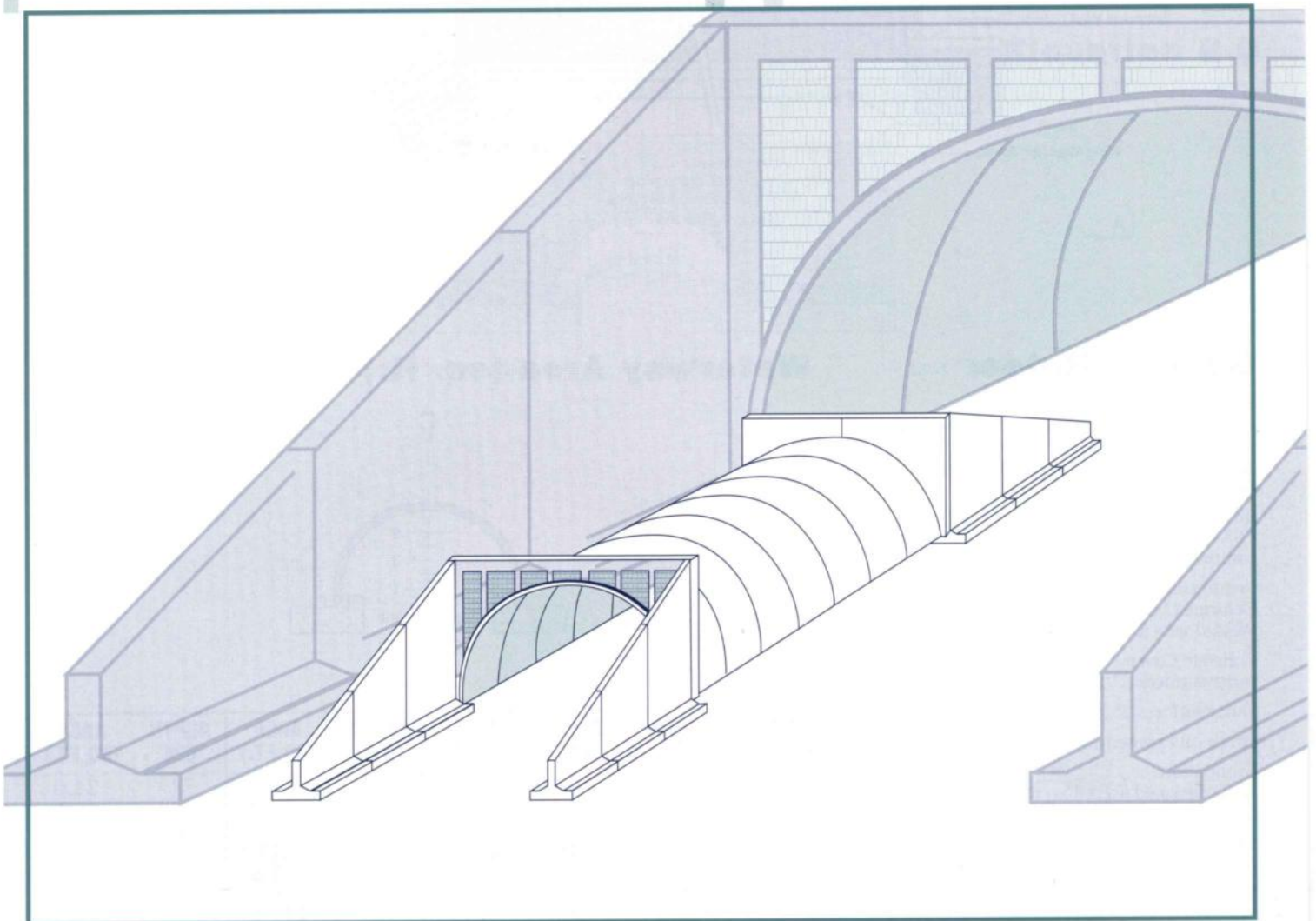


TYPE E12, E16, E20, E24

TYPE E12, E16, E20, E24

BEBO ARCH SYSTEM

... The Economical Solution



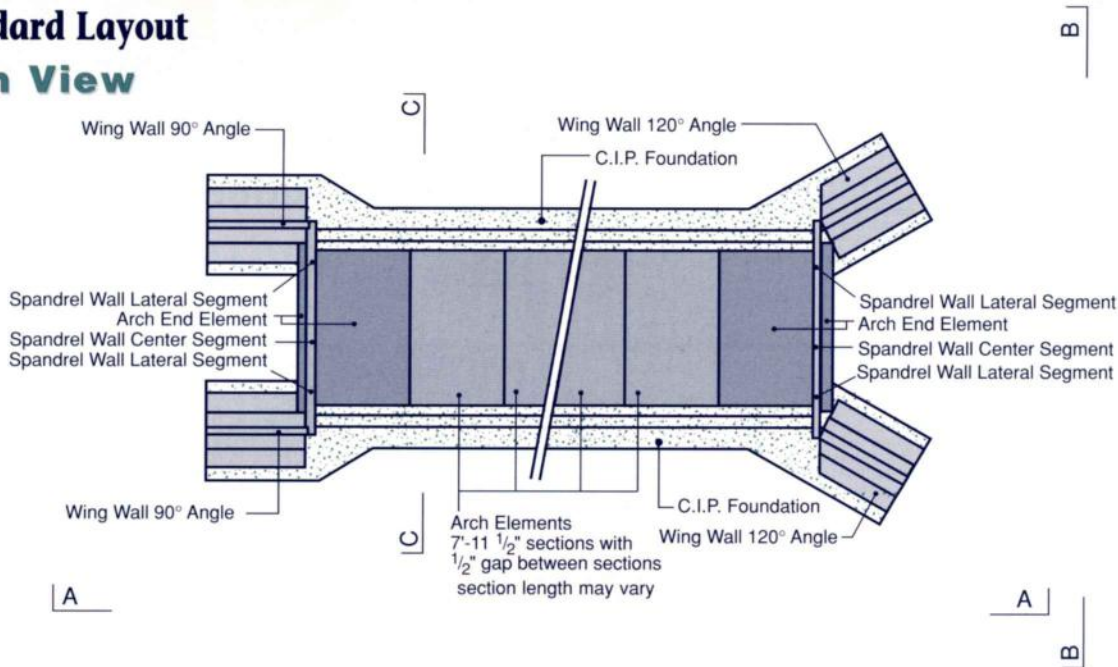
SHAW
PIPE

TYPE E12, E16, E20, E24

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 CAN3-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)

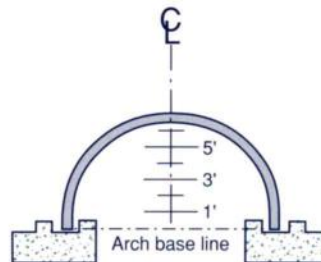
Finish all exposed edges with 3/4" bevel

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

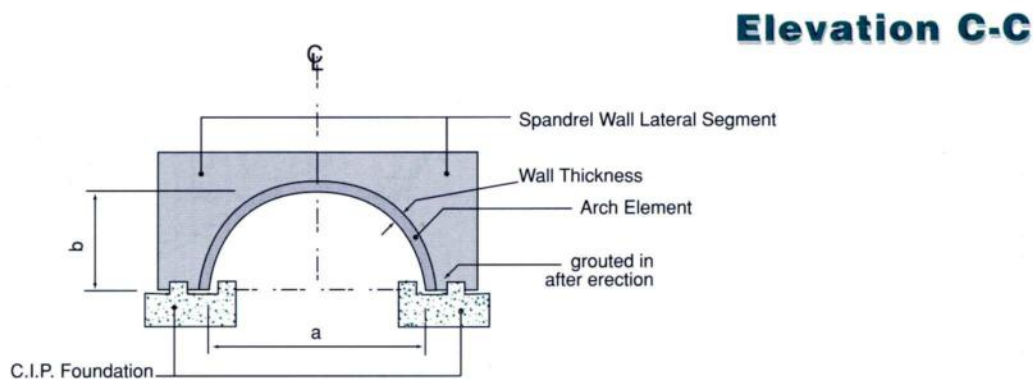
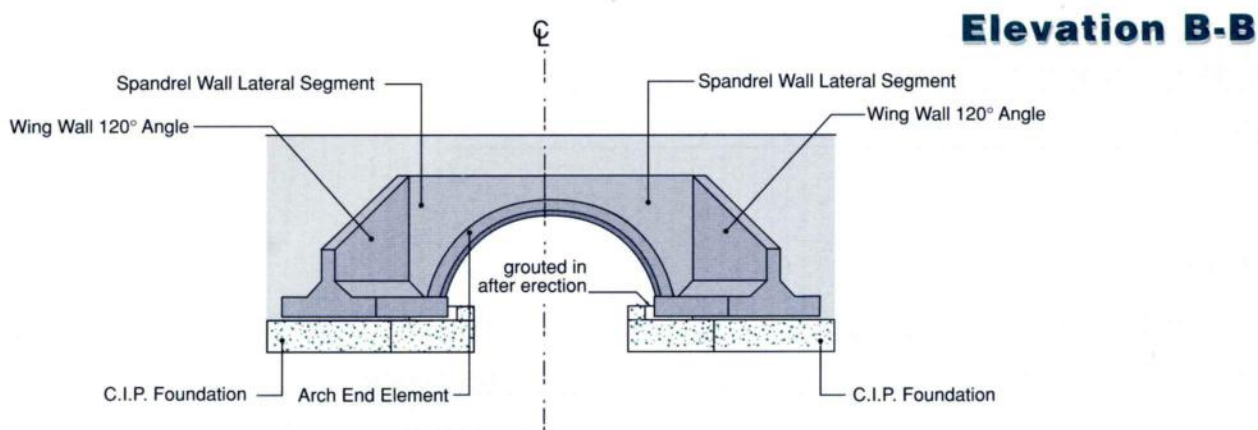
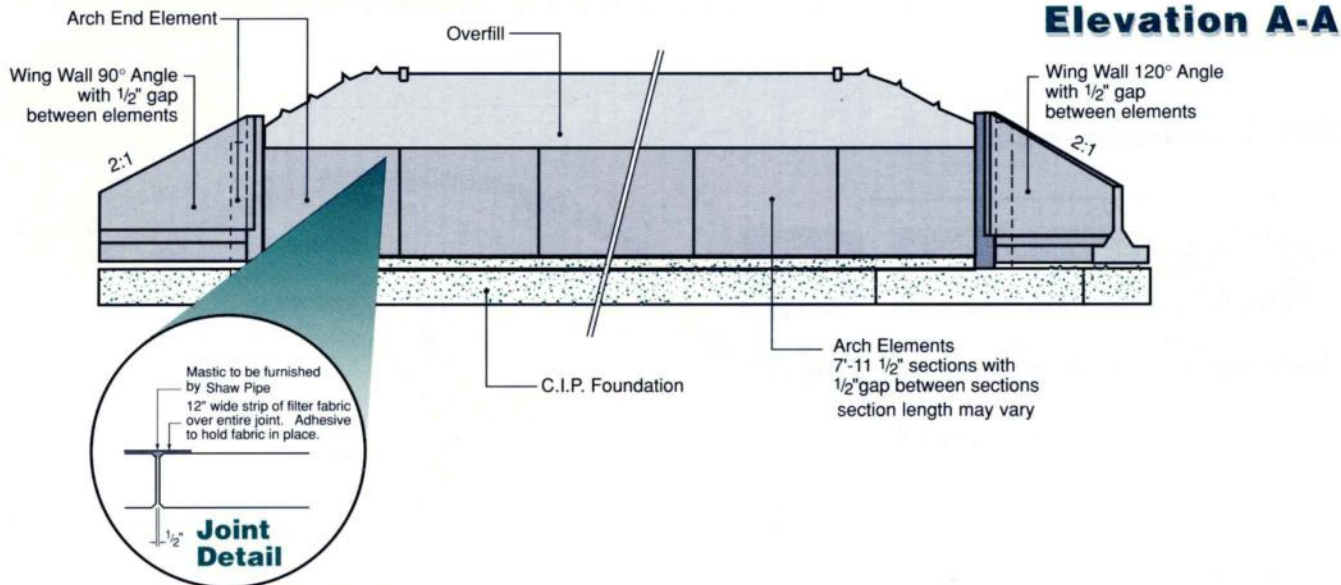
Design Loads:
 CS-600 Truckload

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.)



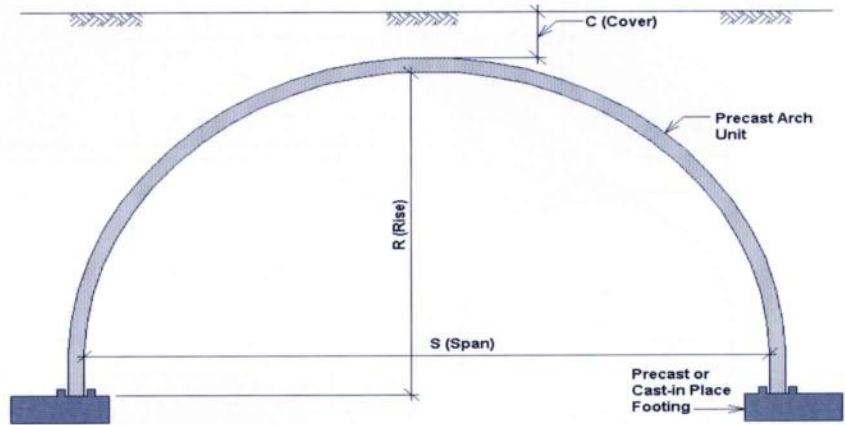
DEPTH E12	AREA (SQ.FT.)	DEPTH E16	AREA (SQ.FT.)	DEPTH E20	AREA (SQ.FT.)	DEPTH E24	AREA (SQ.FT.)
1'	12.0	1'	16.0	1'	20.0	1'	24.0
2'	23.9	2'	31.9	2'	39.9	2'	48.0
3'	35.5	3'	47.5	3'	59.6	3'	71.9
4'	46.1	4'	62.4	4'	78.6	4'	95.6
5'	55.3	5'	76.1	5'	96.7	5'	118.8
6'	62.2	6'	88.1	6'	113.3	6'	141.1
6'6"	63.8	7'	97.6	7'	128.1	7'	162.2
		7'10"	101.9	8'	140.1	8'	181.7
				9'	147.8	9'	199.2
				9'2"	148.3	10'	213.9
						11'	224.5
						11'6"	227.1



TYPE	A-SPAN (FT.)	B-RISE (FT.)	WEIGHT (LBS.)	WALL THICKNESS	TYPE	A-SPAN (FT.)	B-RISE (FT.)	WEIGHT (LBS.)	WALL THICKNESS
E12/0	11'2 5/32"	3'6"	11710	8"	E20/0	18'7 7/32"	5'2"	18390	8"
E12/1	11'9 19/32"	4'6"	13490	8"	E20/1	19'4 11/16"	6'2"	20180	8"
E12/2	12'	5'6"	15190	8"	E20/2	19'10" 3/16"	7'2"	21890	8"
E12/3	12'	6'6"	16780	8"	E20/3	20'	8'2"	23570	8"
E16/0	14'4 1/2"	3'10"	14100	8"	E20/4	20'	9'2"	25150	8"
E16/1	15'3 19/32"	4'10"	15950	8"	E24/0	22'9 1/4"	6'6"	22650	8"
E16/2	15'9 15/16"	5'10"	17690	8"	E24/1	23'5 17/32"	7'6"	24400	8"
E16/3	16'	6'10"	19380	8"	E24/2	23'10" 13/32"	8'6"	26090	8"
E16/4	16'	7'10"	20960	8"	E24/3	24'	9'6"	27760	8"
					E24/4	24'	10'6"	29350	8"
					E24/5	24'	11'6"	30940	8"

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: _____

