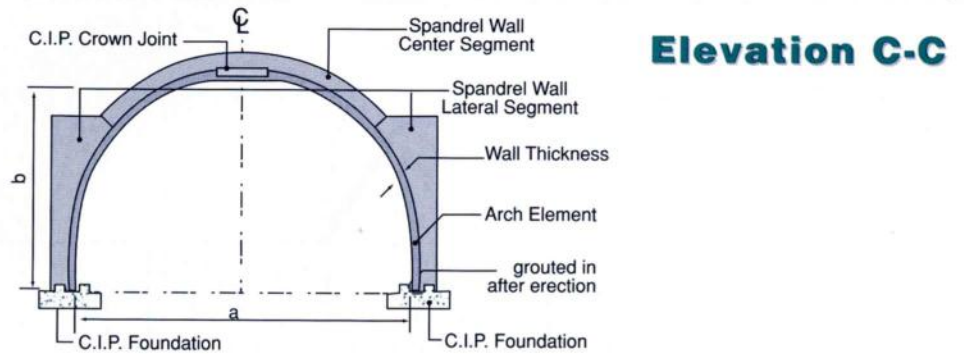
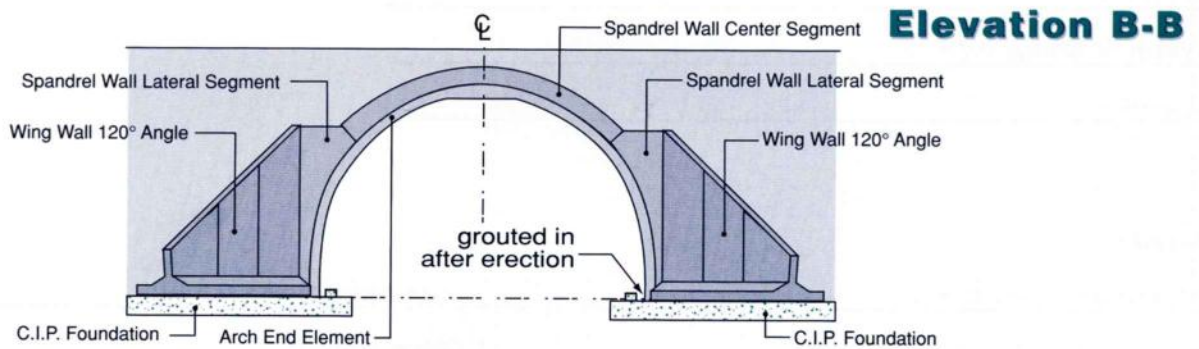
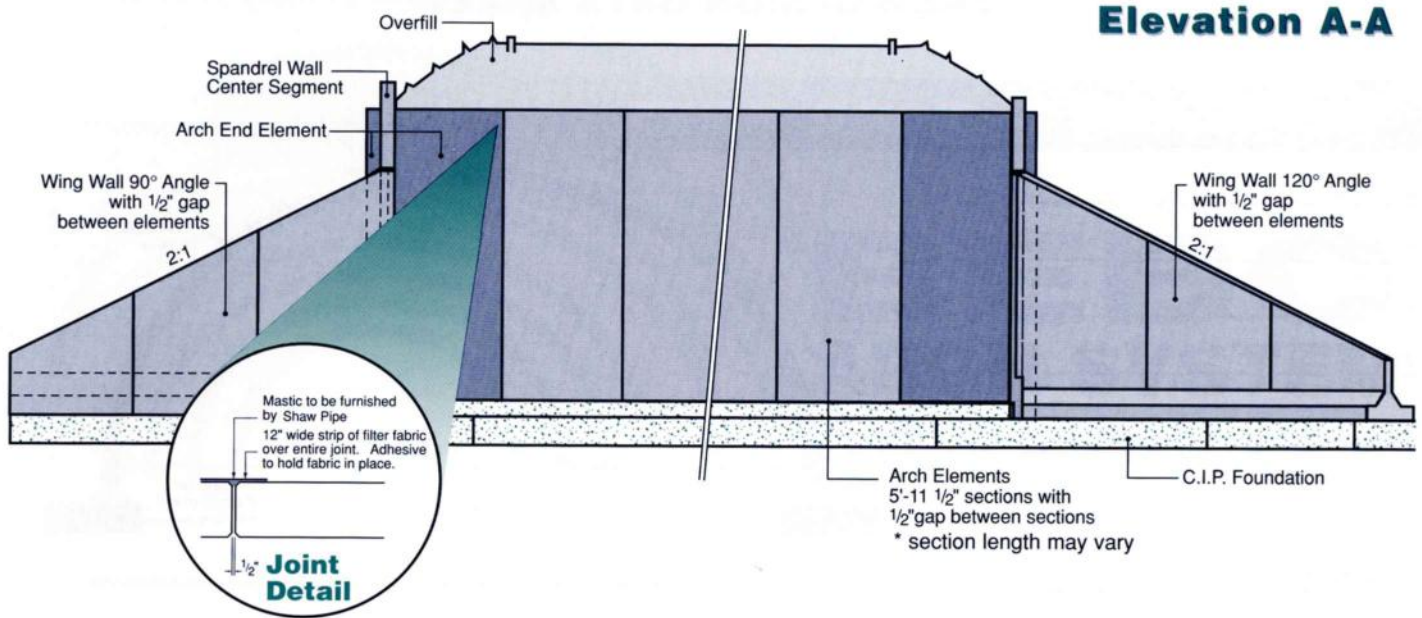
Earth Cover:
 Min. 1 1/2 ft (including pavement) Max. 15 ft
 (Larger overfill heights can be accommodated if further analysis is undertaken and additional reinforcement used)



Waterway Area (sq. ft.)



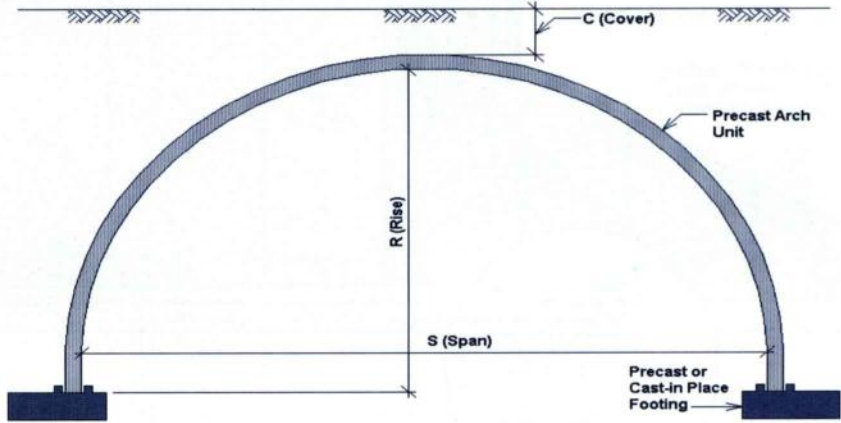
| DEPTH C30T | AREA (SQ.FT.) | DEPTH C36T | AREA (SQ.FT.) | DEPTH C42T | AREA (SQ.FT.) |
|---------------|------------------|---------------|------------------|---------------|------------------|
| 1' | 30.0 | 1' | 36.0 | 1' | 42.0 |
| 2' | 60.0 | 2' | 72.0 | 2' | 84.0 |
| 3' | 90.0 | 3' | 108.0 | 3' | 126.0 |
| 4' | 120.0 | 4' | 144.0 | 4' | 168.0 |
| 5' | 150.0 | 5' | 180.0 | 5' | 210.0 |
| 6' | 179.8 | 6' | 216.0 | 6' | 252.0 |
| 7' | 209.4 | 7' | 252.0 | 7' | 294.0 |
| 8' | 238.6 | 8' | 287.8 | 8' | 335.9 |
| 9' | 267.2 | 9' | 323.5 | 9' | 377.6 |
| 10' | 295.1 | 10' | 358.8 | 10' | 419.0 |
| 11' | 322.1 | 11' | 393.6 | 11' | 460.0 |
| 12' | 348.1 | 12' | 427.9 | 12' | 500.5 |
| 13' | 372.8 | 13' | 461.4 | 13' | 540.5 |
| 14' | 396.0 | 14' | 494.2 | 14' | 579.7 |
| 15' | 417.4 | 15' | 525.9 | 15' | 618.1 |
| 16' | 436.6 | 16' | 556.5 | 16' | 655.5 |
| 17' | 453.2 | 17' | 585.7 | 17' | 691.9 |
| 18' | 466.2 | 18' | 613.4 | 18' | 727.0 |
| 18'6" | 470.8 | 19' | 639.3 | 19' | 760.8 |
| | | 20' | 663.1 | 20' | 792.9 |
| | | 21' | 684.4 | 21' | 823.3 |
| | | 22' | 702.7 | 22' | 851.6 |
| | | 23' | 717.0 | 23' | 877.6 |
| | | 23'6" | 722.1 | 24' | 900.8 |
| | | | | 25' | 920.6 |
| | | | | 26' | 936.1 |
| | | | | 26'6" | 941.6 |



| TYPE | A-SPAN (FT.) | B-RISE (FT.) | WEIGHT (LBS.) | WALL THICKNESS | TYPE | A-SPAN (FT.) | B-RISE (FT.) | WEIGHT (LBS.) | WALL THICKNESS |
|--------|--------------|--------------|---------------|----------------|--------|--------------|--------------|---------------|----------------|
| C30T/0 | 29'4 23/32" | 11'6" | 14870 | 10" | C36T/6 | 36' | 20'6" | 25190 | 11" |
| C30T/1 | 29'8 25/32" | 12'6" | 15640 | 10" | C36T/7 | 36' | 21'6" | 26010 | 11" |
| C30T/2 | 29'11 3/16" | 13'6" | 16410 | 10" | C36T/8 | 36' | 22'6" | 26830 | 11" |
| C30T/3 | 30' | 14'6" | 17180 | 10" | C36T/9 | 36' | 23'6" | 27650 | 11" |
| C30T/4 | 30' | 15'6" | 17920 | 10" | | | | | |
| C30T/5 | 30' | 16'6" | 18660 | 10" | C42T/0 | 41'6 27/32" | 17'6" | 26260 | 1' |
| C30T/6 | 30' | 17'6" | 19410 | 10" | C42T/1 | 41'9 23/32" | 18'6" | 27180 | 1' |
| C30T/7 | 30' | 18'6" | 2015 | 10" | C42T/2 | 41'11 7/16" | 19'6" | 28090 | 1' |
| | | | | | C42T/3 | 42' | 20'6" | 29010 | 1' |
| C36T/0 | 35'5 31/32" | 14'6" | 20210 | 11" | C42T/4 | 42' | 21'6" | 29900 | 1' |
| C36T/1 | 35'9 5/16" | 15'6" | 21060 | 11" | C42T/5 | 42' | 22'6" | 30790 | 1' |
| C36T/2 | 35'11 3/8" | 16'6" | 21900 | 11" | C42T/6 | 42' | 23'6" | 31680 | 1' |
| C36T/3 | 36' | 17'6" | 22740 | 11" | C42T/7 | 42' | 24'6" | 32580 | 1' |
| C36T/4 | 36' | 18'6" | 23560 | 11" | C42T/8 | 42' | 25'6" | 33470 | 1' |
| C36T/5 | 36' | 19'6" | 24370 | 11" | C42T/9 | 42' | 26'6" | 34360 | 1' |

ARCH DESIGN DATA SHEET

Project Title: _____
 Location: _____
 Contact: _____
 Phone: _____
 Fax: _____



Geometry

Span (S): _____
 Width of Bridge (W): _____
 Rise (R): _____

Loads

Minimum Cover (C^{min}): _____ Maximum Cover (C^{max}): _____
 Specified Live Load: _____ Other Loads: _____
 Allowable Bearing Pressure: _____ Backfill Density: _____

