

UPDATED DRAINAGE FEE STUDY

Nexus

The nexus between development in the Vineyard Springs Comprehensive Plan (VSCP) and the required drainage facilities (and therefore the cost of facilities and the drainage fees) was described in the July 2003 VSCP Drainage Fee Study. When the Board of Supervisors approved changing the scope of the drainage facilities in August 2004, the facilities changed (see attached figure) but the nexus remained with the required drainage facilities. Some park facilities have also been included in the nexus on the following basis:

Since federal and state permitting of the VSCP development essentially required staying out of the channel, a joint-use venture with Southgate Recreation and Park District (Southgate) was necessary. It is proposed that lands within the open space corridor will ultimately be a preserve, owned and managed by Southgate, with the County Department of Water Resources acquiring easements for operation and maintenance of the channels and detention basins in the corridor. These detention basins and the park trail (maintenance road) system are required to meet Water Resources Department drainage/stormwater quality standards, and the preserve is necessary for the environmental permit. Because of this, the supplemental fee can be used to supplement Southgate’s funding for trails (including wetlands mitigation and pedestrian bridges) which is insufficient to meet anticipated needs.

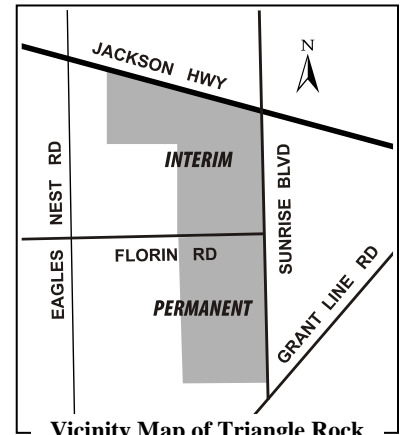
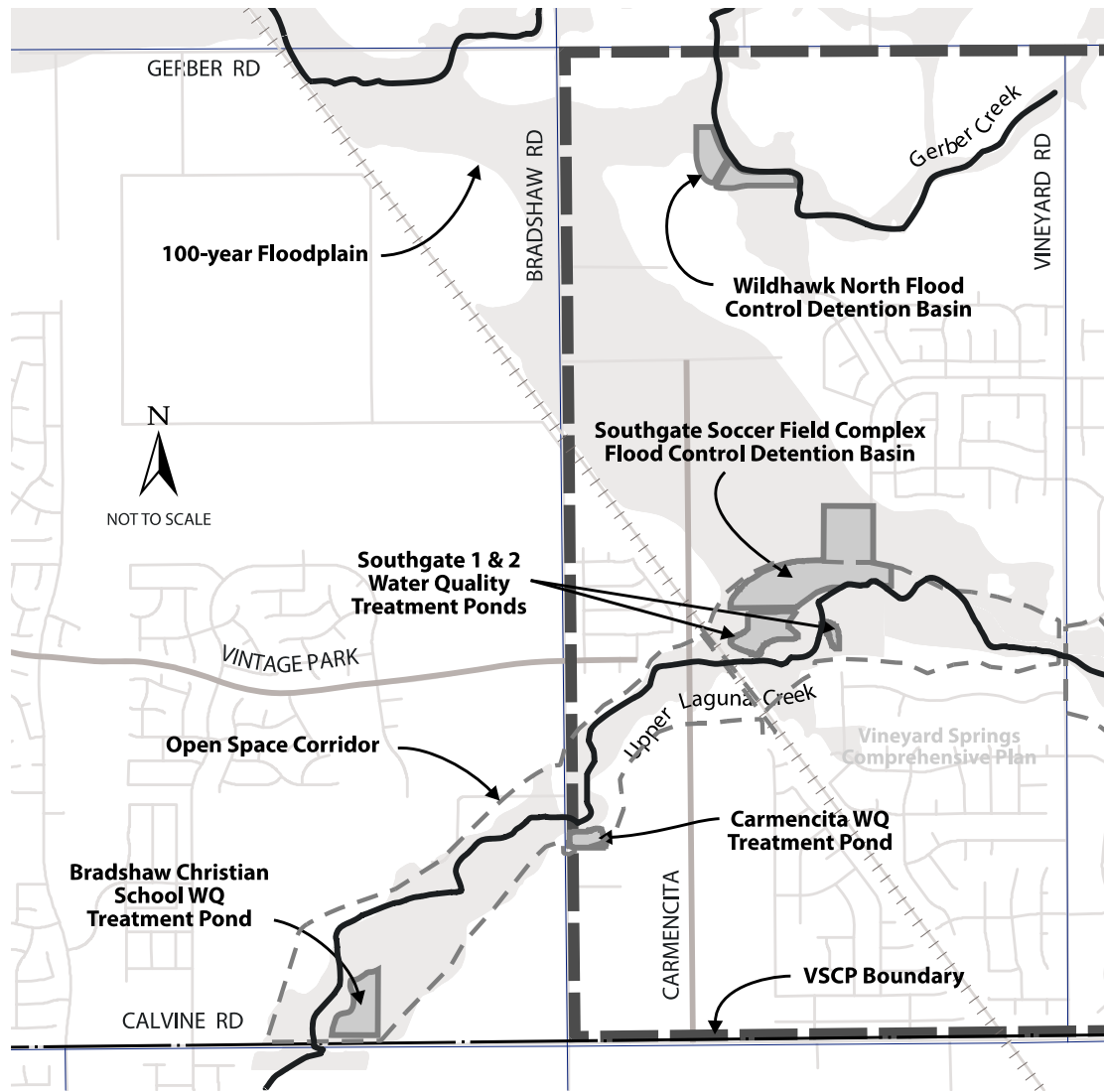
Updated Facility Costs, Fees

The table below summarizes the estimated project costs from the 2000 Public Facilities Finance Plan (PFFP) up to now. The overall project costs and Zone 11A costs decreased substantially between 2003 and 2006 due to the change in project scope (no excavated channel, no work in Elk Grove). The supplemental costs however stayed about the same, offsetting channel excavation with increased detention basin and trail costs.

The original and current supplemental fee is \$13,883 per acre* based on the 2003 estimate, and it is recommended that it stay at that amount. It is also recommended that if any excess funds remain after the required drainage improvements are completed, they be used for geomorphologic and/or environmental remediation of Upper Laguna Creek.

Drainage Fees	2000 PFFP	July 2003	March 2007
Zone 11A	\$9,016,005	\$11,409,569	\$6,944,855
Supplemental	11,486,458	13,924,911	13,946,659
Total	\$20,502,463	\$25,334,490	\$20,891,514

* supplemental fee in 2003 was \$13,924,911/1,003 acres = \$13,883 per acre



Vicinity Map of Triangle Rock Flood Control Detention Basin

UPDATED SCOPE OF DRAINAGE IMPROVEMENTS

Four stormwater quality (WQ) treatment ponds:

- Bradshaw Christian School
- Carmencita
- Southgate 1
- Southgate 2

Three flood control detention basins:

- Southgate Soccer Field Complex
- Wildhawk North
- Triangle Rock

Vineyard Springs Comprehensive Plan Drainage Fee Cost Summary (June 2007)

DRAINAGE FACILITY ITEM	CURRENT FEES (\$) *			PROPOSED FEES (\$)		
	Zone 11A	Supplemental	Combined	Zone 11A	Supplemental	Combined
Flood Control Detention Basins	3,728,093	2,454,292	6,182,385	1,420,125	7,873,986	9,294,111
Stormwater Quality Basins	727,114	426,636	1,153,750	693,829	1,540,553	2,234,382
Channel Improvements	3,285,245	6,672,095	9,957,340	372,360	460,100	832,460
Storm Drains	2,469,334		2,469,334	2,870,140		2,870,140
Trails/Maintenance Road				1,588,400	825,000	2,413,400
Access Roads, Revegetation	1,199,784		1,199,784			
Environmental Mitigation – Wetlands		4,371,888	4,371,888		2,402,750	2,402,750
Staff Labor					250,000	250,000
Consultants					594,270	594,270
TOTALS	11,409,569	13,924,911	25,334,480	6,944,855	13,946,659	20,891,514
Area Developed (acres)		1,003			1,003	
Supplemental Fee (\$ per acre)		\$13,883			**	

*Current fees approved August 5, 2003 (Ordinance No. WAO-2509)

** It is recommended that the VSCP Supplemental Fee remain \$13,883 per acre

Triangle Rock and Southgate Flood Control (FC) Detention Basins

ITEM				DRAINAGE FEE COSTS (\$)		
	Quantity	Units	Unit Rate	Zone 11A	Supplemental	Combined
Triangle Rock/Vulcan FC						
Property	30	acres	\$50,000		1,500,000	
Pump station (50 cfs)	1	LS	\$2,000,000		2,000,000	
Pump (annualized pumping, O&M, replacement)	1	LS	\$250,000		250,000	
Construction (drop structure, weir, road)	1	LS	\$250,000	250,000		
Environmental mitigation	1	LS	\$50,000		50,000	
Hydroseed	30	acres	\$1,656	49,680		
Subtotal				299,680	3,800,000	
Total including 20% Contingency				359,616	4,560,000	4,919,616
Southgate Soccer Field Complex FC						
Property (Within Floodplain & OSC)	10.54	acres	\$50,000		527,000	
Property (Within Floodplain)	5.23	acres	\$50,000		261,500	
Property (Outside both)	1.73	acres	\$150,000		259,500	
Excavation	150,000	CY	\$3.48	522,000		
Excavation	150,000	CY	\$4.30		645,000	
Inlet/Outlet, Weir, Road	1	LS	\$150,000	50,000	100,000	
DSOD (construction and inspections)	1	LS	\$250,000		250,000	
Subtotal				572,000	2,043,000	
Total including 20% Contingency				686,400	2,451,600	3,138,000

Gerber Creek FC Basin and Channel

ITEM				DRAINAGE FEE COSTS (\$)		
	Quantity	Units	Unit Rate	Zone 11A	Supplemental	Combined
G45 Gerber Creek FC Basin						
Property	9.14	acres	\$50,000		457,000	
Basin Excavation	60,850	CY	\$3.48	211,758		
Excavation (Truck Export)	60,850	CY	\$4.30		261,655	
Construction, Inlet/Outlet	1	LS	\$100,000	100,000		
Subtotal				311,758	718,655	
Total including 20% Contingency				374,109	862,386	1,236,495
Total (Triangle Rock, Southgate, G45)				1,420,125	7,873,986	9,294,111
Channel Improvements						
Gerber Creek						
Excavation Vineyard to Gerber #2	107,000	CY	\$3.48	372,360		
Excavation (Truck Export)	107,000	CY	\$4.30		460,100	
Total including 20% Contingency				372,360	460,100	832,460

Environmental Mitigation

ITEM				DRAINAGE FEE COSTS (\$)		
	Quantity	Units	Unit Rate	Zone 11A	Supplemental	Combined
Vernal Pool Credit Purchase						
Detention Basins	0.51	acre	\$325,000		165,750	
Trails	1.56	acre	\$325,000		507,000	
Total					672,750	672,750
Habitat Installation in Southgate FC Basin (Seasonal Wetland + GGS)						
Construction Design Documents					300,000	
Land Trust Endowment					450,000	
Conservation Easement					80,000	
Construction Cost					500,000	
Maintenance/Monitoring/Reporting					400,000	
Total					1,730,000	1,730,000
Total						
					2,402,750	2,402,750

Stormwater Quality Treatment Basins

ITEM				DRAINAGE FEE COSTS (\$)		
	Quantity	Units	Unit Rate	Zone 11A	Supplemental	Combined
Pond 1 (Southgate)						
Property Easement*	11.1	acres	28,080*		311,688	
Basin Excavation	46,580	CY	\$3.48	162,098		
Excavation (Truck Export)	46,580	CY	\$4.30		200,294	
Inlet/Outlet (plus Wildhawk lateral)	1	LS	\$150,000	150,000		
Vegetation, Planting	8	acres	\$16,200		129,600	
Subtotal				312,098	641,582	
Total including 20% Contingency				374,518	769,898	1,144,416
Pond 2 (Southgate)						
Property Easement*	1.4	acres	28,080*		39,312	
Basin Excavation	8,000	CY	\$3.48	27,840		
Excavation (Truck Export)	8,000	CY	\$4.30		34,400	
Construction, Inlet/Outlet	1	LS	\$50,000	50,000		
Vegetation, Planting	1.0	acres	\$16,200		16,200	
Subtotal				77,840	89,912	
Total including 20% Contingency				93,408	107,894	201,302
Pond 3 (Carmencita)						
Property (in Open Space Corridor)	1.5	acres	\$50,000		75,000	
Property (outside OSC)	0.5	acres	\$150,000		75,000	
Basin Excavation	16,890	CY	\$3.48	58,777		
Construction, Inlet/Outlet	1	LS	\$50,000	50,000		
Vegetation, Planting	1.5	acres	\$16,200		24,300	
Subtotal				108,777	234,300	
Total including 20% Contingency				130,532	209,160	339,692

* Easements for Ponds 1 and 2 (valued at \$351,000) transferred to Water Resources in exchange for portion of deferred drainage fees for Wildhawk Golf Course

Stormwater Quality Treatment Basins (continued)

ITEM				DRAINAGE FEE COSTS (\$)		
	Quantity	Units	Unit Rate	Zone 11A	Supplemental	Combined
Pond 4 (Bradshaw Christian School)						
Property	10	acres	\$28,080		280,800	
Basin Excavation	8,470	CY	\$3.48	29,475		
Construction, Inlet/Outlet	1	LS	\$50,000	50,000		
Vegetation, Planting	6	acres	\$16,200		97,200	
Subtotal				79,475	297,200	
Total including 20% Contingency				95,370	453,600	548,970
Total Ponds 1 – 4						
				693,829	1,540,553	2,234,382

Stormwater Quality Treatment Basins Sizes

POND	DRAINAGE AREA	EXCAVATED VOLUME	PROPERTY AREA
	acres	CY	acres
1-Southgate	466	46,580	11.1
2-Southgate	75	8,000	1.4
3-BCS	170	8,470	10.0
4-Carmencita	90	16,890	2.0

Supplement to Southgate's Funding^(a) for Trails/Maintenance Road

		QUANTITY	UNITS	UNIT RATE (\$)	COST (\$)	BALANCE REQUIRED (\$)
Trails/Maintenance Road	Southgate Funding	6,600	LF	22	(145,200)	
	Current Estimate: Upgrade existing trail	5,092 (b)	LF	50	254,600	
	Construct new trail	17,000 (c)	LF	87	1,479,000	
	Zone 11A					1,588,400
Pedestrian Bridges	Current Estimate	3	each	275,000	825,000	
Supplemental Fee						825,000

(a) Southgate received funding from 2001 VSCP Financing Plan

(b) Existing trail is 10' wide, 2" thick asphalt/concrete paving, over 4" AB on 90% compacted subgrade.

(c) Included in new trail are 8,000 LF d/s of VSCP (Calvine to Bradshaw), 7,000LF within the VSCP and the open space corridor, and 2,000 LF within the VSCP but outside the open space corridor (immediately d/s of Excelsior)

List of Consultants

CONSULTANT	SUPPLEMENTAL FEE (\$)
EIP/Parus (Environ. Permitting)	275,000
Mead & Hunt (Surveys)	105,570
Eva Butler (Collaborative)	78,700
William Lettis (Geomorphology)	100,000
Wood Rodgers (LOMR)	35,000
Total	594,270