



Table 1
Construction Cost Estimates Summary

Major Basin	Basin 5		
Alternative	Conveyance	Detention	Local
Item	Total Cost (\$)	Total Cost (\$)	Total Cost (\$)
Channels	419,654	531,147	163,700
Culverts	942,750	1,501,600	13,524,300
Drop Structures	94,400	155,600	-
Detention Facilities	-	-	-
Bridges	-	-	-
Leaves	-	-	-
Sub-Total (Rounded)	\$1,457,000	\$2,188,000	\$13,688,000
30% Construction Contingency	\$437,100	\$656,400	\$4,106,400
15% Engineering Contingency	\$218,550	\$328,200	\$2,053,200
Total (Rounded)	\$2,113,000	\$3,173,000	\$19,848,000



Table 7-1-CH
Channel Cost Estimates
Major Basin 5 Alternative - Conveyance

Channel and Reach	Existing 100-yr Flow (cfs)	Proposed 100-yr Flow (cfs)	Design Flow (cfs)	Channel Length	Channel Type	Material	Excavation (CY)	Unit Cost (\$)	Total Cost (\$)
Diversion 504 Channel Capacity (DP 5-225 to Hannum)	641	636	800	4000	Flat Channel Design	Grass	31,111	83	333,118
Diversion 504 Channel Capacity (Hannum to Burlington Pond)	679	726	800	1300	Steep Channel Design	Grass	7,800	67	86,537

Sub-Total \$419,654

Table 7-2-CH
Channel Cost Estimates
Major Basin 5 Alternative - Detention

Channel and Reach	Existing 100-yr Flow (cfs)	Proposed 100-yr Flow (cfs)	Design Flow (cfs)	Channel Length	Channel Type	Material	Excavation (CY)	Unit Cost (\$)	Total Cost (\$)
Diversion 504 Channel Capacity (DP 5-225 to Hannum)	641	1704	1,700	4000	Flat Channel Design	Grass	55,111	98	391,491
Diversion 504 Channel Capacity (Hannum to Burlington Pond)	679	1704	1,700	1300	Steep Channel Design	Grass	13,397	107	139,656

Sub-Total \$531,147



**Table 7-1-CU
Culvert Cost Estimate
Major Basin 5 Alternative - Conveyance**

Design Point	Road Crossing	Channel and Reach	Existing Size	Future 100-yr Flow (cfs)	Necessary Facility for Future 100-year Flow	Number of Culverts	Culvert Length (ft) ¹	Unit Cost (\$)	End Section Unit Cost (\$)	Total Cost (\$)
5-247	Hannum Rd.	Lower Stone Pile Creek	CMP 2-5'	727	2- 10' x 5' CBC	2	90	850	40,000	193,000
5-236	I-90	Tributary 506	CMP 1 - 6'	351	8'x6' CBC	1	285	650	40,000	225,250
5-239	I-90	Tributary 505	CMP 1 - 6'	591	2 -9'x5' CBC	2	285	850	40,000	524,500
Sub-Total										\$942,750

**Table 7-2-CU
Culvert Cost Estimate
Major Basin 5 Alternative - Detention**

Facility Number	Road Crossing	Channel and Reach	Existing Size	Future 100-yr Flow (cfs)	Necessary Facility for Future 100-year Flow	Number of Culverts	Culvert Length (ft) ¹	Unit Cost (\$)	End Section Unit Cost (\$)	Total Cost (\$)
5-247	Hannum Rd.	Lower Stone Pile Creek	CMP 2-5'	1,704	Culvert Replacement w/ 4-9'x5'	4	100	850	40,000	380,000
5-243		Lower Stone Pile Creek	none	1,704	Culvert Replacement w/ 4-9'x5'	4	120	850	40,000	448,000
5-243		Lower Stone Pile Creek	none	300	Add 72" RCP	1	1980	320	40,000	673,600
Sub-Total										\$1,501,600

Table X
Drop Structure Cost Estimate
Major Basin 5 Alternative - Conveyance

Channel	Existing 100-yr Flow (cfs)	Proposed 100-yr Flow (cfs)	Design Flow (cfs)	Channel Length (ft)	Existing Slope	Proposed Slope	Elevation Change (ft)	No. of Drops	Unit Cost (\$)	Total Cost (\$)
Diversion 504 Channel Capacity (Hannum to Burlington Pond)	679	726	800	1,300	1.40%	0.20%	15.6	4	23,600	94,400

Sub-Total **\$94,400**
30% Construction Contingency **\$28,320**
15% Engineering Contingency **\$14,160**
Total **\$136,880**

Major Basin 5 Alternative - Detention

Channel	Existing 100-yr Flow (cfs)	Proposed 100-yr Flow (cfs)	Design Flow (cfs)	Channel Length (ft)	Existing Slope	Proposed Slope	Elevation Change (ft)	No. of Drops	Unit Cost (\$)	Total Cost (\$)
Diversion 504 Channel Capacity (Hannum to Burlington Pond)	679	1,700	1,700	1,300	1.40%	0.20%	15.6	4	38,900	155,600

Sub-Total **\$155,600**